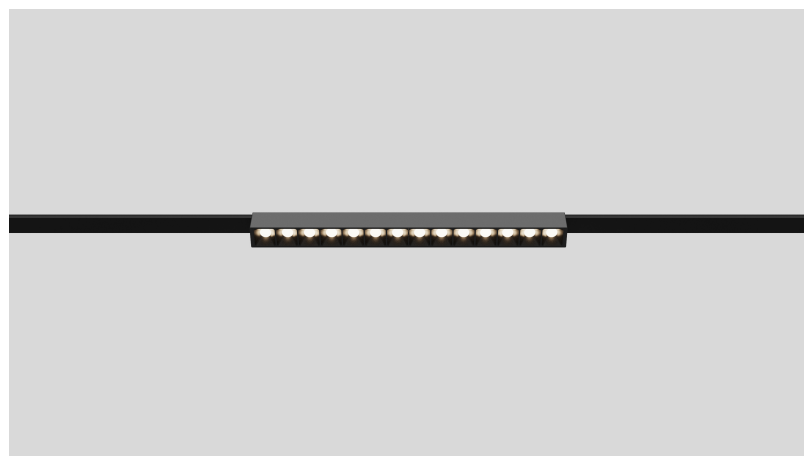
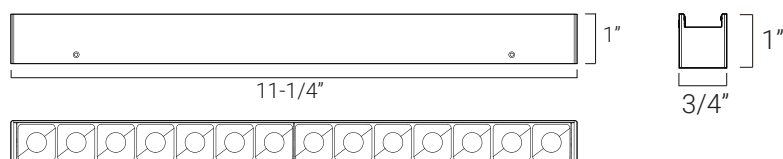
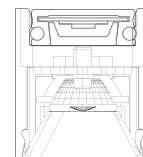
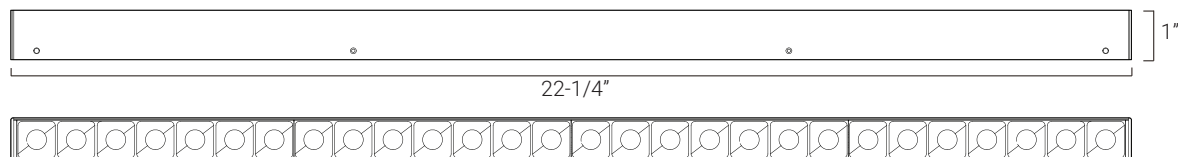




FT-L4R-11



FT-L4R-22



section view into track

TENSION 'DOWNLIGHT' SERIES

The 'Downlight' luminaire easily integrates into a track system and is designed with a minimal profile from the track for a clean, sophisticated look.

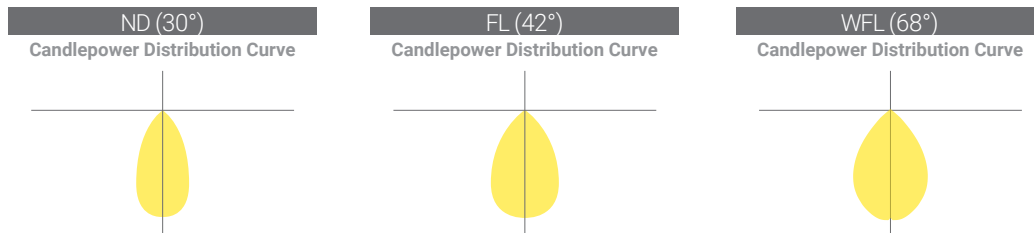
The FT-L4R can be installed individually or combined with other Tension system track luminaires to create the perfect design. Multiple fixtures can be mounted next to each other on one track for a continuous ray of illumination.

The FT-L4R luminaire is equipped with your choice of 30° narrow distribution, 42° flood, or 68° wide flood TIR optics, ideal for a wide variety of applications, and provides glare-free illumination ideal for downlight and task lighting applications.

