

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: P558450

Luminaire Tested: FSR-12-1-LD4-1HI-35-UNV-80-85-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558450
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-80-85-EDD-90
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRON
SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 792.0 lumens
Efficiency: N/A
Efficacy: 73.3 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

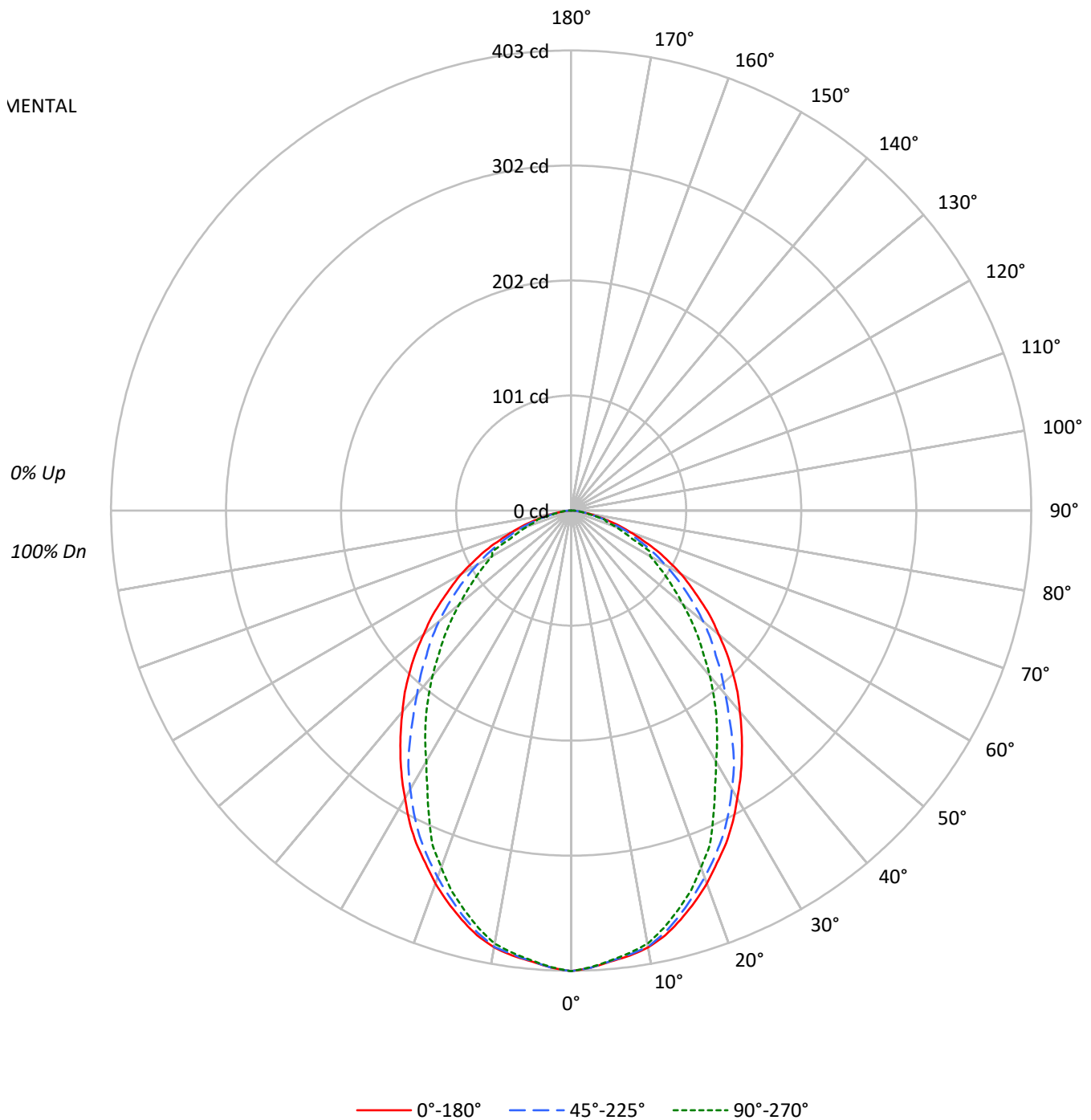
Input Watts (W): 10.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	4342	4342	4342
5°	4283	4279	4273
10°	4246	4241	4210
15°	4132	4091	4033
20°	3981	3916	3809
25°	3816	3734	3501
30°	3617	3501	3153
35°	3426	3236	2917
40°	3230	2949	2654
45°	3046	2726	2399
50°	2820	2530	2140
55°	2609	2293	1916
60°	2390	2047	1718
65°	2104	1793	1521
70°	1731	1570	1290
75°	1377	1202	1260
80°	924	868	812
85°	580	692	803

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3046 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.6	4.7
10°-20°	103.1	13.0
20°-30°	142.7	18.0
30°-40°	152.1	19.2
40°-50°	138.8	17.5
50°-60°	108.7	13.7
60°-70°	70.9	8.9
70°-80°	31.4	4.0
80°-90°	6.8	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°	283.3	35.8
0°-40°	435.4	55.0
0°-60°	683.0	86.2
0°-90°	792.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	792.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	403	403	403	403	403	
5°	396	396	396	396	396	38
15°	371	371	367	363	362	104
25°	321	320	314	303	295	148
35°	261	259	246	228	222	163
45°	200	196	179	164	158	154
55°	139	135	122	108	102	125
65°	83	78	70	72	60	81
75°	33	31	29	28	30	35
85°	5	5	6	6	6	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	403.4	403.4	403.4	403.4	403.4
2.5°	400.6	400.6	400.6	400.2	400.2
5°	396.4	396.0	396.0	395.5	395.5
7.5°	393.2	392.7	392.2	391.8	390.8
10°	388.5	388.5	388.0	385.7	385.2
12.5°	381.0	380.6	378.7	375.5	374.5
15°	370.8	370.8	367.1	363.3	361.9
17.5°	359.6	359.1	354.5	350.7	348.9
20°	347.5	346.5	341.9	335.8	332.5
22.5°	333.9	333.9	328.3	320.4	317.2
25°	321.3	319.5	314.4	303.2	294.8
27.5°	306.9	304.1	298.5	282.6	272.8
30°	291.0	289.6	281.7	261.2	253.7
32.5°	276.1	273.8	265.4	243.9	237.9
35°	260.7	258.9	246.3	227.6	222.0
37.5°	245.3	243.0	227.1	212.2	205.2
40°	229.9	227.1	209.9	196.4	188.9
42.5°	215.5	211.7	195.0	180.5	172.1
45°	200.1	195.9	179.1	164.2	157.6
47.5°	184.7	181.0	165.6	150.2	142.7
50°	168.4	165.1	151.1	135.7	127.8
52.5°	154.8	149.7	136.2	120.8	114.3
55°	139.0	134.8	122.2	107.7	102.1
57.5°	124.5	120.3	108.7	95.1	90.5
60°	111.0	104.9	95.1	83.5	79.8
62.5°	96.1	91.4	83.0	73.2	77.9
65°	82.6	77.9	70.4	71.8	59.7
67.5°	67.6	65.3	58.8	52.2	50.4
70°	55.0	52.2	49.9	42.9	41.0
72.5°	43.8	41.0	37.8	34.0	32.6
75°	33.1	30.8	28.9	27.5	30.3
77.5°	22.9	21.9	20.5	19.1	18.7
80°	14.9	14.5	14.0	13.5	13.1
82.5°	8.9	8.9	8.9	8.9	8.9
85°	4.7	5.1	5.6	6.1	6.5
87.5°	2.8	2.8	3.3	3.7	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)