FIBERSTARS™
AN ENERGY FOCUS COMPANY

* <u>INTERNATIONAL</u> *

Factory Representative
Distributor Net Price Book
and Reference Guide

Effective Date April 1st, 2012

LED Luminaires

Stranded Fiber Optics

Contents

LED DockLight

Cat. Page	Part Number	CRI	CCT	Beam	Cord Configuration	Mount	Color	DN Price
60	LEDDL-765NSP-15HWS-SY	75	6500 K	11°	10' fly leads	Std. Arm	Yellow	$356.00
60	LEDDL-765NSP-15PIS-SY	75	6500 K	11°	10' IEC60320-C14	Std. Arm	Yellow	$356.00
60	LEDDL-765NSP-15PNS-SY	75	6500 K	11°	10' Nema 5-15	Std. Arm	Yellow	$356.00
60	LEDDL-765NSP-15SIA-SY	75	6500 K	11°	16" switch IEC60320-C14	Std. Arm	Yellow	$356.00
60	LEDDL-765NSP-15SNS-SY	75	6500 K	11°	16" switch Nema 5-15	Std. Arm	Yellow	$356.00
60	LEDDL-765NFL-15HWS-SY	75	6500 K	30°	10' fly leads	Std. Arm	Yellow	$356.00
60	LEDDL-765NFL-15PIS-SY	75	6500 K	30°	10' IEC60320-C14	Std. Arm	Yellow	$356.00
60	LEDDL-765NFL-15PNS-SY	75	6500 K	30°	10' Nema 5-15	Std. Arm	Yellow	$356.00
60	LEDDL-765NFL-15SIA-SY	75	6500 K	30°	16" switch IEC60320-C14	Std. Arm	Yellow	$356.00
60	LEDDL-765NFL-15SNS-SY	75	6500 K	30°	16" switch Nema 5-15	Std. Arm	Yellow	$356.00
NEW	LEDDL-765SFL-15HWS-SY	75	6500 K	11° ctr 30° out	10' fly leads	Std. Arm	Yellow	$356.00
NEW	LEDDL-765SFL-15PNS-SY	75	6500 K	11° ctr 30° out	10' Nema 5-15	Std. Arm	Yellow	$356.00
NEW	LEDDL-765SFL-15SIA-SY	75	6500 K	11° ctr 30° out	16" switch IEC60320-C14	Std. Arm	Yellow	$356.00
NEW	LEDDL-765SFL-15SNS-SY	75	6500 K	11° ctr 30° out	16" switch Nema 5-15	Std. Arm	Yellow	$356.00

DockLight Accessories

Cat. Page	Part Number	Product	Details	DN Price
104	LEDDL-ARM-42	DockLight Arm	42",SINGLE STRUT	$160.00
104	LEDDL-ARM-60	DockLight Arm	60",SINGLE STRUT	$190.00
104	LEDDL-YOKE-SY-HB	Replacement Yoke	ARM, HEX BOLT	$30.00
104	LEDDL-YOKE-SY-TS	Replacement Yoke	ARM, THUMB SCREW	$30.00
104	LEDDL-YOKE-TY-HB	Replacement Yoke	TRUN, HEX BOLT	$30.00
104	LEDDL-YOKE-TY-TS	Replacement Yoke	TRUN, THUMB SCREW	$30.00

LED Retrofit Kit for Wallpacks

Cat. Page	Part Number	CRI	CCT	Beam	Mounting	Energy	Connect	DN Price
NEW	LEDWP-656VFL-RFK	>65	5600K	120°	Universal bracket	31W	Molex	$278.00

LED LandScape Light, small

Cat. Page	Part Number	CRI	CCT	Beam	Cord Configuration	Energy	Color	DN Price
62	LEDLS-765NSP-15HWC-AB	75	6500 K	11°	6' fly leads	15W	Bronze	$356.00
62	LEDLS-765NSP-15HWC-BK	75	6500 K	11°	6' fly leads	15W	Black	$356.00
62	LEDLS-765NSP-15HWD-AB	75	6500 K	11°	no cord	15W	Bronze	$356.00
62	LEDLS-765NSP-15HWD-BK	75	6500 K	11°	no cord	15W	Black	$356.00
62	LEDLS-765NFL-15HWC-AB	75	6500 K	30°	6' fly leads	15W	Bronze	$356.00
62	LEDLS-765NFL-15HWC-BK	75	6500 K	30°	6' fly leads	15W	Black	$356.00
62	LEDLS-765NFL-15HWD-AB	75	6500 K	30°	no cord	15W	Bronze	$356.00
62	LEDLS-765NFL-15HWD-BK	75	6500 K	30°	no cord	15W	Black	$356.00
62	LEDLS-765FLD-15HWC-AB	75	6500 K	40°	6' fly leads	15W	Bronze	$356.00
62	LEDLS-765FLD-15HWC-BK	75	6500 K	40°	6' fly leads	15W	Black	$356.00
62	LEDLS-765FLD-15HWD-AB	75	6500 K	40°	no cord	15W	Bronze	$356.00
62	LEDLS-765FLD-15HWD-BK	75	6500 K	40°	no cord	15W	Black	$356.00
62	LEDLS-765OVL-15HWC-AB	75	6500 K	34° x 14°	6' fly leads	15W	Bronze	$356.00
62	LEDLS-765OVL-15HWC-BK	75	6500 K	34° x 14°	6' fly leads	15W	Black	$356.00
62	LEDLS-765OVL-15HWD-AB	75	6500 K	34° x 14°	no cord	15W	Bronze	$356.00
62	LEDLS-765OVL-15HWD-BK	75	6500 K	34° x 14°	no cord	15W	Black	$356.00
62	LEDLS-835NSP-15HWC-AB	80	3500 K	11°	6' fly leads	15W	Bronze	$356.00
62	LEDLS-835NSP-15HWC-BK	80	3500 K	11°	6' fly leads	15W	Black	$356.00
62	LEDLS-835NSP-15HWD-AB	80	3500 K	11°	no cord	15W	Bronze	$356.00
62	LEDLS-835NSP-15HWD-BK	80	3500 K	11°	no cord	15W	Black	$356.00
62	LEDLS-835NFL-15HWC-AB	80	3500 K	30°	6' fly leads	15W	Bronze	$356.00
62	LEDLS-835NFL-15HWC-BK	80	3500 K	30°	6' fly leads	15W	Black	$356.00
62	LEDLS-835NFL-15HWD-AB	80	3500 K	30°	no cord	15W	Bronze	$356.00
62	LEDLS-835NFL-15HWD-BK	80	3500 K	30°	no cord	15W	Black	$356.00
62	LEDLS-835FLD-15HWC-AB	80	3500 K	40°	6' fly leads	15W	Bronze	$356.00
62	LEDLS-835FLD-15HWC-BK	80	3500 K	40°	6' fly leads	15W	Black	$356.00
62	LEDLS-835FLD-15HWD-AB	80	3500 K	40°	no cord	15W	Bronze	$356.00
62	LEDLS-835FLD-15HWD-BK	80	3500 K	40°	no cord	15W	Black	$356.00
62	LEDLS-835OVL-15HWC-AB	80	3500 K	34° x 14°	6' fly leads	15W	Bronze	$356.00
62	LEDLS-835OVL-15HWC-BK	80	3500 K	34° x 14°	6' fly leads	15W	Black	$356.00
62	LEDLS-835OVL-15HWD-AB	80	3500 K	34° x 14°	no cord	15W	Bronze	$356.00
62	LEDLS-835OVL-15HWD-BK	80	3500 K	34° x 14°	no cord	15W	Black	$356.00

LED LandScape Light, large

Cat. Page	Part Number	CRI	CCT	Beam	Cord Configuration	Energy	Color	DN Price
62	LEDLS-765NSP-26HWC-AB	75	6500 K	11°	6' fly leads	26W	Bronze	$534.00
62	LEDLS-765NSP-26HWC-BK	75	6500 K	11°	6' fly leads	26W	Black	$534.00
62	LEDLS-765NSP-26HWD-AB	75	6500 K	11°	no cord	26W	Bronze	$534.00
62	LEDLS-765NSP-26HWD-BK	75	6500 K	11°	no cord	26W	Black	$534.00
62	LEDLS-765NFL-26HWC-AB	75	6500 K	30°	6' fly leads	26W	Bronze	$534.00
62	LEDLS-765NFL-26HWC-BK	75	6500 K	30°	6' fly leads	26W	Black	$534.00
62	LEDLS-765NFL-26HWD-AB	75	6500 K	30°	no cord	26W	Bronze	$534.00
62	LEDLS-765NFL-26HWD-BK	75	6500 K	30°	no cord	26W	Black	$534.00
62	LEDLS-765FLD-26HWC-BK	75	6500 K	40°	6' fly leads	26W	Bronze	$534.00
62	LEDLS-765FLD-26HWC-AB	75	6500 K	40°	6' fly leads	26W	Black	$534.00
62	LEDLS-765FLD-26HWD-AB	75	6500 K	40°	no cord	26W	Bronze	$534.00
62	LEDLS-765FLD-26HWD-BK	75	6500 K	40°	no cord	26W	Black	$534.00
62	LEDLS-765OVL-26HWC-AB	75	6500 K	34° x 14°	6' fly leads	26W	Bronze	$534.00
62	LEDLS-765OVL-26HWC-BK	75	6500 K	34° x 14°	6' fly leads	26W	Black	$534.00
62	LEDLS-765OVL-26HWD-AB	75	6500 K	34° x 14°	no cord	26W	Bronze	$534.00
62	LEDLS-765OVL-26HWD-BK	75	6500 K	34° x 14°	no cord	26W	Black	$534.00
62	LEDLS-835NSP-26HWC-AB	80	3500 K	11°	6' fly leads	26W	Bronze	$534.00
62	LEDLS-835NSP-26HWC-BK	80	3500 K	11°	6' fly leads	26W	Black	$534.00
62	LEDLS-835NSP-26HWD-AB	80	3500 K	11°	no cord	26W	Bronze	$534.00
62	LEDLS-835NSP-26HWD-BK	80	3500 K	11°	no cord	26W	Black	$534.00
62	LEDLS-835NFL-26HWC-AB	80	3500 K	30°	6' fly leads	26W	Bronze	$534.00
62	LEDLS-835NFL-26HWC-BK	80	3500 K	30°	6' fly leads	26W	Black	$534.00
62	LEDLS-835NFL-26HWD-AB	80	3500 K	30°	no cord	26W	Bronze	$534.00
62	LEDLS-835NFL-26HWD-BK	80	3500 K	30°	no cord	26W	Black	$534.00
62	LEDLS-835FLD-26HWC-AB	80	3500 K	40°	6' fly leads	26W	Bronze	$534.00
62	LEDLS-835FLD-26HWC-BK	80	3500 K	40°	6' fly leads	26W	Black	$534.00
62	LEDLS-835FLD-26HWD-AB	80	3500 K	40°	no cord	26W	Bronze	$534.00
62	LEDLS-835FLD-26HWD-BK	80	3500 K	40°	no cord	26W	Black	$534.00
62	LEDLS-835OVL-26HWC-AB	80	3500 K	34° x 14°	6' fly leads	26W	Bronze	$534.00
62	LEDLS-835OVL-26HWC-BK	80	3500 K	34° x 14°	6' fly leads	26W	Black	$534.00
62	LEDLS-835OVL-26HWD-AB	80	3500 K	34° x 14°	no cord	26W	Bronze	$534.00
62	LEDLS-835OVL-26HWD-BK	80	3500 K	34° x 14°	no cord	26W	Black	$534.00

LandScape Light Accessories

Cat. Page	Part Number	Product	Details	DN Price
104	LEDLS-PHTSNSR	Photo Sensor	PHOTO SENSOR	$150.00
104	LEDLS-SLPFTTR-BLT	Slip Fitter	SLIP FITTER,3-1/2 BOLT	$88.00
104	LEDLS-SLPFTTR-NPT	Slip Fitter	SLIP FITTER,1/2 NPT	$60.00
NEW	LEDLS-VS-SM-AB/BK	Glare Shield	Shield for small LandScape	$40.00
NEW	LEDLS-VS-LG-AB/BK	Glare Shield	Shield for large LandScape	$46.00

LED Globe Light

Cat. Page	Part Number	CRI	CCT	Beam	Cord Configuration	Energy	Color	DN Price
61	EFO-LEDSG-015-02	75	6500 K	92°	no cord	15W	White	$356.00
61	EFO-LEDLG-026-02	75	6500 K	96°	no cord	26W	White	$534.00

GlobeLight Accessories

Cat. Page	Part Number	Product	Details	DN Price
104	EFO-LEDGM-AM	GlobeLight Mount	ANGLE MOUNT	$34.00
104	EFO-LEDGM-FM	GlobeLight Mount	FLAT MOUNT	$34.00
104	EFO-LEDGM-FSM	GlobeLight Mount	FLAT STAR MOUNT	$34.00

LED HazGlobe   Class 1 Division 2

Cat. Page	Part Number	CRI	CCT	Beam	Mounting	Energy	Color	DN Price
NEW	LEDGL-765-15HAZ-01-BK	75	6500 K	92°	Flat mount	15W	Black	$778.00
NEW	LEDGL-765-15HAZ-01-WT	75	6500 K	92°	Flat mount	15W	White	$778.00
NEW	LEDGL-765-15HAZ-01-AA	75	6500 K	92°	Flat mount	15W	Raw Alu	$778.00
NEW	LEDGL-765-15HAZ-02-BK	75	6500 K	92°	Trunnion/Pendant	15W	Black	$778.00
NEW	LEDGL-765-15HAZ-02-WT	75	6500 K	92°	Trunnion/Pendant	15W	White	$778.00
NEW	LEDGL-765-15HAZ-02-AA	75	6500 K	92°	Trunnion/Pendant	15W	Raw Alu	$778.00
NEW	LEDGL-765-15HAZ-03-BK	75	6500 K	92°	Stanchion	15W	Black	$778.00
NEW	LEDGL-765-15HAZ-03-WT	75	6500 K	92°	Stanchion	15W	White	$778.00
NEW	LEDGL-765-15HAZ-03-AA	75	6500 K	92°	Stanchion	15W	Raw Alu	$778.00
NEW	LEDGL-765-26HAZ-01-BK	75	6500 K	96°	Flat mount	26W	Black	$934.00
NEW	LEDGL-765-26HAZ-01-WT	75	6500 K	96°	Flat mount	26W	White	$934.00
NEW	LEDGL-765-26HAZ-01-AA	75	6500 K	96°	Flat mount	26W	Raw Alu	$934.00
NEW	LEDGL-765-26HAZ-02-BK	75	6500 K	96°	Trunnion/Pendant	26W	Black	$934.00
NEW	LEDGL-765-26HAZ-02-WT	75	6500 K	96°	Trunnion/Pendant	26W	White	$934.00
NEW	LEDGL-765-26HAZ-02-AA	75	6500 K	96°	Trunnion/Pendant	26W	Raw Alu	$934.00
NEW	LEDGL-765-26HAZ-03-BK	75	6500 K	96°	Stanchion	26W	Black	$934.00
NEW	LEDGL-765-26HAZ-03-WT	75	6500 K	96°	Stanchion	26W	White	$934.00
NEW	LEDGL-765-26HAZ-03-AA	75	6500 K	96°	Stanchion	26W	Raw Alu	$934.00

LED Tube Lamp

Cat. Page	Part Number	Type	Color	Energy		DN Price
NEW	LEDFLT8-WW48-16BIPARV	Linear BiPin	Warm White 3500K	16W	48" (4')	$78.00
NEW	LEDFLT8-NW48-16BIPARV	Linear BiPin	Neutral White 4500K	16W	48" (4')	$78.00
NEW	LEDFLT8-CW48-16BIPARV	Linear BiPin	Cool White 6500K	16W	48" (4')	$78.00
NEW	LEDFLT8-WW60-20BIPARV	Linear BiPin	Warm White 3500K	20W	60" (5')	$92.00
NEW	LEDFLT8-NW60-20BIPARV	Linear BiPin	Neutral White 4500K	20W	60" (5')	$92.00
NEW	LEDFLT8-CW60-20BIPARV	Linear BiPin	Cool White 6500K	20W	60" (5')	$92.00

Linear Fixtures with LED Tube Lamps *

Cat. Page	Part Number	Type	Lamps	Lens	Color	Mount	DN Price
NEW	LEDFLVPX-2L24GR-CP04W	2' Vapor tight	2	PC lens	White	Universal	$264.24
NEW	LEDFLVPX-3L48GR-CP04W	4' Vapor tight	2	PC lens	White	Universal	$376.91
NEW	LEDFLHBY-4L48GR-CA04W	4' High Bay	4	No Lens	White	Universal	$555.79
NEW	LEDFLHBY-6L48GR-CA04W	4' High Bay	6	No Lens	White	Universal	$805.23
NEW	LEDFLHBY-8L48GR-CA04W	4' High Bay	8	No Lens	White	Universal	$1,052.51

*ships with LED Lamps in individual packaging

Fixtures

Catalog Page	Category	Part Number	Description	Color/Size	Standard Tail Length	DN Price
10	Decorative	DF-MEDUSA-05	Medusa Fiber Optic Chandelier	5' diameter	10' total; 6' max suspension w/ rod;	$13,897.48
10	Decorative	DF-MEDUSA-065	Medusa Fiber Optic Chandelier	6.5' diameter	10' total; 6' max suspension w/ rod;	$13,897.48
10	Decorative	DF-MEDUSA-08	Medusa Fiber Optic Chandelier	8' diameter	10' total; 6' max suspension w/ rod;	$14,801.06
10	Decorative	DF-MEDUSA-TAIL-xx	Additional Tail Length price per foot	2x40 fibers @3.00mm	40' max recommended	$164.02
10	Decorative	DF-MEDUSA-PLT	Medusa Drop Plate		For hardceiling suspended mounting	$5,140.00
10	Decorative	DF-JELLY-05-150	Jelly Light Fiber Optic Chandelier	5' diameter	3' standard	$6,960.00
10	Decorative	DF-JELLY-065-150	Jelly Light Fiber Optic Chandelier	6.5' diameter	3' standard	$7,476.00
10	Decorative	DF-JELLY-08-150	Jelly Light Fiber Optic Chandelier	8' diameter	3' standard	$12,374.00
10	Decorative	DF-JELLY-10-150	Jelly Light Fiber Optic Chandelier	10' diameter	3' standard	$12,890.00
10	Decorative	DF-JELLY-05-400	Jelly Light Fiber Optic Chandelier	5' diameter	3' standard	$15,223.38
10	Decorative	DF-JELLY-065-400	Jelly Light Fiber Optic Chandelier	6.5' diameter	3' standard	$15,714.46
10	Decorative	DF-JELLY-08-400	Jelly Light Fiber Optic Chandelier	8' diameter	3' standard	$18,660.92
10	Decorative	DF-JELLY-10-400	Jelly Light Fiber Optic Chandelier	10' diameter	3' standard	$19,152.00
10	Decorative	DF-JELLY-TAIL-xx	Additional Tail Length price per foot	400 fibers @1.00mm	20' max recommended	$204.62
11	Decorative	DF-SCINT-600	Scintilla Crystal and Fiber Chandelier	24" diameter	6.5' standard	$6,118.37
11	Decorative	DF-SCINT-600-TAIL	Additional Tail Length price per foot	37 fibers @ 1.5mm	30' max recommended	$110.00
11	Decorative	DF-SCINT-800	Scintilla Crystal and Fiber Chandelier	32" diameter	6.5' standard	$8,717.42
11	Decorative	DF-SCINT-800-TAIL	Additional Tail Length price per foot	46 fibers @ 1.5mm	30' max recommended	$170.00
11	Decorative	DF-SCINT-1000	Scintilla Crystal and Fiber Chandelier	39" diameter	6.5' standard	$11,318.86
11	Decorative	DF-SCINT-1000-TAIL	Additional Tail Length price per foot	77 fibers @ 1.5mm	30' max recommended	$220.00

Fixtures

Catalog Page	Category	Part Number	Description	Color/Size	Standard Tail Length	DN Price
12	Decorative	DF-LALUNA-400	LaLuna Fiber Optic Moon	24" diameter	3' standard	$2,418.31
12	Decorative	DF-LALUNA-400-TAIL-xx	LaLuna Fiber Optic Moon	24" diameter	30' max recommended	$100.00
12	Decorative	DF-LALUNA-600	LaLuna Fiber Optic Moon	32" diameter	6.5' standard	$2,606.55
12	Decorative	DF-LALUNA-600-TAIL-xx	LaLuna Fiber Optic Moon	32" diameter	30' max recommended	$120.00
12	Decorative	DF-LALUNA-1000	LaLuna Fiber Optic Moon	39" diameter	6.5' standard	$5,599.57
12	Decorative	DF-LALUNA-1000-TAIL-xx	LaLuna Fiber Optic Moon	39" diameter	30' max recommended	$157.50
14	Decorative	DF-VINO-CLASSIC	Upside Down Wine Glass	79" shaft		$1,659.84
14	Decorative	DF-VINO-DROP	Pendant Lamp	79" shaft		$1,672.12

Notes:

1) Design fixtures are made to order as individual illumination art pieces. Certain imperfections may incur.

2) Because these pieces are custom and made to order they cannot be returned for any reason other than non-functionality.

