

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: P560189

Luminaire Tested: FSR-12-2-LD4-2HI-35-UNV-80-96-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560189
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-LD4-2HI-35-UNV-80-96-EDD
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED G ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3709.0 lumens
Efficiency: N/A
Efficacy: 85.9 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

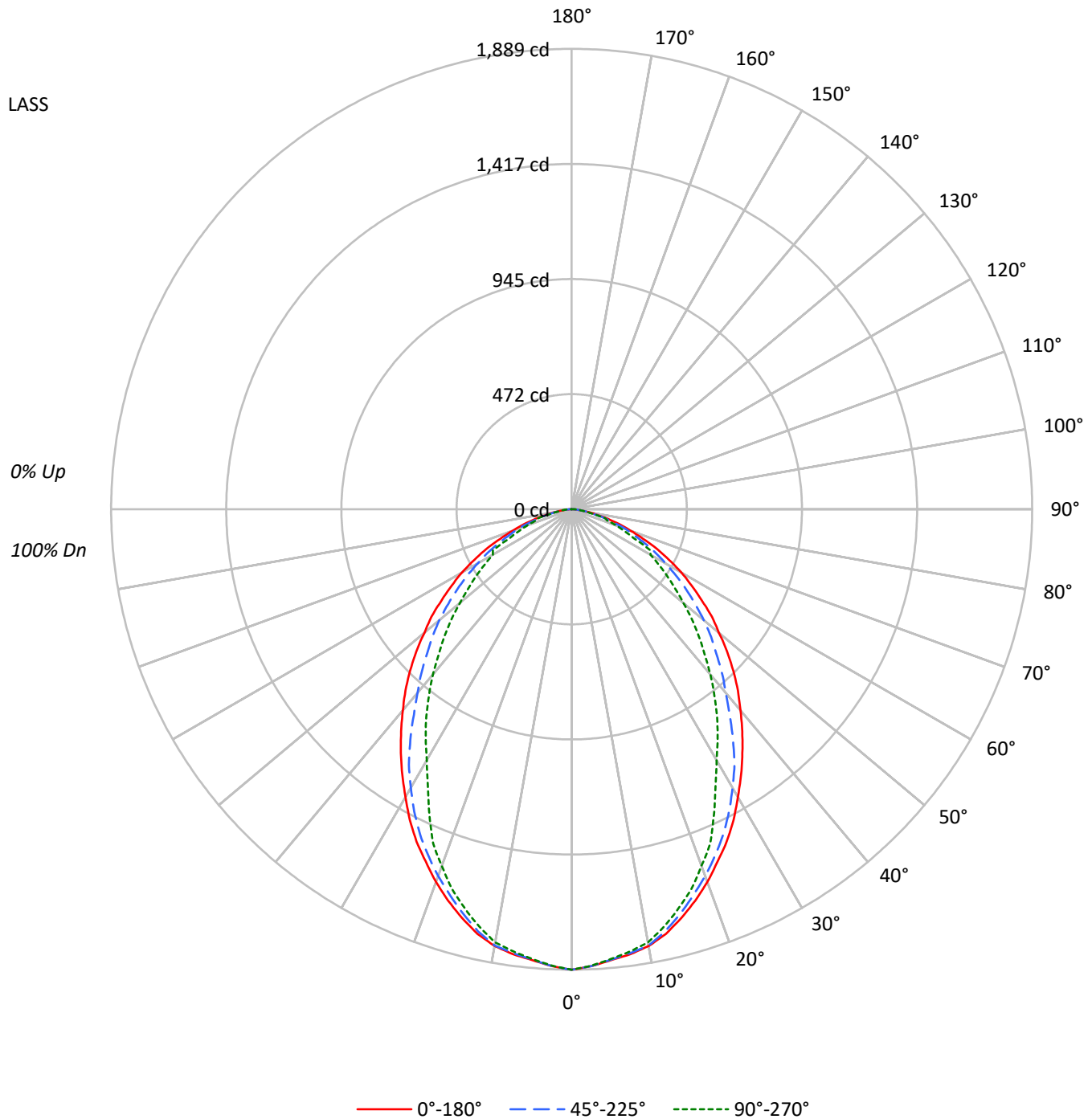
Input Watts (W): 43.2
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					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°	10168	10168	10168
5°	10030	10018	10007
10°	9943	9931	9859
15°	9675	9577	9444
20°	9320	9170	8919
25°	8937	8742	8197
30°	8470	8198	7384
35°	8022	7577	6831
40°	7565	6906	6215
45°	7132	6384	5619
50°	6602	5925	5011
55°	6107	5370	4488
60°	5595	4796	4020
65°	4923	4200	3561
70°	4055	3677	3024
75°	3225	2816	2953
80°	2166	2030	1897
85°	1346	1618	1890

