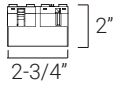
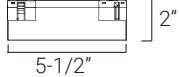


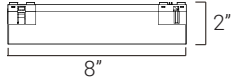
FG-L4R-3



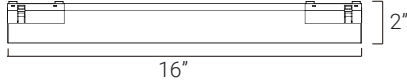
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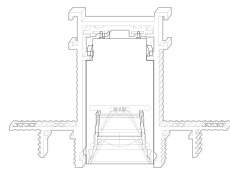
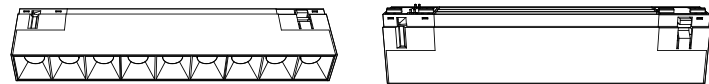
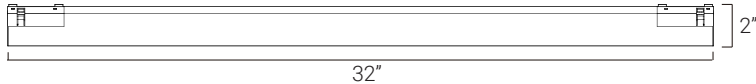
FG-L4R-8



FG-L4R-16



FG-L4R-32



section view into track

GROOVE 'LINEAR DOWNLIGHT' SERIES

The 'Linear Recessed Downlight & Task' luminaire easily integrates into a track system and sits flush with the ceiling line or wall for a clean, sophisticated look.

The FG-L4R can be installed individually or combined with other Groove system track luminaires to create the perfect design. Multiple fixtures can be mounted next to each other on one track for a continuous ray of illumination.

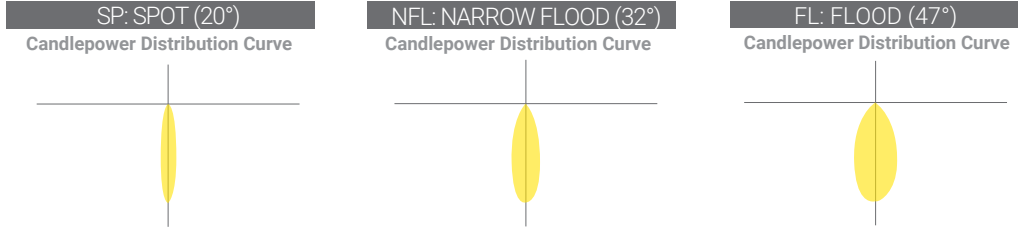
The FG-L4R luminaire is equipped with your choice of 20° spot, 32° narrow flood, or 47° flood TIR optics, ideal for a wide variety of applications, and provides glare-free illumination ideal for downlight and task lighting applications.

SERIES	Groove - 'Linear Downlight' series
SIZE	3", 5", 8", 16", 32"
CCT	2700K, 3000K, 3500K, 4000K, 5000K
CRI	90+
COLOR QUALITY	2 Step MacAdam Ellipse
OPTICS	Spot 20°, Narrow Flood 32°, Flood 47°
FINISH	● BK (Black)
DIMMING	On / Off, DIM10 - (0-10V Dimming), DALI.1 - DALI 2, BLE - Bluetooth
LIFETIME	L70 at 60,000 Hours
PHOTOMETRIC TESTS	In Accordance with IES LM79-08, LM80 and TM-30, TM-21

SERIES	DELIVERED LUMENS	WATTAGE
FG-L4R-3	300	6W
FG-L4R-5	500	10W
FG-L4R-8	800	13W
FG-L4R-16	1600	23W
FG-L4R-32	3200	45W

Based on 4000K, 90+ CRI. Actual wattage may vary +/- 5%





Reference IES files for additional distribution curve information.

FEATURES OF GROOVE FAMILY

The Groove 48V DC track system is available with multiple sleek, slender, and compact track heads that can be seamlessly mounted onto the track by simply clicking the track head's connector into place, allowing you to interchange one Groove-compatible luminaire for another. The Groove's intuitive click-in track makes it easy to install and switch luminaires, so the system can be updated to match any design or application, current or future.

The Groove track system is available in Trimless Recessed, Recessed Flanged, Ceiling/ Surface, and Suspended options, and can be integrated in most ceiling and wall applications. Utilize suspended and surface mounting options for surface such as wood, drywall or T-Bar ceilings.

The Groove offers a variety of connector accessories that enable users to tailor their designs with custom rectangular, square, or many other linear patterns. The T, X, L Corners and power connectors create dynamic designs that transcend flat surfaces including wall to ceiling, wrap corners, and more.

Drivers can be stowed within the system, hidden from view, or placed in a remote location. The single driver can power runs up to 65' long and 480 Watts. Please refer to driver spec sheets for more detailed information. Our team at Elite Lighting can help you organize the placement of drivers and complete systems.

Fixtures can be installed individually or combined with other Groove track system luminaires to create the perfect design. Multiple linear fixtures can be mounted next to each other on one track for continuous rays of illumination.

Available track head options are in-line linear, adjustable linear, spot, pendant, cylinder, and suspended. Many track heads are crafted with black interiors and TIR optics, providing precise beam control and reducing glare. Most track heads that are available with optics are field-changeable, with various lumen and distribution options. Additionally, some track heads can be overlaid with a single optical accessory, like the Linear Diffuser, Frosted Diffuser, and Honeycomb accessories. Some track heads can be used with spot-light, flood-light, snoot, and wall-wash accessories. (Please refer to the spec sheet on each individual track head for more detailed information.)

Subsequently, the system can be used for accent, task, and general illumination, making it ideal for a plethora of applications, such as galleries, museums, hospitality spaces, retail spaces, corporate offices, and residential spaces.

CONSTRUCTION

All track heads are engineered to have an extremely long lifespan and service period by using coolLED's Advanced Thermodynamic Design, which includes an extruded aluminum body, a hidden diecast heat sink, and a thermal management system.

LED MODULE PERFORMANCE

The Groove System's luminaires are equipped with 2-step McAdam Eclipse LEDs, which provide consistent color across all fixtures, and 90+CRI. The LEDs are available in a variety of kelvin temperature options.

DRIVERS

The Groove System is powered by constant voltage drivers with a rating of 50/60Hz at a 120/277V input and a 48V output. They produce less than 20% THD, have a 90% power factor, and are thermally protected for additional safety. Driver wattages range from 75W to 450W and can power up to 65 ft. of track. Groove drivers can be installed internally within the track or remotely mounted, and are available in 0-10V 1% Dimming, Dali Dimming, or 120V On/ Off Non-Dimming Driver. Please see Groove track system spec sheets for a complete list of drivers and capabilities.

DIMMING INFORMATION

DIM10 - 0-10V dimming on either MVOLT 120, 277. Dimmable down to 1% of initial lumens, standard. Available in 75W, 100W, 150W., 240W.
 DIMTR - Electronic low voltage dimming. Available in 120V.
 DALI - DALI DT6 dimming down to 1% Available in 75W, 100W, 150W, 240W.

EldoLED PowerDrive dimming down to 0.1%. Please see the EldoLED website for wiring diagrams and a full list of compatible DMX and DALI control systems.

FINISH

Luminaires are available in a powder-coated black or white post-paint finish. They may also be issued in custom RAL colors upon request. Consult the factory to find out which custom colors can be accommodated.

WARRANTY

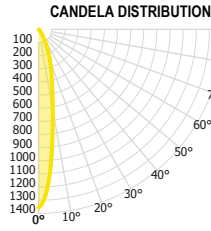
Five-year warranty for parts and components.