3) General lead time on custom order chandaliers is 12 weeks. Individual lead times may vary and will be given when an order is received.

Fixtures

Catalog Page		Category	Part Number	Description	Color	Ferrule Requirement	Max Fiber	DN Price
17		Decorative	CRE1101	Micro Bullet	Clear	N/A	1	$2.88
17		Decorative	CRE1102	Mini Bullet	Clear	N/A	12	$2.96
17		Decorative	CRE1103	Bullet	Clear	N/A	25	$9.66
17		Decorative	CRE1104	Maxi Bullet	Clear	N/A	75	$15.16
17		Decorative	CRE1105	Icicle Bullet	Clear	N/A	12	$11.93
17		Decorative	CRE1106	Opal Ball	opal	N/A	12	$2.81
17		Decorative	CRE1107	5 Point Star	Clear	N/A	12	$6.17
17		Decorative	CRE1108-MB	Micro Bullet with Bezel	Black	N/A	1	$5.36
17		Decorative	CRE1108-WT	Micro Bullet with Bezel	White	N/A	1	$5.36
17		Decorative	CRE1109-MB	Mini Bullet with Bezel	Black	N/A	12	$5.36
17		Decorative	CRE1109-WT	Mini Bullet with Bezel	White	N/A	12	$6.57
17		Decorative	CRE1110-MB	Bullet with Bezel	Black	N/A	25	$13.55
17		Decorative	CRE1110-WT	Bullet with Bezel	White	N/A	25	$13.55
17		Decorative	CRE1111-MB	Bullet with Bezel	Black	N/A	12	$11.53
17		Decorative	CRE1111-WT	Bullet with Bezel	White	N/A	12	$11.53
17		Decorative	CRE1112-MB	Maxi Bullet with Bezel	Black	N/A	75	$18.50
17		Decorative	CRE1112-WT	Maxi Bullet with Bezel	White	N/A	75	$18.65
17		Decorative	CRE1113-MB	5 Point Starwith Bezel	Black	N/A	12	$9.11
17		Decorative	CRE1113-WT	5 Point Starwith Bezel	White	N/A	12	$9.11
17		Decorative	CRE1114-MB	Opal Ball with Bezel	Black	N/A	12	$7.37
17		Decorative	CRE1114-WT	Opal Ball with Bezel	White	N/A	12	$7.37
17		Decorative	CRE1115-PB	Fine Point	Gold	Included	1	$26.17
17		Decorative	CRE1115-CH	Fine Point	Chrome	Included	1	$26.17
17		Decorative	CRE1116-PB	Crystal Point	Gold	Included	12	$41.85
17		Decorative	CRE1116-CH	Crystal Point	Chrome	Included	12	$41.85
17		Decorative	CRE1117-PB	Large Crystal Point	Gold	Included	12	$53.66
17		Decorative	CRE1117-CH	Large Crystal Point	Chrome	Included	12	$53.66
17		Decorative	CRE1118-PB	Mini Downlight	Gold	Included	12	$38.09
17		Decorative	CRE1118-CH	Mini Downlight	Chrome	Included	12	$38.09
24		Display	Focal Point PF10-0-S	Focusing Spotlight, 60° beam, 10' Tail	Aluminum	N/A	25	$114.01
24		Display	Focal Point PF10-4-S	Focusing Spotlight, 40° beam, 10' Tail	Aluminum	N/A	25	$126.00
24		Display	Focal Point PF10-0-B	Focusing Spotlight, 60° beam, 10' Tail	Black	N/A	25	$114.01
24		Display	Focal Point PF10-4-B	Focusing Spotlight, 40° beam, 10' Tail	Black	N/A	25	$126.00
24		Display	Focal Point PF20-0-S	Focusing Spotlight, 60° beam, 20' Tail	Aluminum	N/A	25	$161.99
24		Display	Focal Point PF20-4-S	Focusing Spotlight, 40° beam, 20' Tail	Aluminum	N/A	25	$174.01
24		Display	Focal Point PF20-0-B	Focusing Spotlight, 60° beam, 20' Tail	Black	N/A	25	$161.99
24		Display	Focal Point PF20-4-B	Focusing Spotlight, 40° beam, 20' Tail	Black	N/A	25	$174.01

Fixtures

Catalog Page		Category	Part Number	Description	Color	Ferrule Requirement	Max Fiber	DN Price
24		Display	Focal Point PF30-0-S	Focusing Spotlight, 60° beam, 30' Tail	Aluminum	N/A	25	$216.01
24		Display	Focal Point PF30-4-S	Focusing Spotlight, 40° beam, 30' Tail	Aluminum	N/A	25	$228.00
24		Display	Focal Point PF30-0-B	Focusing Spotlight, 60° beam, 30' Tail	Black	N/A	25	$216.01
24		Display	Focal Point PF30-4-B	Focusing Spotlight, 40° beam, 30' Tail	Black	N/A	25	$228.00
25		Display	CRE2224-MB	Miniature Spotlight	Black	CRE-M10/xx	75	$78.75
25		Display	CRE2224-SS	Miniature Spotlight	Silver	CRE-M10/xx	75	$78.75
25		Display	CRE2225-MB	Miniature Lensed Spotlight	Black	CRE-M10/xx	50	$117.26
25		Display	CRE2225-SS	Miniature Lensed Spotlight	Silver	CRE-M10/xx	50	$117.26
26		Display	LBM061001251	Caselight, Floodlight with Lens, Focusing	Black	LBM006020xx	62	$194.69
26		Display	LBM061001252	Caselight, Floodlight without Lens	Black	LBM006020xx	62	$100.19
26		Display	LBM061001253	Caselight, No Glare Floodlight, without Lens	Black	LBM006020xx	62	$102.54
27		Display	LBM06100524	Caselight, No Glare, Tapered	Black	LBM006020xx	62	$54.26
27		Display	LBM06100624	Caselight, No Glare, 24°-48° Focusing	Black	LBM006020xx	62	$168.74
								$0.00
29		Accent	FE-1111-MB	Fixed Lens Mini Spot Light	Black	A10516-xx	75	$110.90
29		Accent	FE-1111-WT	Fixed Lens Mini Spot Light	White	A10516-xx	75	$154.22
29		Accent	FE-1111-PB	Fixed Lens Mini Spot Light	Gold	A10516-xx	75	$113.97
29		Accent	FE-1111-SS	Fixed Lens Mini Spot Light	Silver	A10516-xx	75	$147.71
30		Accent	FS-310-5	Fiberstix - 5 inches	Clear	Included	25	$110.29
30		Accent	FS-310-9	Fiberstix - 9 inches	Clear	Included	25	$133.98
30		Accent	FS-310-12	Fiberstix - 12 inches	Clear	Included	25	$140.11
30		Accent	CRE2504-MB	Drop Acrylic Rod	Black	CRE-FRL-xx	75	$119.95
30		Accent	CRE2504-WT	Drop Acrylic Rod	White	CRE-FRL-xx	75	$119.95
30		Accent	CRE2504-PB	Drop Acrylic Rod	Gold	CRE-FRL-xx	75	$119.95
30		Accent	CRE2504-SS	Drop Acrylic Rod	Silver	CRE-FRL-xx	75	$119.95
30		Accent	CRE2506-MB	Drop Acrylic Tube	Black	CRE-FRL-xx	75	$122.35
30		Accent	CRE2506-WT	Drop Acrylic Tube	White	CRE-FRL-xx	75	$122.35
30		Accent	CRE2506-PB	Drop Acrylic Tube	Gold	CRE-FRL-xx	75	$122.35
30		Accent	CRE2506-SS	Drop Acrylic Tube	Silver	CRE-FRL-xx	75	$122.35
32		Accent	CRE2501-MB	Fixed Lens Downlight	Black	CRE-FRL-xx	75	$134.99
32		Accent	CRE2501-WT	Fixed Lens Downlight	White	CRE-FRL-xx	75	$134.99

Fixtures

Catalog Page		Category	Part Number	Description	Color	Ferrule Requirement	Max Fiber	DN Price
32		Accent	CRE2501-PB	Fixed Lens Downlight	Gold	CRE-FRL-xx	75	$134.99
32		Accent	CRE2501-SS	Fixed Lens Downlight	Silver	CRE-FRL-xx	75	$134.99
32		Accent	CRE2502-CL-MB	Lensed Downlight, Clear or Frosted Lens	Black	CRE-FRL-xx	75	$133.08
32		Accent	CRE2502-CL-WT	Lensed Downlight, Clear or Frosted Lens	White	CRE-FRL-xx	75	$133.08
32		Accent	CRE2502-CL-PB	Lensed Downlight, Clear or Frosted Lens	Gold	CRE-FRL-xx	75	$133.08
32		Accent	CRE2502-CL-SS	Lensed Downlight, Clear or Frosted Lens	Silver	CRE-FRL-xx	75	$133.08
32		Accent	CRE2502-FR-MB	Lensed Downlight, Clear or Frosted Lens	Black	CRE-FRL-xx	75	$133.08
32		Accent	CRE2502-FR-WT	Lensed Downlight, Clear or Frosted Lens	White	CRE-FRL-xx	75	$133.08
32		Accent	CRE2502-FR-PB	Lensed Downlight, Clear or Frosted Lens	Gold	CRE-FRL-xx	75	$133.08
32		Accent	CRE2502-FR-SS	Lensed Downlight, Clear or Frosted Lens	Silver	CRE-FRL-xx	75	$133.08
34		Accent	LBM06100721	Lensed Accent Light	Brass	LBM006020xx	62	$145.22
34		Accent	LBM06100722	Lensed Accent Light	Matt Chr	LBM006020xx	62	$145.22
34		Accent	CRE2515-MB	Small Fixed Downlight	Black	CRE-M10xx	75	$116.32
34		Accent	CRE2515-WT	Small Fixed Downlight	White	CRE-M10xx	75	$118.42
34		Accent	CRE2515-PB	Small Fixed Downlight	Gold	CRE-M10xx	75	$118.42
34		Accent	CRE2515-SS	Small Fixed Downlight	Silver	CRE-M10xx	75	$118.42
36		Accent	FE-2211-MB	Adjustable Aim Downlight	Black	A10516-xx	75	$92.57
36		Accent	FE-2211-WT	Adjustable Aim Downlight	White	A10516-xx	75	$95.84
36		Accent	FE-2211-PB	Adjustable Aim Downlight	Gold	A10516-xx	75	$105.13
36		Accent	FE-2211-CH	Adjustable Aim Downlight	Chrome	A10516-xx	75	$105.13
36		Accent	CRE1001-MB	Lensed, Fully Adjustable Downlight	Black	CRE-FRL-xx	50	$175.43
36		Accent	CRE1001-WT	Lensed, Fully Adjustable Downlight	White	CRE-FRL-xx	50	$175.43
36		Accent	CRE1001-PB	Lensed, Fully Adjustable Downlight	Gold	CRE-FRL-xx	50	$175.43
36		Accent	CRE1001-CH	Lensed, Fully Adjustable Downlight	Chrome	CRE-FRL-xx	50	$175.43
37		Accent	CRE2231-MB	Miniature Adjustable Lensed Downlight	Black	CRE-M10/xx	75	$154.64
37		Accent	CRE2231-WT	Miniature Adjustable Lensed Downlight	White	CRE-M10/xx	75	$154.64
37		Accent	CRE2231-PB	Miniature Adjustable Lensed Downlight	Gold	CRE-M10/xx	75	$154.64
37		Accent	CRE2231-SS	Miniature Adjustable Lensed Downlight	Silver	CRE-M10/xx	75	$154.64
37		Accent	LBM06100822	Swivel Floodlight with Lens	Stainless Steel	LBM006020xx	62	$124.05
38		Accent	CRE2513-MB	Small Adjustable Eyeball	Black	CRE-M10/xx	75	$122.91

Fixtures

Catalog Page		Category	Part Number	Description	Color	Ferrule Requirement	Max Fiber	DN Price
38		Accent	CRE2513-SS	Small Adjustable Eyeball	Silver	CRE-M10/xx	75	$122.91
38		Accent	CRE2514-MB	Small Adjustable Gimble	Black	CRE-M10/xx	50	$174.28
38		Accent	CRE2514-SS	Small Adjustable Gimble	Silver	CRE-M10/xx	50	$174.28
								$0.00
44		Downlight	CRE2510-MB	Recessed Lens	Black	CRE-FRL-xx	75	$118.80
44		Downlight	CRE2510-WT	Recessed Lens	White	CRE-FRL-xx	75	$118.80
44		Downlight	CRE2510-PB	Recessed Lens	Gold	CRE-FRL-xx	75	$118.80
44		Downlight	CRE2510-SS	Recessed Lens	Silver	CRE-FRL-xx	75	$118.80
44		Downlight	CRE2512-MB	Snoot	Black	CRE-FRL-xx	75	$138.92
44		Downlight	CRE2512-WT	Snoot	White	CRE-FRL-xx	75	$138.92
44		Downlight	CRE2512-PB	Snoot	Gold	CRE-FRL-xx	75	$138.92
44		Downlight	CRE2512-SS	Snoot	Silver	CRE-FRL-xx	75	$138.92
44		Downlight	LBM06100550	Floodlight, Fixed without Lens	Black	LBM006020xx	62	$78.27
44		Downlight	LBM06100530	Floodlight, Fixed without Lens	White	LBM006020xx	62	$95.00
47		Outdoor	LBM06120420	Floor Mounted Uplight with Lens	Stainless Steel	LBM006020xx	75	$306.35
49		Outdoor	CRE1207-CL	Micro Paver - clear lens	Stainless Steel	Included	12	$73.29
49		Outdoor	CRE1207-FR	Micro Paver - frosted lens	Stainless Steel	CRE-FRL-xx	12	$73.29
49		Outdoor	CRE1208-CL	Mini Paver - clear lens	Stainless Steel	CRE-FRL-xx	75	$141.04
49		Outdoor	CRE1208-FR	Mini Paver - frosted lens	Stainless Steel	CRE-FRL-xx	75	$141.04
49		Outdoor	CRE1209-CL	Standard Paver - clear lens	Stainless Steel	CRE-FRL-xx	75	$175.43
49		Outdoor	CRE1209-FR	Standard Paver - frosted lens	Stainless Steel	CRE-FRL-xx	75	$175.43
49		Outdoor	CRE1210-CL	Domed Paver - clear lens	Stainless Steel	CRE-FRL-xx	75	$165.94
49		Outdoor	CRE1210-FR	Domed Paver - frosted lens	Stainless Steel	CRE-FRL-xx	75	$165.94
50		Outdoor	CRE2320-CL	Eyelid Paver - clear lens	Stainless Steel	CRE-FRL-xx	75	$277.94
50		Outdoor	CRE2320-FR	Eyelid Paver - frosted lens	Stainless Steel	CRE-FRL-xx	75	$277.94
51		Outdoor	CRE2321-CL	Small Screw Fix Paver - clear lens	Stainless Steel	CRE-FRL-xx	75	$175.81
51		Outdoor	CRE2321-FR	Small Screw Fix Paver - frosted lens	Stainless Steel	CRE-FRL-xx	75	$175.81
51		Outdoor	CRE2322-CL	Large Screw Fix Paver - clear lens	Stainless Steel	CRE-FRL-xx	75	$174.09

Fixtures

Catalog Page	Category	Part Number	Description	Color	Ferrule Requirement	Max Fiber	DN Price
51	Outdoor	CRE2322-FR	Large Screw Fix Paver - frosted lens	Stainless Steel	CRE-FRL-xx	75	$174.09
51	Outdoor	CRE2324	Dichroic Glass Paver	Stainless Steel	CRE-FRL-xx	75	$195.93
53	Outdoor	FS-712	Poured in Place Paver-small (5mm Tip)	Clear	Included	12	$14.28
53	Outdoor	FS-713	Poured in Place Paver-large (10mm Tip)	Clear	Included	12	$16.44
54	Underwater	LNS-100A	Underwater Lensed Fixture	White		75	$33.73
54	Underwater	LNS-225	Underwater Lensed Fixture	White		225	$37.44
55	Underwater	CRE2153	Fountain Spotlight	Stainless Steel	CRE-FRL-xx	75	$127.55
55	Underwater	LBM061208202	Mini In-ground Floodlight with Lens	Stainless Steel	LBM006020xx	75	$110.04
55	Underwater	LBM06100819	Lensed Fountain Floodlight	Stainless Steel	LBM006020xx	75	$170.00
55	Underwater	LBM06100820	Lensed Fountain Floodlight	Bronze	LBM006020xx	75	$300.00
56	Underwater	LBM09010193	Lensed Fountain Floodlight	Stainless Steel	LBM006020xx	75	$137.93
57	Underwater	LBM06102121	Yoke Mounted Underwater Accent Light	Stainless Steel	LBM006020xx	75	$222.31
57	Underwater	LBM06102120	Recessed Underwater Accent Light	Stainless Steel	LBM006020xx	75	$730.00

MB	Black	GP	Graphite
WT	White	AN	Anthracite
PB	Gold	AL	Aluminum
SS	Silver	CH	Chrome
BC	Brushed Chrome		

Fiber Optic Star Systems

Catalog Page	Category	Part Number	Description	Coverage area	DN Price
73	Fiber Star Systems	STAR-KITA **NightSky**	300 lights, 71W Illuminator w/ Sparkle wheel	75-125 sq ft.	$1,050.00
73	Fiber Star Systems	STAR-KITB **Galaxy**	500 lights,1 shooting star, 95W Illuminator w/ Sparkle	150-255 sq ft.	$2,100.00
73	Fiber Star Systems	STAR-KITC **Universe**	800 lights,2 shooting stars, 95W Illuminator w/ Sparkle	250-300 sq ft.	$3,150.00

Ferrules

Catalog Page		Part Number	OD	Fiber capacity	Max Fiber count	Notes	DN Price
59		A10516-01	13mm	1-25	25 strands	For FS Series fixtures	$6.20
59		A10516-02	13mm	26-50	50 strands	For FS Series fixtures	$6.20
59		A10516-03	13mm	51-75	75 strands	For FS Series fixtures	$6.20
59		A10516-04	16mm	76-100	100 strands	Custom, consult factory for fixture use	$6.20
59		A10516-05	16mm	101-150	150 strands	Custom, consult factory for fixture use	$12.60
59		CRE-FRL8	8mm	1-50	50 strands	For CRE fixtures, specify strand count used	$16.80
59		CRE-FRL10	10mm	51-75	75 strands	For CRE fixtures, specify strand count used	$16.80
59		CRE-M10/25	10mm	1-25	25 strands	For CRE threaded fixtures; threaded	$16.80
59		CRE-M10/50	10mm	26-50	50 strands	For CRE threaded fixtures; threaded	$16.80
59		CRE-M10/75	10mm	51-75	75 strands	For CRE threaded fixtures; threaded	$16.80
59		LBM000602011	8mm	1-3	3 strands	For LBM fixtures, specify strand count used	$16.80
59		LBM000602061	8mm	4-5	5 strands	For LBM fixtures, specify strand count used	$16.80
59		LBM000602021	8mm	6-12	12 strands	For LBM fixtures, specify strand count used	$16.80
59		LBM000602031	8mm	13-25	25 strands	For LBM fixtures, specify strand count used	$16.80
59		LBM000602051	8mm	26-30	30 strands	For LBM fixtures, specify strand count used	$16.80
59		LBM000602041	8mm	31-50	50 strands	For LBM fixtures, specify strand count used	$16.80
59		LBM000602071	8mm	51-62	62 strands	For LBM fixtures, specify strand count used	$16.80
59		LBM000602081	10mm	63-75	75 strands	For LBM fixtures, specify strand count used	$16.80

Lightly Expressed® Light Bars

Many custom configurations are available for our Lightly Expressed Light Bar products.
Please consult factory for specifications and pricing

LightBeam, LightBeam QuarterRoud, LightFrame, TriAxis, FOCI and SpanBars

Type	-	Length	-	Tail	-	Intensity	-	Base size	-	Exposure	-	Finish Type	-	Tail Exit
LB		specify 1" to 120"		specify 10' to 30'		01F 1 Fiber per inch TFO Line		S Standard (480 fibers max)		I Indoor		S Aluminum clear anodized		L Left side exit
LBQR						02F 2 Fibers per inch TFO Line		C Compact (165 fibers max)		O Outdoor		B Aluminum black anodized		R Right side exit
LF *						04F 4 Fibers per inch TFO Line				W Outdoor wet/submerse				D Dual Tail exit
TRX						05F 5 Fibers per inch EFO11								C Custom exit
FOCI						06F 6 Fibers per inch EFO11		LightBeam		Standard (1") Compact (0.65")				
SB						08F 8 Fibers per inch TFO Line		LightBeamQR		Standard (1.25") Compact (0.75")				
						10F 10 Fibers per inch EFO11		LightFrame		Standard (1") Compact (0.65")				
						00C Custom								

* for LF (LightFrame) products please specify **Receiving Channel Size** (A = 0.25", B = 0.375" , C = 0.5", D = 0.75") after the **Base size**

Foci Fixtures - (ADD to the Below Bars - LB Standard Base size ONLY)

	10 Foot Tail	**20 Foot Tail**	**30 Foot Tail**
FOCI fixture	$149.10	$172.20	$195.30

For Fiber calculation add 25 x 0.75 mm fiber for each FOCI fixture
FOCI with no wash fibers is available - consult factory for details

Focal Point Fixtures	**60°**	$114.00	$161.98	$216.00
	40°	$126.00	$174.00	$227.98

The fixtures come with 50 x 0.5 mm fibertail pre-attached

Mounting Brackets (price per bracket)	LB-MB-CL CLEAR (standard)	$7.98
	LB-MB-BL BLACK	$7.98

*Potting - Required to install light bars in water * Use pricing below plus $105/bar plus $2.85/inch*
Linkabilty - Consult factory for soft links to create sharp turns or longer lengths
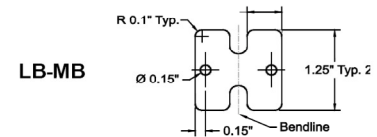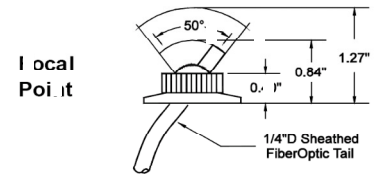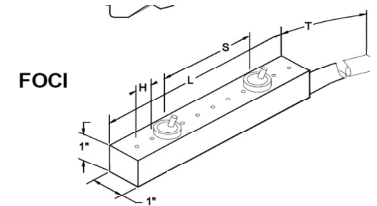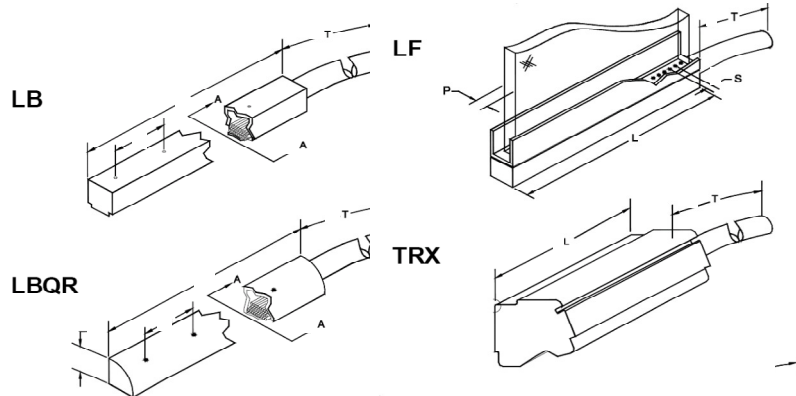
Lightly Expressed® Light Bars

This pricing is for guidance purposes only! We strongly recommend project specific quotes for all your LightBar custom orders. Please consult factory for more detailed information and individual pricing.