SERIES	DELIVERED LUMENS	WATTAGE
FT-L4R-11	750	12W
FT-L4R-22	1500	24W

Based on 3000K, 90+ CRI. Actual wattage may vary +/- 5%

SIZE	11", 22"
CCT	2700K, 000K, 3500K, 4000K, 5000K
CRI	90+
COLOR QUALITY	2 Step MacAdam Ellipse
DISTRIBUTION	ND 30°, FL 42°, WFL 68°
FINISH	● BK (Black) ○ WH (White)
DIMMING	DIM10 - (0-10V Dimming)
WEIGHT	0.32 lbs, 0.63 lbs
LIFETIME	L70 at 60,000 Hours
PHOTOMETRIC TESTS	In Accordance with IES LM79-08, LM80 and TM-30, TM-21



Reference IES files for additional distribution curve information.

FEATURES OF TENSION FAMILY

The Tension system, the latest innovation in track lighting, is ideal for applications in locations where luminaires cannot be suspended from the ceiling, such as in open office spaces with tall ceilings. This design provides a solution by attaching its turnbuckles to two walls up to 65' apart, installed straight at 0° or up to 45° in any direction – an innovative and practical, yet stylish, piece perfect for any modern building.

The Tension's available track head options are in-line linear, spot, pendant, pendant-linear, and cylinder. The Tension 48V DC track system is available with multiple sleek, slender, and compact track heads that can be mounted onto any part of the track with an easy-installation 2-step method. Simply click the track head connector into place, then secure the luminaire with the locking mechanism provided. This quick and intuitive process allows users to interchange one Tension-compatible luminaire for another for a design that adapts to the user's preferences, updating to match any design or application, current or future.

This wide, flexible design can provide continuous light ideal for a high-end office with practical, yet aesthetic lumination. Concealed uplight tape and track conductors provide indirect lighting for an elegant look.

Utilize Diffused or Downlight linear or pendant, small or large spot, and sphere or cylinder track head to customize your type of lumination: visual focus, highlights, or pendant lighting effects designed 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 cool LED's Advanced Thermodynamic Design, which includes an extruded aluminum body, a hidden diecast heat sink, and a thermal management system.

LED MODULE PERFORMANCE

The Tension 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.

FINISH

The Tension track system is available in a powder-coated black post-paint finish.

The Tension luminaires are all available in a powder-coated black or white post-paint finish.