EXAMPLE:					
SERIES	OPTICS	CCT	CRI	FINISH	OPTION
FG-L4R-3	<input type="checkbox"/> SP=20°	<input type="checkbox"/> 27K	<input type="checkbox"/> 90	<input type="checkbox"/> BK (Black)	<input type="checkbox"/> 48V
FG-L4R-5	<input type="checkbox"/> NFL=32°	<input type="checkbox"/> 30K			<input type="checkbox"/> 48V-BLE (Bluetooth)
FG-L4R-8	<input type="checkbox"/> FL=47°	<input type="checkbox"/> 35K			*Power supply must be ordered separately
FG-L4R-16		<input type="checkbox"/> 40K			
FG-L4R-32		<input type="checkbox"/> 50K			

FG-L4R-3-SP-40K-90

TEST NO.: **220062**

INPUT WATTS: **6.4** LUMENS: **322** EFFICACY: **50** BEAM ANGLE: **20** SPACING CRITERIA: **0.31**



	0°	90°
0°	1356	1356
10°	621	655
20°	253	264
30°	83	97
40°	21	26
50°	0	0
60°	0	0
70°	0	0
80°	0	0
90°	0	0

	0.00°	90.00°
0.00°	14591556	14591556
45.00°	136241	160445
55.00°	0	0
65.00°	0	0
75.00°	0	0
85.00°	0	0

ZONE	LUMENS
0° - 10°	88
10° - 20°	114
20° - 30°	77
30° - 40°	34
40° - 50°	10
50° - 60°	0
60° - 70°	0
70° - 80°	0
80° - 90°	0

ZONE	UMENS	% LUMINAIRE
0° - 20°	202	63%
0° - 30°	278	86%
0° - 40°	312	97%
0° - 60°	322	100%
0° - 80°	322	100%
0° - 90°	322	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	37.7 fc	2.0 ft	2.0 ft
8.0 ft	21.2 fc	2.7 ft	2.7 ft
10.0 ft	13.6 fc	3.4 ft	3.3 ft
12.0 ft	9.4 fc	4.1 ft	4.0 ft
14.0 ft	6.9 fc	4.8 ft	4.7 ft
16.0 ft	5.3 fc	5.4 ft	5.3 ft
18.0 ft	4.2 fc	6.1 ft	6.0 ft
20.0 ft	3.4 fc	6.8 ft	6.6 ft

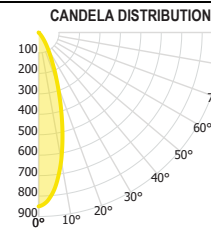
INDOOR COEFFICIENTS OF UTILIZATION

pf	pc	20%																0%	
		80%				70%				50%				30%					
pw		70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	118	118	118	118	115	115	115	115	110	110	110	105	105	105	101	101	101	99	0%
1	113	111	109	107	111	109	107	106	105	104	102	101	100	99	98	97	96	95	0%
2	109	105	102	99	107	103	100	98	100	98	96	97	95	94	93	92	90	90	0%
3	105	100	96	92	103	98	95	92	96	93	90	94	91	89	91	89	88	86	0%
4	101	95	90	87	99	94	90	87	92	88	86	90	87	85	88	86	84	82	0%
5	97	91	86	82	96	90	85	82	88	84	81	86	83	81	85	82	80	79	0%
6	94	87	82	78	92	86	81	78	85	81	78	83	80	77	82	79	77	75	0%
7	90	83	78	75	89	82	78	75	81	77	74	80	77	74	79	76	74	72	0%
8	87	80	75	72	86	79	75	72	78	74	71	77	74	71	76	73	71	70	0%
9	84	77	72	69	83	76	72	69	75	71	69	75	71	68	74	71	68	67	0%
10	82	74	69	66	81	74	69	66	73	69	66	72	68	66	72	68	66	65	0%

FG-L4R-3-NFL-40K-90

TEST NO.: **220062**

INPUT WATTS: **6.4** LUMENS: **333** EFFICACY: **52** BEAM ANGLE: **32** SPACING CRITERIA: **0.51**



	0°	90°
0°	851	851
10°	636	694
20°	270	335
30°	88	116
40°	19	28
50°	0	0
60°	0	0
70°	0	0
80°	0	0
90°	0	0

	0.00°	90.00°
0.00°	9155028	9155028
45.00°	107014	148571
55.00°	0	0
65.00°	0	0
75.00°	0	0
85.00°	0	0

ZONE	LUMENS
0° - 10°	72
10° - 20°	131
20° - 30°	83
30° - 40°	36
40° - 50°	10
50° - 60°	0
60° - 70°	0
70° - 80°	0
80° - 90°	0

ZONE	UMENS	% LUMINAIRE
0° - 20°	203	61%
0° - 30°	286	86%
0° - 40°	323	97%
0° - 60°	333	100%
0° - 80°	333	100%
0° - 90°	333	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	23.6 fc	3.5 ft	3.6 ft
8.0 ft	13.3 fc	4.6 ft	4.8 ft
10.0 ft	8.5 fc	5.8 ft	6.0 ft
12.0 ft	5.9 fc	6.9 ft	7.2 ft
14.0 ft	4.3 fc	8.1 ft	8.4 ft
16.0 ft	3.3 fc	9.2 ft	9.7 ft
18.0 ft	2.6 fc	10.4 ft	10.9 ft
20.0 ft	2.1 fc	11.5 ft	12.1 ft

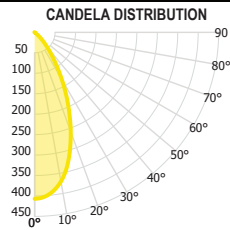
INDOOR COEFFICIENTS OF UTILIZATION

pf	pc	20%																0%	
		80%				70%				50%				30%					
pw		70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	118	118	118	118	115	115	115	115	110	110	110	106	106	106	101	101	101	99	0%
1	114	111	109	107	111	109	107	105	105	104	102	101	100	99	98	97	96	95	0%
2	109	105	101	99	107	103	100	98	100	98	96	97	95	93	95	93	91	90	0%
3	105	99	95	92	103	98	94	91	95	92	90	93	91	88	91	89	87	86	0%
4	101	94	90	86	99	93	89	86	91	88	85	89	86	84	87	85	83	81	0%
5	97	90	85	81	95	89	84	81	87	83	80	86	82	80	84	81	79	78	0%
6	93	86	81	77	92	85	80	77	83	79	76	82	79	76	81	78	75	74	0%
7	89	82	77	73	88	81	76	73	80	76	73	79	75	72	78	75	72	71	0%
8	86	78	73	70	85	78	73	70	77	73	70	76	72	69	75	72	69	68	0%
9	83	75	70	67	82	75	70	67	74	70	67	73	69	66	72	69	66	65	0%
10	80	72	67	64	79	72	67	64	71	67	64	70	66	64	70	66	64	63	0%

FG-L4R-3-FL-40K-90

TEST NO.: 220062

INPUT WATTS: 6.4 LUMENS: 301 EFFICACY: 47 BEAM ANGLE: 49 SPACING CRITERIA: 0.75



CANDELA TABLE	
	0° 90°
0°	407 407
10°	370 354
20°	258 250
30°	133 135
40°	49 52
50°	0 0
60°	0 0
70°	0 0
80°	0 0
90°	0 0

LUMINANCE (cd/sq.m)		
	0.00°	90.00°
0.00°	4380588	4380588
45.00°	384063	438712
55.00°	0	0
65.00°	0	0
75.00°	0	0
85.00°	0	0

LUMENS PER ZONE	
ZONE	LUMENS
0° - 10°	37
10° - 20°	90
20° - 30°	91
30° - 40°	58
40° - 50°	24
50° - 60°	0
60° - 70°	0
70° - 80°	0
80° - 90°	0