			10 Foot Tail	20 Foot Tail	30 Foot Tail
Low Intensity 1 Fiber Per Inch 1.00" spacing	up to 12"		$132.30	$153.30	$176.40
	13" - 24"		$172.20	$203.70	$235.20
	25" - 36"		$214.20	$254.10	$296.10
	37" - 48"		$256.20	$304.50	$354.90
	49" - 60"		$300.30	$357.00	$417.90
	61" - 72"		$342.30	$409.50	$478.80
	73" - 84"		$388.50	$464.10	$541.80
	85" - 96"		$432.60	$518.70	$604.80
	97" - 108"		$480.90	$579.60	$680.40
	109" - 120"		$527.10	$640.50	$756.00
Medium Intensity 2 Fibers Per Inch 0.50" Spacing	up to 12"		$161.70	$193.20	$224.70
	13" - 24"		$233.10	$281.40	$331.80
	25" - 36"		$306.60	$375.90	$441.00
	37" - 48"		$378.00	$464.10	$550.20
	49" - 60"		$455.70	$558.60	$663.60
	61" - 72"		$533.40	$655.20	$777.00
	73" - 84"		$619.50	$756.00	$894.60
	85" - 96"		$695.10	$854.70	$1,012.20
	97" - 108"		$779.10	$957.60	$1,131.90
	109" - 120"		$863.10	$1,058.40	$1,251.60
High Intensity 4 Fibers Per Inch 0.25" Spacing	up to 12"		$220.50	$270.90	$319.20
	13" - 24"		$352.80	$436.80	$520.80
	25" - 36"		$491.40	$611.10	$737.10
	37" - 48"		$625.80	$785.40	$945.00
	49" - 60"		$779.10	$966.00	$1,163.40
	61" - 72"		$913.50	$1,144.50	$1,375.50
	73" - 84"		$1,064.70	$1,333.50	$1,604.40
	85" - 96"		$1,215.90	$1,518.30	$1,822.80
	97" - 108"		$1,371.30	$1,711.50	$2,076.90
Bright 5 Fibers Per Inch 0.20" Spacing	up to 12"		$249.90	$308.70	$367.50
	13" - 24"		$411.60	$516.60	$619.50
	25" - 36"		$579.60	$728.70	$877.80
	37" - 48"		$747.60	$942.90	$1,138.20
	49" - 60"		$953.40	$1,165.50	$1,407.00
	61" - 72"		$1,102.50	$1,388.10	$1,675.80
	73" - 84"		$1,348.20	$1,629.60	$1,986.60
	85" to 96"		$1,587.60	$1,873.20	$2,295.30
Super Bright 6 Fibers Per Inch 0.166" Spacing	up to 12"		$279.30	$346.50	$413.70
	13" - 24"		$470.40	$594.30	$716.10
	25" - 36"		$672.00	$846.30	$1,022.70
	37" - 48"		$871.50	$1,100.40	$1,333.50
	49" - 60"		$1,079.40	$1,365.00	$1,650.60
	61" - 72"		$1,291.50	$1,631.70	$1,971.90
	73" - 80"		$1,453.20	$1,860.60	$2,217.60
Xtra Bright 8 Fibers Per Inch 0.125" Spacing	up to 12"		$338.10	$424.20	$508.20
	13" - 24"		$590.10	$749.70	$909.30
	25" - 36"		$848.40	$1,081.50	$1,312.50
	37" - 48"		$1,117.20	$1,421.70	$1,724.10
	49" - 60"		$1,400.70	$1,766.10	$2,142.00
Ultra Bright 10 Fibers Per Inch 0.100" Spacing	up to 12"		$396.90	$501.90	$606.90
	13" - 24"		$709.80	$905.10	$1,100.40
	25" - 36"		$1,031.10	$1,318.80	$1,606.50
	37" - 48"		$1,362.90	$1,738.80	$2,121.00

Please consult factory for any custom length

Stranded Fiber

FiberSpots Ⓢ

Non-Cabled, Stranded Fiber, end emitting

End emitting stranded fiber optic cable. Can be used with all stranded fiber fixtures for downlighting, case lighting, step lighting and for creating decorative patterns of light. Recommended in lengths up to 30'. Allow 3' to 5' service loop per end. Can be cut, harnessed and ferruled at factory or in field. Use LB-HK-3 or FS-163 tools for harnessing. Use LB-HK-3, FS-163, or FS-118 tools for ferruling. Minimum bend radius is 4x outer diameter. Factor harnessing available upon request. Consult factory. Priced Per Foot.

Cat. Page	Product Name	Qty. Strand	Outer Diameter		Min Bend Radius		Max Spool	Outer Jacket	Note	DN Price
			inches	mm	inches	mm	ft			
67	FSPT-1	1	0.17	4	0.68	17	1000	Black PVC		$0.27
67	FSPT-2	2	0.17	4	0.68	17	1000	Black PVC		$0.42
67	FSPT-3	3	0.18	5	0.72	18	1000	Black PVC		$0.52
67	FSPT-5	5	0.18	5	0.72	18	1000	Black PVC		$0.66
67	FSPT-8	8	0.18	5	0.72	18	1000	Black PVC		$0.84
67	FSPT-10	10	0.25	6	1.00	25	1000	Black PVC		$0.98
67	FSPT-12	12	0.25	6	1.00	25	1000	Black PVC		$1.12
67	FSPT-18	18	0.25	6	1.00	25	1000	Black PVC		$1.55
67	FSPT-25	25	0.27	7	1.08	27	1000	Black PVC		$2.11
67	FSPT-30	30	0.27	7	1.08	27	1000	Black PVC		$2.46
67	FSPT-50	50	0.41	10	1.64	42	1000	Black PVC		$4.13
67	FSPT-62	62	0.44	11	1.76	45	1000	Black PVC		$4.88
67	FSPT-75	75	0.44	11	1.76	45	1000	Black PVC		$5.90
67	FSPT-100	100	0.52	13	2.06	52	600	Black PVC		$8.02
67	FSPT-150	150	0.61	15	2.44	62	500	Black PVC		$11.90
67	FSPT-200	200	0.70	18	2.80	71	250	Black PVC		$14.45
67	B225	225	0.78	20	3.10	79	250	Black PVC		$17.53
67	B300	300	0.83	21	3.30	84	250	Black PVC		$22.98

Stranded Fiber

Star Cable Ⓢ

Non-Cabled, Stranded Fiber, end emitting

End emitting fiber optic cable in different diameters to create star ceilings or other points of light that require varying degrees of brightness. Recommended for star ceilings in lengths up to 30'. Allow 3' to 5' extra fiber per end. Can be cut and harnessed at factory or in field. Use LB-HK-3 or FS-163 tools for harnessing. Minimum bend radius is 4x outer diameter. Priced Per Foot.

Cat. Page	Product Name	Qty. Strand	Outer Diameter		Min Bend Radius		Max Spool	Outer Jacket	Note	DN Price
			inches	mm	inches	mm	ft			
70	FS-30-J-2.2	1	0.09	2	0.37	9	1000	Black PVC	Contains (1) .75mm dia. Strand	$0.38
70	FS-40-J-2.2	1	0.09	2	0.37	9	1000	Black PVC	Contains (1) 1.0mm dia. Strand	$0.49
70	FS-60-J-2.2	1	0.09	2	0.37	9	1000	Black PVC	Contains (1) 1.5mm dia. Strand	$1.06
70	FS-80-J-3.0	1	0.12	3	0.49	12	1000	Black PVC	Contains (1) 2.0mm dia. Strand	$2.16
70	STAR-34/50	34	0.44	11	1.76	45	1000	Black PVC	Contains 34 strands, 24@0.75, 7@1.0, 3@1.5	$7.00

BritePak Ⓢ

Cabled, stranded fiber, side emitting

Side emitting stranded optical fiber. Patented cabling method allows maximum light distribution through the clear outer jacket. Recommended in lengths up to 100' for direct view applications, 50' for indirect applications. Both ends should be terminated. Allow 3' to 5' service loop. Can be cut to length at factory or in field. Use LB-HK-3 or FS-163 tools for harnessing. Minimum bend radius is 4x outer diameter. Priced Per Foot.

Cat. Page	Product Name	Qty. Strand	Outer Diameter		Min Bend Radius		Max Spool	Outer Jacket	Note	DN Price
			inches	mm	inches	mm	ft			
74	BPAK-15	14	0.21	5	0.83	21	1000	Clear PVC		$3.80
74	BPAK-42	42	0.34	9	1.29	33	1000	Clear PVC		$6.96
74	BPAK-50	49	0.34	9	1.30	33	1000	Clear PVC		$7.67
74	BPAK-75	77	0.43	11	1.58	40	800	Clear PVC		$10.60
74	BPAK-100	98	0.51	13	1.86	47	600	Clear PVC		$12.54
74	BPAK-150	140	0.61	15	2.24	57	500	Clear PVC		$17.30

405N Illuminator

Ordering Guide
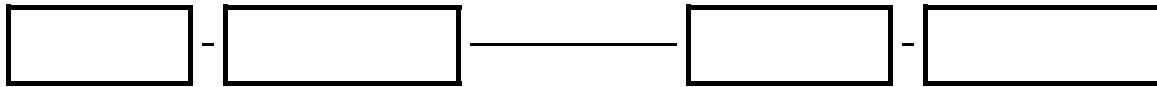
Model Options	Color Options	Voltage Options	Accessory Option
405N/30	NC No Color	D 120V,60Hz	003 Standard 300 Fiber Capacity
405N/40	C1 Single Color	I 240V,60Hz	004 Special 400 Fiber Capacity
405N/30MR	C41 Four-Color Wheel, 1 RPM	277 277V,60Hz	005 Special 450 Fiber Capacity
405N/40MR	(Specify Colors and Sequence)	220I 220V,50Hz	(Star Ceilings, White Light Only)
405N/30MC*	C43 Four Color Wheel, 3.6 RPM	230I 230V,50Hz	006 Special 600 Fiber Capacity
405N/42MC*	(Specify Colors and Sequence)	240I 240V,50Hz	(Star Ceilings, White Light Only)
	C81 Eight-Color Wheel, 1 RPM		SM Sync Master
*Uses Phillips	(Specify Colors and Sequence)		(Use One Per Network; C4 or C8 only)
MasterColor Lamp	C83 Eight-Color Wheel, 3.6 RPM		SY Sync Slave
	(Specify Colors and Sequence)		(C4 or C8 only)
UL Listed for	SPW Sparkle Wheel (Add to C4 or C8 only)		CV Variable Delay Controller
Damp Locations	(400 strands max, not for DMX)		(One per Network; Use with 3.6 RPM
	SPW/NC Sparkle Wheel		Motors Only)
	(w/motor, specify 1 or 3.6 RPM,		DX DMX Interface, Hardwired
	400 strands max, not for DMX)		(2 Motor Control; C8 Only, 300 fiber max.)
	DWM/NC Dimming Wheel, Mechanical		DXLR DMX Interface, XLR Connectors
	(w/motor, specity 1 or 3.6 RPM,		(2 Motor Control; C8 Only, 300 fiber max.)
	not used w/color wheel)		HP Hammertone Painted

	Base Unit 405N/30-NC-D-003	150-Watt HID Lamp, 3000 KELVIN, No Color, 120V	$1,079.40
		(Includes lamp and zinc optical port kit, magnetic ballast)	

Additions to Base Price

Code	Description		Price
30	3000K Lamp, Dichroic Reflector No Charge		No Charge
40	4000K Lamp, Dichroic Reflector No Charge		No Charge
30MR	3000K Lamp, Metal Reflector		-$35.00
40MR	4000K Lamp, Metal Reflector		-$35.00
30MC	3000K Lamp, Dichroic Reflector, Philips MasterColor® lamp		$60.90
42MC	4200K Lamp, Dichroic Reflector, Philips MasterColor® lamp		$60.90
C1	Single Color	* Standard 4 color wheel: Green, Magenta, Cyan, no color	$52.50
C41	Four-Color Wheel, 1 RPM (Specify Colors and Sequence)		$98.70
C43	Four-Color Wheel, 3.6 RPM (Specify Colors and Sequence)		$98.70
C81	Eight-Color Wheel, 1 RPM (Specify Colors and Sequence)	* Standard 8 color wheel: Magenta, Teal, Orange, Yellow, Cyan, Dark Blue, Green, no color	$144.90
C83	Eight-Color Wheel, 3.6 RPM (Specify Colors and Sequence)		$144.90
SPW	Sparkle Wheel (Add to C4 or C8 only, 400 strands max, Not for DMX)		$48.30
SPW/NC	Sparkle Wheel (w/motor, specify 1 or 3.6 RPM, 400 strands max, Not for DMX)		$58.80
DWM/NC	Dimming Wheel, Mechanical (w/motor, specify 1 or 3.6 RPM, not used w/color wheel)		$69.30
240, 277	277 Other Domestic Voltages		$25.20
220I,230I,240I	230I 240I International Voltages		$25.20
003	Standard 300 Fiber Capacity		
004	Special 400 Fiber Capacity		$12.60
005	Special 450 Fiber Capacity (Star Ceilings, White Light Only)		$12.60
006	Special 600 Fiber Capacity (Star Ceilings, White Light Only)		$12.60
SM	Sync Master (Use One Per Network; C4 or C8 only)		$441.00
SY	Sync Slave (C4 or C8 only)		$420.00
CV	Variable Delay Controller (One Per Network; Use with 3.6 RPM Motors Only)		$525.00
DX	DMX Interface, Hardwired (2 Motor Control; C8 Only, 300 fibers max.)		$1,260.00
DXLR	DMX Interface, XLR Connectors (2 Motor Control; C8 Only, 300 fibers max.)		$1,365.00

Replacement Lamp(s) - see Replacement Lamps on page 30

* If custom colors are not specified at the time of ordering, Illuminators will be delivered with standard color wheels

404N Illuminator

Ordering Guide

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Model Options

404N/30
404N/40
404N/30MR
404N/40MR
404N/30MC*
404N/42MC*

*Uses Phillips
MasterColor Lamp

UL Listed for
Wet Locations

Color Options

NC	No Color
C1	Single Color
C41	Four-Color Wheel, 1 RPM
	(Specify Colors and Sequence)
C43	Four Color Wheel, 3.6 RPM
	(Specify Colors and Sequence)
C81	Eight-Color Wheel, 1 RPM
	(Specify Colors and Sequence)
C83	Eight-Color Wheel, 3.6 RPM
	(Specify Colors and Sequence)
SPW	Sparkle Wheel (Add to C4 or C8 only)
	400 strands max, Not for DMX)
SPW/NC	Sparkle Wheel
	(w/motor, specify 1 or 3.6 RPM,
	400 strands max, Not for DMX)
DWM/NC	Dimming Wheel, Mechanical
	(w/motor, specify 1 or 3.6 RPM,
	not used w/color wheel)

Voltage Options

D	120V,60Hz
I	240V,60Hz
277	277V,60Hz
220I	220V,50Hz
230I	230V,50Hz
240I	240V,50Hz

Accessory Option

003	Standard 300 Fiber Capacity
004	Special 400 Fiber Capacity
005	Special 450 Fiber Capacity
	(Star Ceilings, White Light Only)
006	Special 600 Fiber Capacity
	(Star Ceilings, White Light Only)
SM	Sync Master
	(Use One Per Network; C4 or C8 only)
SY	Sync Slave
	(C4 or C8 only)
CV	Variable Delay Controller
	(One per Network; Use with 3.6 RPM
	Motors Only)
DX	DMX Interface, Hardwired
	(2 Motor Control; C8 Only, 300 strands max.)
DXLR	DMX Interface, XLR Connectors
	(2 Motor Control; C8 Only, 300 strands max.)
WB	Wall Mounting Brackets

Base Unit 404N/30-NC-D-003	150-Watt HID Lamp, 3000 KELVIN, No Color, 120V	$1,400.70
	(Includes lamp and zinc optical port kit, magnetic ballast)	

Additions to Base Price

30	3000K Lamp, Dichroic Reflector No Charge	No Charge
40	4000K Lamp, Dichroic Reflector No Charge	No Charge
30MR	3000K Lamp, Metal Reflector	-$35.00
40MR	4000K Lamp, Metal Reflector	-$35.00
30MC	3000K Lamp, Dichroic Reflector, Philips MasterColor® lamp	$60.90
42MC	4200K Lamp, Dichroic Reflector, Philips MasterColor® lamp	$60.90
C1	Single Color	$52.50
C41	Four-Color Wheel, 1 RPM (Specify Colors and Sequence)	$98.70
C43	Four-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	$98.70
C81	Eight-Color Wheel, 1 RPM (Specify Colors and Sequence)	$144.90
C83	Eight-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	$144.90
SPW	Sparkle Wheel (Add to C4 or C8 only, 400 strands max)	$48.30
SPW/NC	Sparkle Wheel (w/motor, specify 1 or 3.6 RPM, 400 strands max)	$58.80
DWM/NC	Dimming Wheel, Mechanical (w/motor, specify 1 or 3.6 RPM, not used w/color wheel)	$69.30
240, 277	277 Other Domestic Voltages	$25.20
220I,230I,240I	230I 240I International Voltages	$25.20
003	Standard 300 Fiber Capacity	$0.00
004	Special 400 Fiber Capacity	$12.60
005	Special 450 Fiber Capacity (Star Ceilings, White Light Only)	$12.60
006	Special 600 Fiber Capacity (Star Ceilings, White Light Only)	$12.60
SM	Sync Master (Use One Per Network; C4 or C8 only)	$495.60
SY	Sync Slave (C4 or C8 only)	$472.00
CV	Variable Delay Controller (One Per Network; Use with 3.6 RPM Motors Only)	$525.00
DX	DMX Interface, Hardwired (2 Motor Control; C8 Only, 300 fibers max.)	$1,260.00
DXLR	DMX Interface, XLR Connectors (2 Motor Control; C8 Only, 300 fibers max.)	$1,365.00
WB	Wall Mounting Brackets	$73.50

> * Standard 4 color wheel:
> Green, Magenta, Cyan, no color

> * Standard 8 color wheel:
> Magenta, Teal, Orange, Yellow,
> Cyan, Dark Blue, Green, no color

Replacement Lamp(s) - see Replacement Lamps on page 30

* If custom colors are not specified at the time of ordering, Illuminators will be delivered with standard color wheels

601 Illuminator

Ordering Guide

601	–			–	
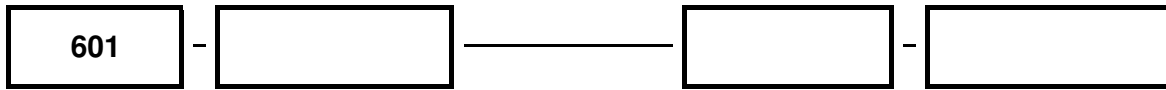
Model Options	**Color Options**	**Voltage Options**	**Accessory Option**
601	NC No Color	D 120V,60Hz	003 Standard 300 Fiber Capacity
	C1 Single Color	I 240V,60Hz	004 Special 400 Fiber Capacity
UL Listed for	C41 Four-Color Wheel, 1 RPM	220I 220V,50Hz	005 Special 450 Fiber Capacity
Damp Locations	(Specify Colors and Sequence)		(Star Ceilings, White Light Only)

