

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: P974696

Luminaire Tested: FLR2-24-45HE-L835-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974696
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-L835-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

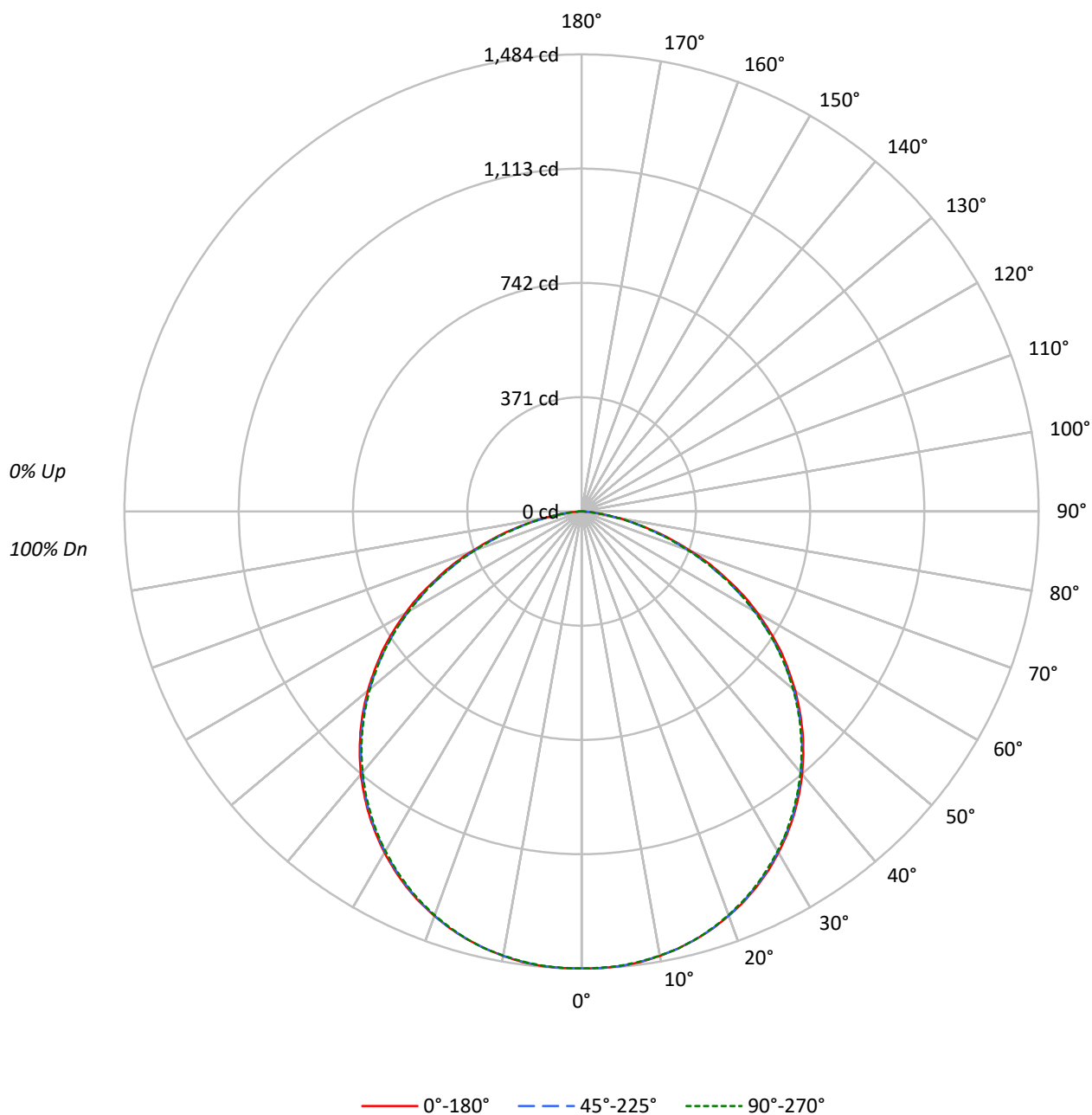
Lumens per Lamp: N/A
Luminaire Lumens: 4194.5 lumens
Efficiency: N/A
Efficacy: 120.9 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	1997	1997	1997
5°	2001	2001	1999
10°	2002	2001	2001
15°	2003	2002	2002
20°	2001	2000	1997
25°	1997	1993	1990
30°	1988	1982	1978
35°	1975	1970	1963
40°	1958	1945	1943
45°	1932	1921	1915
50°	1896	1882	1876
55°	1851	1825	1822
60°	1774	1742	1742
65°	1660	1621	1626
70°	1494	1448	1443
75°	1254	1204	1199
80°	916	871	908
85°	517	477	485