ZONAL LUMEN SUMMARY		
ZONE	UMENS	% LUMINAIRE
0° - 20°	127	42%
0° - 30°	219	73%
0° - 40°	277	92%
0° - 60°	301	100%
0° - 80°	301	100%
0° - 90°	301	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	11.3 fc	5.5 ft	5.5 ft
8.0 ft	6.4 fc	7.3 ft	7.3 ft
10.0 ft	4.1 fc	9.1 ft	9.1 ft
12.0 ft	2.8 fc	10.9 ft	10.9 ft
14.0 ft	2.1 fc	12.8 ft	12.7 ft
16.0 ft	1.6 fc	14.6 ft	14.6 ft
18.0 ft	1.3 fc	16.4 ft	16.4 ft
20.0 ft	1.0 fc	18.2 ft	18.2 ft

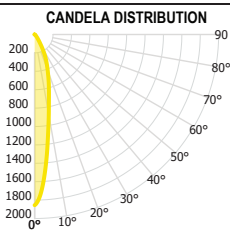
INDOOR COEFFICIENTS OF UTILIZATION

pf	20%												0%					
	80%			70%			50%			30%				10%				
pc	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	117	117	117	117	114	114	114	114	109	109	109	104	104	104	100	100	100	98
1	112	109	107	104	109	107	105	103	103	101	100	99	98	97	96	95	94	92
2	106	102	98	95	104	100	96	94	97	94	91	94	92	90	91	89	88	86
3	101	95	90	86	99	94	89	86	91	87	84	89	86	83	87	84	82	80
4	96	89	84	80	94	88	83	79	86	82	78	84	80	77	82	79	76	75
5	91	83	78	74	90	83	77	73	81	76	73	79	75	72	78	74	72	70
6	87	79	73	69	86	78	72	68	76	72	68	75	71	68	74	70	67	66
7	83	74	68	64	82	73	68	64	72	67	64	71	67	63	70	66	63	62
8	79	70	64	60	78	69	64	60	68	63	60	67	63	60	66	62	59	58
9	75	66	60	57	74	66	60	57	65	60	56	64	59	56	63	59	56	55
10	72	63	57	53	71	62	57	53	61	57	53	61	56	53	60	56	53	52

FG-L4R-5-SP-40K-90

TEST NO.: 220062

INPUT WATTS: 9.7 LUMENS: 515 EFFICACY: 53 BEAM ANGLE: 20 SPACING CRITERIA: 0.32



CANDELA TABLE	
	0° 90°
0°	1855 1855
10°	886 952
20°	415 442
30°	150 163
40°	37 41
50°	0 0
60°	0 0
70°	0 0
80°	0 0
90°	0 0

LUMINANCE (cd/sq.m)		
	0.00°	90.00°
0.00°	7131090	7131090
45.00°	101501	113516
55.00°	0	0
65.00°	0	0
75.00°	0	0
85.00°	0	0

LUMENS PER ZONE	
ZONE	LUMENS
0° - 10°	121
10° - 20°	172
20° - 30°	136
30° - 40°	65
40° - 50°	21
50° - 60°	0
60° - 70°	0
70° - 80°	0
80° - 90°	0

ZONAL LUMEN SUMMARY		
ZONE	UMENS	% LUMINAIRE
0° - 20°	293	57%
0° - 30°	429	83%
0° - 40°	494	96%
0° - 60°	515	100%
0° - 80°	515	100%
0° - 90°	515	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	51.5 fc	2.1 ft	2.1 ft
8.0 ft	29.0 fc	2.8 ft	2.7 ft
10.0 ft	18.6 fc	3.5 ft	3.4 ft
12.0 ft	12.9 fc	4.2 ft	4.1 ft
14.0 ft	9.5 fc	4.9 ft	4.8 ft
16.0 ft	7.2 fc	5.6 ft	5.5 ft
18.0 ft	5.7 fc	6.3 ft	6.2 ft
20.0 ft	4.6 fc	7.0 ft	6.8 ft

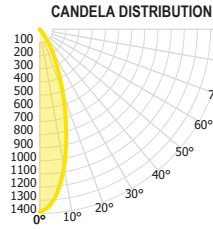
INDOOR COEFFICIENTS OF UTILIZATION

pf	20%												0%					
	80%			70%			50%			30%				10%				
pc	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	117	117	117	117	115	115	115	115	110	110	110	105	105	105	101	101	101	99
1	113	110	108	106	110	108	106	105	104	103	101	101	100	98	97	96	96	94
2	108	104	101	98	106	102	99	97	99	97	95	96	94	93	94	92	91	89
3	104	98	94	91	102	97	93	90	95	91	89	92	90	87	90	88	86	85
4	100	93	89	85	98	92	88	85	90	86	84	88	85	83	86	84	82	80
5	96	89	84	80	94	88	83	80	86	82	79	85	81	78	83	80	78	76
6	92	84	79	76	91	84	79	76	82	78	75	81	77	75	80	77	74	73
7	88	81	76	72	87	80	75	72	79	75	72	78	74	71	77	73	71	70
8	85	77	72	69	84	77	72	69	76	71	68	75	71	68	74	70	68	67
9	82	74	69	66	81	73	69	66	73	68	65	72	68	65	71	68	65	64
10	79	71	66	63	78	71	66	63	70	66	63	69	65	62	68	65	62	61

FG-L4R-5-NFL-40K-90

TEST NO.: **220062**

INPUT WATTS: **9.8** LUMENS: **581** EFFICACY: **59** BEAM ANGLE: **32** SPACING CRITERIA: **0.54**



	0°	90°
0°	1387	1387
10°	1065	1056
20°	516	501
30°	189	181
40°	38	38
50°	0	0
60°	0	0
70°	0	0
80°	0	0
90°	0	0

	0.00°	90.00°
0.00°	5332364	5332364
45.00°	79102	80842
55.00°	0	0
65.00°	0	0
75.00°	0	0
85.00°	0	0

ZONE	LUMENS
0° - 10°	118
10° - 20°	220
20° - 30°	153
30° - 40°	71
40° - 50°	19
50° - 60°	0
60° - 70°	0
70° - 80°	0
80° - 90°	0

ZONE	UMENS	% LUMINAIRE
0° - 20°	338	58%
0° - 30°	491	85%
0° - 40°	562	97%
0° - 60°	581	100%
0° - 80°	581	100%
0° - 90°	581	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	38.5 fc	3.7 ft	3.6 ft
8.0 ft	21.7 fc	4.9 ft	4.8 ft
10.0 ft	13.9 fc	6.2 ft	6.0 ft
12.0 ft	9.6 fc	7.4 ft	7.2 ft
14.0 ft	7.1 fc	8.6 ft	8.4 ft
16.0 ft	5.4 fc	9.9 ft	9.6 ft
18.0 ft	4.3 fc	11.1 ft	10.8 ft
20.0 ft	3.5 fc	12.3 ft	12.0 ft