Model Options

601

UL Listed for
Damp Locations

Color Options

NC   No Color
C1   Single Color
C41   Four-Color Wheel, 1 RPM
    (Specify Colors and Sequence)
C43   Four Color Wheel, 3.6 RPM
    (Specify Colors and Sequence)
C81   Eight-Color Wheel, 1 RPM
    (Specify Colors and Sequence)
C83   Eight-Color Wheel, 3.6 RPM
    (Specify Colors and Sequence)
SPW   Sparkle Wheel
    (Add to C4 or C8 only,
    400 strands max, not for DMX)
SPW/NC   Sparkle Wheel
    (w/motor, specify 1 or 3.6 RPM,
    400 strands max, not for DMX)
DWM/NC   Dimming Wheel, Mechanical
    (w/motor, specity 1 or 3.6 RPM,
    not used w/color wheel)

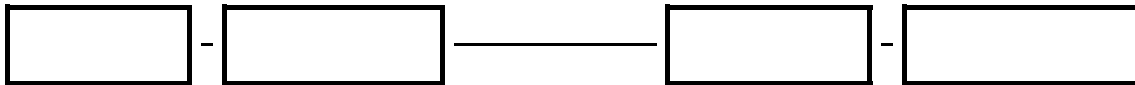**Voltage Options**

D   120V,60Hz
I   240V,60Hz
220I   220V,50Hz

Accessory Option

003   Standard 300 Fiber Capacity
004   Special 400 Fiber Capacity
005   Special 450 Fiber Capacity
    (Star Ceilings, White Light Only)
006   Special 600 Fiber Capacity
    (Star Ceilings, White Light Only)
SM   Sync Master
    (Use One Per Network; C4 or C8 only)
SY   Sync Slave
    (C4 or C8 only)
CV   Variable Delay Controller
    (One per Network; Use with 3.6 RPM
    Motors Only)
DX   DMX Interface, Hardwired
    (2 Motor Control; C8 Only)
    (300 fiber max)
DXLR   DMX Interface, XLR Connectors
    (2 Motor Control; C8 Only)
    (300 fiber max)
HP   Hammertone Painted

Base Unit 601-NC-D-003	250-Watt HID Lamp, No Color, 120Volt	$3,230.70
	(Includes lamp and zinc optical port kit, electronic ballast)	

Additions to Base Price

|		
C1	Single Color	$33.88
C41	Four-Color Wheel, 1 RPM (Specify Colors and Sequence)	$89.54
C43	Four-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	$67.76
C81	Eight-Color Wheel, 1 RPM (Specify Colors and Sequence)	$166.98
C83	Eight-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	$145.20
SPW	Sparkle Wheel (Add to C4 or C8 only, 400 strands max, Not for DMX)	$55.66
SPW/NC	Sparkle Wheel (w/motor, specify 1 or 3.6 RPM, 400 strands max, Not for DMX)	$67.76
DWM/NC	Dimming Wheel, Mechanical (w/motor, specify 1 or 3.6 RPM, not used w/color wheel)	$79.86
240	Other Domestic Voltages	$29.04
220I	International Voltages	$29.04
004	Special 400 Fiber Capacity	$14.52
005	Special 450 Fiber Capacity (Star Ceilings, White Light Only)	$14.52
006	Special 600 Fiber Capacity (Star Ceilings, White Light Only)	$14.52
SM	Sync Master (Use One Per Network; C4 or C8 only)	$508.20
SY	Sync Slave (C4 or C8 only)	$484.00
CV	Variable Delay Controller (One Per Network; Use with 3.6 RPM Motors Only)	$605.00
DX	DMX Interface, Hardwired (2 Stepper Motor Control; C8 Only, 300 fibers max.)	$1,452.00
DXLR	DMX Interface, XLR Connectors (2 Stepper Motor Control; C8 Only, 300 fibers max.)	$1,573.00
	Replacement Lamp(s) - see Replacement Lamps on page 30	

> * Standard 4 color wheel:
> Green, Magenta, Cyan, no color

> * Standard 8 color wheel:
> Magenta, Teal, Orange, Yellow,
> Cyan, Dark Blue, Green, no color

* If custom colors are not specified at the time of ordering, Illuminators will be delivered with standard color wheels

602 Illuminator

Ordering Guide

602	–		———		–	
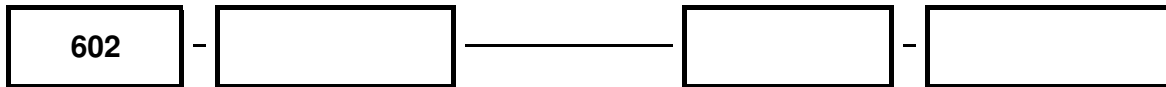
Model Options	**Color Options**		**Voltage Options**		**Accessory Option**	
602	NC	No Color	D	120V,60Hz	003	Standard 300 Fiber Capacity
	C1	Single Color	I	240V,60Hz	004	Special 400 Fiber Capacity
	C41	Four-Color Wheel, 1 RPM	220I	220V,50Hz	005	Special 450 Fiber Capacity
UL Listed for		(Specify Colors and Sequence)				(Star Ceilings, White Light Only)
Wet Locations	C43	Four Color Wheel, 3.6 RPM			006	Special 600 Fiber Capacity
		(Specify Colors and Sequence)				(Star Ceilings, White Light Only)
	C81	Eight-Color Wheel, 1 RPM			SM	Sync Master
		(Specify Colors and Sequence)				(Use One Per Network; C4 or C8 only)
	C83	Eight-Color Wheel, 3.6 RPM			SY	Sync Slave
		(Specify Colors and Sequence)				(C4 or C8 only)
	SPW	Sparkle Wheel			CV	Variable Delay Controller
		(Add to C4 or C8 only,				(One per Network; Use with 3.6 RPM
		400 strands max, Not for DMX)				Motors Only)
	SPW/NC	Sparkle Wheel			DX	DMX Interface, Hardwired
		(w/motor, specify 1 or 3.6 RPM,				(2 Motor Control; C8 Only)
		400 strands max, Not for DMX)				(300 fibers max.)
	DWM/NC	Dimming Wheel, Mechanical			DXLR	DMX Interface, XLR Connectors
		(w/motor, specity 1 or 3.6 RPM,				(2 Motor Control; C8 Only)
		not used w/color wheel)				(300 fibers max.)

Base Unit 602-NC-D-003	250-Watt HID Lamp, No Color, 120Volt	$3,045.00
	(Includes lamp and zinc optical port kit, electronic ballast)	

Additions to Base Price

C1	Single Color	* Standard 4 color wheel: Green, Magenta, Cyan, no color	$33.88
C41	Four-Color Wheel, 1 RPM (Specify Colors and Sequence)		$89.54
C43	Four-Color Wheel, 3.6 RPM (Specify Colors and Sequence)		$67.76
C81	Eight-Color Wheel, 1 RPM (Specify Colors and Sequence)	* Standard 8 color wheel: Magenta, Teal, Orange, Yellow, Cyan, Dark Blue, Green, no color	$166.98
C83	Eight-Color Wheel, 3.6 RPM (Specify Colors and Sequence)		$145.20
SPW	Sparkle Wheel (Add to C4 or C8 only, 400 strands max, not for DMX)		$55.66
SPW/NC	Sparkle Wheel (w/motor, specify 1 or 3.6 RPM, 400 strands max. not for DMX)		$67.76
DWM/NC	Dimming Wheel, Mechanical (w/motor, specify 1 or 3.6 RPM, not used w/color wheel)		$79.86
240	Other Domestic Voltages		$29.04
220I	International Voltages		$29.04
004	Special 400 Fiber Capacity		$14.52
005	Special 450 Fiber Capacity (Star Ceilings, White Light Only)		$14.52
006	Special 600 Fiber Capacity (Star Ceilings, White Light Only)		$14.52
SM	Sync Master (Use One Per Network; C4 or C8 only)		$508.20
SY	Sync Slave (C4 or C8 only)		$484.00
CV	Variable Delay Controller (One Per Network; Use with 3.6 RPM Motors Only)		$605.00
DX	DMX Interface, Hardwired (2 Stepper Motor Control; C8 Only, 300 fibers max.)		$1,452.00
DXLR	DMX Interface, XLR Connectors (2 Stepper Motor Control; C8 Only, 300 fibers max.)		$1,573.00

Replacement Lamp(s) - see Replacement Lamps on page 30

* If custom colors are not specified at the time of ordering, Illuminators will be delivered with standard color wheels
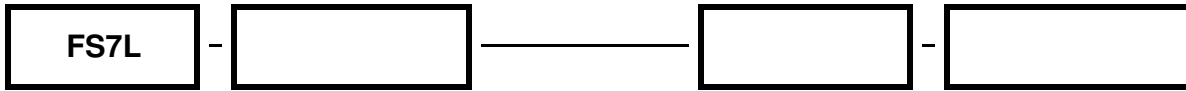
FS7L Illuminator

Ordering Guide

FS7L	–			–	

Model Options	**Color Options**		**Voltage Options**	**Accessory Option**	

Model Options

FS7L

UL Listed for
Damp Locations

Color Options

NC	No Color
C1	Single Color
C41	Four-Color Wheel, 1 RPM (Specify Colors and Sequence)
C43	Four Color Wheel, 3.6 RPM (Specify Colors and Sequence)
C81	Eight-Color Wheel, 1 RPM (Specify Colors and Sequence)
C83	Eight-Color Wheel, 3.6 RPM (Specify Colors and Sequence)
SPW	Sparkle Wheel (Add to C4 or C8 only) 400 strands max)
SPW/NC	Sparkle Wheel (w/motor, specify 1 or 3.6 RPM, 400 strands max)
DWM/NC	Dimming Wheel, Mechanical (w/motor, specify 1 or 3.6 RPM, not used w/color wheel)

Voltage Options

D	120V,60Hz
220I	220V,50Hz
230I	230V,50Hz
I	240V,50Hz

Accessory Option

003	Standard 300 Fiber Capacity
004	Special 400 Fiber Capacity
005	Special 450 Fiber Capacity (Star Ceilings, White Light Only)
006	Special 600 Fiber Capacity (Star Ceilings, White Light Only)
SM	Sync Master (Use One Per Network; C4 or C8 only)
SY	Sync Slave (C4 or C8 only)
CV	Variable Delay Controller (One per Network; Use with 3.6 RPM Motors Only)
DR	Dimmable Ready (Consumer-grade Residential Electronic Dimmer)
DRC	Dimmable Ready (Commercial-grade Architectural Electronic Dimmer)

Base Unit FS7L-NC-D-003	183-Watt MR16 Lamp, No Color, 120 Volt (Includes lamp and zinc optical port kit, electronic ballast)	$529.00

Additions to Base Price

C1	Single Color **	$29.40
C41	Four-Color Wheel, 1 RPM (Specify Colors and Sequence)	$77.70
C43	Four-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	$58.80
C81	Eight-Color Wheel, 1 RPM (Specify Colors and Sequence)	$144.90
C83	Eight-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	$126.00
SPW	Sparkle Wheel (Add to C4 or C8 only, 400 strands max)	$48.30
SPW/NC	Sparkle Wheel (w/motor, specify 1 or 3.6 RPM, 400 strands max)	$58.80
DWM/NC	Dimming Wheel, Mechanical (w/motor, specify 1 or 3.6 RPM, not used w/color wheel)	$69.30
220I,230I,240I	International Voltages	$25.20
004	Special 400 Fiber Capacity	$12.60
005	Special 450 Fiber Capacity (Star Ceilings, White Light Only)	$12.60
006	Special 600 Fiber Capacity (Star Ceilings, White Light Only)	$12.60
SM	Sync Master (Use One Per Network; C4 or C8 only)	$289.80
SY	Sync Slave (C4 or C8 only)	$252.00
CV	Variable Delay Controller (One Per Network; Use with 3.6 RPM Motors Only)	$525.00
PS	Plug and Switches (Not available with DR or DRC Option)	$60.90
DR	Dimmable Ready (for Consumer-grade Residential Electronic Dimmer)	$42.00
DRC	Dimmable Ready (for Commercial-grade Architectural Electronic Dimmer)	$42.00

> * Standard 4 color wheel:
> Green, Magenta, Cyan, no color

> * Standard 8 color wheel:
> Magenta, Teal, Orange, Yellow, Cyan, Dark Blue, Green, no color

Replacement Lamp(s) - see Replacement Lamps on page 30

* If custom colors are not specified at the time of ordering, Illuminators will be delivered with standard color wheels

** Specify colors at time of ordering

FS13L Illuminator ⓢ 2 ports with 2 x 100W QH lamps

Ordering Guide

FS13L	–				–	

Model Options

FS13L

UL Listed for
Damp Locations
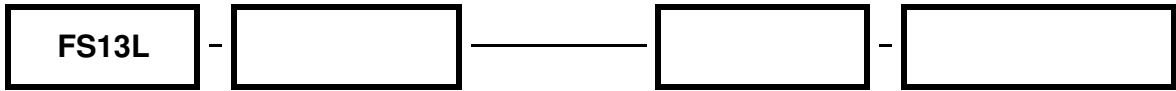
Color Options

NC   No Color
C1   Single Color

Voltage Options

D   120V,60Hz
220I 220V,50Hz
230I 230V,50Hz
I   240V,50Hz

Accessory Option

003   Standard 300 Fiber Capacity
004   Special 400 Fiber Capacity
005   Special 450 Fiber Capacity
       (Star Ceilings, White Light Only)
006   Special 600 Fiber Capacity
       (Star Ceilings, White Light Only)
PS   Plug and Switches
       (Not available with DR option)
DR   Dimmable Ready (Consumer-grade
       Residential Electronic Dimmer)
FS-TVK2 Ventilation Kit

Base Unit FS13L-NC-D-003	100-Watt MR16 Lamps, No Color, 120 Volt		$662.50
	(Includes lamp and zinc optical port kit, electronic ballast)		

Additions to Base Price

C1	Single Color **	$58.80
220I,230I,240I	International Voltages	$25.20
004	Special 400 Fiber Capacity	$12.60
005	Special 450 Fiber Capacity (Star Ceilings, White Light Only)	$12.60
006	Special 600 Fiber Capacity (Star Ceilings, White Light Only)	$12.60
PS	Plug and Switches (Not available with DR Option)	$60.90
DR	Dimmable Ready (Consumer-grade Residential Electronic Dimmer)	$42.00
FS-TVK2	Ventilation Kit	$218.40
	Replacement Lamp(s) - see Replacement Lamps on page 30	

*** Specify colors at time of ordering*

FS12L Illuminator

Ordering Guide

FS12L	–						
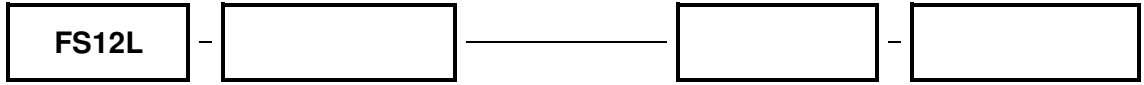
Model Options	**Color Options**	**Voltage Options**	**Accessory Option**
FS7L	NC No Color	D 120V,60Hz	003 Standard 300 Fiber Capacity
	C1 Single Color	220I 220V,50Hz	004 Special 400 Fiber Capacity
	C41 Four-Color Wheel, 1 RPM	230I 230V,50Hz	005 Special 450 Fiber Capacity
	(Specify Colors and Sequence)	I 240V,50Hz	(Star Ceilings, White Light Only)
	C43 Four Color Wheel, 3.6 RPM		006 Special 600 Fiber Capacity
	(Specify Colors and Sequence)		(Star Ceilings, White Light Only)
	C81 Eight-Color Wheel, 1 RPM		PS Plug and Switches
	(Specify Colors and Sequence)		(Not available with DR or DRC Option)
	C83 Eight-Color Wheel, 3.6 RPM		DR Dimmable Ready (Consumer-grade
	(Specify Colors and Sequence)		Residential Electronic Dimmer)
	SPW Sparkle Wheel (Add to C4 or C8 only		DRC Dimmable Ready
UL Listed for	400 strands max)		(Commercial-grade Architectural
Damp Locations	SPW/NC Sparkle Wheel		Electronic Dimmer)
	(w/motor, specify 1 or 3.6 RPM,		FS-TVK2 Ventilation Kit
	400 strands max)		
	DWM/NC Dimming Wheel, Mechanical		
	(w/motor, specity 1 or 3.6 RPM,		
	not used w/color wheel)		

Base Unit FS12L-NC-D-003	100-Watt MR16 Lamp, No Color, 120 Volt		$475.20
	(Includes lamp and zinc optical port kit, electronic ballast)		

Additions to Base Price

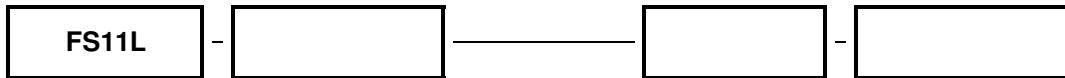|			
C1	Single Color **		$29.40
C41	Four-Color Wheel, 1 RPM (Specify Colors and Sequence)	* Standard 4 color wheel: Green, Magenta, Cyan, no color	$77.70
C43	Four-Color Wheel, 3.6 RPM (Specify Colors and Sequence)		$58.80
C81	Eight-Color Wheel, 1 RPM (Specify Colors and Sequence)		$144.90
C83	Eight-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	* Standard 8 color wheel: Magenta, Teal, Orange, Yellow, Cyan, Dark Blue, Green, no color	$126.00
SPW	Sparkle Wheel (Add to C4 or C8 only, 400 strands max)		$48.30
SPW/NC	Sparkle Wheel (w/motor, specify 1 or 3.6 RPM, 400 strands max)		$58.80
DWM/NC	Dimming Wheel, Mechanical (w/motor, specify 1 or 3.6 RPM, not used w/color wheel)		$69.30
220I,230I,240I	International Voltages		$25.20
004	Special 400 Fiber Capacity		$12.60
005	Special 450 Fiber Capacity (Star Ceilings, White Light Only)		$12.60
006	Special 600 Fiber Capacity (Star Ceilings, White Light Only)		$12.60
PS	Plug and Switches (Not available with DR or DRC Option)		$60.90
DR	Dimmable Ready (for Consumer-grade Residential Electronic Dimmer)		$42.00
DRC	Dimmable Ready (for Commercial-grade Architectural Electronic Dimmer)		$42.00
FS-TVK2	Ventalation Kit		$218.40
	Replacement Lamp(s) - see Replacement Lamps on page 30		

* If custom colors are not specified at the time of ordering, Illuminators will be delivered with standard color wheels

** Specify colors at time of ordering

FS11L Illuminator ⓢ

Ordering Guide

| FS11L | – | | | | – | | | – | |

Model Options

FS11L

UL Listed for
Damp Locations

Color Options

NC	No Color
C1	Single Color
C41	Four-Color Wheel, 1 RPM (Specify Colors and Sequence)
C43	Four Color Wheel, 3.6 RPM (Specify Colors and Sequence)
C81	Eight-Color Wheel, 1 RPM (Specify Colors and Sequence)
C83	Eight-Color Wheel, 3.6 RPM (Specify Colors and Sequence)
SPW	Sparkle Wheel (Add to C4 or C8 only) 400 strands max)
SPW/NC	Sparkle Wheel (w/motor, specify 1 or 3.6 RPM, 400 strands max)
DWM/NC	Dimming Wheel, Mechanical (w/motor, specify 1 or 3.6 RPM, not used w/color wheel)

Voltage Options

D	120V,60Hz
220I	220V,50Hz
230I	230V,50Hz
I	240V,50Hz

Accessory Option

003	Standard 300 Fiber Capacity
004	Special 400 Fiber Capacity
005	Special 450 Fiber Capacity (Star Ceilings, White Light Only)
006	Special 600 Fiber Capacity (Star Ceilings, White Light Only)
PS	Plug and Switches (Not avilable with DR or DRC Option)
DR	Dimmable Ready (Consumer-grade Residential Electronic Dimmer)
DRC	Dimmable Ready (Commercial-grade Architectural Electronic Dimmer)
FS-TVK2	Ventilation Kit

Base Unit FS11L-NC-D-003	71-Watt MR16 Lamp, No Color, 120 Volt (Includes lamp and zinc optical port kit, electronic ballast)	$427.50