DRIVERS

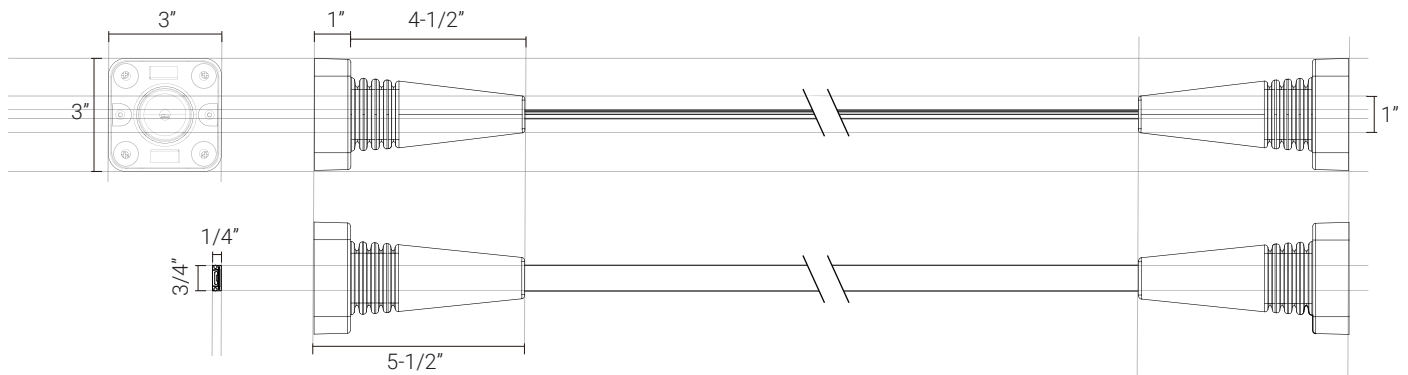
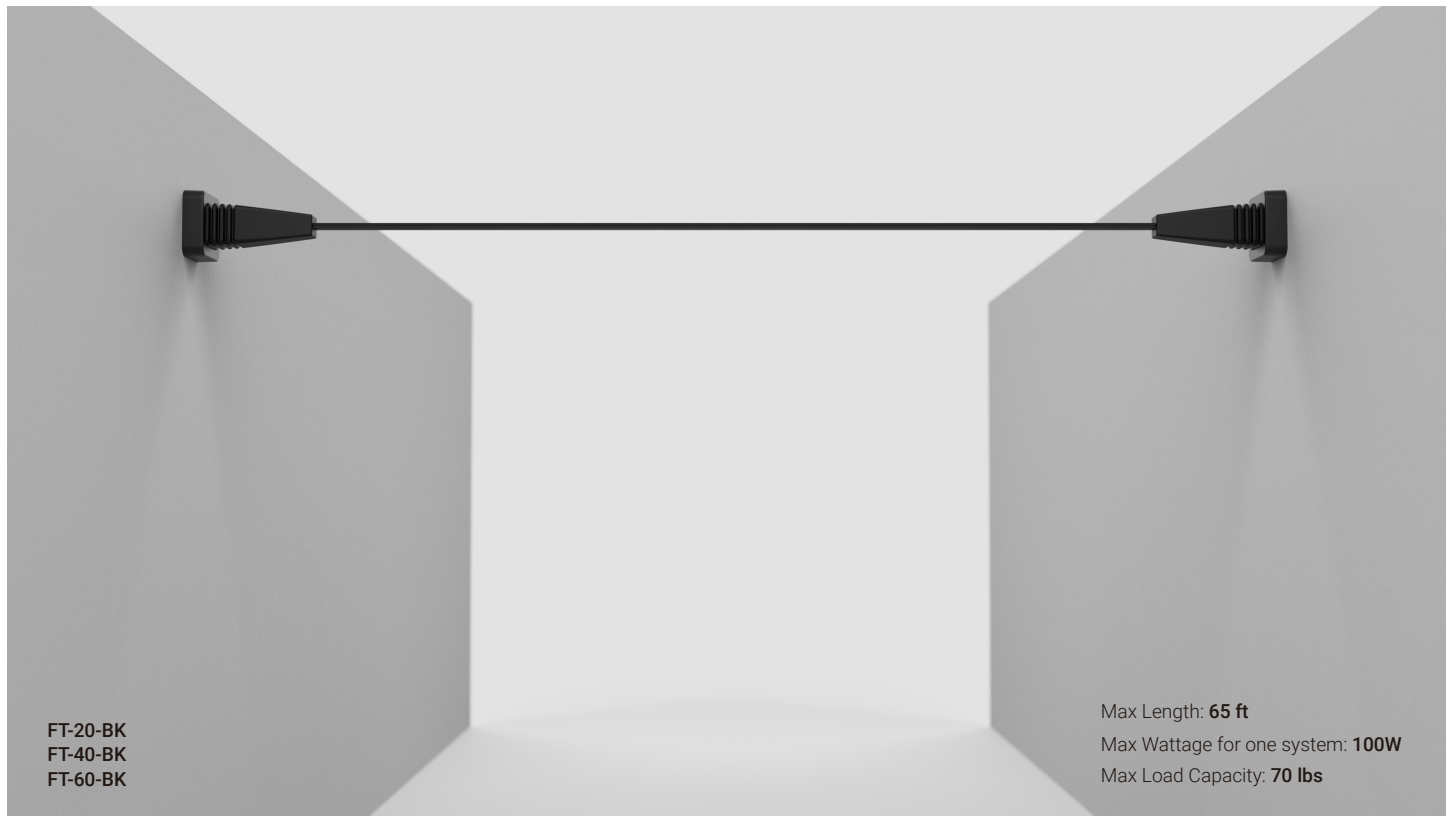
The Tension System is powered by constant voltage drivers with a rating of 50/60Hz at a 120/277V input and a 48V output. They produce less than 20% THD, have a 90% power factor, and are thermally protected for additional safety. Driver wattage is only available in 100W and can power up to 6 ft. of track. Tension drivers can be remotely mounted, and are available in 0-10V 1 % Dimming. Please see Tension track system spec sheets for a complete list of drivers and capabilities.

