

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: P973748

Luminaire Tested: FLR2-22-45HE-L830-CP375

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973748
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-2)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-22-45HE-L830-CP375
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

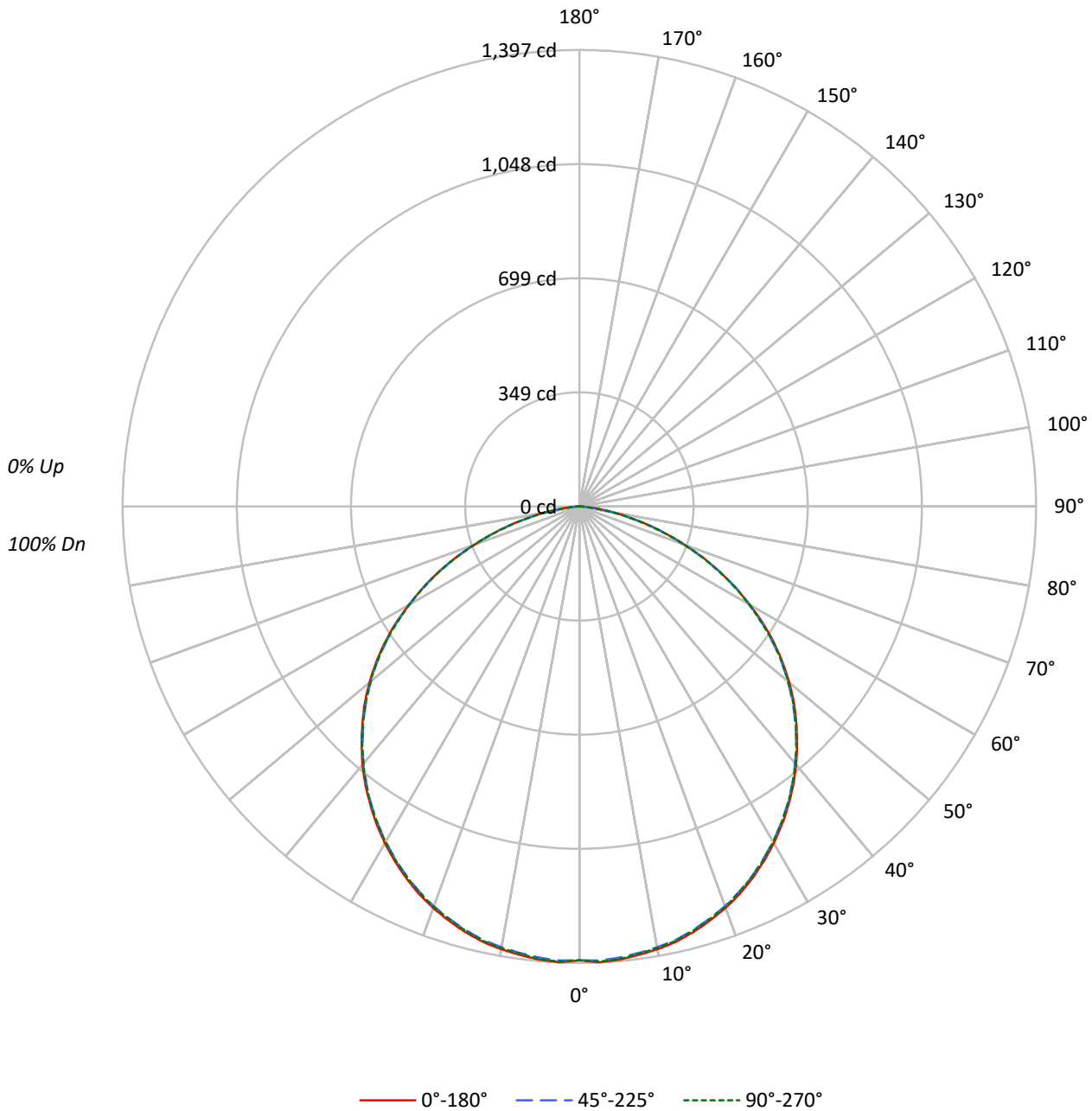
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3884.0 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 36.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor:
Total Harmonic Distortion (THDi):
Frequency (hertz): 60
Stabilization Time: HR
Operation Time: HR
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										
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	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						100														
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85						85														
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71						71														
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60						60														
4	83	71	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51						51														
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44						44														
6	71	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39						39														
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34						34														
8	61	47	39	33	59	47	39	33	45	38	33	44	37	32	43	37	32	30						30														
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27						27														
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25						25														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3737	3737	3737
5°	3761	3745	3756
10°	3760	3744	3750
15°	3757	3740	3745
20°	3744	3729	3734
25°	3724	3708	3711
30°	3697	3681	3684
35°	3664	3649	3652
40°	3625	3607	3610
45°	3572	3555	3562
50°	3509	3484	3491
55°	3409	3381	3393
60°	3241	3227	3227
65°	3026	3021	3010
70°	2680	2693	2686
75°	2256	2239	2221
80°	1623	1595	1582
85°	849	849	821