Additions to Base Price

C1	Single Color **		$29.40
C41	Four-Color Wheel, 1 RPM (Specify Colors and Sequence)		$77.70
C43	Four-Color Wheel, 3.6 RPM (Specify Colors and Sequence)		$58.80
C81	Eight-Color Wheel, 1 RPM (Specify Colors and Sequence)		$144.90
C83	Eight-Color Wheel, 3.6 RPM (Specify Colors and Sequence)		$126.00
SPW	Sparkle Wheel (Add to C4 or C8 only, 400 strands max)		$48.30
SPW/NC	Sparkle Wheel (w/motor, specify 1 or 3.6 RPM, 400 strands max)		$58.80
DWM/NC	Dimming Wheel, Mechanical (w/motor, specify 1 or 3.6 RPM, not used w/color wheel)		$69.30
220I,230I,240I	International Voltages		$25.20
004	Special 400 Fiber Capacity		$12.60
005	Special 450 Fiber Capacity (Star Ceilings, White Light Only)		$12.60
006	Special 600 Fiber Capacity (Star Ceilings, White Light Only)		$12.60
PS	Plug and Switches (Not available with DR or DRC Option)		$60.90
DR	Dimmable Ready (for Consumer-grade Residential Electronic Dimmer)		$42.00
DRC	Dimmable Ready (for Commercial-grade Architectural Electronic Dimmer)		$42.00
FS-TVK2	Ventalation Kit		$218.40
	Replacement Lamp(s) - see Replacement Lamps on page 30		

* Standard 4 color wheel:
Green, Magenta, Cyan, no color

* Standard 8 color wheel:
Magenta, Teal, Orange, Yellow, Cyan, Dark Blue, Green, no color

* If custom colors are not specified at the time of ordering, Illuminators will be delivered with standard color wheels

** Specify colors at time of ordering

Replacement Lamps

Catalog Page		Part Number	Lamp Type	Base Type	Wattage	CRI	CCT	Illuminator Use	Rated Life	DN Price
99	(S)	HI-075	Quartz Halogen	MR-16, GU 5.3	71 Watt	95	3050K	FS11L	4,000 hrs	$21.25
99	(S)	HI-100	Quartz Halogen	MR-16, GZ 6.35	100 Watt	95	3050K	FS12L, FS13L	1,500 hrs	$34.86
99	(S)	HI-110	Quartz Halogen	MR-16, GU 5.3	183 Watt	95	3200K	FS7L	700 hrs	$35.83
99	(S)	HID-430	Quartz Metal Halide	T-6, G-12	150 Watt	80	3000K	404N, 405N	6,000 hrs	$361.83
99	(S)	HID-440	Quartz Metal Halide	T-6, G-12	150 Watt	80	4000K	405N, 405N	6,000 hrs	$355.76
99	(S)	HID-430MC	Ceramic Metal Halide	T-6, G-12	150 Watt	85	3000K	404N, 405N	10,000 hrs	$431.02
99	(S)	HID-440MC	Ceramic Metal Halide	T-6, G-12	150 Watt	95	4000K	404N, 405N	6,000 hrs	$454.08
99	(S)	HID-MR30	Quartz Metal Halide	T-6, G-12 w/ Metal Reflector	150 Watt	80	3000K	404N, 405N	6,000 hrs	$165.90
99	(S)	HID-MR40	Quartz Metal Halide	T-6, G-12 w/ Metal Reflector	150 Watt	80	4000K	404N, 405N	6,000 hrs	$158.28
99	(S)	HID-601	Quartz Metal Halide	M4 Screw	250 Watt	70	6400K	601, 602	2,000 hrs	$759.46
99	(L)	EFO-700-NC-D	Quartz Metal Halide	Arc Tube	70 Watt	75	3500K	EFO11, EFO44	15,000 hrs	$118.71
99	(L)	EFO-700-SC-D	Quartz Metal Halide	Arc Tube	70 Watt	75	Single color	EFO11, EFO44	15,000 hrs	$129.99
99	(L)	EFO-800-NC-D	Quartz Metal Halide	Arc Tube	70 Watt	87	4500K	EFO11, EFO44	15,000 hrs	$122.55
99	(L)	EFO-700-NC-AAG	Quartz Metal Halide	Arc Tube	70 Watt	75	3500K	EFO-AG, AC Ballast	15,000 hrs	$115.73
99	(L)	EFO-700-SC-AAG	Quartz Metal Halide	Arc Tube	70 Watt	75	Single color	EFO-AG, AC Ballast	15,000 hrs	$126.92
99	(L)	EFO-700-NC-DAG	Quartz Metal Halide	Arc Tube	70 Watt	75	3500K	EFO-AG, DC Ballast	15,000 hrs	$123.28
99	(L)	EFO-700-SC-DAG	Quartz Metal Halide	Arc Tube	70 Watt	75	Single color	EFO-AG, DC Ballast	15,000 hrs	$134.47

Color and Effect Wheels

Catalog Page	Part Number	Description	Size	Use	Note	DN Price
100	PT-01C	4 Color Wheel	2.000" Square	FS7L, FS11L, FS12L, 404N, 405N, 601, 602	Standard colors: Green, Magenta, Cyan, no color Motor is not included with wheels	$47.27
100	PT-08C	8 Color Wheel	3.000" Octagon	FS7L, FS11L, FS12L, 404N, 405N, 601, 602	Standard colors: Magenta, Teal, Orange, Yellow, Cyan, Dark Blue, Green, no color. Motor not included	$114.79
100	PT-10C	4 Color Wheel	2.800" Square	FS7L, FS11L, FS12L, 404N, 405N, 601, 602	Standard colors: Green, Magenta, Cyan, no color. Motor is not included with wheels	$58.59
100	PT-11C	8 Color Wheel	3.250" Octagon	FS7L, FS11L, FS12L, 404N, 405N, 601, 602	Standard colors: Magenta, Teal, Orange, Yellow, Cyan, Dark Blue, Green, no color. Motor not included	$136.69
100	AG-04C	4 Color Wheel	3.625" Octagon	EFO-AG	Standard colors: Aqua, Magenta, Green, Yellow, no color. Motor is not included with wheels	$85.05
100	SPKWL	Perforated Metal Sparkle Wheel	2.000" Square	FS7L, FS11L, FS12L, 404N, 405N, 601, 602	400 Strands Maximum. Uses the same motor as color wheel if used in conjunction	$21.13
100	DIMWL	Perforated Metal Dimming Wheel	3.000" Octagon	FS7L, FS11L, FS12L, 404N, 405N, 601, 602	Cannot be used with a color wheel 20%, 40%, 60% and 100% Transmission	$53.51
100	MBF-SOL	Lens; Softening Filter	2.000" Round Dia x 0.125" (H) (51mm x 3mm)	EFO-MBF, EFO-MBF-F, EFO-AAL, EFO-LPS II	Must be ordered with fixtures, for use with EFO-AAL order mounting clip EFO-AAL-FC	$9.62
100	MBF-HEX	Louver; Hexagon Filter	2.000" Round Dia x 0.128" (H) (51mm x 3.25mm)	EFO-MBF, EFO-MBF-F, EFO-AAL, EFO-LPS II	Must be ordered with fixtures, for use with EFO-AAL order mounting clip EFO-AAL-FC	$6.91

Optical Ports

Catalog Page	Part Number	Description	Fiber Capacity	Illuminator Use	Note	DN Price
101	A10980	Zinc Optical Port	300 Fibers Max	FS7L, FS11L, FS12L, FS13L, 404N, 405N, 601, 602	Includes compression fitting for fiber cable	$30.58
101	C10641-33	Zinc Port Tip Insert for use with Optical Port	400 Fibers Max	FS7L, FS11L, FS12L, FS13L, 404N, 405N, 601, 602	Use with A10980	$3.36
101	C10641-45	Zinc Port Tip Insert for use with Optical Port	450 Fibers Max	FS7L, FS11L, FS12L, FS13L, 404N, 405N, 601, 602	Use with A10980	$3.53
101	C10643	Zinc Port Tip Insert for use with Optical Port	600 Fibers Max	FS7L, FS11L, FS12L, FS13L, 404N, 405N, 601, 602	Use with A10980	$20.54

Cutting Tools

Catalog Page	Product Name	Description	Details	DN Price
102	FS-118	Light-Duty Hot Knife with New-Style Shovel Type Blades	60 watt electric hot knife for porting small bundles of fiber into ferrules or small port tips	$176.55
102	FS-163	Standard Hot Knife	Butane hot knife for porting bundles of fiber into ferrules or port tips	$325.80
102	01-15001-00	Replacement Blade	Shovel-type blades; For FS-163 and FS-118	$39.58
102	LB-HK-3	Heavy Duty Hot Knife	Contractor grade electric hot knife for porting bundles of fiber into ferrules or port tips	$976.65
102	LB-HK3-BLADE	Replacement Blade	For use with LB-HK-3	$60.06

Installation Tools

Catalog Page	Product Name	Description	Details	DN Price
102	FS-117	Lens Wrench for LNS Fixture	Used to tighten lens onto lens housing	$25.37
102	FS-DP4	Star Ceiling Drill Bit Kit	Set of (4) bits in three sizes for use drilling through gypsum (drywall) or cellulose (ceiling tile) ceilings	$23.12

Controls

Catalog Page	Product Name	Description	Details	Illuminator Use	DN Price
102	CV	Variable Delay on Color	Synchronizes the movement of all color wheels for up to 100 (-SY) illuminators within a network	601, 602, 405N, 404N, FS7L	$525.00
102	DX	DMX Control of Dowser (Dimmer Wheel and 8 Color Wheel)	DMX-512 compatible control using 3 DMX channels	601, 602, 405N, 404N, FS7L	$1,260.00
102	DXLR	5-PinXLR DMX Dowser Control (Dimmer and 8 Color Wheel)	DMX-512 compatible control using 3 DMX channels with 5-pin XLR cable	601, 602, 405N, 404N, FS7L	$1,365.00
102	SM	Synchronization Master	Synchronizes the color changes of up to 40 slave (-SY) illuminators	601, 602, 405N, 404N, FS7L	$441.00
102	SY	Synchronization Slave	Allows an illuminator to operate on a -CV or -SM network	601, 602, 405N, 404N, FS7L	$420.00
102	DR	Dimmable Ready	For wall-box rheostat dimmers, electronic transformer	FS13L, FS12L, FS11L	$42.55
102	DRC	Dimmable Ready	For architectural and commercial dimmers, electronic transformer	FS13L, FS12L, FS11L	$42.55

Illuminator Mounting Accessories

Catalog Page	Product Name	Description	Details	Illuminator Use	DN Price
103	FS-TVK2	Ventilation Kit	36" long, flexible duct, rigid vent	FS11L, FS12L, FS13L	$338.94
103	FS-WB	Wall Mount Bracket	0.76" (W) x 9.00" (L) x 7.70" (H)	404N vertical wall,w/Lag Bolts	$240.98

Fiber Mounting Accessories

Catalog Page	Product Name	Description	Details	Fiber use	DN Price
103	TRK-5/8	PVC U-Track Extrusion	0.63" Square x 6' Long (16mm x 1.83m)	BPAK-150 cable in straight or slightly curved lines	$13.21
103	TRK-U1/2	PVC U-Track Extrusion	0.59" Square x 6' Long (15mm x 1.83m)	BPAK-75 & BPAK-100 straight; slightly curved lines	$9.03
103	TRK-U3/8	PVC U-Track Extrusion	0.46" Square x 6' Long (11.7mm x 1.83m)	BPAK-40 & BPAK-50 straight; slightly curved lines	$7.29
103	HI-102	PVC Clips	0.48" x 0.84" x 0.38" (12 x 21 x 10mm)	BPAK-15 in curved lines, securing very small FSPT	$0.36
103	HI-103	PVC Clips	0.48" x 1" x 0.48" (12 x 25 x 12mm)	BPAK-40 AND BPAK-50 in curved lines, small FSPT	$0.36
103	HI-104	PVC Clips	0.48" x 1.2 x 0.62" (12 x 30 x 16mm)	BPAK-75 and BPAK-100 in curved lines, medium FSPT	$0.90
103	HI-105	PVC Clips	0.48" x 1.2" x 0.68" (12 x 30 x 17mm)	BPAK-150 in curved lines, securing large FSPT	$0.61
103	FS-131	Double-sided Tape	5/16" (W) x 165' (L) (8mm x 50m)	TEMPORARY for side-emitting fiber, use with FS-136	$35.66
103	FS-136	Silicone Adhesive	10.3oz Tube (300 ml)	Approved for adhering side-emitting fibers and track	$23.69
103	FS-112	Epoxy, 2-Part	1.7 fl.oz (50 ml), DP-100 clear	Use with FS-113, FS-114	$39.88
103	FS-113	Epoxy Mixing Nozzle	0.209" (L) (5.3 mm), 12 in bag	Use with FS-112, FS-114	$2.81
103	FS-114	Epoxy Applicator Gun	2:1 mixing gun	Use with FS-112, FS-113	$199.73
103	FS-115	Epoxy Kit		Adhering fibers and ferrules, disposable kit	$31.02

Fixture Mounting Accessories

Catalog Page		Product Name	Description	Details	Fixture Use	DN Price
104		FS-910	Ground Mounting Stake	6 inch (150mm) black plastic stake	FS-210 and FS-310 into soil or similar materials	$45.52
104		FS-912	Extension for FS-210	6 inch (150mm) black plastic ball joints	Length extension for FS-210	$13.71
104		LB-MB-CL	Mounting Bracket	1.25" Square (31.75mm)	Lightly Expressed LightBars; adhesive strip included	$10.26
104		LB-MB-BL	Mounting Bracket	1.25" Square (31.75mm)	Lightly Expressed LightBars; adhesive strip included	$7.88
104		CRE2302	Spring Adaptor	1.201" (OD) x 3.150" (Spring H)	CRE Fixtures without spring clips	$33.50
104		CRE1211	Paver Installation Tube, Small	1.299" (OD) x 4.724" (H)	Outdoor fixtures, small sizes	$10.86
104		CRE1212	Paver Installation Tube, Medium	1.677" (OD) x 4.724" (H)	Outdoor fixtures, medium sizes	$10.86
104		CRE1213	Paver Installation Tube, Large	2.500" (OD) x 4.331" (H)	Outdoor fixtures, large sizes	$21.84
104		LBM061008201	Locking Nut, Bronze	M-22 thread nut	LBM06100820	$39.90
104		LBM061008191	Locking Nut, V4A Stainless	M-22 thread nut	LBM06100819	$39.90
104		LEDDL-ARM-24	DockLight Arm	24" ,Single Strut	LEDDL-xxx-xxx-xx	$175.23
104		LEDDL-ARM-42	DockLight Arm	42",Single Strut	LEDDL-xxx-xxx-xx	$206.51
104		LEDDL-ARM-60	DockLight Arm	60",Single Strut	LEDDL-xxx-xxx-xx	$315.40
104		LEDDL-YOKE-SY-HB	Replacement Yoke	Arm, Hex Bold	LEDDL-xxx-xxx-xx	$31.50
104		LEDDL-YOKE-SY-TS	Replacement Yoke	Arm, Thumb Screw	LEDDL-xxx-xxx-xx	$33.93
104		LEDDL-YOKE-TY-HB	Replacement Yoke	Trunnion, Hex Bold	LEDDL-xxx-xxx-xx	$31.50
104		LEDDL-YOKE-TY-TS	Replacement Yoke	Trunnion, Thumb Screw	LEDDL-xxx-xxx-xx	$31.50
104		LEDLS-PHTSNSR	Photo Sensor	Photo Sensor	LEDLS-xxx-xxx-xx	$225.47
104		LEDLS-SLPFTTR-BLT	Slip Fitter	Slip Fitter,3-1/2 bolt	LEDLS-xxx-xxx-xx	$122.24
104		LEDLS-SLPFTTR-NPT	Slip Fitter	Slip Fitter,1/2 nipple	LEDLS-xxx-xxx-xx	$86.49
104		EFO-LEDGM-AM	GlobeLight Mount	Angle mount	EFO-LEDSG/LG	$63.00
104		EFO-LEDGM-FM	GlobeLight Mount	Flat mount	EFO-LEDSG/LG	$31.50
104		EFO-LEDGM-FSM	GlobeLight Mount	Flat start mount	EFO-LEDSG/LG	$42.00

Replacement Parts

Illuminator	Part Description	Part #	DN Price
405(N)/404(N)	Lamp, 150W MH, 4000K	HID-440	$371.57
405(N)/404(N)	Lamp, 150W MH, 3000K	HID-430	$377.91
405(N)/404(N)	1 rpm motor ~ non·sync	54-15005-01	$15.10
405(N)/404(N)	3.6 rpm motor· non-sync	54-15005-01	$15.10
405(N)/404(N)	1 rpm motor - sync	A8935	$335.30
40S(N)/404(N)	3.6 rpm motor - sync	A8630	$258.99
405(N)/404(N)	Sync Master PC Board	C12467	$241.50
405(N)/404(N)	Sync Slave PC Board	C12468	$226.40
405(N)/404(N)	Sync colorwheel magnet	A9547	$15.10
405(N)/404(N)	Sync PCB hall sensor	A9811	$15.10
405(N)	Fan - [405(N) Only]	B11981	$79.99
405(N)	Fan Cord - [405(N) Only]	A7003	$14.60
404(N)	Fan - Large [404(N) Only]	B9467	$90.57
404(N)	Fan - Small [404(N) Only]	A8154	$99.79
40S(N)/404(N)	Thermal cut-out switch	A8219	$9.05
405(N)/404(N)	Limit Switch	A8151	$20.54
405(N)/404(N)	Ballast	C12221	$245.13
405(N)/404(N)	Transformer - (Sync Only)	B12698	$23.54
405(N)/404(N)	4 color, colorwheel	PT-01C	$83.33
405(N)/404(N)	8 color, coJorwheel	PT-08C	$166.03
405(N)/404(N)	Hot Mirror Brkt Assy	A11937	$88.83
405(N)/404(N)	Lamp Wire Assy.	A8155	$15.10
405(N)/404(N)	Lamp Wire Assy.	A8160	$15.10
405(N)/404(N)	Lamp Wire Assy.	A8148	$15.10
405(N)/404(N)	Single Color Bracket	02-15003-00	$9.45
405(N)/404(N)	Hot Mirror for C1	B9712	$22.70
405(N)/404(N)	Screws for C 1	A9150	$1.58
405(N)/404(N)	CNV Motor 8rkt Assy. (8 color, 1 RPM)	A12482	$33.20
405(N)/404(N)	10T (1 RPM) motor gear	53-15001-00	$1.58
405(N)/404(N)	36T (3.6 RPM) motor gear	A12298	$2.29
405(N)/404(N)	36T (3.6 & RPM) cw gear	A11823	$2.90
601	Lamp, 250W Metal Halide	HID-601	$793.21
601	1 rpm motor - non sync	54-15005-01	$15.10
601	3.6 rpm motor - non sync	54-15005-01	$15.10
601	1 rpm motor - sync	A8935	$335.30
601	3.6 rpm motor - sync	A8630	$258.99
601	Sync Master PC Board	C12467	$241.50
601	Sync Slave PC Board	C12468	$226.40
601	Sync Hall Sensor	A9811	$15.10
601	Fan	A7002	$31.27
601	Fan Cord	A7003	$14.60
601	Thermal cut-out switch	A8219	$9.05

Replacement Parts

Illuminator	Part Description	Part #	DN Price
601	Limit Switch	A8151	$20.29
601	Ballast	B11816	$1,874.65
601	Transformer - sync only	B12698	$23.44
601	4 color, colorwheel	PT-01C	$83.08
601	8 color, colorwheel	PT-08C	$166.03
601	Sync Colorwheel Magnet	A9547	$15.10
601	Sync PCB hall sensor	A9811	$15.10
601	Hot Mirror Brkt Assy.	A12638	$111.70
601	Single Color Bracket for C 1	02-15003-00	$12.08
601	Hot Mirror for C1	B9712	$22.70
601	Screws for C 1	A9150	$1.58
FS7L	Lamp, 183W, 19.7V, 3000K	HI-110	$42.00
FS7L	Lamp Holder	B9156	$4.70
FS7L	Lamp/Mirror Bracket (KIT) w/ B9712	B12003	$47.10
FS7L	Lamp/Mirror Bracket (KIT) w/ B12003	B9712	$49.20
FS7L	Oplical Port Kit	A10980	$99.62
FS7L	1 rpm motor - non-sync	54-15005-01	$15.10
FS7L	3.6 rpm motor - non sync	54-15005-01	$15.10
FS7L	1 rpm motor - sync	A8935	$335.30
FS7L	3.6 rpm motor - sync	A8630	$257.94
FS7L	Sync Master PC Board	C12467	$241.50
FS7L	Sync Slave PC 80ard	C12468	$226.40
FS7L	Sync cololWheel magnet	A9547	$15.10
FS7L	Sync PC8 hall sensor	A9811	$15.10
FS7L	Fan	B11981	$79.99
FS7L	Fan Cord	A7003	$14.60
FS7L	Thermal cut-out switch	A8219	$9.05
FS7L	Electronic Transformer	B12212	$100.82
FS7L	4 color, colorwheel	PT-07C	$67.20
FS7L	8 color, colorNheel	PT-08C	$134.40
FS7L	Strain Relief	A7009	$5.80
FS7L	Fuse Holder	A8091	$6.99
FS7L	Fuse, 2.SA, 250V, slow-blow	A9182	$5.25

POLICIES: Order Processing

BEFORE AN ORDER CAN BE RELEASED TO MANUFACTURING:

1. The order must be sent via fax, e-mail or mailed by the representative agency with rep cover PO.

2. The original purchase order from the distributor or "bill to" must also be faxed or e-mailed. **Dollar amount on customer PO must match PO from representative, and a job name must be listed.**

3. When an order does not meet the minimum required order amount of $100.00, a $25.00 service charge is to be added to the order, except for replacement parts (lamps, c/w motor, ballast, etc.).