Remote Mount Driver Options:

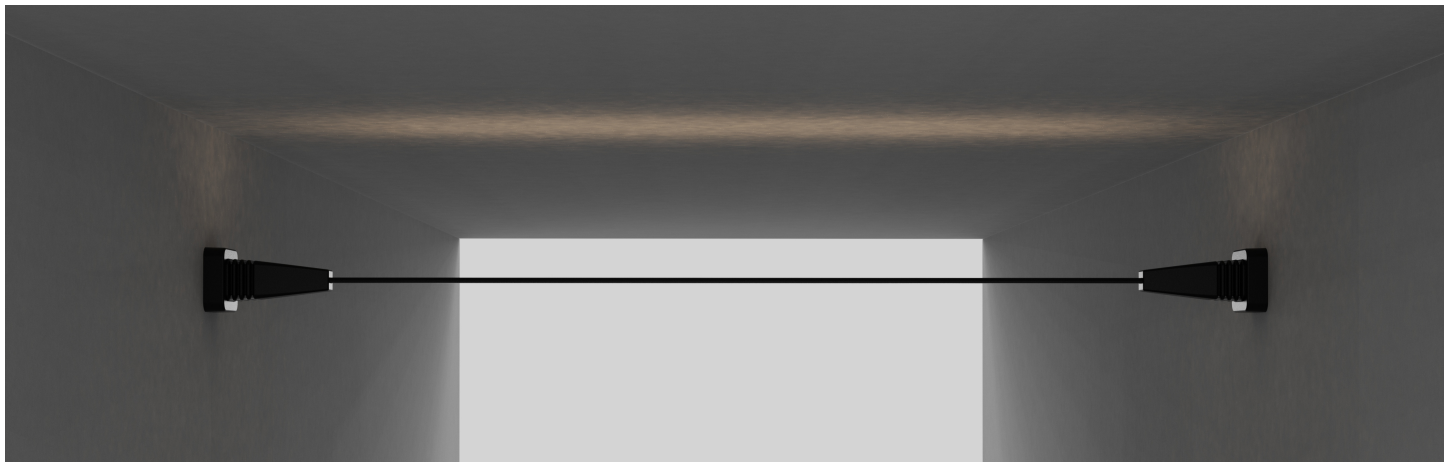
0-10V dimming on either MVOLT 120, 277 Dimmable down to 1% of initial lumens. FT-DR- ELG-100-48: 60W @ 120V or 85W. @ 277V.

EXAMPLE:					
SERIES	OPTICS	CCT	CRI	FINISH	OPTION
FT-L4R-11	☐ ND=30° ☐ FL=42° ☐ WFL=68°	☐ 27K ☐ 30K ☐ 35K ☐ 40K ☐ 50K	☐ 90	☐ BK (Black) ☐ WH (White)	☐ 48V
FT-L4R-22					

ACCESSORY - TRACK



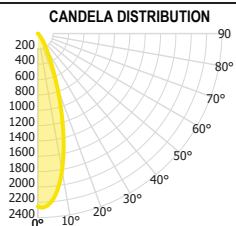
ACCESSORY - UPLIGHT



FT-L4R-11-ND-30K-90

TEST NO.: **220070**

INPUT WATTS: **11.8** LUMENS: **755** EFFICACY: **64** BEAM ANGLE: **30** SPACING CRITERIA: **0.54**



CANDELA TABLE		
	0°	90°
0°	2255	2255
10°	1815	1731
20°	735	650
30°	206	193
40°	53	60
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°	4334396	4334396
45.00°	66952	72959
55.00°	0	0
65.00°	0	0
75.00°	0	0
85.00°	0	0

