

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: P974508

Luminaire Tested: FLR2-24-40HE-L830-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974508
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-3)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-24-40HE-L830-CP080
Description: SHAPER SENSE CIRCLE
LIGHT LEVEL 1
Light Source:
Ballast/Driver: -

Summary

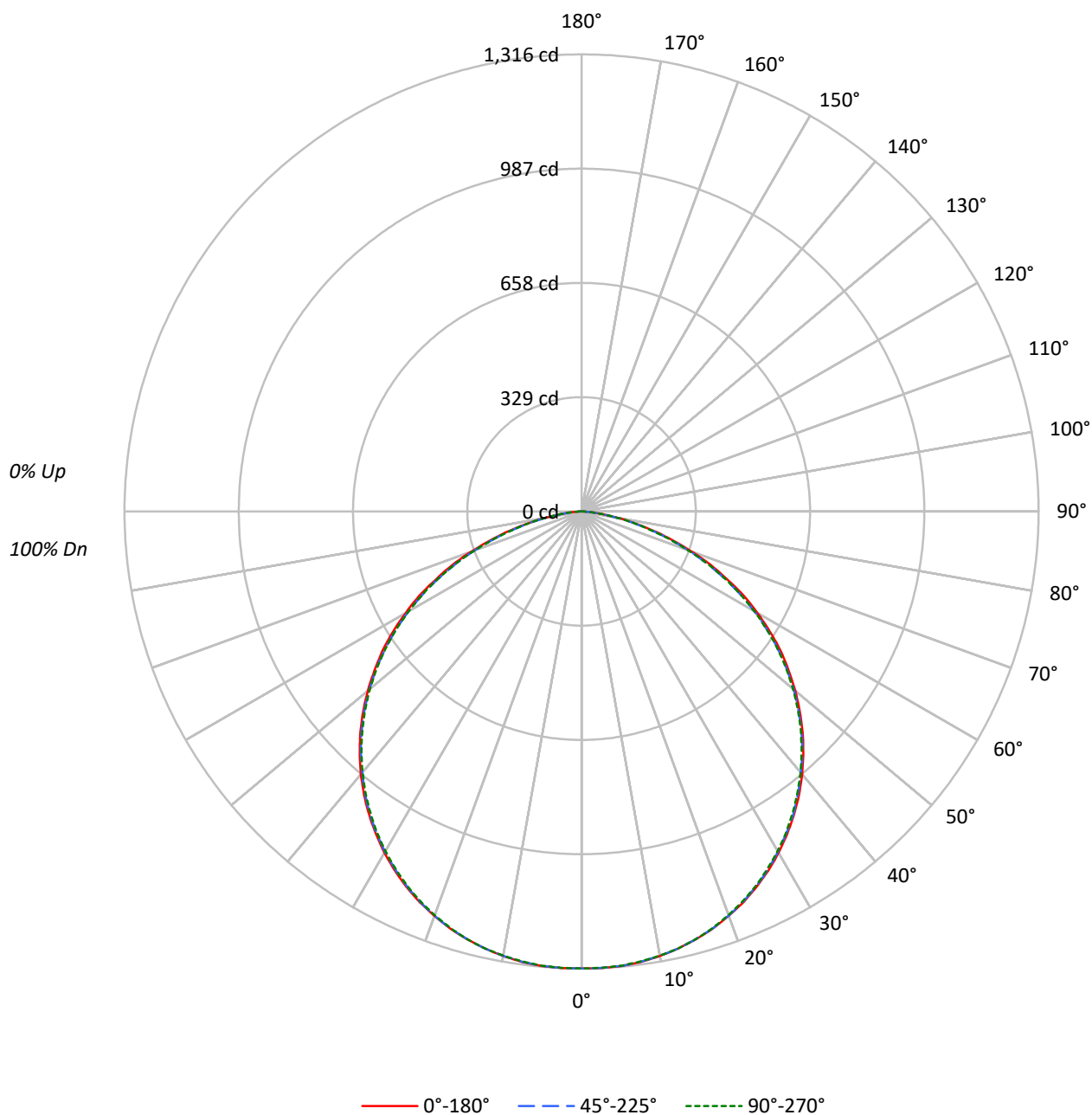
Lumens per Lamp: N/A
Luminaire Lumens: 3720.0 lumens
Efficiency: N/A
Efficacy: 124.4 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 29.9
Input Voltage (V):
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					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	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	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85		85
2	99	91	85	79	97	89	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	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51		51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44		44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38		38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34		34
8	61	47	39	33	59	47	38	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	39	33	29	27		27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25		25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1771	1771	1771
5°	1774	1774	1773
10°	1776	1775	1774
15°	1776	1775	1775
20°	1774	1774	1771
25°	1771	1768	1765
30°	1763	1758	1754
35°	1752	1747	1741
40°	1736	1725	1723
45°	1714	1704	1698
50°	1681	1669	1664
55°	1642	1619	1616
60°	1573	1545	1545
65°	1472	1437	1442
70°	1325	1284	1280
75°	1112	1068	1063
80°	812	772	805
85°	460	423	431