4. When an order is from a new distributor, and dollar amount is $2000.00 or more, the customer may apply for credit terms. A signed credit application should be sent with the order. Allow 5-7 working days for credit approval processing. Orders from new customers under $2000.00 must be pre-paid at the time of order placement via check, Visa, Master Card; no COD'S.

5. When an order must ship the same day the purchase order was received, a $50.00 same day rush charge must be added to the order. **Same day shipments apply to stocked items only.** (Illuminators are not stock items) This charge is in addition to the equipment prices and freight. The order must be received by 10:00 a.m. PST of that same shipping day, with a follow-up call for confirmation.

6. All custom and built to specification orders require a 50% deposit. This includes but is not limited to: the Lightly Expressed and European Design fixture series, custom fiber optic harnesses, non-catalogued items, and projects requiring on-site factory services or installation.

7. The purchase order must reference a job name, specifier, job location, Fiberstars' estimate/quote number and terms.

8. If distributor is already set up with open credit, standard terms of Net 30 days must be indicated on the purchase order.

9. ACCEPTABLE TERMS OF SALE: **Factory, Ex-works, Origin or Shipping Point.** Applicable sale term must be clearly indicated on customer purchase order.

10. STANDARD FREIGHT TERMS: **Customer purchase order must reflect our standard freight terms,** which are collect or pre-paid & add. When freight term is "collect", a designated carrier and account number must be provided w/ order.

11. **Customers in the states of CA, NY, OH, TX, VA, & WA must have a Tax Resale Certificate** on file or sales tax will be charged.

12. To ensure the fastest delivery, all pertinent information should be included. Lack of information will delay the order process.

PRODUCT SPECIFICATIONS:

1. When listing individual part numbers, always make sure that every part number is complete. For example, when ordering any illuminator, specify the following:

   a. Type of lamp for 404N and 405N only – 3000˚K or 4000˚K

   b. Speed of color wheel motor (1.0 or 3.6 RPM)

   c. Color wheel selection (for C1, C4 or C8) and the sequence of colors, start color for synchronized units

   d. Voltage/Hz (120V, 60Hz, etc)

   e. Options (synchronization, variable delay, dimmable ready, DMX, etc)

2. When ordering fiber optic cable or track, the quantity should be indicated as a unit of measure: fiber footage / # of pieces of track. (If more than one cut is required on fiber length, a cutting charge per cut will be incurred).

3. Make sure all installation materials are included in the order such as silicone, epoxy, ferrules double-sided tape, etc.

4. Always remember to add a hot knife to all new orders. It is a required and reusable tool for installation (Part number FS-118, FS-163, or LB-HK3).

5. Please indicate on the customer's PO request for partial shipment of material.

POLICIES: Terms and Conditions

Credit

All new accounts must have a credit application and state resale card (CA, NY, OH, TX, VA, & WA only) on file before an order can be processed. An initial order must be over $2,000.00 US before an open account status can be considered. Open account status for domestic orders is extended only to companies that are: 1) medium or large size, 2) established, and 3) have a good credit history. Unless credit is established, all sales are Check with Order, approved credit card only, no C.O.D's.

Terms

Payment terms are Net 30 days from shipping date. **All custom orders require a 50% deposit.** Late charges of 1-1/2% per month will be added to all past due invoices and represent the deferred price of the item purchased. Energy Focus, Inc. /Fiberstars reserves the right to hold any orders if an account has open invoices which extend beyond payment terms.

Orders: Orders will only be accepted with a written purchase order signed by an authorized agent of the issuing customer.

Minimum Billing: Any order less than $100.00 will incur a $25.00 additional processing charge.

Cancellation

If a sales order is cancelled after the order has already passed credit and is in production, there will be a $100.00 cancellation processing fee as well as up to a 50% restocking charge.

Freight

All prices are FOB Factory, NO Freight Allowed. Unless otherwise specified, method of shipment will be determined by Fiberstars. Orders requesting shipment within 24 hours will incur a $50.00 additional processing charge. All estimates of freight costs before actual shipment are only estimates and Energy Focus, Inc. /Fiberstars is not liable for the difference between an estimate and the actual cost of the shipment. Purchase orders must indicate "FOB Factory, Ex-works or Origin" and "Collect or Prepay & Add." Any special shipping instructions (i.e. Overnight) must be indicated on purchase order, and a shipping account number must be provided.

Loss or Damage: The customer should take up loss or Damage Loss of damage of shipments with the customer's local agent of the shipping firm. We will provide a copy of the original bill of lading and can provide assistance in filing your claim with the carrier.

Limited Warranty: Energy Focus, Inc. /Fiberstars warrants its fiber optic cable to be free from defects in material and/or workmanship, under normal use and service, for a period of **one year** from the date of original purchase, provided the product is installed to the specifications outlined by Energy Focus, Inc. /Fiberstars. Energy Focus, Inc. /Fiberstars warrants its illuminators, hardware and fixtures *excluding the lamp* to be free from defects in material and/or workmanship, under normal use and service, for a period of **one year** from the date of original purchase, provided the product is installed to be the specifications outline by Energy Focus, Inc. /Fiberstars In the event of a defect in material or workmanship during the warranty period, Energy Focus, Inc. /Fiberstars will repair or replace (at its option) your lighting system component, under the conditions of the warranty. See Limited Warranty Policies sheet for details.

Returns

All returns require a Return Goods Authorization Number (RGA #). Energy Focus, Inc. /Fiberstars will not be responsible for product returned without an RGA #. Call Fiberstars Customer Service Department at (888) 704-2292, before returning any goods. A minimum restocking charge of 50% will be made on standard products returned in their factory sealed shipping cartons within three months of original shipping date. Customer is responsible for shipping both ways. Custom products, including fiber optic cable cut to length, are not returnable. Refer to Returned Goods Authorization Policies sheet for further details.

Taxes: Any Federal or State Excise Tax for which we may be liable on any sale will be charged to and paid by the buyer. Customer is responsible for furnishing resale certificate.

Payment of Invoices

Remit to Energy Focus, Inc, Dept CH 17516, Palatine, IL 60055-7516

For payment related questions you can also contact the corporate office Account Receivables Department
George Hanna, Credit Manager at Energy Focus, Inc., P.O Box 72233, Cleveland, OH 44192-2233
ACH Payments: Huntington National Bank; Routing No.: 041000153; Account No.:01662110272 ; SWIFT Code: n/a
Wire Payments: Huntington National Bank; Routing No.:044000024; Account No.:01662110272; SWIFT Code: HUNTUS33

 Phone: (440) 715-1337 * Fax: (440) 542-1526 * email: ghanna@energyfocusinc.com

POLICIES: Returned Goods Authorizations

Obtain an RGA Number

All returns require a Return Goods Authorization Number (RGA #). Call Fiberstars; Customer Service Department at (888) 704-2292 to obtain an RGA number before returning any products. Energy Focus, Inc./ Fiberstars will not be responsible for product returned without an RGA number.

Expiration Date

RGA numbers are good for a period of 90 days from issuance.

Minimum Restocking Charge

A minimum restocking charge of 50% will be made on standard products returned in their factory sealed shipping cartons within three months (90 Days) of original shipping date. Products are not returnable for credit or exchange after 90 days.

Custom products including fiber tubing cut to length, color wheels, products that have opened cartons and/or products that have been used are not returnable.

Shipping

Energy Focus Inc./ Fiberstars is not responsible for shipping charges incurred when returning product to or from the factory. When returning any products, the RGA number must be clearly marked on each carton. Products should be returned to: Fiberstars Receiving; Energy Focus, Inc.7051 Commerce Circle, Pleasanton, CA 94588 (925) 463-5520

Limited Warranty

Energy Focus Inc./ Fiberstars warrants its fiber optic cable to be free from defects in material and/or workmanship, under normal use and service, for a period of **one year** from the date of original purchase, provided the product is installed to the specifications outlined by Energy Focus Inc./ Fiberstars. Energy Focus Inc./ Fiberstars warrants its illuminators, hardware and fixtures *excluding the lamp* to be free from defects in material and/or workmanship, under normal use and service for a period of **one year** from the date of original purchase, provided the product is installed to the specifications outlined by Energy Focus Inc./ Fiberstars. In the event of a defect in material of workmanship during the warranty period, Energy Focus Inc./ Fiberstars will repair or replace (at its option) your lighting system component, under the conditions of the warranty. See Limited Warranty Policies sheet for details.

Reimbursed Costs

Energy Focus Inc./ Fiberstars is not responsible for costs incurred when removing product to be returned for repair or for reinstallation costs after repair.

POLICIES: Limited Warranty

Energy Focus Inc./ Fiberstars warrants its fiber optic cable to be free from defects in material and/or workmanship, under normal use and service, for a period to **one year** from the date of original purchase, provided the product is installed to the specifications outlined by Energy Focus Inc./ Fiberstars. Energy Focus Inc./ Fiberstars warrants its illuminators, hardware, and fixtures *excluding the lamp* to be free from defects in material and/or workmanship, under normal use and service, for a period of **one year** from the date of original purchase. A Lighting System is defined as an Energy Focus Inc./ Fiberstars illuminator coupled with Energy Focus Inc./ Fiberstars. fiber optic cable to deliver fiber optic lighting. The use of an Energy Focus Inc./ Fiberstars component (illuminator or fiber optic cable) with a non-Energy Focus Inc./ Fiberstars component voids all warranties. Energy Focus Inc./ Fiberstars components are designed to be part of an Energy Focus Inc./ Fiberstars system. Their use with other components will affect their performance and therefore will not be under warranty.

In the event of a defect in material or workmanship during the warranty period, Energy Focus Inc./ Fiberstars will repair or replace (at its option) the component (s) under the conditions of this Warranty. Energy Focus Inc./ Fiberstars will do so at its expense for the cost of materials but not for shipping. THIS REMEDY IS THE SOLE AND EXCLUSIVE REMEDY FOR ANY AND ALL CLAIMS RELATING TO ANY BREACH OF WARRANTY BY ENERGY FOCUS INC. / FIBERSTARS

LIMITATIONS, EXCLUSIONS AND OTHER RIGHTS:

A. EXCEPT AS PROVIDED HEREIN, ENERGY FOCUS, INC. / FIBERSTARS MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ALL SUCH WARRANTIES ARE EXPRESSLY DISCLAIMED. Some states do not allow the exclusion of an implied warranty, so the above exclusion may not apply to you.

B. IN NO EVENT SHALL ENERGY FOCUS, INC. / FIBERSTARS BE LIABLE FOR INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF ENERGY FOCUS, INC. HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. THIS DISCLAIMER APPLIES DURING AND AFTER THE WARRANTY PERIOD. Some states do not allow the exclusion or limitation of indirect, incidental or consequential damages, so the above limitation or exclusion may not apply to you.

C. ENERGY FOCUS, INC. / FIBERSTARS is not responsible for defects or malfunctions in and/or damage to Lighting Systems where a sale is specifically made without warranty. In such sales, the disclaimers of warranty and liability, set forth above, shall continue to apply.

D. This Warranty covers normal consumer use and does not cover damage which occurs in shipment or failure with results from alteration, theft, misuse, abuse, abnormal use, negligent installation, improper maintenance or where adequate care has not been taken to prevent ice or snow damage to the Lighting System.

E. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE.

If you discover a defect or malfunction during the period to which this WARRANTY applies, write or phone Fiberstars for information on receiving warranty service. Please address your inquiries to:

<div align="center">

Fiberstars, An Energy Focus Company
Warranty Service/Customer Support, Commercial Lighting Division
6678 Owens Drive, Suite 105, Pleasanton, CA 94588
Phone: (888)-704-2276 Fax: (888) 704-2292

</div>

ENERGY FOCUS LIMITED WARRANTY ON LED PRODUCTS

Energy Focus Inc. warrants its LED products to be free from defects in material and/or workmanship, under normal use and service for a period of 5 years from the date of manufacture, provided the product is installed to the specifications outlined by Energy Focus, Inc. Warranty pertains to product failure of zero light output.

LED Accessory products are guaranteed to be free from defects in material and/or workmanship, under normal use and service for a period of 1 years from the date of manufacture, provided the product is installed to the specifications outlined by Energy Focus, Inc.

In the event of a defect in material or workmanship during the warranty period, Energy Focus Inc. will repair or replace (at its option) the component(s) under the conditions of this warranty. Energy Focus Inc. will do so at its expense for the cost of materials but not for shipping. THIS REMEDY IS THE SOLE AND EXCLUSIVE REMEDY FOR ANY AND ALL CLAIMS RELATING TO ANY BREACH OF WARRANTY BY ENERGY FOCUS INC.

LIMITATIONS, EXCLUSIONS AND OTHER RIGHTS:

1) Except as provided herein, Energy Focus Inc. makes no other warranties, express or implied, including but not limited to the implied warranties of merchantability or fitness for a particular purpose, and all such warranties are expressly disclaimed. Some states do not allow the exclusion of an implied warranty, so the above exclusion may not apply to you.

2) In no event shall Energy Focus Inc. be liable for indirect, incidental, or consequential damages, even if Energy Focus Inc. has been advised of the possibility of such damage. This disclaimer applies during and after the warranty period. Some states do not allow for the exclusion or limitation of indirect, incidental or consequential damages, so the above limitation or exclusion may not apply to you.

3) Energy Focus Inc. is not responsible for defects or malfunctions in and/or to the product where a sale is specifically made without warranty. In such sales, the disclaimers of warranty and liability, set forth above, shall continue to apply.

4) This warranty covers normal consumer use and does not cover damages which occur in shipment or failure with results from alteration, accident, theft, misuse, abuse, abnormal use, negligent installation, improper maintenance or where adequate care has not been taken to prevent damage to the product.

5) This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

This warranty covers the following product series:

LEDDL DockLights, LEDLS LandScape Lights, EFO-LEDSG & EFO-LEDLG GlobeLights, LEDGL HazGlobe Series, LEDTR TrackLights, LEDFLT8 Tube Lamps.

For any other Energy Focus LED products not covered in this warranty, please inquire with Customer Service at (888) 704-2276 or by email at customerservice@fiberstars.com

Fiberstars is a division of Energy Focus, Inc. and all products sold through the Fiberstars channel are protected by this warranty.

If you discover a defect or malfunction during the period to which this warranty applies, write or call Energy Focus Inc. for information on receiving warranty service.

Please address your inquiries to:
Fiberstars, An Energy Focus Company
Warranty Services Department
6678 Owens Drive Suite 105
Pleasanton, CA 94588
T (888) 704-2276 * F (925) 463-5522 * E customerservice@fiberstars.com

Technical Information: GROUP RE-LAMPING

A group re-lamping program is extremely important to ensure the integrity of fiber optic lighting projects.

- **In an end-emitting application (i.e. downlights) group re-lamping is crucial to ensure consistent light output from downlights in an area.** Lamps must be replaced in all illuminators at the same time. If the lamps are replaced on an "as needed" basis, some groups of downlights will appear brighter and/or different color than other groups of downlights.

- **The situation is even more noticeable with a side-emitting application** (i.e. neon replacement). For example, if you have a lamp failure in one illuminator on a run of fiber that is fed from two illuminators and only the failed lamp is replaced; your fiber run could be noticeably brighter at one end that at the other. To avoid this situation, group re-lamping is the solution.

- **Group re-lamping should take place at 80% of manufacturer's rated lamp life.** A percentage of the working lamps replaced should be kept. These lamps would be used for any early failure and should last until the next scheduled re-lamping.

- **If lamps are burned beyond rated life, light output diminishes** while energy consumption and risk of rupture increases. Metal halide lamps are constructed of an outer bulb with an internal arc tube made of quartz. The arc tube operates under high pressure at very high temperatures. The arc tube and the outer bulb may unexpectedly rupture due to internal causes or external factors.

- **Continuous operation can lead to unexpected lamp rupture.** Since Energy Focus Inc./ Fiberstars' EFO illuminators use metal halide lamps, we recommend that in continuously operating systems (24 hours/day, 7 days/week), turn lamps (illuminators) off once per day for at least one hour. Failure to comply increases the chance of rupture. Please include this recommendation on all projects that are specified with Energy Focus Inc. / Fiberstars fiber optic lighting systems.

- **Without a re-lamping program, projects have a tendency to deteriorate.** Low light and/or uneven output will result in complaints, which will lead to customer service calls. The bottom line is that Energy Focus Inc. / Fiberstars and fiber optic lighting in general will be viewed in negative light.

Please encourage your specifiers and end-users to utilize a group re-lamping program. This will keep all Energy Focus Inc. / Fiberstars projects working to their maximum potential, which will keep the customer satisfied.

TROUBLESHOOTING GUIDE

Fiber optic cable not as bright as when first installed ……….

- Check lamp and re-lamp if necessary
- Inspect fiber cut at port. If uneven, pulled-back, or melted/burnt, fiber port must be re-terminated**.**

Fiber optic cable has melted ……….

- Verify that illuminator is installed to specifications in installation manual, including appropriate ventilation.
- Be sure fiber port is cleaned before re-porting.
- Recut fiber optic cable at least 8-10 inches behind melted fiber following instructions in installation manual.

Illuminator will not come on ……….

- Check wiring for input voltage.
- Check circuit breaker.
- If a lamp is having trouble starting, it is near the end of its life. Replace lamp.
- Make sure lid is closed completely in order to make contact with the limiting switch.

Illuminators will not sync with each other (UO 5 only)

- Check low voltage wiring. Make sure no wires are crossed or shorted.

- 9Vbattery test: take the battery to the low voltage wires out of the back of the slave illuminator. Connect the black wire to the negative side of battery. Connect the red and green wire to the positive side of battery. Apply power to the illuminator and the color wheel should rotate. If it does not, contact factory. (This test does not work with master illuminator.)

Illuminator comes on for 5-15 minutes, then turns off ……….

- Check lamp, it may be at the end of its life. Replace lamp.
- Illuminator may be overheating, check ventilation and correct if necessary.

Color wheel will not rotate ……….

- Check color wheel to insure the progress is not impeded.
- Check wiring to switch to insure a good electrical path is present.

TFO Illuminator Mounting

All TFO Illuminators

- Minimum clearance of 24" (on all sides except bottom) and must have sufficient ventilation.
- Must be accessible for relamping and maintenance.
- All illuminators can be mounted horizontally on a flat surface.
- Some can be mounted vertically in the recommended positions below (arrow indicates air flow).
- FS1L and 602 can only be mounted horizontally on a flat surface.

FS7L, FS11L, FS12L, FS13L Illuminators

Mount illuminators either: 1) horizontally on a flat surface, or 2) vertically on a wall (refer to diagrams).

Port to the top

Port to the bottom

For FS7L only; FS11L, FS12L & FS13L can be mounted port right.
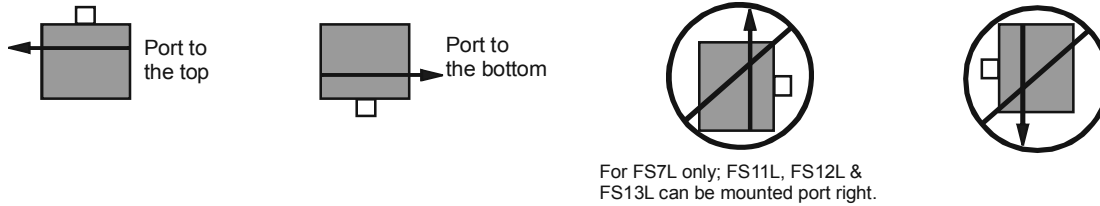
404N Illuminators

Mount illuminators either: 1) horizontally on a flat surface, or 2) horizontally to a vertical surface (refer to diagrams).
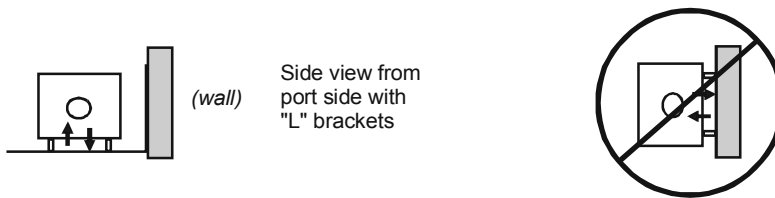
(wall)

Side view from port side with "L" brackets

405N Illuminators

Mount illuminators either: 1) horizontally on a flat surface, or 2) vertically on a wall (refer to diagrams).

Port to the top

Port to the right
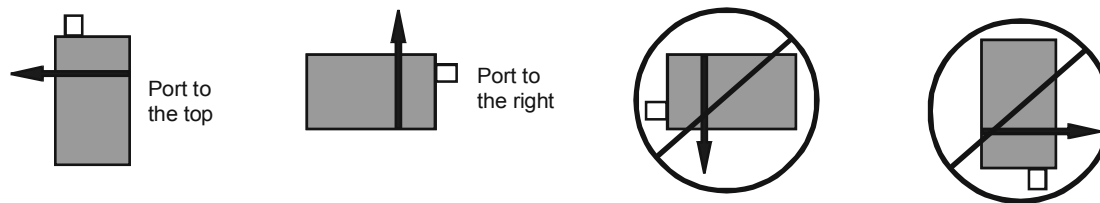
601 Illuminators

Mount illuminators either: 1) horizontally on a flat surface, or 2) vertically on a wall (refer to diagrams).

