

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: P974861

Luminaire Tested: FLR2-24-45HE-L840-CP375

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974861
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: FLR2-24-45HE-L840-CP375
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

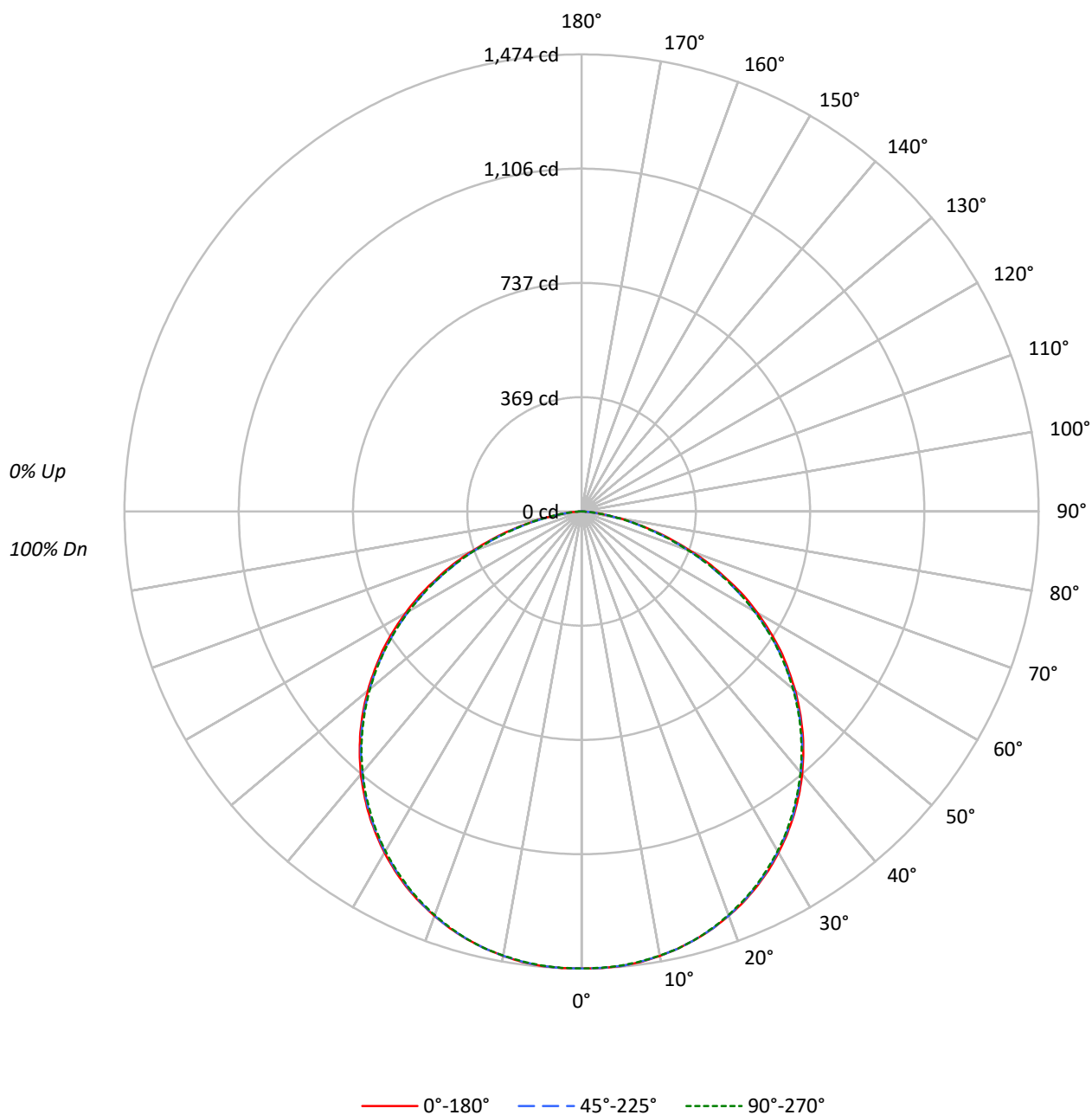
Lumens per Lamp: N/A
Luminaire Lumens: 4166.3 lumens
Efficiency: N/A
Efficacy: 120.1 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
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°	1983	1983	1983
5°	1987	1987	1986
10°	1989	1988	1987
15°	1989	1989	1989
20°	1987	1987	1984
25°	1984	1980	1976
30°	1975	1969	1965
35°	1962	1956	1950
40°	1944	1932	1930
45°	1919	1908	1902
50°	1883	1869	1863
55°	1839	1813	1810
60°	1762	1731	1731
65°	1649	1610	1615
70°	1483	1438	1434
75°	1246	1196	1190
80°	910	865	902
85°	514	474	482