LUMENS PER ZONE	
ZONE	LUMENS
0° - 10°	187
10° - 20°	304
20° - 30°	163
30° - 40°	74
40° - 50°	26
50° - 60°	0
60° - 70°	0
70° - 80°	0
80° - 90°	0

ZONAL LUMEN SUMMARY		
ZONE	UMENS	% LUMINAIRE
0° - 20°	492	65%
0° - 30°	655	87%
0° - 40°	729	97%
0° - 60°	755	100%
0° - 80°	755	100%
0° - 90°	755	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	62.6 fc	3.2 ft	3.2 ft
8.0 ft	35.2 fc	4.2 ft	4.3 ft
10.0 ft	22.6 fc	5.3 ft	5.3 ft
12.0 ft	15.7 fc	6.3 ft	6.4 ft
14.0 ft	11.5 fc	7.4 ft	7.5 ft
16.0 ft	8.8 fc	8.4 ft	8.5 ft
18.0 ft	7.0 fc	9.5 ft	9.6 ft
20.0 ft	5.6 fc	10.5 ft	10.7 ft

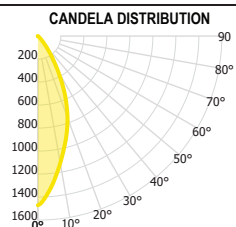
INDOOR COEFFICIENTS OF UTILIZATION

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

FT-L4R-11-FL-30K-90

TEST NO.: **220070**

INPUT WATTS: **11.8** LUMENS: **869** EFFICACY: **74** BEAM ANGLE: **42** SPACING CRITERIA: **0.62**



CANDELA TABLE		
	0°	90°
0°	1471	1471
10°	1122	1364
20°	754	957
30°	348	412
40°	86	99
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°	2826680	2826680
45.00°	102453	95874
55.00°	0	0
65.00°	0	0
75.00°	0	0
85.00°	0	0

LUMENS PER ZONE	
ZONE	LUMENS
0° - 10°	133
10° - 20°	310
20° - 30°	270
30° - 40°	122
40° - 50°	33
50° - 60°	0
60° - 70°	0
70° - 80°	0
80° - 90°	0

ZONAL LUMEN SUMMARY		
ZONE	UMENS	% LUMINAIRE
0° - 20°	444	51%
0° - 30°	714	82%
0° - 40°	836	96%
0° - 60°	869	100%
0° - 80°	869	100%
0° - 90°	869	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	40.8 fc	4.6 ft	4.9 ft
8.0 ft	23.0 fc	6.1 ft	6.5 ft
10.0 ft	14.7 fc	7.6 ft	8.2 ft
12.0 ft	10.2 fc	9.2 ft	9.8 ft
14.0 ft	7.5 fc	10.7 ft	11.4 ft
16.0 ft	5.7 fc	12.2 ft	13.0 ft
18.0 ft	4.5 fc	13.8 ft	14.7 ft
20.0 ft	3.7 fc	15.3 ft	16.3 ft

INDOOR COEFFICIENTS OF UTILIZATION

pf	pc	20%																		0%	
		80%				70%				50%				30%				10%			0%
		70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%			
0	118	118	118	118	115	115	115	115	110	110	110	106	106	106	101	101	101	99			
1	113	111	108	106	111	109	107	105	105	103	101	101	100	98	97	97	96	94			
2	108	104	100	97	106	102	99	96	99	96	94	96	94	92	93	92	90	89			
3	104	98	93	90	102	96	92	89	94	90	88	92	89	86	89	87	85	84			
4	99	92	87	84	97	91	87	83	89	85	82	87	84	81	85	83	80	79			
5	95	87	82	78	93	86	82	78	85	80	77	83	79	77	82	78	76	75			
6	91	83	77	74	89	82	77	73	80	76	73	79	75	72	78	75	72	71			
7	87	78	73	69	86	78	73	69	77	72	69	76	71	68	74	71	68	67			
8	83	75	69	66	82	74	69	66	73	69	65	72	68	65	71	67	65	63			
9	80	71	66	62	79	71	66	62	70	65	62	69	65	62	68	64	62	60			
10	77	68	63	59	76	67	62	59	67	62	59	66	62	59	65	61	59	58			

