

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: P974042

Luminaire Tested: FLR2-22-45HE-L950-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974042
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-L950-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

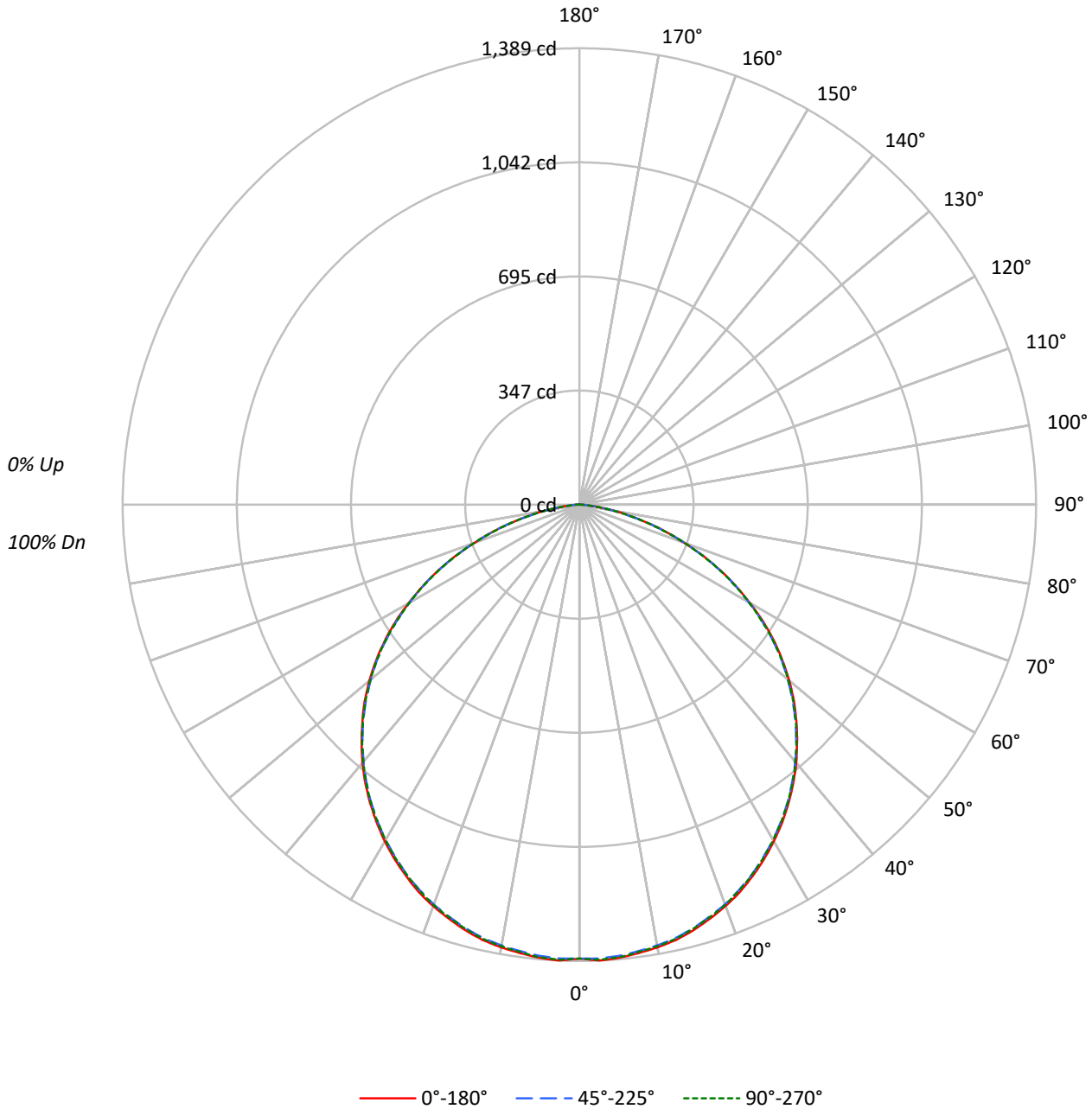
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3863.0 lumens
Efficiency: N/A
Efficacy: 106.7 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°	3717	3717	3717
5°	3741	3724	3736
10°	3740	3723	3730
15°	3737	3720	3725
20°	3724	3709	3714
25°	3704	3689	3691
30°	3677	3661	3664
35°	3644	3630	3633
40°	3606	3588	3591
45°	3552	3536	3543
50°	3490	3465	3472
55°	3391	3362	3375
60°	3224	3210	3210
65°	3010	3004	2993
70°	2665	2678	2672
75°	2245	2227	2209
80°	1613	1587	1573
85°	843	843	815

