

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: P558448

Luminaire Tested: FSR-12-1-LD4-1HI-35-UNV-80-84-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558448
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-12-1-LD4-1HI-35-UNV-80-84-EDD-90
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRON
SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 808.0 lumens
Efficiency: N/A
Efficacy: 74.8 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

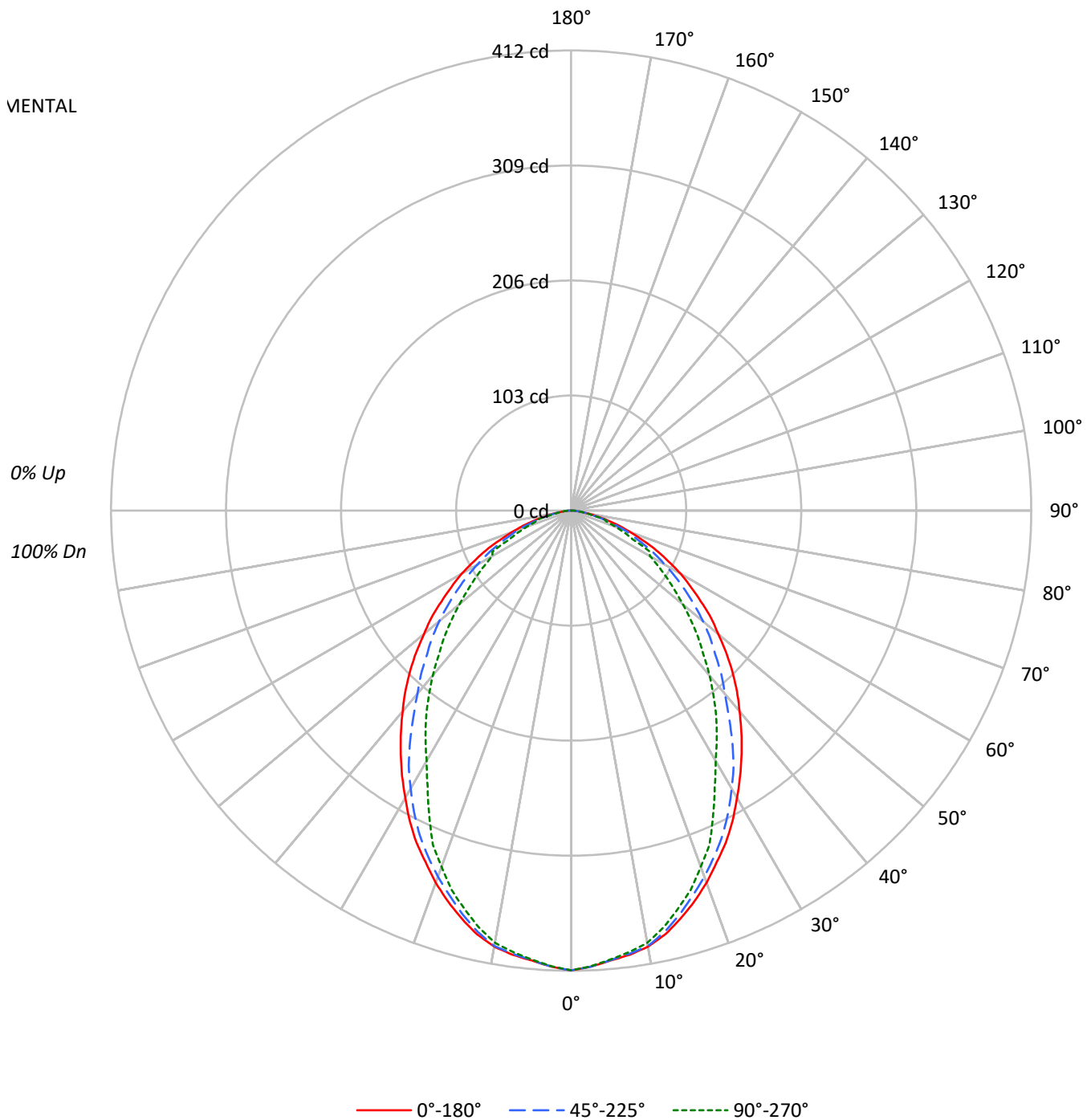
Input Watts (W): 10.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																														
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																												
1	110	106	102	99	108	104	100	97	100	97	94	96	94	91	92	90	89	87																												
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75																												
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	65																												
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56																												
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50																												
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47	56	50	46	44																												
7	69	56	48	43	67	56	48	42	54	47	42	53	46	42	51	46	42	40																												
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38	36																												
9	61	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	33																												
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4430	4430	4430
5°	4370	4365	4360
10°	4333	4327	4295
15°	4216	4173	4114
20°	4061	3995	3887
25°	3893	3809	3571
30°	3690	3572	3217
35°	3495	3301	2976
40°	3296	3008	2708
45°	3107	2781	2448
50°	2877	2582	2184
55°	2661	2340	1955
60°	2437	2090	1752
65°	2145	1829	1551
70°	1766	1602	1319
75°	1406	1227	1285
80°	942	886	824
85°	593	704	827