Port to the right
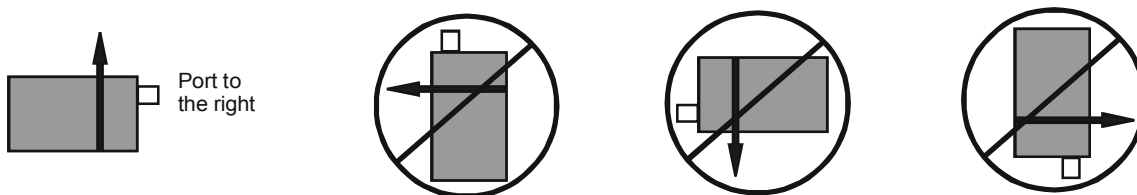
TFO Porting Instructions

1. Pre Heat the Hot Knife

Plug in or ignite the hot knife (#FS-118, FS-163, or LB-HK-3). Hold or prop the knife vertically so the blade tip is up. Allow it to heat for 8 - 10 minutes.

2. Assemble the Optical Port

Zinc Port

Screw the compression fitting onto the back of the zinc port.

Select a ferrule tip and slide it into the port, using the keyway to align.

    Small Ferrule = up to 100 fibers
    Medium Ferrule = up to 200 fibers
    Large Ferrule = up to 300 fibers
    XLarge Ferrule Options: 400, 450, 600

(Special applications. See illuminator sections.)

Plastic Port

Select a ferrule tip and slide it into the port, using the keyway to align.

    Small Ferrule = up to 100 fibers
    Midsize Ferrule = up to 150 fibers
    Medium Ferrule = up to 200 fibers
    Large Ferrule = up to 300 fibers

Slide cutting cap over the ferrule.

If using 501 port, slide the black boot over the fiber tubing so the opening faces the ends of the fiber tubing.

Aluminum Port

Select a ferrule tip and slide it into the port. Secure it with the setscrew.

    Small Ferrule = up to 100 fibers
    Medium Ferrule = up to 211 fibers
    Large Ferrule = up to 300 fibers

3. Strip Off the Outer Tubing

About 9" from each end, score around the circumference of the tubing so that it cuts the tubing but not the fibers.
Important: do not nick or cut the fibers. Pull off the outer tubing.

If using BritePak® or SuperStars® fiber optic cable, unwind the mylar wrap and cut off. Loosen the fibers thoroughly from the cabling by rubbing/rolling the fibers between your palms so that they are loose and straight.

4. Insert the Fibers into the Optical Port

Push fibers through the large end of the optical port. Rotate the port to help feed the fibers through easier. The edges of the outer tubing should wedge against the inside of the port where it begins to narrow. The fibers should extend 3" - 4" beyond the ferrule. *Caution: do not break or crimp fibers.*

5. Clamp the Fiber Tubing

Zinc Port

Insert dummy plug if needed to take up extra space. Tighten the compression fitting to apply pressure on the tubing to hold it in place

Plastic Port

Partially screw down clamp. Use the dummy plugs or spacers to take up extra space. Tighten the screws so the clamp applies pressure on the tubing to hold it in place.

Aluminum Port

Partially screw down clamp. Use the dummy plugs to take up extra space. Tighten the screws so the clamp applies pressure on the tubing to hold it in place.

6. Stuff the Ferrule Tip

With scissors or Fiskars®, cut off about 2" of loose fibers. Stuff the ferrule tip around the edge with these fibers until no space remains between the fibers. This will help prevent the fibers from pulling back or melting.

7. Cut the Fibers with the Hot Knife

Note: This step is critical.
Place the preheated hot knife blade with the cutting edge against the ferrule tip or cutting cap. The top of the blade should tilt slightly away, about 2°. With downward pressure, cut through the fiber bundle. As you cut, rotate the port slowly. Do not saw back and forth. When properly heated, the hot knife should take 10 - 15 seconds to cut the fibers. The fiber ends should look clean and flat. Uneven cuts, debris, or the oil from your fingers will diminish the light output. Once cut, do not touch the fiber ends with your fingers.

(For plastic port, remove the cutting cap.)

8. Insert the Finished Optical Port into the Illuminator

PORT ASSEMBLY/FIBER TERMINATION

A) Insure that the total fiber count of all fiber tubings is 300 or less. If you have more than 300 individual fibers, you will need a second illuminator.
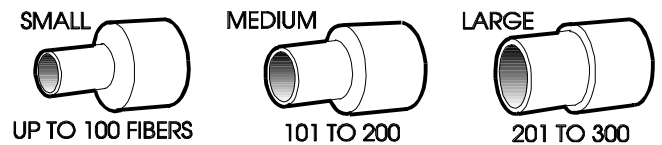
B) Insert the proper size tip into the port and twist with pliers to lock (fig. 1).
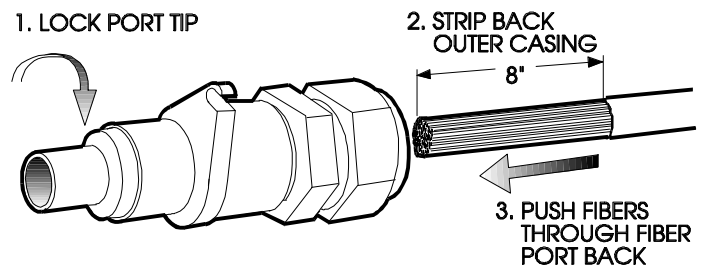
C) Strip back all fiber casings no less than 8 inches (fig. 2). Take care not to nick the fibers.

D) Insert the bare fibers into the port so ALL fibers protrude past the port tip (fig 3). Be sure the outer jacket doesn't insert further than the grey compression fitting. Tighten the port compression nut down on the fiber casing (fig 4).
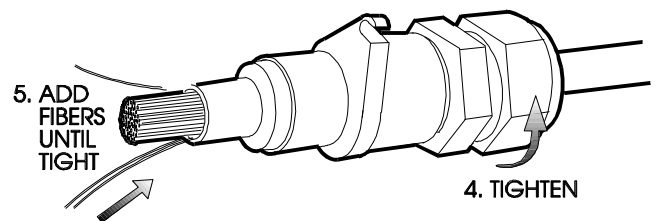
E) IMPORTANT: If the port tip is not completely full, insert short pieces of individual fibers into the tip until it is completely full (fig. 5). This will keep the lit fibers perpendicular to the lamp, and prevent the fibers from overheating.
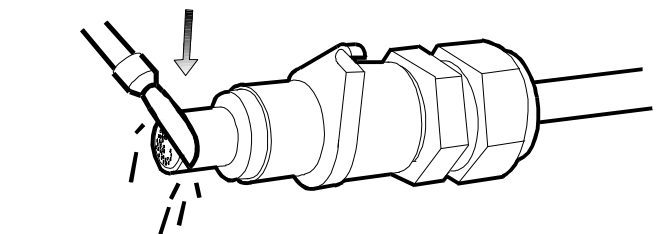
F) Heat an electric or butane hot knife so it is hot enough to melt the fibers. Apply firm downward pressure on the fibers, with the blade touching the port tip at a slight angle (fig 6). Do not saw at the fibers. Allow the heat of the knife to slowly trim the fibers. Ease the pressure as the knife almost completes the cut. Place the hot knife in a safe place to cool.

SMALL — UP TO 100 FIBERS

MEDIUM — 101 TO 200

LARGE — 201 TO 300

1. LOCK PORT TIP

2. STRIP BACK OUTER CASING 8"

3. PUSH FIBERS THROUGH FIBER PORT BACK

5. ADD FIBERS UNTIL TIGHT

4. TIGHTEN

6. APPLY STEADY DOWNWARD FORCE WITH HOT KNIFE DO NOT SAW BACK AND FORTH

Glass Block Installation

FS-136 Silicone (should encapsulate fiber optic cable)

FS-131 Double-Sided Tape

Mortar or Grout

Viewing Side
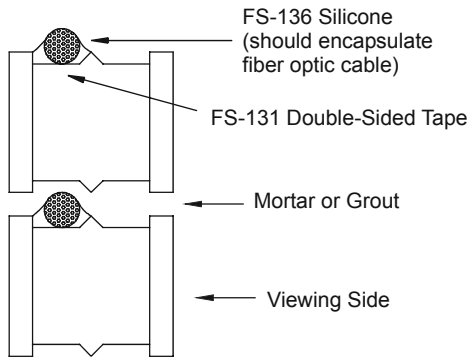
Note: Diameter of fiber must accommodate glass block clearance.

Mortar Joint Method (Between Mortar Joints)

Mount fiber optic cable directly between glass blocks. Use glass block without edge coating. If you do select a glass block that has edge coating, it must be removed to allow light transmission.

Tack fiber optic cable to the top of the row of glass block with hot glue to hold it in place and create a straight line along the top of the block. Run a heavy bead of Fiberstars silicone adhesive (FS-136) on both sides of fiber optic cable. Apply mortar to joint and set the block.

On the ends of the glass block wall, a channel will have to be created to hide the fiber optic cable where it passes from course to course. This channel must be a minimum of 2" deep to avoid kinking the fiber optic cable.

Backlit Method (Behind Glass Blocks)

Paint background white.

Install track and fiber optic cable 3" - 6" behind glass blocks on white background at the midpoint of each course of glass block. Using adhesive and screws, install track as straight as possible.

Run a bead of adhesive inside the track to help keep the fiber optic cable in place. Press the fiber optic cable into the track, being careful not to kink or bend the fiber optic cable more than a 2" bend radius. Do not use cap.

3"

Backwall (Painted white)

Glass Block

Mortar Joint

Fiber Optic Cable

Track (attached with screws 12" O.C.)
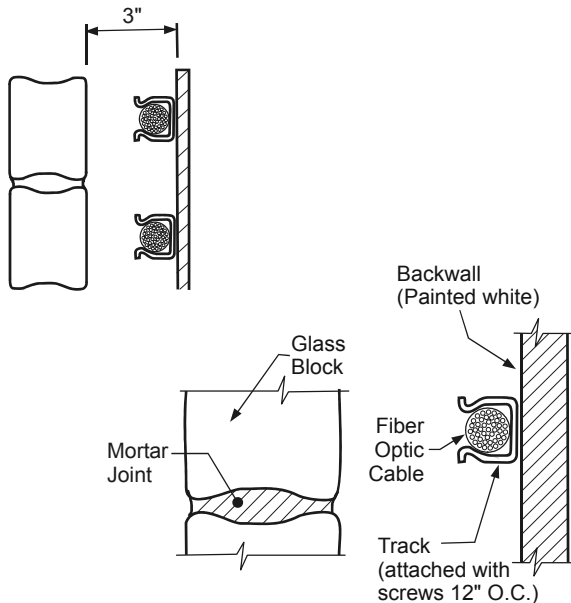
Edge Lit Glass Installation

Recommended Viewing →

Reflected Light

Etched or Carved Design

Panel To Be Illuminated
(See Notes 1,2)

2 in. Minimum Clear
Area Recommended

LightFrame Fixture
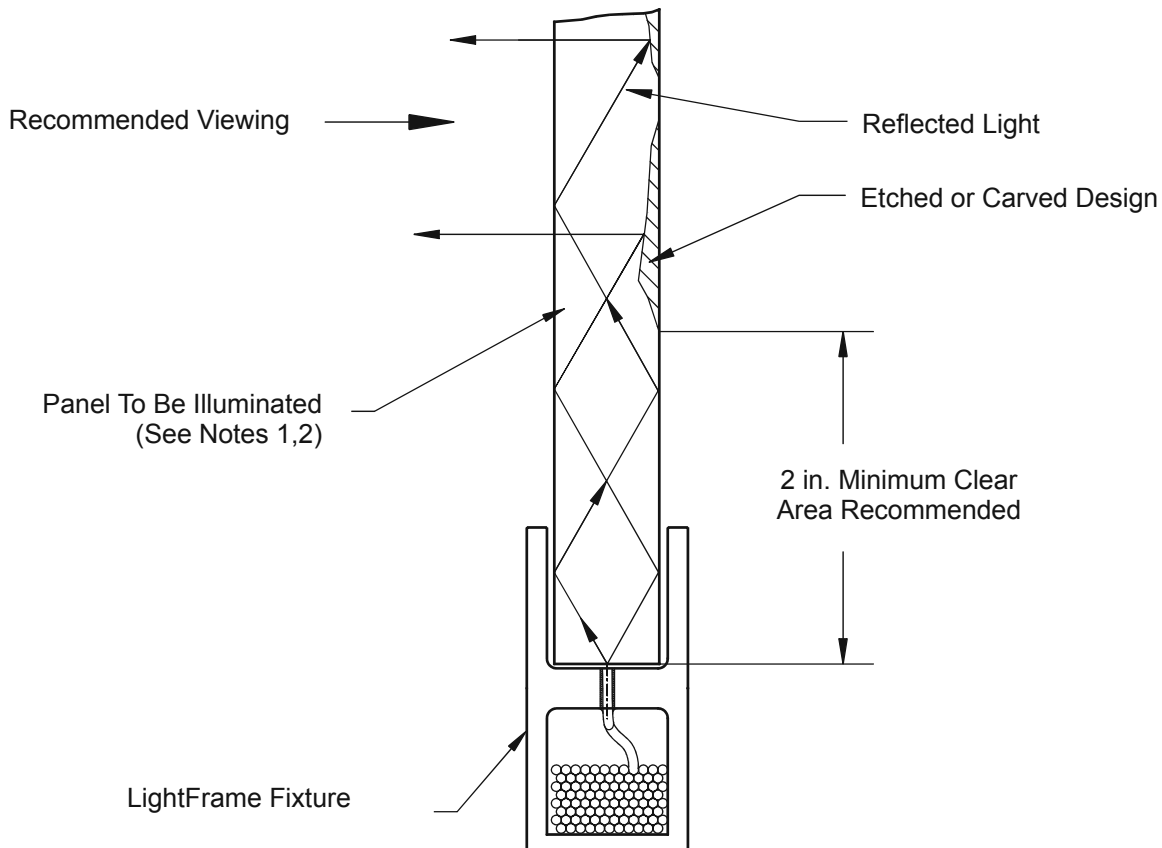
**Section View Thru
Fixture & Panel**

NOTES:

1. *(Very Important)* Glass shall support fixture--fixture cannot support glass

2. Glass edge in contact with LightFrame fixtures must be polished or clean break.

3. Acrylic edge in contact with LightFrame fixtures must be polished clear.

4. Install illuminator in vented location within 30 feet of illuminated panel.

Display Case Installation

LB   **LBQR**   **Foci**   **TRX**
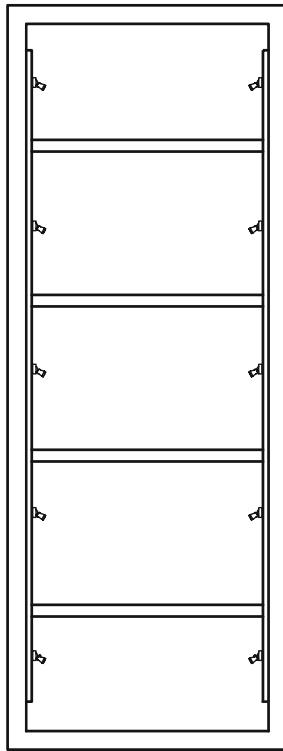
Tall Case
Vertical Fixture Orientation (Sides)
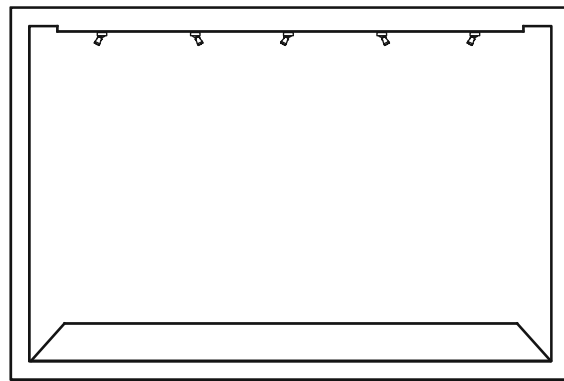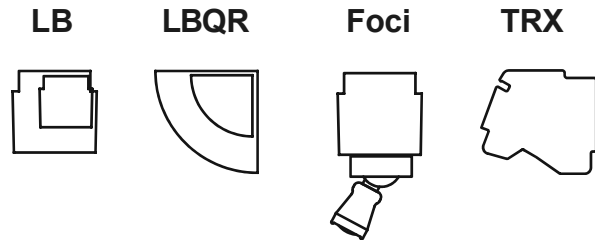
Long Case
Horizontal Fixture Orientation (Top)

NOTES:

1. Attach fixtures with adjustable "Type H"
   brackets using threaded fasteners
   and/or VHB type adhesive.

2. Refer to fixture-cable dimensions to
   determine bend radius of feed Cable.

3. Install illuminator in vented location
   within 30 feet of illuminated panel.

Stair Riser Lighting Installation

Concealed Conduits
To Illuminator

Plan
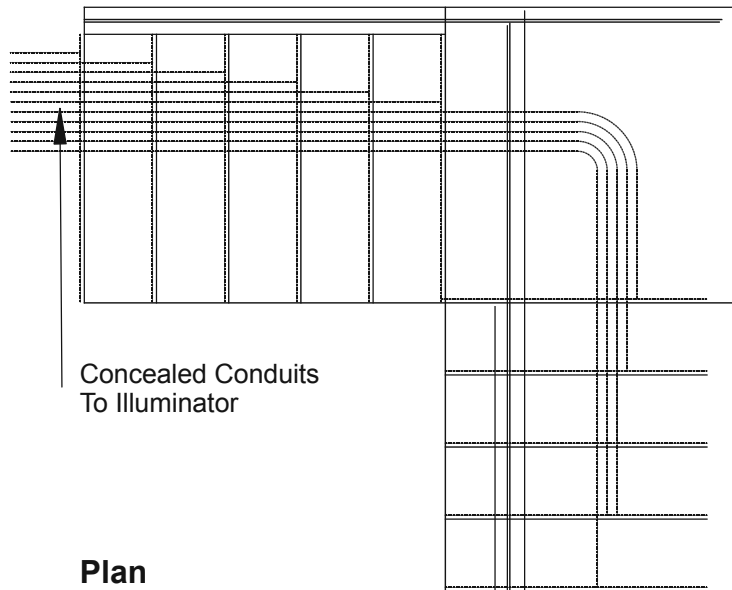
NOTES:

1. Attach fixtures with high performance silicone adhesive (GE IS808) or equivalent.

2. Install illuminator in ventilated location, within 30 feet of stairway.

3. All conduit bends to be sweep type fittings.

Conduit Penetration Flush With
Concrete Tread In Bedding Layer

Decorative Stone Facing With
Slotted Recess For Fixture

LightBeam Fixture

Nonmetallic Rigid Conduit
(Typical all risers)
See Note 3.
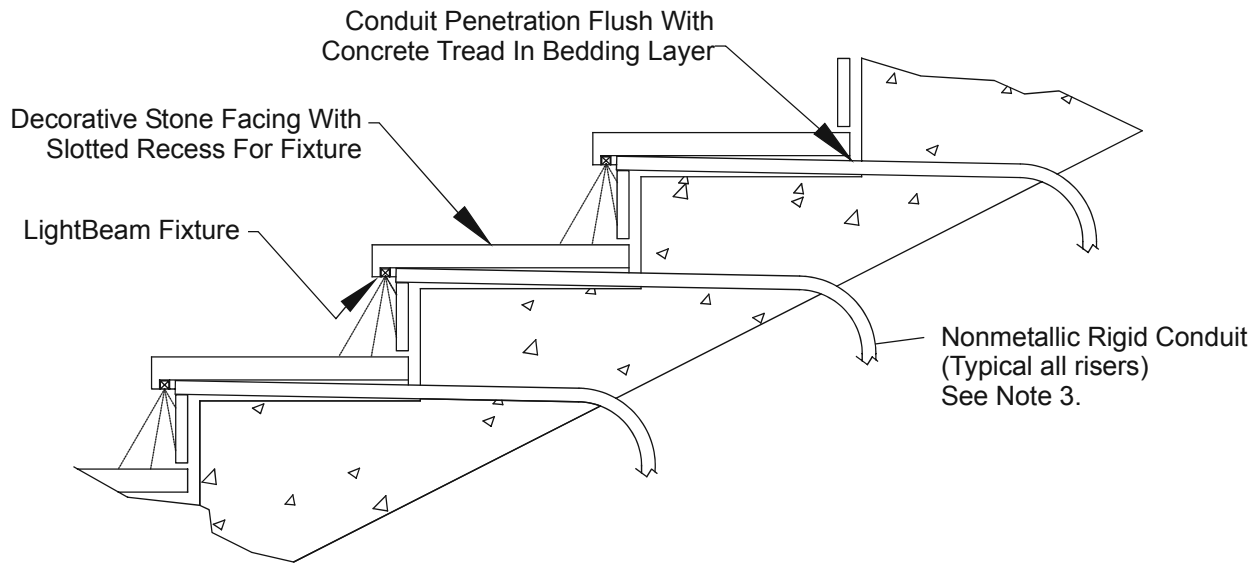
Elevation (Section)

Cove Lighting Installation

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Cove Installation - Cove Glow Illumination
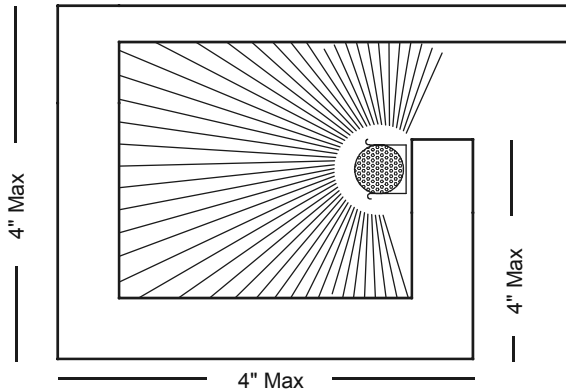
Cove Installation - Ceiling Glow Illumination
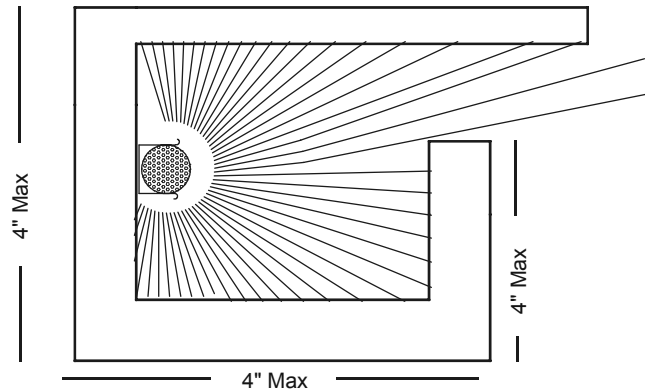
Secure track or mounting clips to cove wall with screws (maintain height below viewing angle). Snap BritePak-III® fiber optic cable into track, or LightBeam™ to the mounting clips. Run fiber optic cable ends to illuminator.