FT-L4R-11-WFL-30K-90

TEST NO.: **220070**

INPUT WATTS: **11.8**

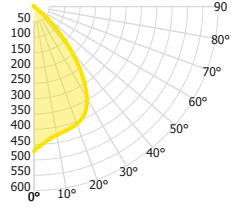
LUMENS: **654**

EFFICACY: **55**

BEAM ANGLE: **68**

SPACING CRITERIA: **1.11**

CANDELA DISTRIBUTION



CANDELA TABLE

	0°	90°
0°	471	471
10°	426	491
20°	407	499
30°	344	417
40°	188	221
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°	905860	905860
45.00°	267888	347507
55.00°	0	0
65.00°	0	0
75.00°	0	0
85.00°	0	0

LUMENS PER ZONE

ZONE	LUMENS
0° - 10°	45
10° - 20°	137
20° - 30°	206
30° - 40°	182
40° - 50°	84
50° - 60°	0
60° - 70°	0
70° - 80°	0
80° - 90°	0

ZONAL LUMEN SUMMARY

ZONE	UMENS	% LUMINAIRE
0° - 20°	182	28%
0° - 30°	388	59%
0° - 40°	570	87%
0° - 60°	654	100%
0° - 80°	654	100%
0° - 90°	654	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	13.1 fc	8.5 ft	8.7 ft
8.0 ft	7.4 fc	11.4 ft	11.6 ft
10.0 ft	4.7 fc	14.2 ft	14.5 ft
12.0 ft	3.3 fc	17.1 ft	17.4 ft
14.0 ft	2.4 fc	19.9 ft	20.3 ft
16.0 ft	1.8 fc	22.8 ft	23.3 ft
18.0 ft	1.5 fc	25.6 ft	26.2 ft
20.0 ft	1.2 fc	28.4 ft	29.1 ft

INDOOR COEFFICIENTS OF UTILIZATION

pc	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	115	115	115	115	112	112	112	107	107	103	103	99	99	99	99	99	99	0%
1	109	106	104	102	107	104	102	100	99	97	97	95	94	94	92	91	90	0%
2	103	98	94	91	101	97	93	90	94	90	88	91	88	86	88	86	84	0%
3	98	91	86	82	96	90	85	81	87	83	80	85	81	78	82	80	77	0%
4	92	84	78	74	90	83	78	74	81	76	73	79	75	72	77	74	71	0%
5	87	78	72	68	85	77	71	67	75	70	67	74	69	66	72	68	65	0%
6	82	73	66	62	80	72	66	62	70	65	61	69	64	61	68	63	60	0%
7	77	68	61	57	76	67	61	57	66	60	56	64	60	56	63	59	56	0%
8	73	63	57	52	72	62	56	52	61	56	52	60	55	52	59	55	52	0%
9	69	59	53	48	68	58	52	48	57	52	48	57	52	48	56	51	48	0%
10	65	55	49	45	64	55	49	45	54	48	45	53	48	45	52	48	45	0%

FT-L4R-22-ND-30K-90

TEST NO.: **220070**

INPUT WATTS: **22.3**

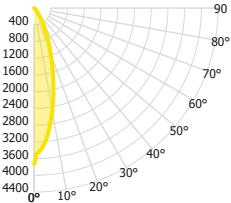
LUMENS: **1300**

EFFICACY: **58**

BEAM ANGLE: **30**

SPACING CRITERIA: **0.46**

CANDELA DISTRIBUTION



CANDELA TABLE

	0°	90°
0°	3734	3734
10°	2502	2413
20°	1153	980
30°	432	365
40°	77	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°	1674775	1674775
45.00°	24730	26931
55.00°	0	0
65.00°	0	0
75.00°	0	0
85.00°	0	0