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3107 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.3	4.7
10°-20°	105.1	13.0
20°-30°	145.6	18.0
30°-40°	155.2	19.2
40°-50°	141.6	17.5
50°-60°	110.9	13.7
60°-70°	72.3	8.9
70°-80°	32.0	4.0
80°-90°	6.9	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°	289.0	35.8
0°-40°	444.2	55.0
0°-60°	696.8	86.2
0°-90°	808.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	808.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	412	412	412	412	412	
5°	404	404	404	404	404	38
15°	378	378	374	371	369	106
25°	328	326	321	309	301	151
35°	266	264	251	232	226	166
45°	204	200	183	168	161	157
55°	142	138	125	110	104	127
65°	84	80	72	73	61	83
75°	34	31	30	28	31	36
85°	5	5	6	6	7	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	411.6	411.6	411.6	411.6	411.6
2.5°	408.7	408.7	408.7	408.3	408.3
5°	404.4	404.0	404.0	403.5	403.5
7.5°	401.1	400.6	400.2	399.7	398.7
10°	396.4	396.4	395.9	393.5	393.0
12.5°	388.7	388.3	386.4	383.0	382.1
15°	378.3	378.3	374.5	370.7	369.2
17.5°	366.9	366.4	361.6	357.8	355.9
20°	354.5	353.5	348.8	342.6	339.3
22.5°	340.7	340.7	335.0	326.9	323.6
25°	327.8	325.9	320.7	309.3	300.7
27.5°	313.1	310.2	304.5	288.3	278.4
30°	296.9	295.5	287.4	266.5	258.8
32.5°	281.7	279.3	270.7	248.9	242.7
35°	266.0	264.1	251.2	232.2	226.5
37.5°	250.3	247.9	231.7	216.5	209.4
40°	234.6	231.7	214.1	200.3	192.7
42.5°	219.8	216.0	198.9	184.1	175.6
45°	204.1	199.8	182.7	167.5	160.8
47.5°	188.4	184.6	168.9	153.2	145.6
50°	171.8	168.4	154.2	138.5	130.4
52.5°	158.0	152.7	138.9	123.2	116.6
55°	141.8	137.5	124.7	109.9	104.2
57.5°	127.0	122.8	110.9	97.1	92.3
60°	113.2	107.1	97.1	85.2	81.4
62.5°	98.0	93.3	84.7	74.7	79.5
65°	84.2	79.5	71.8	73.3	60.9
67.5°	69.0	66.6	60.0	53.3	51.4
70°	56.1	53.3	50.9	43.8	41.9
72.5°	44.7	41.9	38.5	34.7	33.3
75°	33.8	31.4	29.5	28.1	30.9
77.5°	23.3	22.4	20.9	19.5	19.0
80°	15.2	14.8	14.3	13.8	13.3
82.5°	9.0	9.0	9.0	9.0	9.0
85°	4.8	5.2	5.7	6.2	6.7
87.5°	2.9	2.9	3.3	3.8	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)