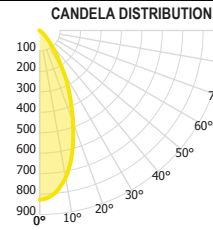
INDOOR COEFFICIENTS OF UTILIZATION

pf	pc	20%												0%					
		80%			70%			50%			30%				10%				
pw		70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	0%	
0	118	118	118	118	115	115	115	115	110	110	110	105	105	105	105	101	101	101	99
1	113	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94	94
2	109	104	101	98	107	103	100	97	100	97	95	95	95	93	94	92	91	89	89
3	104	99	95	91	102	97	94	90	95	92	89	93	90	88	90	88	86	85	85
4	100	94	89	85	98	93	88	85	90	87	84	89	85	83	87	84	82	81	81
5	96	89	84	80	94	88	83	80	86	82	79	85	81	79	83	80	78	77	77
6	92	85	80	76	91	84	79	76	83	78	75	81	78	75	80	77	74	73	73
7	89	81	76	72	87	80	75	72	79	75	72	78	74	71	77	73	71	70	70
8	85	77	72	69	84	77	72	69	76	71	68	75	71	68	74	70	68	67	67
9	82	74	69	66	81	73	69	65	73	68	65	72	68	65	71	67	65	64	64
10	79	71	66	63	78	71	66	63	70	65	63	69	65	62	68	65	62	61	61

FG-L4R-5-FL-40K-90

TEST NO.: **220062**

INPUT WATTS: **9.7** LUMENS: **553** EFFICACY: **57** BEAM ANGLE: **47** SPACING CRITERIA: **0.70**



	0°	90°
0°	827	827
10°	731	740
20°	478	482
30°	234	234
40°	80	80
50°	0	0
60°	0	0
70°	0	0
80°	0	0
90°	0	0

	0.00°	90.00°
0.00°	3180928	3180928
45.00°	224205	222031
55.00°	0	0
65.00°	0	0
75.00°	0	0
85.00°	0	0

ZONE	LUMENS
0° - 10°	75
10° - 20°	172
20° - 30°	166
30° - 40°	101
40° - 50°	40
50° - 60°	0
60° - 70°	0
70° - 80°	0
80° - 90°	0

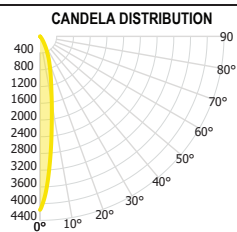
ZONE	UMENS	% LUMINAIRE
0° - 20°	247	45%
0° - 30°	412	75%
0° - 40°	513	93%
0° - 60°	553	100%
0° - 80°	553	100%
0° - 90°	553	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	23.0 fc	5.1 ft	5.0 ft
8.0 ft	12.9 fc	6.7 ft	6.7 ft
10.0 ft	8.3 fc	8.4 ft	8.4 ft
12.0 ft	5.7 fc	10.1 ft	10.1 ft
14.0 ft	4.2 fc	11.8 ft	11.8 ft
16.0 ft	3.2 fc	13.5 ft	13.4 ft
18.0 ft	2.6 fc	15.2 ft	15.1 ft
20.0 ft	2.1 fc	16.9 ft	16.8 ft

INDOOR COEFFICIENTS OF UTILIZATION

pf	pc	20%												0%					
		80%			70%			50%			30%				10%				
pw		70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	0%	
0	117	117	117	117	114	114	114	114	109	109	109	105	105	105	100	100	100	98	98
1	112	109	107	105	109	107	105	103	103	102	100	100	98	97	96	95	94	92	92
2	107	102	98	95	104	100	97	94	97	94	92	94	92	90	92	90	88	87	87
3	102	96	91	87	100	94	90	87	92	88	85	89	86	84	87	85	83	81	81
4	97	90	85	81	95	89	84	80	87	82	79	85	81	78	83	80	77	76	76
5	92	84	79	75	91	83	78	75	82	77	74	80	76	73	79	75	73	71	71
6	88	80	74	70	86	79	73	70	77	73	69	76	72	69	75	71	68	67	67
7	84	75	69	65	82	74	69	65	73	68	65	72	68	65	71	67	64	63	63
8	80	71	65	62	79	70	65	61	69	65	61	68	64	61	68	64	61	59	59
9	76	67	62	58	75	67	62	58	66	61	58	65	61	58	64	60	57	56	56
10	73	64	59	55	72	64	58	55	63	58	55	62	58	55	61	57	54	53	53

FG-L4R-8-SP-40K-90
TEST NO.: 220062
INPUT WATTS: 13.6 LUMENS: 886 EFFICACY: 65 BEAM ANGLE: 20 SPACING CRITERIA: 0.26

CANDELA TABLE

	0°	90°
0°	4148	4148
10°	1626	1871
20°	644	704
30°	210	211
40°	47	45
50°	0	0
60°	0	0
70°	0	0
80°	0	0
90°	0	0

LUMINANCE (cd/sq.m)

	0.00°	90.00°
0.00°	11161636	11161636
45.00°	70708	79499
55.00°	0	0
65.00°	0	0
75.00°	0	0
85.00°	0	0

LUMENS PER ZONE

ZONE	LUMENS
0° - 10°	261
10° - 20°	310
20° - 30°	204
30° - 40°	87
40° - 50°	25
50° - 60°	0
60° - 70°	0
70° - 80°	0
80° - 90°	0

ZONAL LUMEN SUMMARY

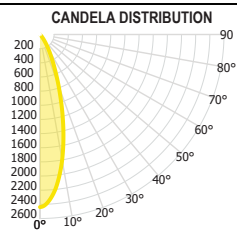
ZONE	UMENS	% LUMINAIRE
0° - 20°	570	64%
0° - 30°	774	87%
0° - 40°	861	97%
0° - 60°	886	100%
0° - 80°	886	100%
0° - 90°	886	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	115.2 fc	1.9 ft	1.8 ft
8.0 ft	64.8 fc	2.5 ft	2.4 ft
10.0 ft	41.5 fc	3.1 ft	3.0 ft
12.0 ft	28.8 fc	3.8 ft	3.7 ft
14.0 ft	21.2 fc	4.4 ft	4.3 ft
16.0 ft	16.2 fc	5.0 ft	4.9 ft
18.0 ft	12.8 fc	5.7 ft	5.5 ft
20.0 ft	10.4 fc	6.3 ft	6.1 ft

INDOOR COEFFICIENTS OF UTILIZATION

pf	pc	20%																0%
		80%				70%				50%				30%				
pw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	118	118	118	118	115	115	115	115	110	110	106	106	106	101	101	101	99	99
1	114	111	109	107	111	109	107	106	105	104	103	102	101	100	98	97	97	95
2	109	105	102	99	107	104	101	98	101	98	96	98	96	94	95	94	92	91
3	105	100	96	93	103	99	95	92	96	93	91	94	92	90	92	90	88	87
4	101	96	91	88	100	94	90	87	92	89	86	91	88	85	89	86	84	83
5	98	91	87	83	96	90	86	83	89	85	82	87	84	82	86	83	81	80
6	94	87	83	79	93	87	82	79	85	82	79	84	81	78	83	80	78	76
7	91	84	79	76	90	83	79	76	82	78	75	81	78	75	80	77	75	74
8	88	81	76	73	87	80	76	73	79	75	72	78	75	72	78	74	72	71
9	85	78	73	70	84	77	73	70	77	73	70	76	72	70	75	72	69	68
10	83	75	71	68	82	75	70	68	74	70	67	73	70	67	73	69	67	66

FG-L4R-8-NFL-40K-90
TEST NO.: 220062
INPUT WATTS: 13.5 LUMENS: 932 EFFICACY: 69 BEAM ANGLE: 32 SPACING CRITERIA: 0.50

CANDELA TABLE

	0°	90°
0°	2439	2439
10°	1802	1946
20°	766	944
30°	238	333
40°	45	86
50°	0	0
60°	0	0
70°	0	0
80°	0	0
90°	0	0

LUMINANCE (cd/sq.m)

