

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: FAIL-SAFE

Report Number: P560417

Luminaire Tested: FSR-12-2-LD4-2LO-35-UNV-93-84-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560417
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-135-5)
Test Lab: INNOVATION CENTER
Issue Date: 7/20/2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FSR-12-2-LD4-2LO-35-UNV-93-84-EDD
Description: 1X2 FSR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2283.0 lumens
Efficiency: N/A
Efficacy: 97.6 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

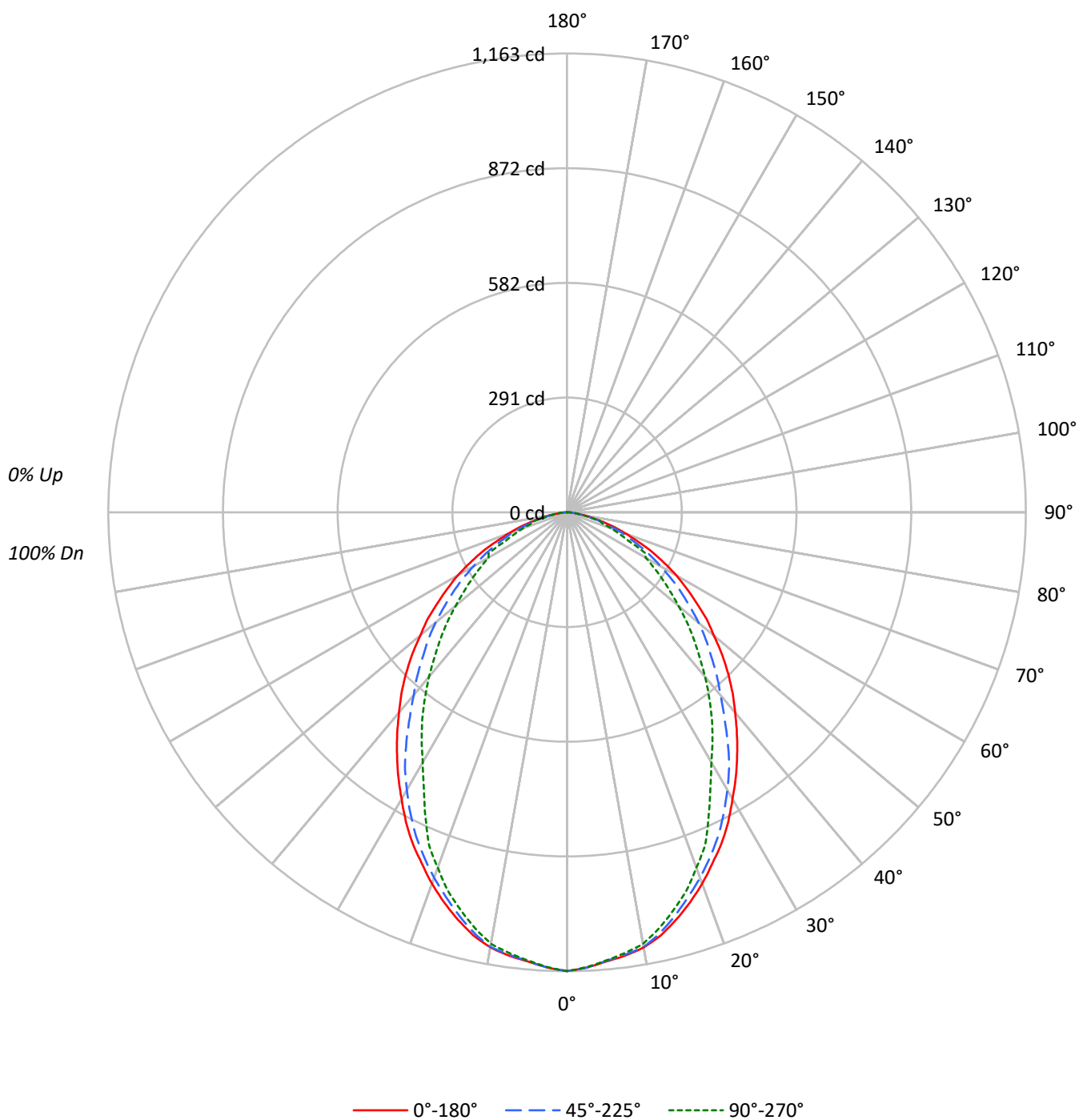
Input Watts (W): 23.4
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20
RC	80					70					50					30					10
RW	70	50	30	10		70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																					
0	119	119	119	119		116	116	116	116		111	111	111		106	106	106		102	102	102
1	110	106	102	99		108	104	100	97		100	97	94		96	94	91		92	90	89
2	101	94	88	83		99	92	87	82		89	84	80		86	82	78		83	79	77
3	93	84	77	71		91	82	76	70		79	74	69		77	72	68		74	70	67
4	86	75	67	61		84	74	66	61		72	65	60		69	64	59		67	62	58
5	80	68	60	54		78	67	59	53		65	58	53		63	57	52		61	56	52
6	74	62	53	48		72	61	53	47		59	52	47		57	51	47		56	50	46
7	69	56	48	43		67	56	48	42		54	47	42		53	46	42		51	46	42
8	65	52	44	38		63	51	44	38		50	43	38		49	42	38		48	42	38
9	61	48	40	35		59	47	40	35		46	39	35		45	39	34		44	38	34
10	57	44	37	32		56	44	37	32		43	36	32		42	36	32		41	36	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6259	6259	6259
5°	6174	6166	6159
10°	6120	6113	6069
15°	5955	5896	5813
20°	5737	5644	5490
25°	5501	5381	5046
30°	5213	5046	4545
35°	4937	4664	4204
40°	4657	4251	3825
45°	4390	3930	3459
50°	4063	3647	3085
55°	3759	3305	2762
60°	3444	2953	2475
65°	3031	2585	2192
70°	2496	2264	1862
75°	1986	1734	1817
80°	1333	1249	1165
85°	827	994	1161

