

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: P560705

Luminaire Tested: FSR-12-2-LD4-2STD-50-UNV-81-84-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560705
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-81-84-EDD
Description: 1X2 FSR TROFFER WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2977.0 lumens
Efficiency: N/A
Efficacy: 89.4 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

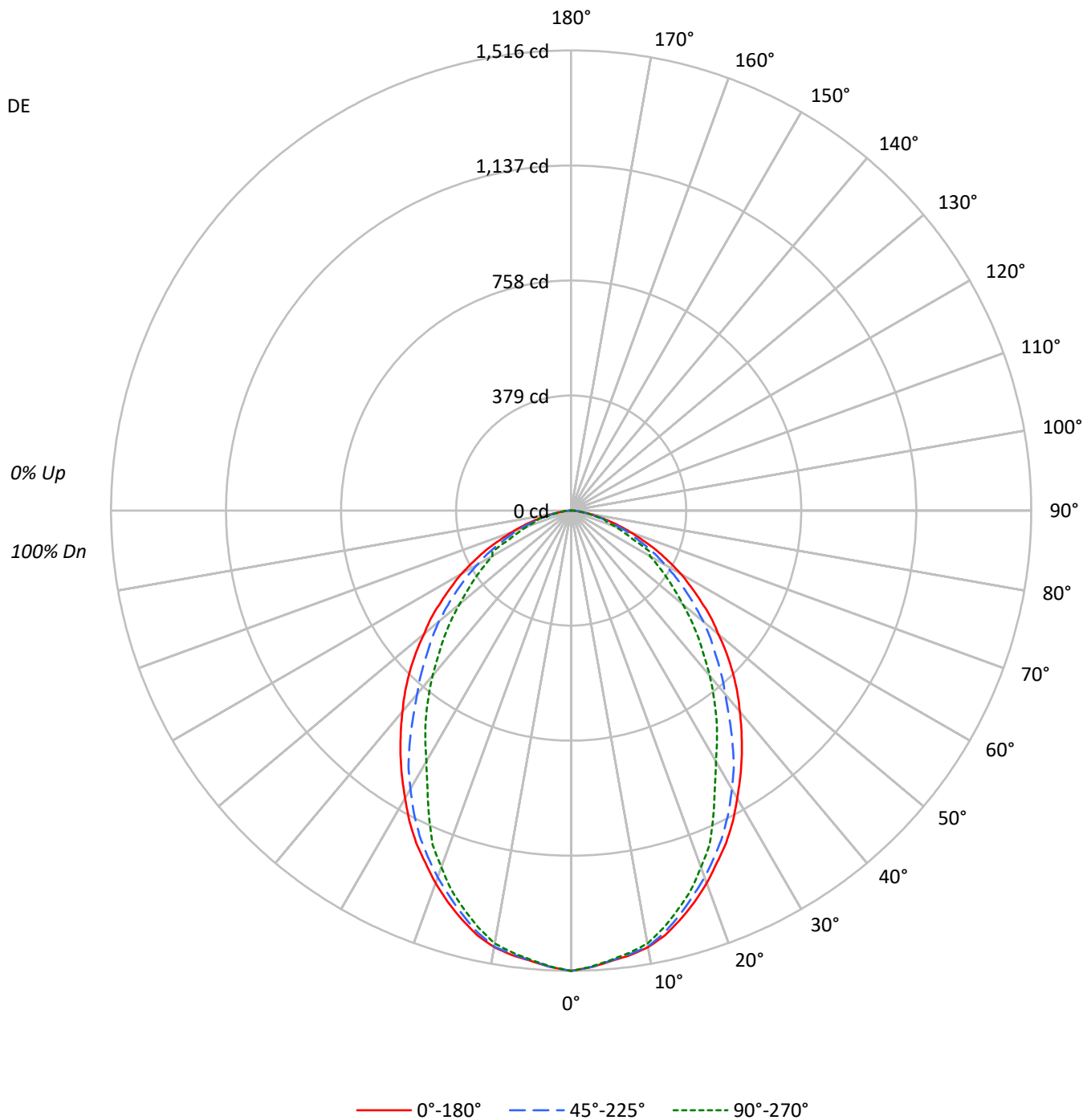
Input Watts (W): 33.3
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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				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°	8161	8161	8161
5°	8050	8041	8031
10°	7981	7971	7914
15°	7765	7687	7580
20°	7481	7360	7159
25°	7173	7017	6580
30°	6798	6581	5927
35°	6439	6081	5483
40°	6072	5543	4988
45°	5724	5124	4510
50°	5299	4756	4022
55°	4902	4310	3602
60°	4491	3849	3227
65°	3952	3371	2858
70°	3256	2952	2428
75°	2589	2260	2371
80°	1739	1630	1522
85°	1081	1297	1513