	0.00°	90.00°
0.00°	6562218	6562218
45.00°	64619	108612
55.00°	0	0
65.00°	0	0
75.00°	0	0
85.00°	0	0

LUMENS PER ZONE

ZONE	LUMENS
0° - 10°	205
10° - 20°	366
20° - 30°	233
30° - 40°	100
40° - 50°	27
50° - 60°	0
60° - 70°	0
70° - 80°	0
80° - 90°	0

ZONAL LUMEN SUMMARY

ZONE	UMENS	% LUMINAIRE
0° - 20°	571	61%
0° - 30°	804	86%
0° - 40°	905	97%
0° - 60°	932	100%
0° - 80°	932	100%
0° - 90°	932	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	67.7 fc	3.4 ft	3.5 ft
8.0 ft	38.1 fc	4.6 ft	4.7 ft
10.0 ft	24.4 fc	5.7 ft	5.8 ft
12.0 ft	16.9 fc	6.9 ft	7.0 ft
14.0 ft	12.4 fc	8.0 ft	8.1 ft
16.0 ft	9.5 fc	9.2 ft	9.3 ft
18.0 ft	7.5 fc	10.3 ft	10.5 ft
20.0 ft	6.1 fc	11.4 ft	11.6 ft

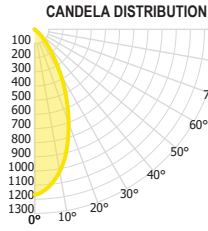
INDOOR COEFFICIENTS OF UTILIZATION

pf	pc	20%																0%
		80%				70%				50%				30%				
pw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	118	118	118	118	115	115	115	115	110	110	106	106	106	101	101	101	99	99
1	114	111	109	107	111	109	107	105	105	104	102	101	100	99	98	97	96	95
2	109	105	102	99	107	103	100	98	100	98	96	97	95	94	95	93	92	90
3	105	99	95	92	103	98	94	91	96	92	90	93	91	88	91	89	87	86
4	101	94	90	86	99	93	89	86	91	88	85	89	86	84	88	85	83	82
5	97	90	85	82	95	89	85	81	87	83	80	86	82	80	84	81	79	78
6	93	86	81	77	92	85	80	77	84	80	77	82	79	76	81	78	76	74
7	90	82	77	74	88	81	77	73	80	76	73	79	75	73	78	75	72	71
8	86	79	74	70	85	78	73	70	77	73	70	76	72	70	75	72	69	68
9	83	75	70	67	82	75	70	67	74	70	67	73	69	67	72	69	66	65
10	80	72	68	64	79	72	67	64	71	67	64	71	67	64	70	66	64	63

FG-L4R-8-FL-40K-90

TEST NO.: **220062**

INPUT WATTS: **13.6** | LUMENS: **851** | EFFICACY: **63** | BEAM ANGLE: **47** | SPACING CRITERIA: **0.72**



CANDELA TABLE		
	0°	90°
0°	1168	1168
10°	1020	1147
20°	703	819
30°	366	415
40°	136	151
50°	0	0
60°	0	0
70°	0	0
80°	0	0
90°	0	0

LUMINANCE (cd/sq.m)		
	0.00°	90.00°
0.00°	3142523	3142523
45.00°	278723	291662
55.00°	0	0
65.00°	0	0
75.00°	0	0
85.00°	0	0

LUMENS PER ZONE	
ZONE	LUMENS
0° - 10°	107
10° - 20°	257
20° - 30°	259
30° - 40°	162
40° - 50°	67
50° - 60°	0
60° - 70°	0
70° - 80°	0
80° - 90°	0

ZONAL LUMEN SUMMARY		
ZONE	UMENS	% LUMINAIRE
0° - 20°	363	43%
0° - 30°	622	73%
0° - 40°	785	92%
0° - 60°	851	100%
0° - 80°	851	100%
0° - 90°	851	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	32.4 fc	5.3 ft	5.3 ft
8.0 ft	18.2 fc	7.1 ft	7.0 ft
10.0 ft	11.7 fc	8.9 ft	8.8 ft
12.0 ft	8.1 fc	10.7 ft	10.6 ft
14.0 ft	6.0 fc	12.5 ft	12.3 ft
16.0 ft	4.6 fc	14.2 ft	14.1 ft
18.0 ft	3.6 fc	16.0 ft	15.8 ft
20.0 ft	2.9 fc	17.8 ft	17.6 ft

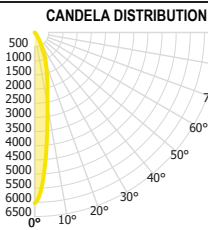
INDOOR COEFFICIENTS OF UTILIZATION

pf	pc	20%																0%	
		80%				70%				50%				30%					10%
pw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%	
0	117	117	117	117	114	114	114	114	109	109	109	104	104	104	100	100	100	98	0%
1	112	109	107	105	109	107	105	103	103	101	100	99	98	97	96	95	94	92	0%
2	106	102	98	95	104	100	97	94	97	94	92	94	92	90	91	89	88	86	0%
3	101	95	90	87	99	94	89	86	91	88	85	89	86	83	87	84	82	81	0%
4	96	89	84	80	95	88	83	79	86	82	79	84	80	78	82	79	77	75	0%
5	92	84	78	74	90	83	78	74	81	77	73	79	76	72	78	75	72	70	0%
6	87	79	73	69	86	78	73	69	77	72	68	75	71	68	74	70	67	66	0%
7	83	74	69	65	82	74	68	64	72	68	64	71	67	64	70	66	63	62	0%
8	79	70	64	61	78	70	64	60	69	64	60	68	63	60	67	63	60	58	0%
9	76	66	61	57	75	66	61	57	65	60	57	64	60	57	63	59	56	55	0%
10	72	63	57	54	71	63	57	54	62	57	54	61	57	53	60	56	53	52	0%

FG-L4R-16-SP-40K-90

TEST NO.: **220062**

INPUT WATTS: **22.5** | LUMENS: **1452** | EFFICACY: **65** | BEAM ANGLE: **20** | SPACING CRITERIA: **0.29**



CANDELA TABLE		
	0°	90°
0°	6028	6028
10°	2624	2775
20°	1163	1207
30°	364	420
40°	78	90
50°	0	0
60°	0	0
70°	0	0
80°	0	0
90°	0	0

LUMINANCE (cd/sq.m)		
	0.00°	90.00°
0.00°	8111010	8111010
45.00°	64867	76778
55.00°	0	0
65.00°	0	0
75.00°	0	0
85.00°	0	0

LUMENS PER ZONE	
ZONE	LUMENS
0° - 10°	379
10° - 20°	494
20° - 30°	371
30° - 40°	162
40° - 50°	45
50° - 60°	0
60° - 70°	0
70° - 80°	0
80° - 90°	0

ZONAL LUMEN SUMMARY		
ZONE	UMENS	% LUMINAIRE
0° - 20°	873	60%
0° - 30°	1244	86%
0° - 40°	1406	97%
0° - 60°	1452	100%
0° - 80°	1452	100%
0° - 90°	1452	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	167.5 fc	1.9 ft	1.9 ft
8.0 ft	94.2 fc	2.6 ft	2.6 ft
10.0 ft	60.3 fc	3.2 ft	3.2 ft
12.0 ft	41.9 fc	3.9 ft	3.9 ft
14.0 ft	30.8 fc	4.5 ft	4.5 ft
16.0 ft	23.5 fc	5.2 ft	5.1 ft
18.0 ft	18.6 fc	5.8 ft	5.8 ft
20.0 ft	15.1 fc	6.4 ft	6.4 ft