LUMENS PER ZONE

ZONE	LUMENS
0° - 10°	302
10° - 20°	486
20° - 30°	300
30° - 40°	159
40° - 50°	53
50° - 60°	0
60° - 70°	0
70° - 80°	0
80° - 90°	0

ZONAL LUMEN SUMMARY

ZONE	UMENS	% LUMINAIRE
0° - 20°	788	61%
0° - 30°	1088	84%
0° - 40°	1247	96%
0° - 60°	1300	100%
0° - 80°	1300	100%
0° - 90°	1300	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	103.7 fc	2.6 ft	2.6 ft
8.0 ft	58.3 fc	3.5 ft	3.4 ft
10.0 ft	37.3 fc	4.3 ft	4.3 ft
12.0 ft	25.9 fc	5.2 ft	5.2 ft
14.0 ft	19.1 fc	6.0 ft	6.0 ft
16.0 ft	14.6 fc	6.9 ft	6.9 ft
18.0 ft	11.5 fc	7.8 ft	7.7 ft
20.0 ft	9.3 fc	8.6 ft	8.6 ft

INDOOR COEFFICIENTS OF UTILIZATION

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	109	109	109	105	105	101	101	101	101	98	0%
1	113	110	108	106	110	108	106	105	104	103	101	101	99	98	97	96	96	0%
2	108	104	101	98	106	102	99	97	99	97	95	96	94	93	94	92	91	0%
3	104	98	94	91	102	97	93	90	95	91	89	92	90	87	90	88	86	0%
4	100	93	89	85	98	92	88	85	90	87	84	88	85	83	87	84	82	0%
5	96	89	84	80	94	88	83	80	86	82	79	85	81	79	83	80	78	0%
6	92	85	80	76	91	84	79	76	83	79	76	81	78	75	80	77	75	0%
7	89	81	76	73	87	80	76	72	79	75	72	78	74	72	77	74	71	0%
8	85	78	73	69	84	77	72	69	76	72	69	75	71	69	74	71	68	0%
9	82	74	70	66	81	74	69	66	73	69	66	72	68	66	72	68	66	0%
10	79	71	67	64	79	71	67	63	70	66	63	70	66	63	69	66	63	0%

FT-L4R-22-FL-30K-90

TEST NO.: **220070**

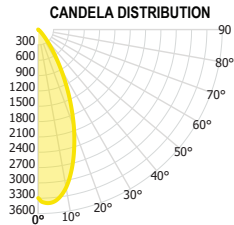
INPUT WATTS: **22.3**

LUMENS: **1685**

EFFICACY: **76**

BEAM ANGLE: **42**

SPACING CRITERIA: **0.74**



CANDELA TABLE		
	0°	90°
0°	3297	3297
10°	3138	2917
20°	2043	1723
30°	870	620
40°	208	147
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°	1478468	1478468
45.00°	54776	35107
55.00°	0	0
65.00°	0	0
75.00°	0	0
85.00°	0	0

LUMENS PER ZONE	
ZONE	LUMENS
0° - 10°	291
10° - 20°	619
20° - 30°	494
30° - 40°	219
40° - 50°	62
50° - 60°	0
60° - 70°	0
70° - 80°	0
80° - 90°	0

ZONAL LUMEN SUMMARY		
ZONE	UMENS	% LUMINAIRE
0° - 20°	910	54%
0° - 30°	1404	83%
0° - 40°	1623	96%
0° - 60°	1685	100%
0° - 80°	1685	100%
0° - 90°	1685	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	91.6 fc	4.2 ft	4.3 ft
8.0 ft	51.5 fc	5.6 ft	5.8 ft
10.0 ft	33.0 fc	7.0 ft	7.2 ft
12.0 ft	22.9 fc	8.5 ft	8.6 ft
14.0 ft	16.8 fc	9.9 ft	10.1 ft
16.0 ft	12.9 fc	11.3 ft	11.5 ft
18.0 ft	10.2 fc	12.7 ft	12.9 ft
20.0 ft	8.2 fc	14.1 ft	14.4 ft