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1932 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.9	3.4
10°-20°	405.8	9.7
20°-30°	618.8	14.8
30°-40°	749.7	17.9
40°-50°	778.7	18.6
50°-60°	696.6	16.6
60°-70°	507.7	12.1
70°-80°	251.4	6.0
80°-90°	44.9	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°	1165.5	27.8
0°-40°	1915.1	45.7
0°-60°	3390.5	80.8
0°-90°	4194.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4194.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1484	1484	1484	1484	1484	
5°	1482	1482	1482	1482	1480	141
15°	1438	1437	1437	1438	1437	406
25°	1345	1344	1342	1342	1340	620
35°	1202	1201	1199	1197	1195	752
45°	1016	1013	1010	1008	1006	783
55°	789	783	778	778	777	703
65°	521	517	509	511	511	517
75°	241	238	232	236	231	257
85°	34	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°	1484.1	1484.1	1484.1	1484.1	1484.1
2.5°	1484.1	1483.6	1483.6	1484.1	1483.0
5°	1481.5	1482.0	1481.5	1481.5	1480.4
7.5°	1475.6	1475.1	1474.5	1475.1	1473.5
10°	1465.5	1465.5	1464.9	1465.5	1464.4
12.5°	1453.2	1453.2	1453.2	1453.8	1453.2
15°	1437.8	1437.3	1437.3	1438.3	1437.3
17.5°	1419.7	1419.1	1419.1	1418.6	1417.5
20°	1397.3	1397.3	1396.8	1396.2	1394.7
22.5°	1373.4	1372.8	1371.2	1371.2	1369.1
25°	1345.1	1343.5	1342.5	1341.9	1340.3
27.5°	1314.2	1312.1	1310.5	1309.4	1307.9
30°	1279.6	1277.5	1275.9	1274.3	1273.2
32.5°	1242.4	1241.3	1238.6	1238.1	1236.0
35°	1202.4	1200.8	1199.2	1197.1	1195.0
37.5°	1159.8	1158.2	1154.5	1153.4	1151.8
40°	1114.5	1112.4	1107.6	1107.6	1106.0
42.5°	1066.1	1064.0	1060.8	1058.6	1057.6
45°	1015.5	1013.4	1009.6	1007.5	1006.4
47.5°	961.7	960.1	955.9	954.3	952.7
50°	905.8	903.7	898.9	897.8	896.2
52.5°	847.2	846.2	839.8	839.2	837.6
55°	789.2	783.3	778.0	778.0	776.9
57.5°	725.3	721.0	714.1	714.1	713.0
60°	659.3	655.5	647.5	648.6	647.5
62.5°	594.8	586.8	579.4	582.6	579.9
65°	521.3	517.1	509.1	511.2	510.7
67.5°	454.2	446.2	438.8	443.1	440.9
70°	379.7	375.4	368.0	372.2	366.9
72.5°	309.4	305.7	298.2	303.0	297.7
75°	241.2	237.5	231.6	235.9	230.6
77.5°	176.8	174.1	168.8	173.1	174.1
80°	118.2	115.0	112.4	116.1	117.2
82.5°	69.2	67.1	66.0	66.6	69.2
85°	33.5	30.9	30.9	31.4	31.4
87.5°	9.1	8.0	9.1	9.6	10.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)