

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: P559974

Luminaire Tested: FSR-12-2-LD4-1LO-50-UNV-93-87-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559974
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-50-UNV-93-87-EDD-90
Description: 1X2 FSR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 956.0 lumens
Efficiency: N/A
Efficacy: 81.7 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

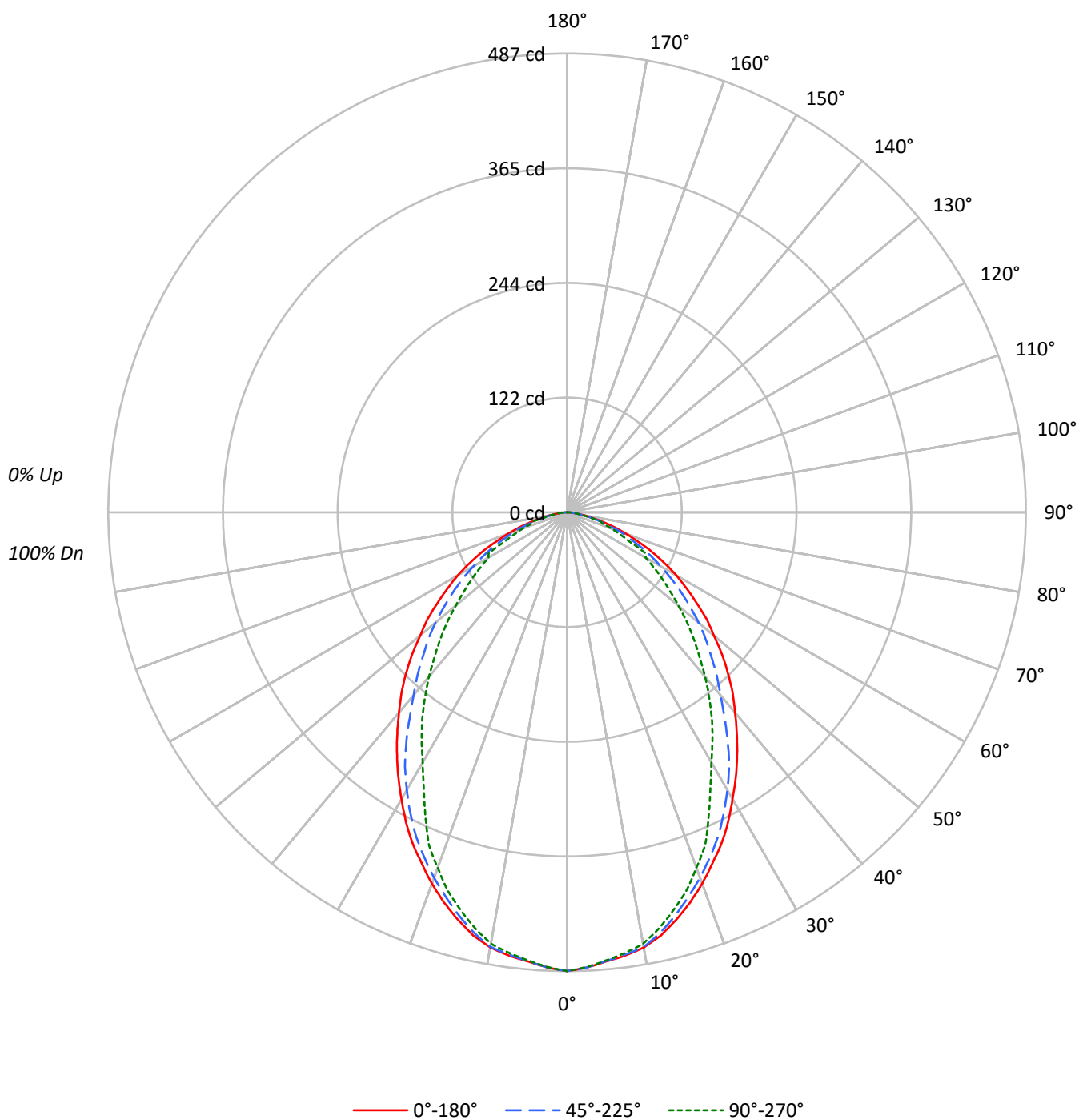
Input Watts (W): 11.7
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	2621	2621	2621
5°	2585	2582	2579
10°	2563	2560	2541
15°	2494	2469	2434
20°	2402	2364	2299
25°	2303	2253	2113
30°	2183	2113	1904
35°	2068	1953	1761
40°	1950	1780	1602
45°	1838	1646	1448
50°	1701	1527	1292
55°	1574	1384	1157
60°	1442	1236	1037
65°	1268	1082	918
70°	1045	947	779
75°	832	726	761
80°	558	524	490
85°	346	420	488

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1838 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.3	4.7
10°-20°	124.4	13.0
20°-30°	172.2	18.0
30°-40°	183.7	19.2
40°-50°	167.5	17.5
50°-60°	131.2	13.7
60°-70°	85.5	8.9
70°-80°	37.9	4.0
80°-90°	8.1	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°	342.0	35.8
0°-40°	525.6	55.0
0°-60°	824.4	86.2
0°-90°	956.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	956.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	487	487	487	487	487	
5°	478	478	478	477	477	45
15°	448	448	443	439	437	126
25°	388	386	379	366	356	178
35°	315	312	297	275	268	197
45°	242	236	216	198	190	186
55°	168	163	148	130	123	150
65°	100	94	85	87	72	98
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°	487.0	487.0	487.0	487.0	487.0
2.5°	483.6	483.6	483.6	483.0	483.0
5°	478.5	478.0	478.0	477.4	477.4
7.5°	474.6	474.0	473.5	472.9	471.8
10°	469.0	469.0	468.4	465.6	465.0
12.5°	460.0	459.4	457.1	453.2	452.1
15°	447.6	447.6	443.1	438.6	436.9
17.5°	434.1	433.5	427.9	423.4	421.1
20°	419.4	418.3	412.7	405.3	401.4
22.5°	403.1	403.1	396.3	386.8	382.8
25°	387.9	385.6	379.4	365.9	355.8
27.5°	370.4	367.1	360.3	341.2	329.3
30°	351.3	349.6	340.0	315.3	306.3
32.5°	333.3	330.5	320.3	294.4	287.1
35°	314.7	312.5	297.3	274.7	268.0
37.5°	296.1	293.3	274.2	256.2	247.7
40°	277.5	274.2	253.3	237.0	228.0
42.5°	260.1	255.6	235.3	217.9	207.7
45°	241.5	236.4	216.2	198.2	190.3
47.5°	222.9	218.4	199.9	181.3	172.3
50°	203.2	199.3	182.4	163.8	154.3
52.5°	186.9	180.7	164.4	145.8	137.9
55°	167.8	162.7	147.5	130.0	123.3
57.5°	150.3	145.2	131.2	114.8	109.2
60°	134.0	126.7	114.8	100.8	96.3
62.5°	116.0	110.3	100.2	88.4	94.0
65°	99.6	94.0	85.0	86.7	72.1
67.5°	81.6	78.8	70.9	63.1	60.8
70°	66.4	63.1	60.2	51.8	49.5
72.5°	52.9	49.5	45.6	41.1	39.4
75°	40.0	37.2	34.9	33.2	36.6
77.5°	27.6	26.5	24.8	23.1	22.5
80°	18.0	17.5	16.9	16.3	15.8
82.5°	10.7	10.7	10.7	10.7	10.7
85°	5.6	6.2	6.8	7.3	7.9
87.5°	3.4	3.4	3.9	4.5	5.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)