

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: P559801

Luminaire Tested: FSR-12-2-LD4-1LO-35-UNV-80-88-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559801
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-LD4-1LO-35-UNV-80-88-EDD
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .500 CLEAR PC ENVIRON
SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 962.0 lumens
Efficiency: N/A
Efficacy: 82.2 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

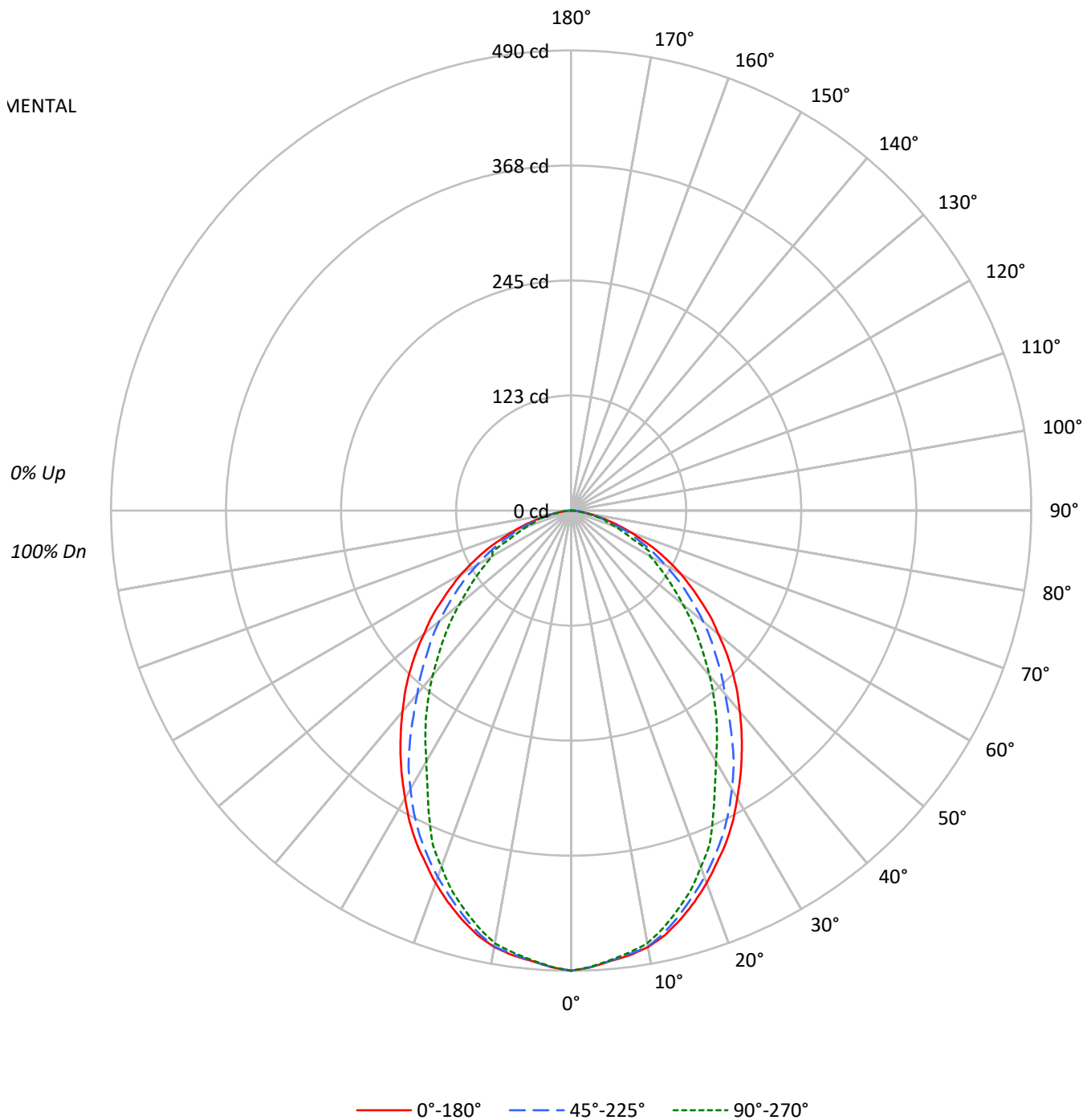
Input Watts (W): 11.7
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2637	2637	2637
5°	2601	2599	2595
10°	2579	2576	2557
15°	2510	2484	2449
20°	2417	2379	2313
25°	2318	2267	2126
30°	2197	2127	1915
35°	2081	1965	1772
40°	1962	1791	1612
45°	1850	1655	1458
50°	1712	1536	1299
55°	1584	1392	1164
60°	1451	1244	1043
65°	1277	1089	923
70°	1051	954	785
75°	836	730	765
80°	561	527	493
85°	352	420	488

