

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: P560639

Luminaire Tested: FSR-12-2-LD4-2STD-40-UNV-80-97-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560639
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-40-UNV-80-97-EDD
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR TEMPERED G ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2945.0 lumens
Efficiency: N/A
Efficacy: 88.4 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

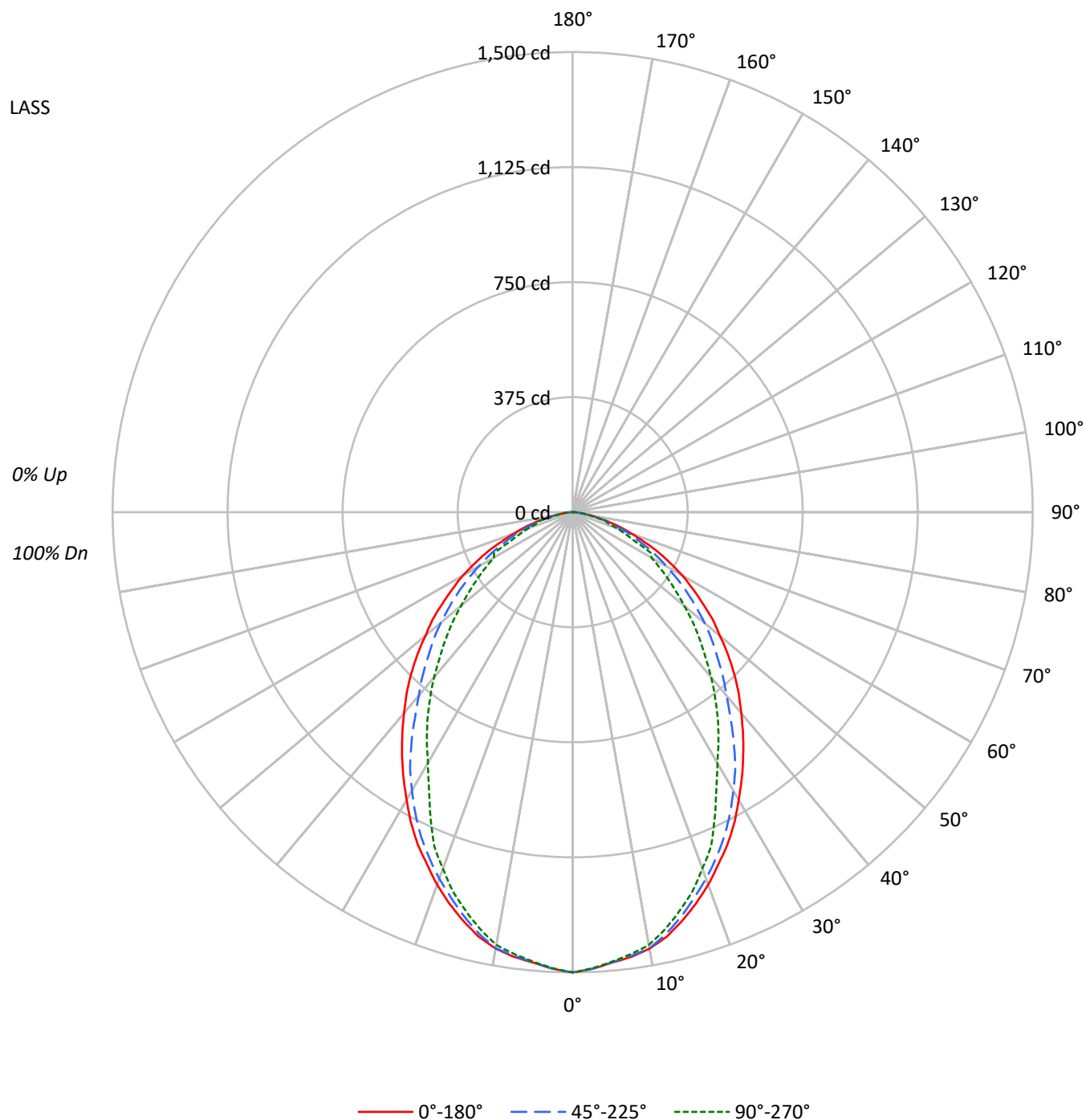
Input Watts (W): 33.3
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	8073	8073	8073
5°	7964	7955	7945
10°	7895	7885	7829
15°	7682	7605	7499
20°	7400	7281	7082
25°	7096	6941	6509
30°	6725	6510	5863
35°	6370	6016	5424
40°	6007	5483	4935
45°	5663	5069	4462
50°	5242	4705	3979
55°	4849	4264	3564
60°	4443	3808	3193
65°	3910	3335	2827
70°	3220	2921	2401
75°	2560	2235	2344
80°	1720	1612	1506
85°	1068	1284	1501

