

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: P974553

Luminaire Tested: FLR2-24-45HE-L830-CP375

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974553
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-L830-CP375
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

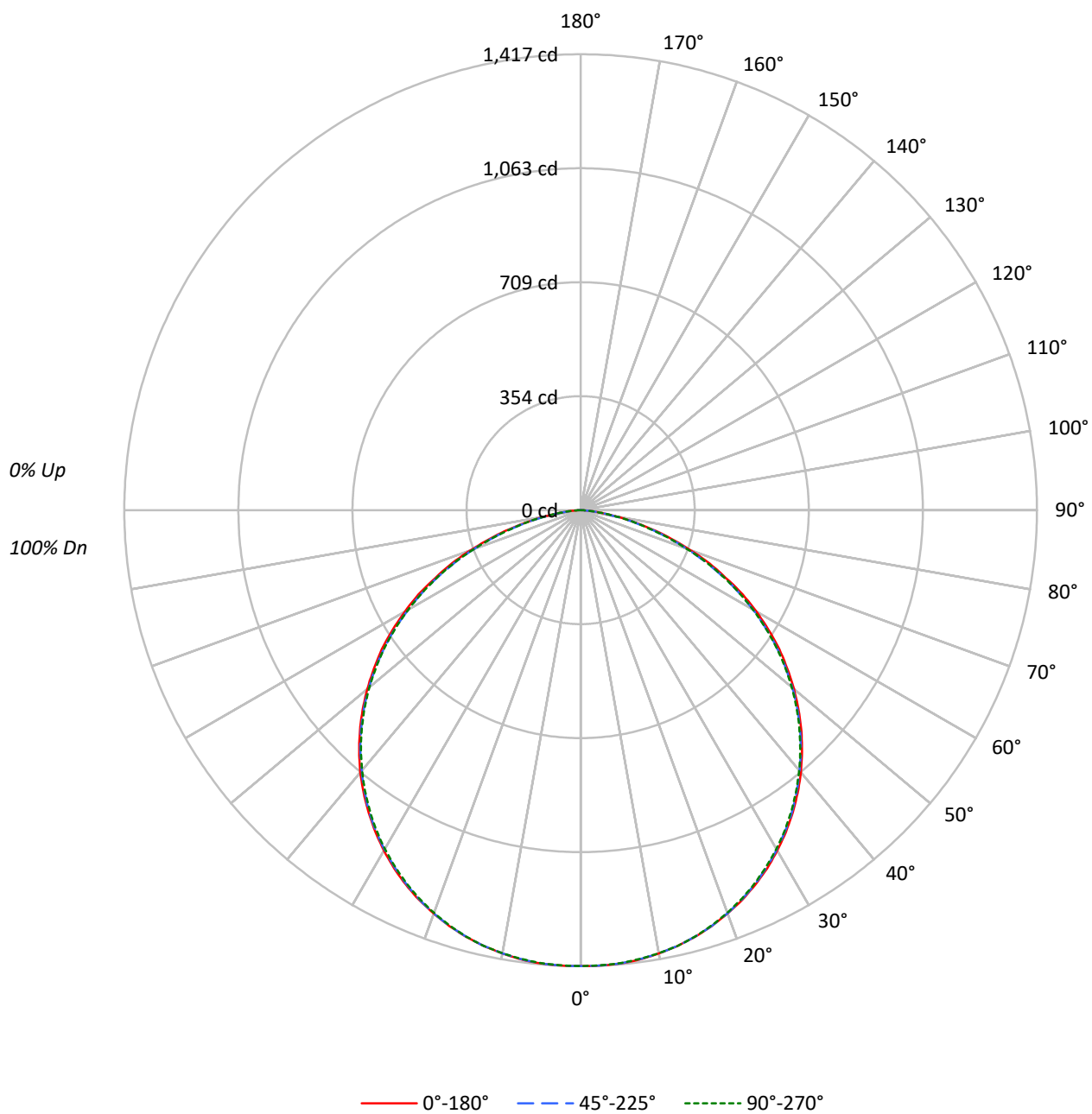
Lumens per Lamp: N/A
Luminaire Lumens: 4004.5 lumens
Efficiency: N/A
Efficacy: 115.4 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	1906	1906	1906
5°	1910	1910	1909
10°	1912	1911	1910
15°	1912	1911	1911
20°	1910	1909	1906
25°	1907	1903	1900
30°	1898	1892	1889
35°	1885	1881	1874
40°	1869	1857	1855
45°	1845	1834	1828
50°	1810	1796	1791
55°	1767	1742	1740
60°	1694	1664	1664
65°	1585	1547	1552
70°	1426	1382	1378
75°	1197	1149	1144
80°	875	831	866
85°	494	455	463