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1714 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.9	3.4
10°-20°	359.9	9.7
20°-30°	548.8	14.8
30°-40°	664.9	17.9
40°-50°	690.6	18.6
50°-60°	617.8	16.6
60°-70°	450.3	12.1
70°-80°	223.0	6.0
80°-90°	39.9	1.1
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°	1033.6	27.8
0°-40°	1698.5	45.7
0°-60°	3006.9	80.8
0°-90°	3720.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3720.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1316	1316	1316	1316	1316	
5°	1314	1314	1314	1314	1313	125
15°	1275	1275	1275	1276	1275	360
25°	1193	1192	1191	1190	1189	550
35°	1066	1065	1064	1062	1060	667
45°	901	899	895	894	893	694
55°	700	695	690	690	689	624
65°	462	459	452	453	453	458
75°	214	211	205	209	204	228
85°	30	27	27	28	28	41
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1316.2	1316.2	1316.2	1316.2	1316.2
2.5°	1316.2	1315.7	1315.7	1316.2	1315.3
5°	1313.8	1314.3	1313.8	1313.8	1312.9
7.5°	1308.6	1308.2	1307.7	1308.2	1306.8
10°	1299.7	1299.7	1299.2	1299.7	1298.7
12.5°	1288.8	1288.8	1288.8	1289.3	1288.8
15°	1275.1	1274.6	1274.6	1275.6	1274.6
17.5°	1259.1	1258.6	1258.6	1258.1	1257.2
20°	1239.2	1239.2	1238.7	1238.3	1236.9
22.5°	1218.0	1217.5	1216.1	1216.1	1214.2
25°	1192.9	1191.5	1190.6	1190.1	1188.7
27.5°	1165.5	1163.7	1162.2	1161.3	1159.9
30°	1134.9	1133.0	1131.5	1130.1	1129.2
32.5°	1101.8	1100.8	1098.5	1098.0	1096.1
35°	1066.4	1065.0	1063.5	1061.7	1059.8
37.5°	1028.6	1027.2	1023.9	1022.9	1021.5
40°	988.4	986.6	982.3	982.3	980.9
42.5°	945.5	943.6	940.8	938.9	937.9
45°	900.6	898.7	895.4	893.5	892.6
47.5°	852.9	851.5	847.7	846.3	844.9
50°	803.3	801.4	797.2	796.2	794.8
52.5°	751.4	750.4	744.8	744.3	742.9
55°	699.9	694.7	690.0	690.0	689.0
57.5°	643.2	639.4	633.3	633.3	632.4
60°	584.7	581.4	574.3	575.2	574.3
62.5°	527.5	520.4	513.8	516.7	514.3
65°	462.3	458.6	451.5	453.4	452.9
67.5°	402.8	395.8	389.1	392.9	391.0
70°	336.7	332.9	326.3	330.1	325.4
72.5°	274.4	271.1	264.5	268.7	264.0
75°	213.9	210.6	205.4	209.2	204.5
77.5°	156.8	154.4	149.7	153.5	154.4
80°	104.8	102.0	99.6	103.0	103.9
82.5°	61.4	59.5	58.6	59.0	61.4
85°	29.8	27.4	27.4	27.9	27.9
87.5°	8.0	7.1	8.0	8.5	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)