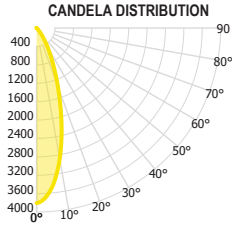
INDOOR COEFFICIENTS OF UTILIZATION

pf	pc	20%																0%	
		80%				70%				50%				30%					10%
pw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%	
0	118	118	118	118	115	115	115	115	110	110	110	105	105	105	101	101	101	99	0%
1	113	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94	0%
2	109	105	101	99	107	103	100	98	100	98	95	97	95	93	94	93	91	90	0%
3	105	99	95	92	103	98	94	91	95	92	90	93	91	88	91	89	87	86	0%
4	101	94	90	86	99	93	89	86	91	88	85	89	86	84	88	85	83	82	0%
5	97	90	85	82	95	89	85	81	87	84	81	86	83	80	84	82	79	78	0%
6	93	86	81	78	92	85	81	77	84	80	77	83	79	76	81	78	76	75	0%
7	90	82	77	74	89	82	77	74	80	76	73	79	76	73	78	75	73	72	0%
8	87	79	74	71	86	78	74	71	77	73	70	76	73	70	76	72	70	69	0%
9	84	76	71	68	83	75	71	68	75	70	67	74	70	67	73	70	67	66	0%
10	81	73	68	65	80	73	68	65	72	68	65	71	67	65	71	67	65	64	0%

FG-L4R-16-NFL-40K-90

TEST NO.: **220062**

INPUT WATTS: **22.5** LUMENS: **1574** EFFICACY: **70** BEAM ANGLE: **32** SPACING CRITERIA: **0.53**



	0°	90°
0°	3805	3805
10°	2889	3009
20°	1346	1456
30°	471	522
40°	88	103
50°	0	0
60°	0	0
70°	0	0
80°	0	0
90°	0	0

	0.00°	90.00°
0.00°	5119854	5119854
45.00°	61822	75732
55.00°	0	0
65.00°	0	0
75.00°	0	0
85.00°	0	0

ZONE	LUMENS
0° - 10°	323
10° - 20°	601
20° - 30°	414
30° - 40°	187
40° - 50°	49
50° - 60°	0
60° - 70°	0
70° - 80°	0
80° - 90°	0

ZONE	UMENS	% LUMINAIRE
0° - 20°	925	59%
0° - 30°	1338	85%
0° - 40°	1525	97%
0° - 60°	1574	100%
0° - 80°	1574	100%
0° - 90°	1574	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	105.7 fc	3.6 ft	3.7 ft
8.0 ft	59.5 fc	4.8 ft	4.9 ft
10.0 ft	38.1 fc	6.0 ft	6.1 ft
12.0 ft	26.4 fc	7.2 ft	7.3 ft
14.0 ft	19.4 fc	8.4 ft	8.5 ft
16.0 ft	14.9 fc	9.6 ft	9.7 ft
18.0 ft	11.7 fc	10.8 ft	11.0 ft
20.0 ft	9.5 fc	12.0 ft	12.2 ft

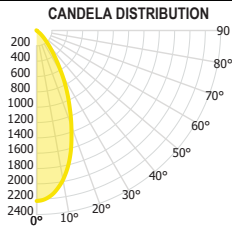
INDOOR COEFFICIENTS OF UTILIZATION

pf	20%												10%				0%
	80%			70%			50%			30%			10%	0%			
pc	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%		
0	118	118	118	118	115	115	115	115	110	110	110	105	105	105	101		
1	113	111	109	107	111	109	107	105	105	103	102	101	100	99	98		
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94		
3	104	99	95	91	102	98	94	91	95	92	89	93	90	88	91		
4	100	94	89	86	98	93	88	85	91	87	84	89	86	83	87		
5	96	89	84	81	95	88	84	80	87	83	80	85	82	79	84		
6	92	85	80	76	91	84	79	76	83	79	76	81	78	75	80		
7	89	81	76	72	88	80	76	72	79	75	72	78	74	72	77		
8	85	77	72	69	84	77	72	69	76	72	69	75	71	68	74		
9	82	74	69	66	81	74	69	66	73	69	66	72	68	65	71		
10	79	71	66	63	78	71	66	63	70	66	63	69	65	63	69		

FG-L4R-16-FL-40K-90

TEST NO.: **220062**

INPUT WATTS: **22.7** LUMENS: **1468** EFFICACY: **65** BEAM ANGLE: **47** SPACING CRITERIA: **0.72**



	0°	90°
0°	2223	2223
10°	1979	1935
20°	1325	1255
30°	666	615
40°	233	211
50°	0	0
60°	0	0
70°	0	0
80°	0	0
90°	0	0

	0.00°	90.00°
0.00°	2991425	2991425
45.00°	234864	211212
55.00°	0	0
65.00°	0	0
75.00°	0	0
85.00°	0	0

ZONE	LUMENS
0° - 10°	200
10° - 20°	459
20° - 30°	439
30° - 40°	266
40° - 50°	105
50° - 60°	0
60° - 70°	0
70° - 80°	0
80° - 90°	0

ZONE	UMENS	% LUMINAIRE
0° - 20°	659	45%
0° - 30°	1098	75%
0° - 40°	1363	93%
0° - 60°	1468	100%
0° - 80°	1468	100%
0° - 90°	1468	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	61.8 fc	5.0 ft	5.0 ft
8.0 ft	34.7 fc	6.7 ft	6.7 ft
10.0 ft	22.2 fc	8.3 ft	8.3 ft
12.0 ft	15.4 fc	10.0 ft	10.0 ft
14.0 ft	11.3 fc	11.6 ft	11.7 ft
16.0 ft	8.7 fc	13.3 ft	13.4 ft
18.0 ft	6.9 fc	15.0 ft	15.0 ft
20.0 ft	5.6 fc	16.6 ft	16.7 ft

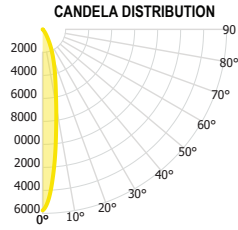
INDOOR COEFFICIENTS OF UTILIZATION

pf	20%												10%				0%
	80%			70%			50%			30%			10%	0%			
pc	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%		
0	117	117	117	117	114	114	114	114	109	109	109	105	105	105	100		
1	112	109	107	105	109	107	105	103	103	101	100	100	98	97	96		
2	107	102	98	95	104	100	97	94	97	94	92	94	92	90	92		
3	102	96	91	87	100	94	90	87	92	88	85	89	86	84	87		
4	97	90	85	81	95	89	84	80	87	82	79	85	81	78	83		
5	92	84	79	75	91	83	78	75	82	77	74	80	76	73	79		
6	88	80	74	70	86	79	74	70	77	73	69	76	72	69	75		
7	84	75	70	66	83	75	69	65	73	69	65	72	68	65	71		
8	80	71	66	62	79	71	65	62	70	65	61	69	64	61	68		
9	76	67	62	58	75	67	62	58	66	61	58	65	61	58	64		
10	73	64	59	55	72	64	58	55	63	58	55	62	58	55	61		

FG-L4R-32-SP-40K-90

TEST NO.: **220062**

INPUT WATTS: **45.7** LUMENS: **3475** EFFICACY: **76** BEAM ANGLE: **20** SPACING CRITERIA: **0.29**



	0°	90°
0°	15740	15740
10°	6803	7451
20°	2685	2854
30°	857	928
40°	212	219
50°	0	0
60°	0	0
70°	0	0
80°	0	0
90°	0	0