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1845 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.5	3.4
10°-20°	387.4	9.7
20°-30°	590.7	14.8
30°-40°	715.7	17.9
40°-50°	743.4	18.6
50°-60°	665.0	16.6
60°-70°	484.7	12.1
70°-80°	240.0	6.0
80°-90°	42.9	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°	1112.7	27.8
0°-40°	1828.4	45.7
0°-60°	3236.9	80.8
0°-90°	4004.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4004.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1417	1417	1417	1417	1417	
5°	1414	1415	1414	1414	1413	135
15°	1373	1372	1372	1373	1372	388
25°	1284	1283	1282	1281	1280	592
35°	1148	1146	1145	1143	1141	718
45°	970	968	964	962	961	747
55°	753	748	743	743	742	671
65°	498	494	486	488	488	493
75°	230	227	221	225	220	246
85°	32	30	30	30	30	44
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1416.9	1416.9	1416.9	1416.9	1416.9
2.5°	1416.9	1416.4	1416.4	1416.9	1415.9
5°	1414.3	1414.8	1414.3	1414.3	1413.3
7.5°	1408.7	1408.2	1407.7	1408.2	1406.7
10°	1399.1	1399.1	1398.6	1399.1	1398.1
12.5°	1387.4	1387.4	1387.4	1387.9	1387.4
15°	1372.6	1372.1	1372.1	1373.2	1372.1
17.5°	1355.4	1354.9	1354.9	1354.3	1353.3
20°	1334.0	1334.0	1333.5	1333.0	1331.5
22.5°	1311.1	1310.6	1309.1	1309.1	1307.1
25°	1284.2	1282.7	1281.6	1281.1	1279.6
27.5°	1254.7	1252.7	1251.1	1250.1	1248.6
30°	1221.7	1219.6	1218.1	1216.6	1215.6
32.5°	1186.1	1185.1	1182.5	1182.0	1180.0
35°	1147.9	1146.4	1144.9	1142.9	1140.8
37.5°	1107.3	1105.7	1102.2	1101.2	1099.6
40°	1064.1	1062.0	1057.4	1057.4	1055.9
42.5°	1017.8	1015.8	1012.7	1010.7	1009.7
45°	969.5	967.5	963.9	961.9	960.9
47.5°	918.1	916.6	912.6	911.0	909.5
50°	864.8	862.7	858.2	857.1	855.6
52.5°	808.8	807.8	801.7	801.2	799.7
55°	753.4	747.8	742.8	742.8	741.7
57.5°	692.4	688.4	681.7	681.7	680.7
60°	629.4	625.8	618.2	619.2	618.2
62.5°	567.9	560.2	553.1	556.2	553.6
65°	497.7	493.6	486.0	488.1	487.5
67.5°	433.7	426.0	418.9	423.0	420.9
70°	362.5	358.4	351.3	355.4	350.3
72.5°	295.4	291.8	284.7	289.3	284.2
75°	230.3	226.7	221.1	225.2	220.1
77.5°	168.8	166.2	161.2	165.2	166.2
80°	112.9	109.8	107.3	110.8	111.8
82.5°	66.1	64.1	63.0	63.5	66.1
85°	32.0	29.5	29.5	30.0	30.0
87.5°	8.6	7.6	8.6	9.2	9.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)