

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: P559799

Luminaire Tested: FSR-12-2-LD4-1LO-35-UNV-80-87-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559799
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-80-87-EDD
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRON
SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1068.0 lumens
Efficiency: N/A
Efficacy: 91.3 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

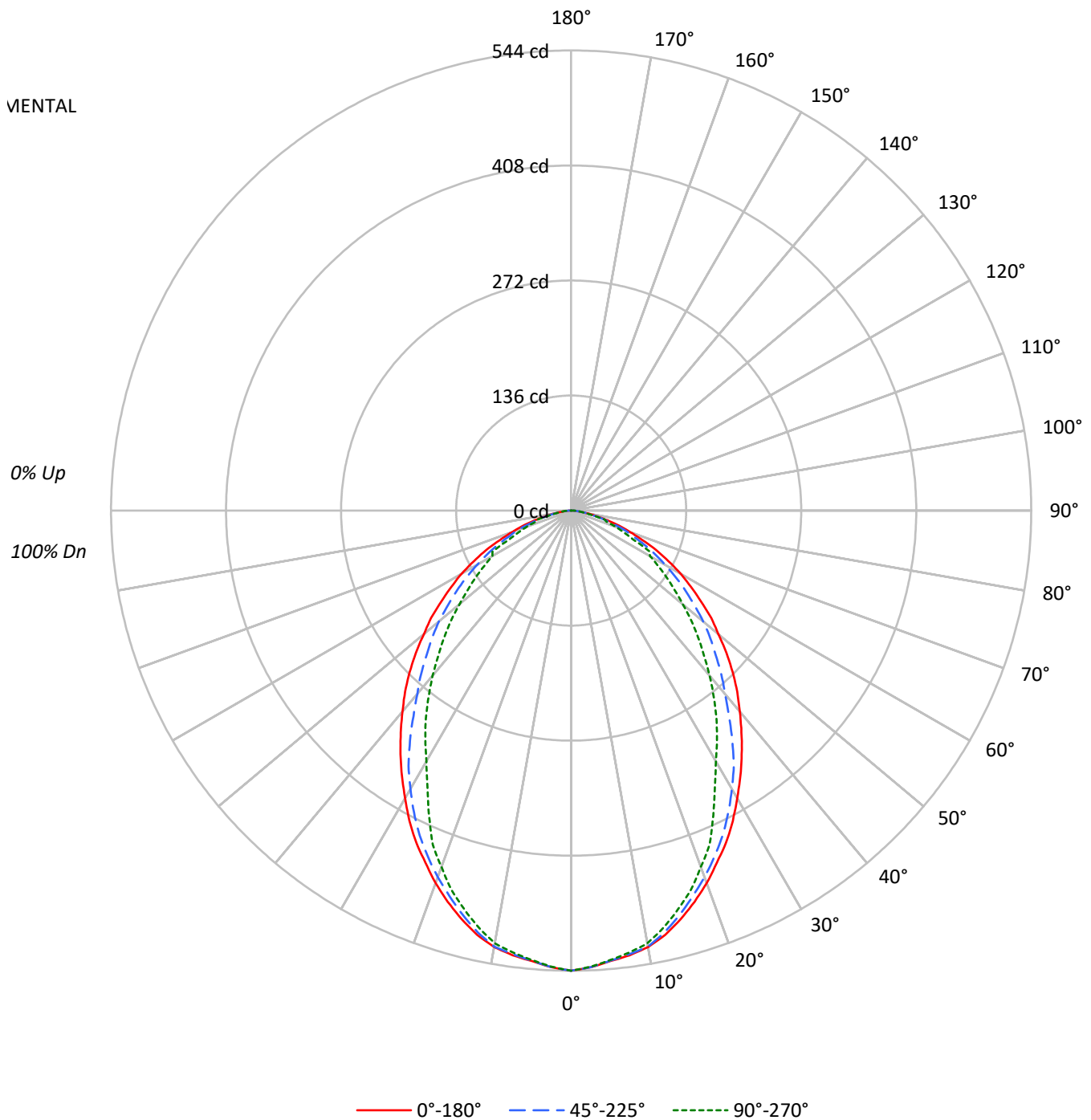
Input Watts (W): 11.7
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	2928	2928	2928
5°	2888	2885	2881
10°	2863	2860	2839
15°	2786	2758	2720
20°	2684	2640	2568
25°	2573	2517	2360
30°	2439	2361	2126
35°	2310	2182	1967
40°	2179	1988	1789
45°	2054	1838	1618
50°	1901	1706	1443
55°	1758	1546	1292
60°	1611	1381	1157
65°	1417	1210	1025
70°	1168	1059	870
75°	930	811	850
80°	623	586	545
85°	389	463	543