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5724 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.2	4.7
10°-20°	387.4	13.0
20°-30°	536.3	18.0
30°-40°	571.9	19.2
40°-50°	521.7	17.5
50°-60°	408.7	13.7
60°-70°	266.4	8.9
70°-80°	118.0	4.0
80°-90°	25.3	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°	1064.9	35.8
0°-40°	1636.8	55.0
0°-60°	2567.3	86.2
0°-90°	2977.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2977.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1516	1516	1516	1516	1516	
5°	1490	1488	1488	1487	1487	141
15°	1394	1394	1380	1366	1360	392
25°	1208	1201	1182	1140	1108	555
35°	980	973	926	856	834	613
45°	752	736	673	617	593	579
55°	522	507	459	405	384	469
65°	310	293	265	270	224	306
75°	124	116	109	103	114	133
85°	18	19	21	23	24	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1516.4	1516.4	1516.4	1516.4	1516.4
2.5°	1505.9	1505.9	1505.9	1504.2	1504.2
5°	1490.1	1488.4	1488.4	1486.6	1486.6
7.5°	1477.9	1476.1	1474.4	1472.6	1469.1
10°	1460.3	1460.3	1458.6	1449.8	1448.1
12.5°	1432.3	1430.5	1423.5	1411.3	1407.8
15°	1393.7	1393.7	1379.7	1365.7	1360.4
17.5°	1351.7	1349.9	1332.4	1318.3	1311.3
20°	1306.1	1302.6	1285.0	1262.2	1250.0
22.5°	1255.2	1255.2	1234.2	1204.4	1192.1
25°	1207.9	1200.9	1181.6	1139.5	1108.0
27.5°	1153.5	1143.0	1122.0	1062.4	1025.6
30°	1093.9	1088.7	1058.9	981.7	953.7
32.5°	1037.8	1029.1	997.5	916.9	894.1
35°	980.0	973.0	925.6	855.5	834.5
37.5°	922.1	913.4	853.8	797.7	771.4
40°	864.3	853.8	788.9	738.1	710.0
42.5°	809.9	795.9	732.8	678.5	646.9
45°	752.1	736.3	673.2	617.1	592.6
47.5°	694.2	680.2	622.4	564.5	536.5
50°	632.9	620.6	568.0	510.2	480.4
52.5°	582.0	562.7	511.9	454.1	429.5
55°	522.4	506.7	459.3	405.0	383.9
57.5°	468.1	452.3	408.5	357.6	340.1
60°	417.2	394.5	357.6	313.8	299.8
62.5°	361.1	343.6	312.1	275.2	292.8
65°	310.3	292.8	264.7	270.0	224.4
67.5°	254.2	245.4	220.9	196.3	189.3
70°	206.9	196.3	187.6	161.3	154.3
72.5°	164.8	154.3	142.0	128.0	122.7
75°	124.5	115.7	108.7	103.4	114.0
77.5°	85.9	82.4	77.1	71.9	70.1
80°	56.1	54.3	52.6	50.8	49.1
82.5°	33.3	33.3	33.3	33.3	33.3
85°	17.5	19.3	21.0	22.8	24.5
87.5°	10.5	10.5	12.3	14.0	15.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)