

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: P560714

Luminaire Tested: FSR-12-2-LD4-2STD-50-UNV-81-94-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560714
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-LD4-2STD-50-UNV-81-94-EDD-90
Description: 1X2 FSR TROFFER WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2596.0 lumens
Efficiency: N/A
Efficacy: 78.0 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

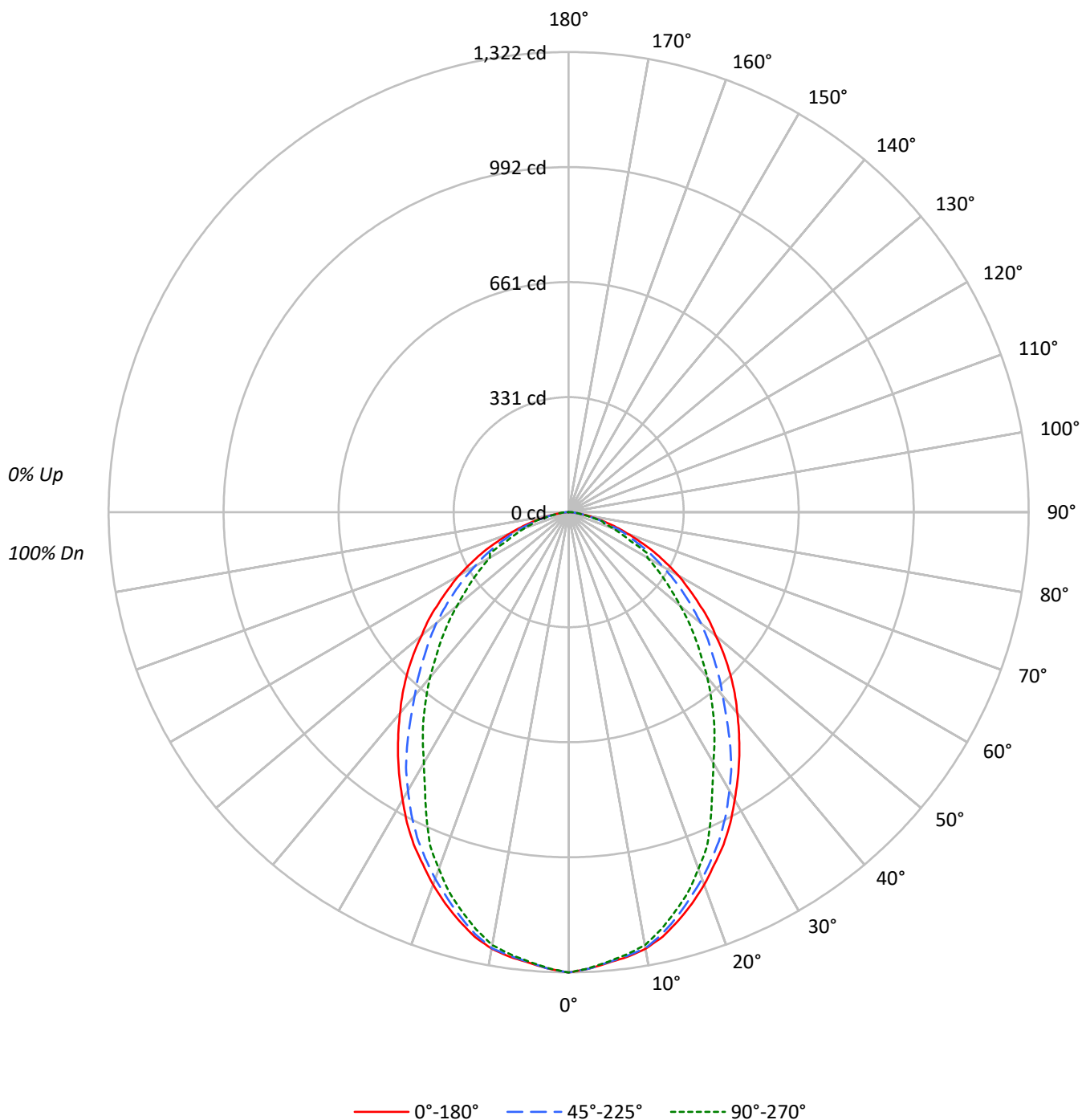
Input Watts (W): 33.3
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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			
RW	70	50	30	10	70	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°	7117	7117	7117
5°	7020	7012	7004
10°	6959	6951	6901
15°	6772	6703	6610
20°	6523	6418	6243
25°	6255	6119	5738
30°	5928	5739	5168
35°	5615	5303	4781
40°	5295	4833	4350
45°	4991	4468	3933
50°	4621	4147	3507
55°	4275	3758	3141
60°	3916	3357	2814
65°	3446	2939	2492
70°	2839	2574	2116
75°	2256	1971	2067
80°	1516	1423	1327
85°	945	1130	1321