	0.00°	90.00°
0.00°	10588996	10588996
45.00°	79518	90336
55.00°	0	0
65.00°	0	0
75.00°	0	0
85.00°	0	0

ZONE	LUMENS
0° - 10°	1002
10° - 20°	1232
20° - 30°	800
30° - 40°	339
40° - 50°	102
50° - 60°	0
60° - 70°	0
70° - 80°	0
80° - 90°	0

ZONE	UMENS	% LUMINAIRE
0° - 20°	2234	64%
0° - 30°	3034	87%
0° - 40°	3374	97%
0° - 60°	3475	100%
0° - 80°	3475	100%
0° - 90°	3475	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	437.2 fc	1.9 ft	2.0 ft
8.0 ft	245.9 fc	2.6 ft	2.6 ft
10.0 ft	157.4 fc	3.2 ft	3.3 ft
12.0 ft	109.3 fc	3.9 ft	3.9 ft
14.0 ft	80.3 fc	4.5 ft	4.6 ft
16.0 ft	61.5 fc	5.2 ft	5.2 ft
18.0 ft	48.6 fc	5.8 ft	5.9 ft
20.0 ft	39.4 fc	6.5 ft	6.6 ft

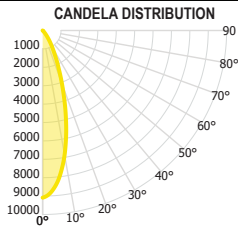
INDOOR COEFFICIENTS OF UTILIZATION

pf	20%																0%				
	80%				70%				50%				30%					10%			
pc	70%	50%	30%	10%	70%	50%	30%	10%	70%	50%	30%	10%	70%	50%	30%	10%	70%	50%	30%	10%	0%
0	118	118	118	118	115	115	115	115	110	110	110	110	105	105	105	101	101	101	99	99	99
1	114	111	109	107	111	109	107	106	105	104	102	102	100	99	98	97	97	97	95	95	95
2	109	105	102	99	107	104	101	98	101	98	96	96	96	94	95	94	92	91	91	91	91
3	105	100	96	93	103	99	95	92	96	93	91	94	92	89	92	90	88	87	87	87	87
4	101	95	91	88	100	94	90	87	92	89	86	90	88	85	89	86	84	83	83	83	83
5	98	91	87	83	96	90	86	83	89	85	82	87	84	81	86	83	81	80	80	80	80
6	94	87	83	79	93	87	82	79	85	81	78	84	81	78	83	80	77	76	76	76	76
7	91	84	79	76	90	83	79	76	82	78	75	81	77	75	80	77	74	73	73	73	73
8	88	81	76	73	87	80	76	73	79	75	72	78	75	72	77	74	72	71	71	71	71
9	85	78	73	70	84	77	73	70	76	72	70	76	72	69	75	72	69	68	68	68	68
10	82	75	70	67	82	74	70	67	74	70	67	73	69	67	72	69	67	66	66	66	66

FG-L4R-32-NFL-40K-90

TEST NO.: **220062**

INPUT WATTS: **45.3** LUMENS: **3539** EFFICACY: **78** BEAM ANGLE: **32** SPACING CRITERIA: **0.52**



	0°	90°
0°	9083	9083
10°	6871	7038
20°	3061	3184
30°	1019	1028
40°	225	220
50°	0	0
60°	0	0
70°	0	0
80°	0	0
90°	0	0

	0.00°	90.00°
0.00°	6110672	6110672
45.00°	71584	80118
55.00°	0	0
65.00°	0	0
75.00°	0	0
85.00°	0	0

ZONE	LUMENS
0° - 10°	770
10° - 20°	1390
20° - 30°	887
30° - 40°	386
40° - 50°	106
50° - 60°	0
60° - 70°	0
70° - 80°	0
80° - 90°	0

ZONE	UMENS	% LUMINAIRE
0° - 20°	2160	61%
0° - 30°	3047	86%
0° - 40°	3433	97%
0° - 60°	3539	100%
0° - 80°	3539	100%
0° - 90°	3539	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	252.3 fc	3.5 ft	3.5 ft
8.0 ft	141.9 fc	4.7 ft	4.7 ft
10.0 ft	90.8 fc	5.8 ft	5.9 ft
12.0 ft	63.1 fc	7.0 ft	7.1 ft
14.0 ft	46.3 fc	8.2 ft	8.3 ft
16.0 ft	35.5 fc	9.4 ft	9.4 ft
18.0 ft	28.0 fc	10.5 ft	10.6 ft
20.0 ft	22.7 fc	11.7 ft	11.8 ft

INDOOR COEFFICIENTS OF UTILIZATION

pf	20%																0%				
	80%				70%				50%				30%					10%			
pc	70%	50%	30%	10%	70%	50%	30%	10%	70%	50%	30%	10%	70%	50%	30%	10%	70%	50%	30%	10%	0%
0	118	118	118	118	115	115	115	115	110	110	110	110	106	106	106	101	101	101	99	99	99
1	114	111	109	107	111	109	107	105	105	104	102	101	100	99	98	97	96	95	95	95	95
2	109	105	102	99	107	103	100	98	100	98	95	97	95	93	95	93	92	90	90	90	90
3	105	99	95	92	103	98	94	91	95	92	90	93	91	88	91	89	87	86	86	86	86
4	101	94	90	86	99	93	89	86	91	88	85	89	86	84	88	85	83	82	82	82	82
5	97	90	85	81	95	89	84	81	87	83	80	86	82	80	84	81	79	78	78	78	78
6	93	86	81	77	92	85	80	77	83	79	76	82	79	76	81	78	75	74	74	74	74
7	89	82	77	73	88	81	77	73	80	76	73	79	75	72	78	75	72	71	71	71	71
8	86	78	73	70	85	78	73	70	77	73	70	76	72	69	75	72	69	68	68	68	68
9	83	75	70	67	82	75	70	67	74	70	67	73	69	66	72	69	66	65	65	65	65
10	80	72	67	64	79	72	67	64	71	67	64	70	67	64	70	66	64	63	63	63	63

FG-L4R-32-FL-40K-90

TEST NO.: **220062**

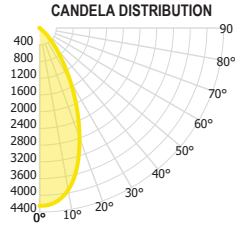
INPUT WATTS: **45.5**

LUMENS: **3173**

EFFICACY: **70**

BEAM ANGLE: **47**

SPACING CRITERIA: **0.77**



CANDELA TABLE

	0°	90°
0°	4252	4252
10°	3934	3765
20°	2789	2679
30°	1463	1452
40°	553	566
50°	0	0
60°	0	0
70°	0	0
80°	0	0
90°	0	0

LUMINANCE (cd/sq.m)

	0.00°	90.00°
0.00°	2860240	2860240
45.00°	275336	297047
55.00°	0	0
65.00°	0	0
75.00°	0	0
85.00°	0	0

LUMENS PER ZONE

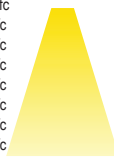
ZONE	LUMENS
0° - 10°	389
10° - 20°	941
20° - 30°	960
30° - 40°	620
40° - 50°	262
50° - 60°	0
60° - 70°	0
70° - 80°	0
80° - 90°	0

ZONAL LUMEN SUMMARY

ZONE	UMENS	% LUMINAIRE
0° - 20°	1330	42%
0° - 30°	2291	72%
0° - 40°	2911	92%
0° - 60°	3173	100%
0° - 80°	3173	100%
0° - 90°	3173	100%