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5663 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.6	4.7
10°-20°	383.2	13.0
20°-30°	530.6	18.0
30°-40°	565.7	19.2
40°-50°	516.1	17.5
50°-60°	404.3	13.7
60°-70°	263.5	8.9
70°-80°	116.8	4.0
80°-90°	25.1	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°	1053.4	35.8
0°-40°	1619.2	55.0
0°-60°	2539.7	86.2
0°-90°	2945.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2945.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1500	1500	1500	1500	1500	
5°	1474	1472	1472	1471	1471	140
15°	1379	1379	1365	1351	1346	388
25°	1195	1188	1169	1127	1096	549
35°	970	962	916	846	826	606
45°	744	728	666	610	586	573
55°	517	501	454	401	380	464
65°	307	290	262	267	222	303
75°	123	114	108	102	113	132
85°	17	19	21	22	24	24
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1500.1	1500.1	1500.1	1500.1	1500.1
2.5°	1489.7	1489.7	1489.7	1488.0	1488.0
5°	1474.1	1472.4	1472.4	1470.7	1470.7
7.5°	1462.0	1460.3	1458.5	1456.8	1453.3
10°	1444.6	1444.6	1442.9	1434.2	1432.5
12.5°	1416.9	1415.2	1408.2	1396.1	1392.6
15°	1378.7	1378.7	1364.9	1351.0	1345.8
17.5°	1337.1	1335.4	1318.0	1304.2	1297.2
20°	1292.0	1288.6	1271.2	1248.7	1236.5
22.5°	1241.7	1241.7	1220.9	1191.4	1179.3
25°	1194.9	1188.0	1168.9	1127.3	1096.1
27.5°	1141.1	1130.7	1109.9	1051.0	1014.5
30°	1082.2	1077.0	1047.5	971.2	943.4
32.5°	1026.7	1018.0	986.8	907.0	884.5
35°	969.5	962.5	915.7	846.3	825.5
37.5°	912.2	903.6	844.6	789.1	763.1
40°	855.0	844.6	780.4	730.1	702.4
42.5°	801.2	787.4	724.9	671.2	639.9
45°	744.0	728.4	666.0	610.5	586.2
47.5°	686.8	672.9	615.7	558.4	530.7
50°	626.1	613.9	561.9	504.7	475.2
52.5°	575.8	556.7	506.4	449.2	424.9
55°	516.8	501.2	454.4	400.6	379.8
57.5°	463.1	447.4	404.1	353.8	336.4
60°	412.8	390.2	353.8	310.4	296.6
62.5°	357.3	339.9	308.7	272.3	289.6
65°	307.0	289.6	261.9	267.1	222.0
67.5°	251.5	242.8	218.5	194.2	187.3
70°	204.6	194.2	185.6	159.6	152.6
72.5°	163.0	152.6	140.5	126.6	121.4
75°	123.1	114.5	107.5	102.3	112.7
77.5°	85.0	81.5	76.3	71.1	69.4
80°	55.5	53.8	52.0	50.3	48.6
82.5°	33.0	33.0	33.0	33.0	33.0
85°	17.3	19.1	20.8	22.5	24.3
87.5°	10.4	10.4	12.1	13.9	15.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)