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1850 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.6	4.7
10°-20°	125.2	13.0
20°-30°	173.3	18.0
30°-40°	184.8	19.2
40°-50°	168.6	17.5
50°-60°	132.1	13.7
60°-70°	86.1	8.9
70°-80°	38.1	4.0
80°-90°	8.2	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°	344.1	35.8
0°-40°	528.9	55.0
0°-60°	829.6	86.2
0°-90°	962.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	962.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	490	490	490	490	490	
5°	482	481	481	480	480	46
15°	450	450	446	441	440	127
25°	390	388	382	368	358	179
35°	317	314	299	276	270	198
45°	243	238	218	199	192	187
55°	169	164	148	131	124	151
65°	100	95	86	87	72	99
75°	40	37	35	33	37	43
85°	6	6	7	7	8	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	490.0	490.0	490.0	490.0	490.0
2.5°	486.6	486.6	486.6	486.1	486.1
5°	481.5	481.0	481.0	480.4	480.4
7.5°	477.6	477.0	476.4	475.9	474.7
10°	471.9	471.9	471.3	468.5	467.9
12.5°	462.8	462.3	460.0	456.0	454.9
15°	450.4	450.4	445.8	441.3	439.6
17.5°	436.8	436.2	430.5	426.0	423.7
20°	422.0	420.9	415.3	407.9	403.9
22.5°	405.6	405.6	398.8	389.2	385.2
25°	390.3	388.1	381.8	368.2	358.0
27.5°	372.8	369.4	362.6	343.3	331.4
30°	353.5	351.8	342.2	317.2	308.2
32.5°	335.4	332.5	322.3	296.3	288.9
35°	316.7	314.4	299.1	276.5	269.7
37.5°	298.0	295.2	275.9	257.8	249.3
40°	279.3	275.9	254.9	238.5	229.4
42.5°	261.7	257.2	236.8	219.2	209.0
45°	243.0	237.9	217.5	199.4	191.5
47.5°	224.3	219.8	201.1	182.4	173.4
50°	204.5	200.5	183.5	164.9	155.2
52.5°	188.1	181.8	165.4	146.7	138.8
55°	168.8	163.7	148.4	130.9	124.1
57.5°	151.3	146.2	132.0	115.6	109.9
60°	134.8	127.5	115.6	101.4	96.9
62.5°	116.7	111.0	100.8	88.9	94.6
65°	100.3	94.6	85.5	87.2	72.5
67.5°	82.1	79.3	71.4	63.4	61.2
70°	66.8	63.4	60.6	52.1	49.9
72.5°	53.3	49.9	45.9	41.4	39.7
75°	40.2	37.4	35.1	33.4	36.8
77.5°	27.8	26.6	24.9	23.2	22.7
80°	18.1	17.6	17.0	16.4	15.9
82.5°	10.8	10.8	10.8	10.8	10.8
85°	5.7	6.2	6.8	7.4	7.9
87.5°	3.4	3.4	4.0	4.5	5.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)