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1919 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.9	3.4
10°-20°	403.1	9.7
20°-30°	614.6	14.8
30°-40°	744.6	17.9
40°-50°	773.5	18.6
50°-60°	691.9	16.6
60°-70°	504.3	12.1
70°-80°	249.7	6.0
80°-90°	44.6	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°	1157.6	27.8
0°-40°	1902.2	45.7
0°-60°	3367.7	80.8
0°-90°	4166.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4166.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1474	1474	1474	1474	1474	
5°	1472	1472	1472	1472	1470	140
15°	1428	1428	1428	1429	1428	403
25°	1336	1334	1333	1333	1331	616
35°	1194	1193	1191	1189	1187	747
45°	1009	1007	1003	1001	1000	777
55°	784	778	773	773	772	698
65°	518	514	506	508	507	513
75°	240	236	230	234	229	255
85°	33	31	31	31	31	46
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1474.1	1474.1	1474.1	1474.1	1474.1
2.5°	1474.1	1473.6	1473.6	1474.1	1473.1
5°	1471.5	1472.0	1471.5	1471.5	1470.4
7.5°	1465.7	1465.1	1464.6	1465.1	1463.5
10°	1455.6	1455.6	1455.1	1455.6	1454.6
12.5°	1443.4	1443.4	1443.4	1444.0	1443.4
15°	1428.1	1427.6	1427.6	1428.6	1427.6
17.5°	1410.1	1409.6	1409.6	1409.1	1408.0
20°	1387.9	1387.9	1387.4	1386.9	1385.3
22.5°	1364.1	1363.6	1362.0	1362.0	1359.9
25°	1336.1	1334.5	1333.4	1332.9	1331.3
27.5°	1305.4	1303.3	1301.7	1300.6	1299.1
30°	1271.0	1268.9	1267.3	1265.7	1264.7
32.5°	1234.0	1232.9	1230.3	1229.8	1227.6
35°	1194.3	1192.7	1191.1	1189.0	1186.9
37.5°	1152.0	1150.4	1146.7	1145.7	1144.1
40°	1107.0	1104.9	1100.2	1100.2	1098.6
42.5°	1058.9	1056.8	1053.6	1051.5	1050.5
45°	1008.7	1006.6	1002.9	1000.7	999.7
47.5°	955.2	953.7	949.4	947.8	946.3
50°	899.7	897.6	892.8	891.8	890.2
52.5°	841.5	840.5	834.1	833.6	832.0
55°	783.9	778.1	772.8	772.8	771.7
57.5°	720.4	716.2	709.3	709.3	708.2
60°	654.8	651.1	643.2	644.2	643.2
62.5°	590.8	582.9	575.5	578.6	576.0
65°	517.8	513.6	505.7	507.8	507.2
67.5°	451.2	443.2	435.8	440.1	438.0
70°	377.1	372.9	365.5	369.7	364.4
72.5°	307.3	303.6	296.2	301.0	295.7
75°	239.6	235.9	230.1	234.3	229.0
77.5°	175.6	173.0	167.7	171.9	173.0
80°	117.4	114.2	111.6	115.3	116.4
82.5°	68.8	66.6	65.6	66.1	68.8
85°	33.3	30.7	30.7	31.2	31.2
87.5°	9.0	7.9	9.0	9.5	10.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)