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2054 cd/sqm

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CATALOG NUMBER: FSR-12-2-LD4-1LO-35-UNV-80-87-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.6	4.7
10°-20°	139.0	13.0
20°-30°	192.4	18.0
30°-40°	205.2	19.2
40°-50°	187.2	17.5
50°-60°	146.6	13.7
60°-70°	95.6	8.9
70°-80°	42.3	4.0
80°-90°	9.1	0.8
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°	382.0	35.8
0°-40°	587.2	55.0
0°-60°	921.0	86.2
0°-90°	1068.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1068.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	544	544	544	544	544	
5°	535	534	534	533	533	51
15°	500	500	495	490	488	141
25°	433	431	424	409	398	199
35°	352	349	332	307	299	220
45°	270	264	242	221	213	208
55°	187	182	165	145	138	168
65°	111	105	95	97	80	110
75°	45	42	39	37	41	48
85°	6	7	8	8	9	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	544.0	544.0	544.0	544.0	544.0
2.5°	540.3	540.3	540.3	539.6	539.6
5°	534.6	534.0	534.0	533.3	533.3
7.5°	530.2	529.6	528.9	528.3	527.0
10°	523.9	523.9	523.3	520.1	519.5
12.5°	513.8	513.2	510.7	506.3	505.0
15°	500.0	500.0	495.0	489.9	488.1
17.5°	484.9	484.3	478.0	473.0	470.4
20°	468.6	467.3	461.0	452.8	448.4
22.5°	450.3	450.3	442.8	432.1	427.7
25°	433.3	430.8	423.9	408.8	397.5
27.5°	413.8	410.1	402.5	381.1	367.9
30°	392.5	390.6	379.9	352.2	342.1
32.5°	372.3	369.2	357.9	328.9	320.8
35°	351.6	349.1	332.1	306.9	299.4
37.5°	330.8	327.7	306.3	286.2	276.7
40°	310.1	306.3	283.0	264.8	254.7
42.5°	290.6	285.5	262.9	243.4	232.1
45°	269.8	264.2	241.5	221.4	212.6
47.5°	249.1	244.0	223.3	202.5	192.5
50°	227.0	222.6	203.8	183.0	172.3
52.5°	208.8	201.9	183.6	162.9	154.1
55°	187.4	181.8	164.8	145.3	137.7
57.5°	167.9	162.3	146.5	128.3	122.0
60°	149.7	141.5	128.3	112.6	107.5
62.5°	129.6	123.3	111.9	98.7	105.0
65°	111.3	105.0	95.0	96.9	80.5
67.5°	91.2	88.1	79.2	70.4	67.9
70°	74.2	70.4	67.3	57.9	55.3
72.5°	59.1	55.3	50.9	45.9	44.0
75°	44.7	41.5	39.0	37.1	40.9
77.5°	30.8	29.6	27.7	25.8	25.2
80°	20.1	19.5	18.9	18.2	17.6
82.5°	11.9	11.9	11.9	11.9	11.9
85°	6.3	6.9	7.5	8.2	8.8
87.5°	3.8	3.8	4.4	5.0	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)