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7132 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.9	4.7
10°-20°	482.7	13.0
20°-30°	668.2	18.0
30°-40°	712.5	19.2
40°-50°	650.0	17.5
50°-60°	509.2	13.7
60°-70°	331.9	8.9
70°-80°	147.0	4.0
80°-90°	31.6	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°	1326.7	35.8
0°-40°	2039.2	55.0
0°-60°	3198.5	86.2
0°-90°	3709.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3709.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1889	1889	1889	1889	1889	
5°	1857	1854	1854	1852	1852	176
15°	1736	1736	1719	1702	1695	488
25°	1505	1496	1472	1420	1380	691
35°	1221	1212	1153	1066	1040	763
45°	937	917	839	769	738	722
55°	651	631	572	504	478	584
65°	387	365	330	336	280	381
75°	155	144	135	129	142	166
85°	22	24	26	28	31	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1889.3	1889.3	1889.3	1889.3	1889.3
2.5°	1876.2	1876.2	1876.2	1874.0	1874.0
5°	1856.6	1854.4	1854.4	1852.2	1852.2
7.5°	1841.3	1839.1	1836.9	1834.7	1830.3
10°	1819.4	1819.4	1817.2	1806.3	1804.1
12.5°	1784.5	1782.3	1773.6	1758.3	1753.9
15°	1736.4	1736.4	1718.9	1701.5	1694.9
17.5°	1684.0	1681.8	1660.0	1642.5	1633.8
20°	1627.2	1622.8	1601.0	1572.6	1557.3
22.5°	1563.9	1563.9	1537.7	1500.5	1485.2
25°	1504.9	1496.2	1472.1	1419.7	1380.4
27.5°	1437.2	1424.1	1397.9	1323.6	1277.7
30°	1362.9	1356.4	1319.2	1223.1	1188.2
32.5°	1293.0	1282.1	1242.8	1142.3	1113.9
35°	1221.0	1212.2	1153.2	1065.9	1039.7
37.5°	1148.9	1138.0	1063.7	993.8	961.0
40°	1076.8	1063.7	982.9	919.5	884.6
42.5°	1009.1	991.6	913.0	845.3	806.0
45°	937.0	917.4	838.7	768.8	738.3
47.5°	864.9	847.5	775.4	703.3	668.4
50°	788.5	773.2	707.7	635.6	598.5
52.5°	725.1	701.1	637.8	565.7	535.1
55°	650.9	631.2	572.3	504.5	478.3
57.5°	583.2	563.5	508.9	445.6	423.7
60°	519.8	491.4	445.6	391.0	373.5
62.5°	449.9	428.1	388.8	342.9	364.8
65°	386.6	364.8	329.8	336.4	279.6
67.5°	316.7	305.8	275.2	244.6	235.9
70°	257.7	244.6	233.7	200.9	192.2
72.5°	205.3	192.2	176.9	159.4	152.9
75°	155.1	144.2	135.4	128.9	142.0
77.5°	107.0	102.7	96.1	89.6	87.4
80°	69.9	67.7	65.5	63.3	61.2
82.5°	41.5	41.5	41.5	41.5	41.5
85°	21.8	24.0	26.2	28.4	30.6
87.5°	13.1	13.1	15.3	17.5	19.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)