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3572 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.5	3.4
10°-20°	378.2	9.7
20°-30°	574.7	14.8
30°-40°	694.7	17.9
40°-50°	721.1	18.6
50°-60°	644.6	16.6
60°-70°	468.7	12.1
70°-80°	230.5	5.9
80°-90°	40.0	1.0
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°	1084.4	27.9
0°-40°	1779.1	45.8
0°-60°	3144.8	81.0
0°-90°	3884.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3884.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1389	1389	1389	1389	1389	
5°	1392	1376	1386	1381	1391	132
15°	1348	1333	1342	1339	1344	381
25°	1254	1240	1249	1246	1250	578
35°	1115	1108	1111	1112	1112	698
45°	938	934	934	936	936	724
55°	727	722	721	722	723	648
65°	475	477	474	474	473	469
75°	217	219	215	216	214	230
85°	28	28	28	28	27	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1388.8	1388.8	1388.8	1388.8	1388.8
2.5°	1396.6	1380.3	1390.6	1384.6	1394.0
5°	1392.3	1376.0	1386.3	1381.1	1390.6
7.5°	1384.6	1368.3	1378.6	1373.4	1381.1
10°	1376.0	1358.8	1370.0	1364.8	1372.5
12.5°	1364.8	1348.5	1358.8	1354.5	1361.4
15°	1348.5	1333.1	1342.5	1339.1	1344.2
17.5°	1328.8	1313.4	1322.8	1320.2	1324.5
20°	1307.4	1292.8	1302.2	1299.6	1303.9
22.5°	1283.3	1267.9	1276.5	1274.8	1278.2
25°	1254.2	1240.4	1249.0	1246.4	1249.9
27.5°	1223.3	1210.4	1217.3	1217.3	1219.0
30°	1189.8	1177.8	1184.7	1184.7	1185.5
32.5°	1153.8	1144.4	1148.7	1149.5	1149.5
35°	1115.2	1107.5	1110.9	1111.8	1111.8
37.5°	1074.9	1067.2	1069.7	1071.4	1071.4
40°	1032.0	1025.1	1026.8	1028.6	1027.7
42.5°	985.7	980.5	981.4	983.1	983.1
45°	938.5	934.2	934.2	935.9	935.9
47.5°	890.4	886.2	884.4	886.2	886.2
50°	838.1	833.8	832.1	833.8	833.8
52.5°	783.2	778.9	778.9	778.9	779.8
55°	726.6	722.3	720.6	722.3	723.2
57.5°	666.5	664.8	662.3	663.1	660.5
60°	602.2	602.2	599.6	601.3	599.6
62.5°	539.6	541.3	538.7	538.7	537.0
65°	475.2	477.0	474.4	474.4	472.7
67.5°	409.2	411.8	408.3	408.3	406.6
70°	340.6	345.7	342.3	343.1	341.4
72.5°	278.8	281.4	277.9	277.9	276.2
75°	217.0	218.7	215.3	216.2	213.6
77.5°	156.1	158.7	155.3	156.1	155.3
80°	104.7	105.5	102.9	103.8	102.1
82.5°	60.9	61.8	60.9	60.0	59.2
85°	27.5	28.3	27.5	27.5	26.6
87.5°	6.9	6.9	6.9	6.9	6.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)