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4390 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.3	4.7
10°-20°	297.1	13.0
20°-30°	411.3	18.0
30°-40°	438.6	19.2
40°-50°	400.1	17.5
50°-60°	313.5	13.7
60°-70°	204.3	8.9
70°-80°	90.5	4.0
80°-90°	19.4	0.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	816.6	35.8
0°-40°	1255.2	55.0
0°-60°	1968.8	86.2
0°-90°	2283.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2283.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1163	1163	1163	1163	1163	
5°	1143	1141	1141	1140	1140	108
15°	1069	1069	1058	1047	1043	300
25°	926	921	906	874	850	425
35°	752	746	710	656	640	470
45°	577	565	516	473	454	444
55°	401	388	352	311	294	359
65°	238	224	203	207	172	235
75°	96	89	83	79	87	102
85°	13	15	16	18	19	19
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1162.9	1162.9	1162.9	1162.9	1162.9
2.5°	1154.9	1154.9	1154.9	1153.5	1153.5
5°	1142.8	1141.4	1141.4	1140.1	1140.1
7.5°	1133.4	1132.0	1130.7	1129.3	1126.6
10°	1119.9	1119.9	1118.6	1111.8	1110.5
12.5°	1098.4	1097.1	1091.7	1082.3	1079.6
15°	1068.8	1068.8	1058.1	1047.3	1043.3
17.5°	1036.6	1035.2	1021.8	1011.0	1005.6
20°	1001.6	998.9	985.5	968.0	958.6
22.5°	962.6	962.6	946.5	923.6	914.2
25°	926.3	920.9	906.1	873.9	849.7
27.5°	884.6	876.6	860.4	814.7	786.5
30°	838.9	834.9	812.0	752.9	731.4
32.5°	795.9	789.2	765.0	703.1	685.7
35°	751.5	746.2	709.9	656.1	639.9
37.5°	707.2	700.4	654.7	611.7	591.5
40°	662.8	654.7	605.0	566.0	544.5
42.5°	621.1	610.4	562.0	520.3	496.1
45°	576.8	564.7	516.3	473.2	454.4
47.5°	532.4	521.6	477.3	432.9	411.4
50°	485.3	475.9	435.6	391.2	368.4
52.5°	446.3	431.6	392.6	348.2	329.4
55°	400.6	388.5	352.2	310.6	294.4
57.5°	359.0	346.9	313.3	274.3	260.8
60°	320.0	302.5	274.3	240.7	229.9
62.5°	277.0	263.5	239.3	211.1	224.5
65°	238.0	224.5	203.0	207.0	172.1
67.5°	194.9	188.2	169.4	150.6	145.2
70°	158.6	150.6	143.9	123.7	118.3
72.5°	126.4	118.3	108.9	98.1	94.1
75°	95.5	88.7	83.4	79.3	87.4
77.5°	65.9	63.2	59.2	55.1	53.8
80°	43.0	41.7	40.3	39.0	37.6
82.5°	25.5	25.5	25.5	25.5	25.5
85°	13.4	14.8	16.1	17.5	18.8
87.5°	8.1	8.1	9.4	10.8	12.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)