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4991 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.1	4.7
10°-20°	337.8	13.0
20°-30°	467.7	18.0
30°-40°	498.7	19.2
40°-50°	455.0	17.5
50°-60°	356.4	13.7
60°-70°	232.3	8.9
70°-80°	102.9	4.0
80°-90°	22.1	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°	928.6	35.8
0°-40°	1427.3	55.0
0°-60°	2238.7	86.2
0°-90°	2596.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2596.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1322	1322	1322	1322	1322	
5°	1299	1298	1298	1296	1296	123
15°	1215	1215	1203	1191	1186	342
25°	1053	1047	1030	994	966	484
35°	855	848	807	746	728	534
45°	656	642	587	538	517	505
55°	456	442	400	353	335	409
65°	271	255	231	235	196	267
75°	108	101	95	90	99	116
85°	15	17	18	20	21	21
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1322.4	1322.4	1322.4	1322.4	1322.4
2.5°	1313.2	1313.2	1313.2	1311.7	1311.7
5°	1299.4	1297.9	1297.9	1296.4	1296.4
7.5°	1288.7	1287.2	1285.7	1284.1	1281.1
10°	1273.4	1273.4	1271.9	1264.3	1262.7
12.5°	1249.0	1247.5	1241.3	1230.6	1227.6
15°	1215.4	1215.4	1203.1	1190.9	1186.3
17.5°	1178.7	1177.1	1161.8	1149.6	1143.5
20°	1138.9	1135.9	1120.6	1100.7	1090.0
22.5°	1094.6	1094.6	1076.2	1050.3	1039.5
25°	1053.3	1047.2	1030.4	993.7	966.2
27.5°	1005.9	996.7	978.4	926.4	894.3
30°	953.9	949.4	923.4	856.1	831.6
32.5°	905.0	897.4	869.9	799.5	779.7
35°	854.6	848.5	807.2	746.0	727.7
37.5°	804.1	796.5	744.5	695.6	672.6
40°	753.7	744.5	687.9	643.6	619.1
42.5°	706.3	694.1	639.0	591.6	564.1
45°	655.8	642.1	587.0	538.1	516.7
47.5°	605.4	593.2	542.7	492.3	467.8
50°	551.9	541.2	495.3	444.9	418.9
52.5°	507.5	490.7	446.4	395.9	374.5
55°	455.6	441.8	400.5	353.1	334.8
57.5°	408.2	394.4	356.2	311.9	296.6
60°	363.8	344.0	311.9	273.6	261.4
62.5°	314.9	299.6	272.1	240.0	255.3
65°	270.6	255.3	230.8	235.4	195.7
67.5°	221.7	214.0	192.6	171.2	165.1
70°	180.4	171.2	163.6	140.6	134.5
72.5°	143.7	134.5	123.8	111.6	107.0
75°	108.5	100.9	94.8	90.2	99.4
77.5°	74.9	71.9	67.3	62.7	61.1
80°	48.9	47.4	45.9	44.3	42.8
82.5°	29.0	29.0	29.0	29.0	29.0
85°	15.3	16.8	18.3	19.9	21.4
87.5°	9.2	9.2	10.7	12.2	13.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)