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3552 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.8	3.4
10°-20°	376.2	9.7
20°-30°	571.6	14.8
30°-40°	690.9	17.9
40°-50°	717.2	18.6
50°-60°	641.2	16.6
60°-70°	466.2	12.1
70°-80°	229.2	5.9
80°-90°	39.7	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°	1078.6	27.9
0°-40°	1769.5	45.8
0°-60°	3127.9	81.0
0°-90°	3863.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3863.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1381	1381	1381	1381	1381	
5°	1385	1369	1379	1374	1383	132
15°	1341	1326	1335	1332	1337	378
25°	1247	1234	1242	1240	1243	575
35°	1109	1102	1105	1106	1106	694
45°	933	929	929	931	931	720
55°	723	718	717	718	719	644
65°	473	474	472	472	470	466
75°	216	218	214	215	212	229
85°	27	28	27	27	26	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1381.4	1381.4	1381.4	1381.4	1381.4
2.5°	1389.0	1372.8	1383.1	1377.1	1386.5
5°	1384.8	1368.6	1378.8	1373.7	1383.1
7.5°	1377.1	1360.9	1371.1	1366.0	1373.7
10°	1368.6	1351.5	1362.6	1357.5	1365.1
12.5°	1357.5	1341.3	1351.5	1347.2	1354.1
15°	1341.3	1325.9	1335.3	1331.9	1337.0
17.5°	1321.6	1306.3	1315.7	1313.1	1317.4
20°	1300.3	1285.8	1295.2	1292.6	1296.9
22.5°	1276.4	1261.1	1269.6	1267.9	1271.3
25°	1247.4	1233.8	1242.3	1239.7	1243.1
27.5°	1216.7	1203.9	1210.7	1210.7	1212.4
30°	1183.4	1171.5	1178.3	1178.3	1179.1
32.5°	1147.6	1138.2	1142.5	1143.3	1143.3
35°	1109.2	1101.5	1104.9	1105.8	1105.8
37.5°	1069.1	1061.4	1064.0	1065.7	1065.7
40°	1026.4	1019.6	1021.3	1023.0	1022.2
42.5°	980.3	975.2	976.1	977.8	977.8
45°	933.4	929.2	929.2	930.9	930.9
47.5°	885.6	881.4	879.7	881.4	881.4
50°	833.6	829.3	827.6	829.3	829.3
52.5°	779.0	774.7	774.7	774.7	775.6
55°	722.7	718.4	716.7	718.4	719.3
57.5°	663.0	661.2	658.7	659.5	657.0
60°	599.0	599.0	596.4	598.1	596.4
62.5°	536.7	538.4	535.8	535.8	534.1
65°	472.7	474.4	471.8	471.8	470.1
67.5°	407.0	409.5	406.1	406.1	404.4
70°	338.7	343.8	340.4	341.3	339.6
72.5°	277.3	279.9	276.4	276.4	274.7
75°	215.9	217.6	214.2	215.0	212.5
77.5°	155.3	157.8	154.4	155.3	154.4
80°	104.1	104.9	102.4	103.2	101.5
82.5°	60.6	61.4	60.6	59.7	58.9
85°	27.3	28.2	27.3	27.3	26.4
87.5°	6.8	6.8	6.8	6.8	6.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)