CONE OF LIGHT

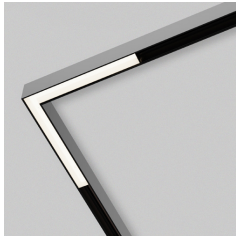
MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	118.1 fc	5.6 ft	5.5 ft
8.0 ft	66.4 fc	7.4 ft	7.4 ft
10.0 ft	42.5 fc	9.3 ft	9.2 ft
12.0 ft	29.5 fc	11.1 ft	11.1 ft
14.0 ft	21.7 fc	13.0 ft	12.9 ft
16.0 ft	16.6 fc	14.8 ft	14.8 ft
18.0 ft	13.1 fc	16.7 ft	16.6 ft
20.0 ft	10.6 fc	18.5 ft	18.4 ft



INDOOR COEFFICIENTS OF UTILIZATION

pf	20%														0%			
	80%			70%			50%			30%			10%					
pc	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	117	117	117	117	114	114	114	114	109	109	109	104	104	104	100	100	100	98
1	111	109	106	104	109	107	105	103	103	101	99	99	98	97	96	95	94	92
2	106	101	98	94	104	100	96	93	97	94	91	94	91	89	91	89	88	86
3	101	95	90	86	99	93	89	86	91	87	84	89	86	83	86	84	82	80
4	96	89	84	80	94	88	83	79	86	81	78	84	80	77	82	79	76	75
5	91	83	78	74	90	82	77	73	81	76	73	79	75	72	78	74	71	70
6	87	78	73	69	85	78	72	68	76	71	68	75	71	67	73	70	67	66
7	83	74	68	64	81	73	68	64	72	67	64	71	66	63	70	66	63	62
8	79	70	64	60	78	69	64	60	68	63	60	67	63	59	66	62	59	58
9	75	66	60	56	74	65	60	56	65	60	56	64	59	56	63	59	56	55
10	72	62	57	53	71	62	57	53	61	56	53	61	56	53	60	56	53	51

GROOVE TRACK LUMINAIRE OPTIONS:



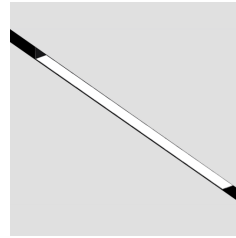
FG-L1R-C90
Seamless Linear Diffused



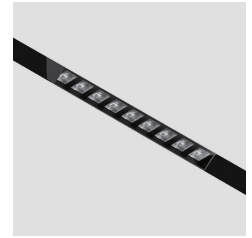
FG-L1R-CI
Seamless Linear Diffused



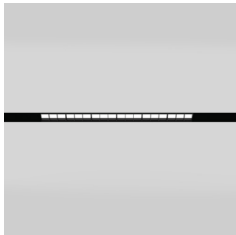
FG-L1R-CO
Seamless Linear Diffused



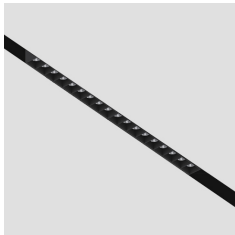
FG-L1R-8|16|32|48|64
Seamless Linear Diffused



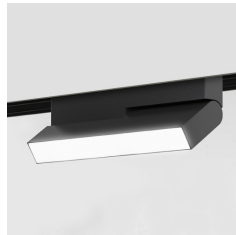
FG-L1-WW-3|8
Wall Wash



FG-L3R-16|32
Linear Louvered



FG-L4R-3|5|8|16|32
Linear Recessed Downlight & Task



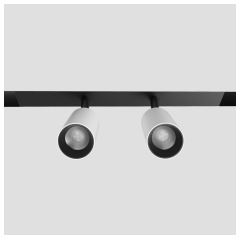
FG-L2A-3|5|8
Linear Diffused & Adjustable Light



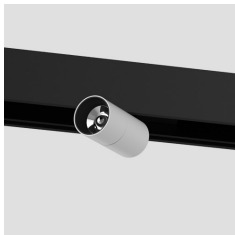
FG-L4A-3|5|8
Linear Adjustable Downlight, Task & Wall Grazer



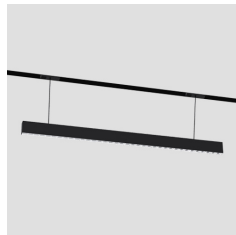
FG-T2-1|2|3|FG-T3-1|2|3
Cylinder



FG-T2-4
Cylinder



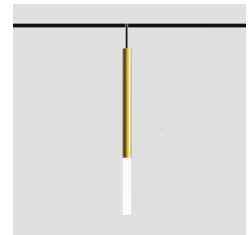
FG-T4-1|2|3
Beam Adjustable Cylinder



FG-L1P-32
Pendant Louvered



FG-P1-1|2
Pendant



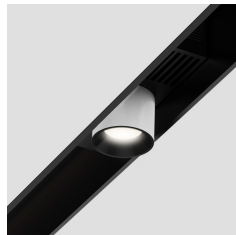
FG-P3-1|2
Pendant



FG-P4-1|2|3
Pendant Globe



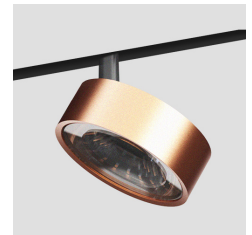
FG-P5-1
Globe



FG-T1-1
Recessed Track Light



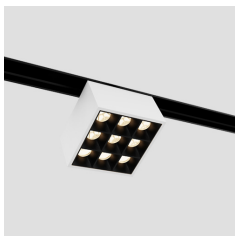
FG-T1-2
Recessed Track Light



FG-T5-1|2
Flat Round



FG-T6-1|2
Flat Square



FG-T7-1|3
Square Track Light



FG-T7-2
Rectangle Track Light

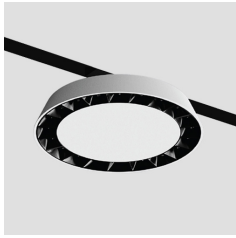


FG-T8-1
Track Globe

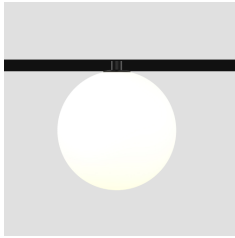


FG-T9-1
Track Globe

GROOVE TRACK LUMINAIRE OPTIONS:



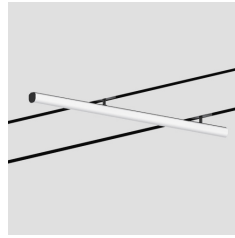
FG-T10-1
Track Downlight



FG-T11-1
Globe



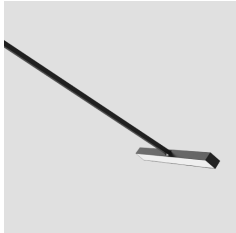
FG-L2S-32 | 48
Surface Light



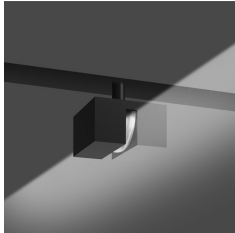
FG-L5S-32 | 48
Surface Light



FG-WL-1
Wall Light



FG-WL-2
Wall Light



FG-LL-1
Line Light



FG-TRJ-1
Projector



FG-TRJ-2
Gobo Projector

GROOVE TRACK MOUNTING OPTIONS:



Trimless Recessed Mount



Surface, Ceiling Mount



Suspended Mount with Uplight



Suspended Mount