Note: When used in a cove, fiber optics will enhance an architectural detail but will not illuminate a room.

Guidelines for using BritePak® in a cove

1. Runs should not exceed 50' between illuminators.
2. Cove interior should be painted gloss white for the best reflective value.
3. Fiber should be installed as high in cove as possible without being seen from viewing area.
4. Installing two runs of fiber optic cable side by side will increase light output.
5. This option is only recommended in low ambient light conditions to create a "glow" in small dimensioned coves.

Guidelines for using LightBeam™ in a cove

1. The first reflective surface should be 4" from the lighted face of a high intensity LightBeam.
2. The first reflective surface should be 6" from the lighted face of a medium intensity LightBeam.
3. Attach LightBeam fixtures with optional brackets and wood screws.
4. Install illuminator in ventilated location, within 30 feet of fixture.
5. Recommended for use in small and medium coves.

Cove Lighting Installation (continued)
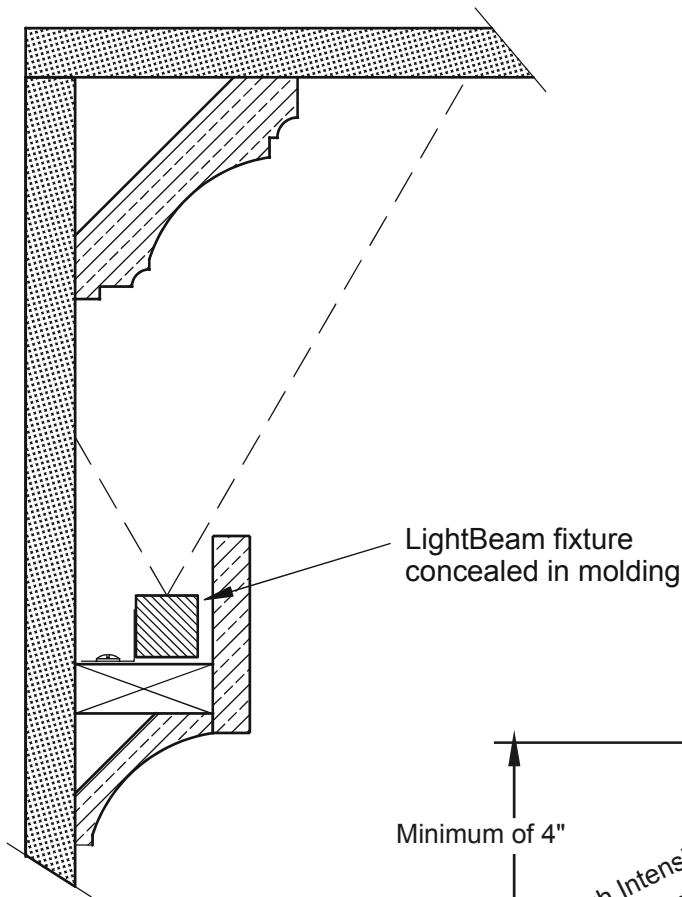
NOTES:

1. Attach LightBeam fixtures with optional brackets and wood screws.

2. Install illuminator in ventilated location, within 30 feet of fixture.

LightBeam fixture concealed in molding

High Intensity Blend Point

96% of output

Minimum of 4"

60°

Based on Line of Sight

Based on Line of Sight

3"
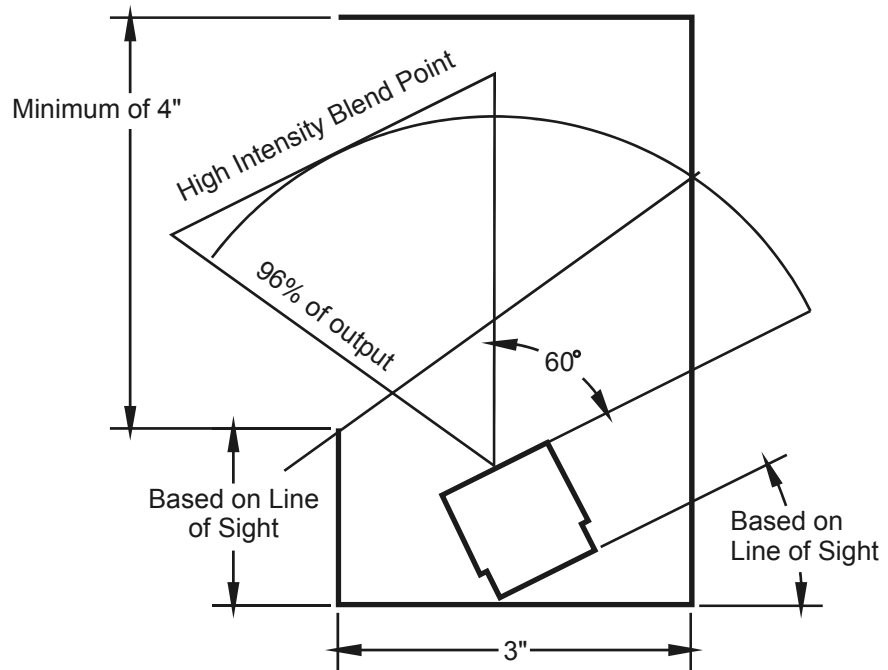
The first reflective surface should be:
4' from the lighted face of a high Intensity LB
6" from the lighted face of a medium Intensity LB

Star Ceiling Applications

e • (510) 490-3247 Fax • www.fiberstars.com

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The "Star Ceiling" effect is a frequently requested Fiberstars application. There are too many factors that rely on personal aesthetic choices to give an exact formula for every application. That is why we have created three different "Star Ceiling Kits." **Star Ceiling Kit A** (300 stars) will cover an area from 30 to 140 sq ft depending on star density with a sparkle wheel effect; **Star Ceiling Kit B** (500 stars) will do the same, but also includes a "shooting star" effect, and **Star Ceiling Kit C** (800 stars) will cover larger ceilings, from 100 to 400 sq ft, also with a "shooting star" effect (see spec sheets for details). General guidelines as follows :

How to Achieve the Effect

The "stars" are created by using individual strands of various sizes of multi-strand fiber in our STAR34/50 cable. These strands are threaded through the ceiling material to produce tiny bright points of lights. The fibers are then glued (with #FS-115 epoxy or FS-136 silicone) into place from the concealed side of the ceiling.

Star Size and Saturation

• Small = .75 mm fiber
• Medium = 1.0 mm fiber
• Large = 1.5 mm fiber
• 1 - 6 "stars" per square foot (depending on the effect desired)

Special Effects

• A sparkle wheel is included in each kit's illuminator.
• Star Ceilings Kits B & C also include a "shooting star" effect.

Notes

• For custom star and effect ceilings contact our D/E/Q department at 1-877-777-7389.

STAR 34/50
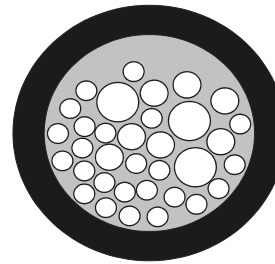
STAR34/50 contains:

24 - .75mm strands

7 - 1.0mm strands

3 - 1.5mm strands

Detail

Fiberstars STAR34/50 fiber optic cable.

Use FS-115 or FS-136 to secure star point.

End of fiber is cut no more than 1/8" from surface with snips or hot knife.

Plan View
Star Kit A

6 fibers per sq. ft.

7'

7'

2 fibers per sq. ft.

12'

12'
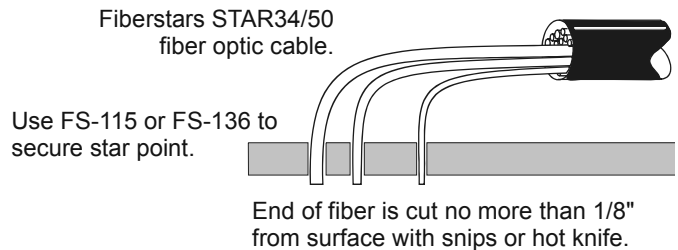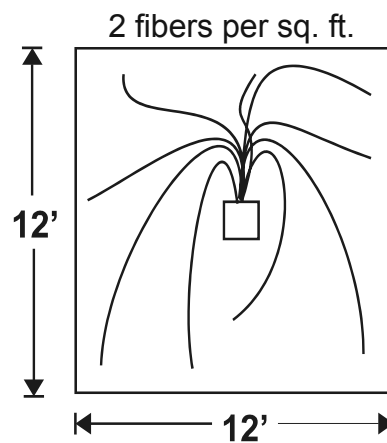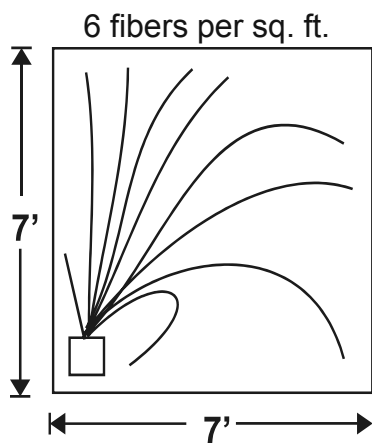
Specification Registration

Submitted by (Name/Agency) _____

Project Name _____

Project Address _____

City/State/Zip _____

Phone # _____

Specification Location

Contact/Title _____

Architect _____

Engineer _____

Lighting Designer _____

Purchasing Location

Distributor _____

Shipping Location

Ship To Location _____

Contractor _____

Primary Bill of Materials

Quantity	Part Number	Description

Approx. Date Specs will be out _____   **Approx. Bid Date** _____

Approx. Shipping Date _____   **Approx. Project Completion Date** _____

Please Check One: ☐ One Time Job   ☐ Permanent Specification   ☐ National Account

*Important: Specification credit will be allowed only if specification registration is received
by Fiberstars, Inc. prior to our receipt of release for shipment.*

FACTORY USE ONLY					
Spec Rep #		Copies to		Date Received	
Order Rep #		Recorded by		Date	
Ship Rep #		Confirmations sent		Date	

LOANER EQUIPMENT FORM

PURPOSE

Energy Focus, Inc. keeps a very limited supply of products for representatives to borrow for a specified amount of time.. Many of our custom or 'made to order' products are not available in this program. For custom samples, or samples that the agency intends to keep, please consult our Sample Program details on page 74. Loaner materials are typically requested for the following reasons:

- For when the Agency's equipment is either already loaned out or not working.
- For doing mock-ups when the Agency needs additional equipment to supplement their own equipment.
- For demonstrating a product that the Agency does not own.

TERMS OF USE

- Energy Focus, Inc. takes requests on a first come, first served basis.
- Energy Focus, Inc. requires a minimum of two (2) days to process loaner requests, but some loaners may be subject to standard lead times.
- The typical loan period is thirty (30) calendar days.
- Energy Focus, Inc. pays for standard freight from the factory to the Agency. The Agency or their clients must pay for any expedited shipments.
- The Agency pays for freight to the next destination or back to Energy Focus, Inc. by whatever method Energy Focus, Inc. designates.
- If equipment is not returned on time, a fine of $100.00 will be deducted from commission; future loan privileges revoked.
- If the representative does not call to request an extension and/or does not respond to repeated communication from Energy Focus, Inc. within a timely manner, the Agency will be invoiced for the full price of the equipment and this amount can be deducted from commission.
- If the equipment is returned either damaged, missing parts or requiring refurbishing, Energy Focus, Inc. will correct the problem and deduct and related charges from the agency's commission.
- If an Agency decides to purchase the equipment they are borrowing, the representative needs to communicate this to Energy Focus, Inc. so an invoice can be issued and Energy Focus, Inc. loaner stock can be replenished. Once purchased, demo equipment is not returnable.

DETAILED REQUEST

Ship What		Ship To	
Illuminator		Contact Name	
Fiber (Type, Length, Port, Ferrules, etc.)		Phone	
		Company Name	
		Address	
Fixtures		City/State/Zip	
Other		FedEx# (If Air Freight Requested)	

Specifier Name_____   Dates Needed –From _____

Project Name _____   To _____

Before Energy Focus, Inc. loans equipment, the terms must be understood and fully agreed to, as evidenced by an authorizing signature from the Agency.

Agency _____   Requester _____

Authorizing Signature_____   Date _____

Phone #_____   Fax # _____Please fax this form to Energy Focus, Inc. **Loaner Equipment** at (440) 815-2064**.** If you have any questions, please contact Customer Service at (800) 327-7877.

Agency Sample Program

Fiberstars is proud to have this agency sample program. We understand the need to acquire product samples for certain sales opportunities and we want to make this process as easy for everyone as possible.

This program is designed to help you augment existing product sample offerings and to ensure that new samples are being effectively used for sales opportunities. This program is not intended to replace our existing Loaner Equipment program. For specific job mock-ups, our Loaner program is a way for our Agencies to obtain materials for a short period of time so that specifiers and clients can evaluate products for application suitability. For more information about our Loaner Program, please consult page 73 of our 2011 Factory Representative Distributor Net Price Book and Reference Guide.

Fiberstars Standard Sample Purchase Program
(Excludes LED Dock Light, LED Globe Light, LED Landscape Light and LED e-Luminator)
- Purchase order must be submitted by and billed to the Agency with Job Name: SAMPLE
- Program is valid for (1) sample of each eligible product per agency office
- Pricing will be published DN less 30%, no commission, plus freight (PPD/ADD)
- Standard 30 day terms apply
- Job Orders are not eligible for sample pricing
- Subject to restrictions – certain products such as custom light bars and decorative chandeliers may not be available at the same discounted price levels. Please consult your Sales Manager for sample arrangements of custom or 'made to order" products.

Fiberstars LED Globe Light / LED Dock Light/ LED LandScape Light Sample Program
- Purchase order must be submitted by and billed to the Agency with Job Name: LED SAMPLE
- Program is valid for (1) sample of each eligible product per agency office
- Pricing will be published DN less 45% at single unit price levels, no commission, plus freight (PPD/ADD)
- 90 day terms will apply
- Job Orders are not eligible for sample pricing

Please consult your Fiberstars sales manager for details on samples of our LED e-Luminator and demo kits.

For questions about our policies, please contact your sales manager or our customer service team at (888) 704-2276.

APPLICATION FOR BUSINESS CREDIT

Credit Department
440-715-1337 / 440-542-1526 (fax)

On the basis of the following data, I/we hereby apply to Energy Focus, Inc. for credit accommodations. The information below as Submitted, is true and correct according to the best of my knowledge. The undersigned agrees to abide by the standard terms & conditions and personal guarantee of sales, as printed below. If you have any questions, please contact the Credit Department.

Legal Name of Business_____ Phone No. :_____

TradeName_____

(Billing) Actual Location of Business _____Fax No. :_____

City/State/Zip_____ E-Mail :_____

Address_____

Tax exempt or Resale ID#?_____

** YOU WILL BE CHARGED SALES TAX (WHERE APPLICABLE) UNLESS THE APPROPRIATE CERTIFICATE IS FORWARDED WITH THIS APPLICATION **

Sole Proprietorship: _____Partnership: _____Corporation: _____LLC: _____

Other: _____Division:_____Subsidiary_____of:_____

Principal and/or Officers:

Name / Title

A._____

B._____

Trade References (Name, Address, Telephone & Fax Number): *Please note credit application will not be processed without trade references.*

A._____

B._____

C._____

Financial Information (Please include recent Financial Statement):

Bank_____Phone No.:_____

Address_____Account#_____

Bonding Company_____ (Contractors must complete)

Address_____ Agents Name: _____ Bond No: _____

SEE TERMS AND CONDITIONS ON PAGE 2

www.energyfocusinc.com

Fiberstars, An Energy Focus Company
Phone: (888) 704-2276 * Fax: (888) 704-2292 * web: www.fiberstars.com

32000 Aurora Road   Solon, Ohio 44139
Tel (800) 327-7877   Fax (440) 715-1112
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TERMS & CONDITIONS AND PERSONAL GUARANTEE

1. Energy Focus, Inc. (Seller) hereby gives notice of its objection to any different or additional terms & conditions.

2. All offers to sell are made F.O.B. point of shipment. Buyer has risk of loss upon shipment from F.O.B. point.

3. Payment terms are 30 days from invoice date unless special financing has been arraigned prior to placing order.

4. Cash discounts for special items, direct shipments or negotiated jobs will be the same as the manufacturer making shipment and will be so indicated on our invoice. Any discount payments received beyond terms from the invoice date will be denied and charged back.

5. In the event Buyer does not pay when due, past due amounts are subject to service charges of 1 ½ percent per month (18% per annum) or maximum permitted by law, whichever is less.

6. All products supplied or services rendered are warranted only to the extent of each manufacturer's individual warranty. Any manufacturer warranties will be furnished upon request.

7. Seller shall not be liable for any labor or back charges other than those agreed upon in advance, between Buyer and Seller in writing. This acceptance agreement of charges must be documented and endorsed by Seller to be valid.

8. No sales representative of the seller has authority to alter, vary, or waive any of the standard terms and conditions herein.

9. In the event the account is placed in the hands of an attorney or collection agency for collection after default in payment pursuant to the payment terms set forth herein, the customer agrees to pay thirty (30%) percent of the unpaid balance due for attorneys fees, which the customer and guarantor below agree is a reasonable fee, together with applicable costs

10. Seller is not accountable or liable for delays in delivery. Factory delivery dates are the best estimates of our suppliers. In no case shall Seller be liable for any consequential, incidental or special damages arising from any delay in delivery.

11. The seller or an authorized representative of seller has my permission to contact any references or any other commercial credit agencies.

12. PERSONAL GUARANTEE – If the purchaser is a corporation, limited liability company (LLC), or any other type of business entity, then those signing this application, whether executing this agreement as an officer of the entity or not, do hereby personally guarantee payment for any and all obligations as set forth herein. In the event of the filing of a petition in bankruptcy by the purchaser, or other insolvency proceeding, Energy Focus, Inc. has the right to proceed under the terms of this personal guarantee against the undersigned guarantor.

13. The undersigned has read, understands and agrees to all of the terms and conditions stated on this Credit Application. I understand that if any portion of this Agreement is unenforceable, the remaining provisions will be enforceable. I further acknowledge receipt of a copy of this agreement. I state that I have not been coerced and that I am not signing this Agreement under any duress

We Report to D&B...
to better serve the
credit community.
D&B
Decide with Confidence
For more information, please visit www.dnb.com/tradeexchange
or call 1 800 999-3867 x7991.

I HAVE READ THE ABOVE STATEMENT AND AGREE TO THE ABOVE TERMS

Date_____-_____-_____ Company_____

Individual Signature_____ Print Name_____
(MUST BE AN OFFICER)

Title_____Witness_____

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Revised 10/15/2008

www.energyfocusinc.com

32000 Aurora Road   Solon, Ohio 44139

Fiberstars, An Energy Focus Company
Phone: (888) 704-2276 * Fax: (888) 704-2292 * web: www.fiberstars.com

Tel (800) 327-7877   Fax (440) 7

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Version 1.2

Credit Card Payment Authorization Form
Please fax completed form back to: 440-542-1526

Date:_____

Customer:_____

Customer Address:_____

_____

Customer Phone:_____

Customer Fax:_____

Invoice Number(s):_____

Amount Due:_____

Cardholders Name:_____

Cardholders Address if different from
above:_____

Circle One: MasterCard   Visa   American Express Discover

Card Number:_____

Security Code:_____

Expiration Date:_____

The undersigned authorizes $_____to be charged on this credit card for payment on the above invoice(s).

Do you wish to use the specified card for future orders/unpaid balances?   ___Yes   ___No

Signature:_____

www.energyfocusinc.com

Notes