INDOOR COEFFICIENTS OF UTILIZATION

pf	pc	20%																0%	
		80%				70%				50%				30%				10%	0%
		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	101	99
1	113	111	108	106	111	109	107	105	105	103	102	101	100	99	98	97	96	94	94
2	108	104	101	98	106	102	99	96	99	97	94	96	94	92	94	92	90	89	89
3	104	98	94	90	102	97	93	90	94	91	88	92	89	87	90	87	86	84	84
4	99	93	88	84	98	92	87	84	90	86	83	88	84	82	86	83	81	80	80
5	95	88	83	79	94	87	82	79	85	81	78	84	80	77	82	79	77	75	75
6	91	83	78	75	90	83	78	74	81	77	74	80	76	73	79	75	73	72	72
7	87	79	74	70	86	79	74	70	78	73	70	76	73	70	75	72	69	68	68
8	84	76	70	67	83	75	70	67	74	70	66	73	69	66	72	69	66	65	65
9	81	72	67	64	80	72	67	63	71	66	63	70	66	63	69	66	63	62	62
10	78	69	64	61	77	69	64	61	68	63	60	67	63	60	67	63	60	59	59

FT-L4R-22-WFL-30K-90

TEST NO.: **220070**

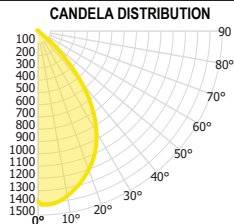
INPUT WATTS: **22.3**

LUMENS: **1502**

EFFICACY: **67**

BEAM ANGLE: **68**

SPACING CRITERIA: **1.06 x 1.06**



CANDELA TABLE		
	0°	90°
0°	1389	1389
10°	1365	1450
20°	1203	1287
30°	949	929
40°	548	426
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°	622737	622737
45.00°	190712	129835
55.00°	0	0
65.00°	0	0
75.00°	0	0
85.00°	0	0

LUMENS PER ZONE	
ZONE	LUMENS
0° - 10°	130
10° - 20°	356
20° - 30°	468
30° - 40°	381
40° - 50°	167
50° - 60°	0
60° - 70°	0
70° - 80°	0
80° - 90°	0

ZONAL LUMEN SUMMARY		
ZONE	UMENS	% LUMINAIRE
0° - 20°	487	32%
0° - 30°	954	64%
0° - 40°	1335	89%
0° - 60°	1502	100%
0° - 80°	1502	100%
0° - 90°	1502	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	38.6 fc	7.5 ft	7.6 ft
8.0 ft	21.7 fc	10.0 ft	10.2 ft
10.0 ft	13.9 fc	12.5 ft	12.7 ft
12.0 ft	9.6 fc	15.1 ft	15.2 ft
14.0 ft	7.1 fc	17.6 ft	17.8 ft
16.0 ft	5.4 fc	20.1 ft	20.3 ft
18.0 ft	4.3 fc	22.6 ft	22.9 ft
20.0 ft	3.5 fc	25.1 ft	25.4 ft

INDOOR COEFFICIENTS OF UTILIZATION

pf pc	20%																0%	
	80%				70%				50%		30%		10%		0%			
pw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	116	116	116	116	113	113	113	113	108	108	108	104	104	104	99	99	99	97
1	110	108	105	103	108	106	103	101	102	100	98	98	97	95	95	93	92	91
2	105	100	96	92	102	98	94	91	95	92	89	92	90	87	89	87	86	84
3	99	93	88	84	97	91	87	83	89	85	82	86	83	80	84	81	79	77
4	94	86	80	76	92	85	80	76	83	78	75	81	77	74	79	76	73	72
5	89	80	74	70	87	79	74	69	77	73	69	76	72	68	74	71	68	66
6	84	75	69	64	82	74	68	64	72	67	64	71	67	63	70	66	63	61
7	79	70	64	59	78	69	63	59	68	63	59	67	62	59	66	61	58	57
8	75	65	59	55	74	65	59	55	64	58	55	63	58	54	62	57	54	53
9	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	54	51	49
10	68	58	52	48	67	57	52	48	56	51	48	56	51	47	55	51	47	46