

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: P558687

Luminaire Tested: FSR-12-1-LD4-1LO-35-UNV-82-97-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558687
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-LD4-1LO-35-UNV-82-97-EDD
Description: 1X1 FSR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 533.0 lumens
Efficiency: N/A
Efficacy: 91.9 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

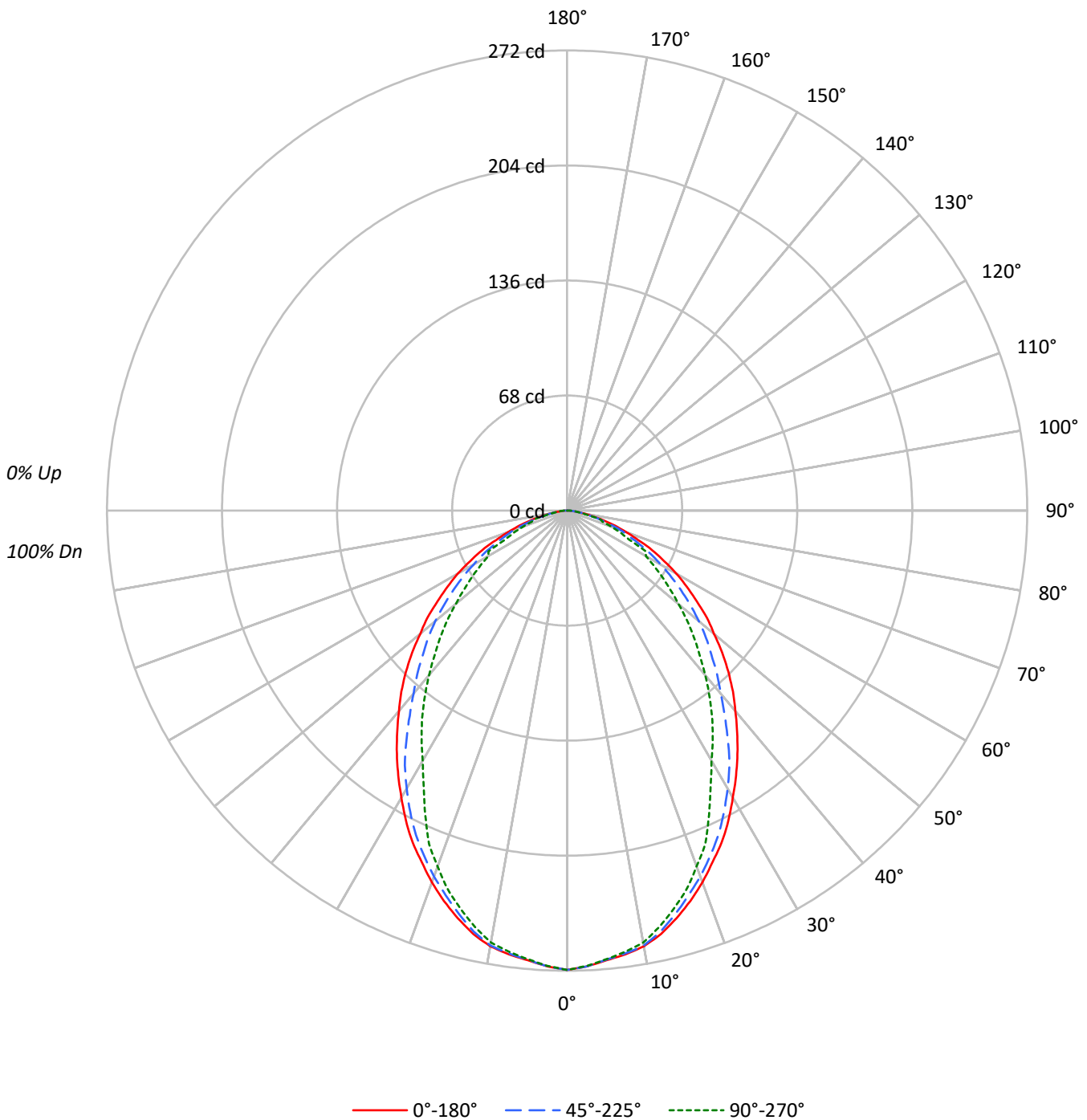
Input Watts (W): 5.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	2922	2922	2922
5°	2883	2880	2876
10°	2858	2854	2834
15°	2780	2752	2715
20°	2678	2636	2564
25°	2569	2513	2356
30°	2435	2357	2122
35°	2306	2177	1963
40°	2174	1984	1786
45°	2050	1834	1615
50°	1897	1703	1440
55°	1755	1543	1289
60°	1608	1378	1156
65°	1416	1207	1024
70°	1164	1057	869
75°	927	811	848
80°	620	583	545
85°	383	469	543

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2050 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.3	4.7
10°-20°	69.4	13.0
20°-30°	96.0	18.0
30°-40°	102.4	19.2
40°-50°	93.4	17.5
50°-60°	73.2	13.7
60°-70°	47.7	8.9
70°-80°	21.1	4.0
80°-90°	4.6	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°	190.7	35.8
0°-40°	293.0	55.0
0°-60°	459.6	86.2
0°-90°	533.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	533.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	272	272	272	272	272	
5°	267	266	266	266	266	25
15°	250	250	247	244	244	70
25°	216	215	212	204	198	99
35°	176	174	166	153	149	110
45°	135	132	120	110	106	104
55°	94	91	82	72	69	84
65°	56	52	47	48	40	55
75°	22	21	20	18	20	24
85°	3	4	4	4	4	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	271.5	271.5	271.5	271.5	271.5
2.5°	269.6	269.6	269.6	269.3	269.3
5°	266.8	266.5	266.5	266.2	266.2
7.5°	264.6	264.3	264.0	263.7	263.0
10°	261.5	261.5	261.1	259.6	259.3
12.5°	256.4	256.1	254.9	252.7	252.0
15°	249.5	249.5	247.0	244.5	243.6
17.5°	242.0	241.7	238.5	236.0	234.8
20°	233.8	233.2	230.1	226.0	223.8
22.5°	224.7	224.7	221.0	215.6	213.4
25°	216.3	215.0	211.6	204.0	198.4
27.5°	206.5	204.6	200.9	190.2	183.6
30°	195.9	194.9	189.6	175.8	170.7
32.5°	185.8	184.2	178.6	164.2	160.1
35°	175.5	174.2	165.7	153.2	149.4
37.5°	165.1	163.5	152.9	142.8	138.1
40°	154.7	152.9	141.2	132.1	127.1
42.5°	145.0	142.5	131.2	121.5	115.8
45°	134.7	131.8	120.5	110.5	106.1
47.5°	124.3	121.8	111.4	101.1	96.0
50°	113.3	111.1	101.7	91.3	86.0
52.5°	104.2	100.8	91.7	81.3	76.9
55°	93.5	90.7	82.2	72.5	68.7
57.5°	83.8	81.0	73.1	64.0	60.9
60°	74.7	70.6	64.0	56.2	53.7
62.5°	64.7	61.5	55.9	49.3	52.4
65°	55.6	52.4	47.4	48.3	40.2
67.5°	45.5	43.9	39.5	35.2	33.9
70°	37.0	35.2	33.6	28.9	27.6
72.5°	29.5	27.6	25.4	22.9	22.0
75°	22.3	20.7	19.5	18.5	20.4
77.5°	15.4	14.8	13.8	12.9	12.6
80°	10.0	9.7	9.4	9.1	8.8
82.5°	6.0	6.0	6.0	6.0	6.0
85°	3.1	3.5	3.8	4.1	4.4
87.5°	1.9	1.9	2.2	2.5	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)