

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: P974840

Luminaire Tested: FLR2-24-55HE-L840-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974840
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: FLR2-24-55HE-L840-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

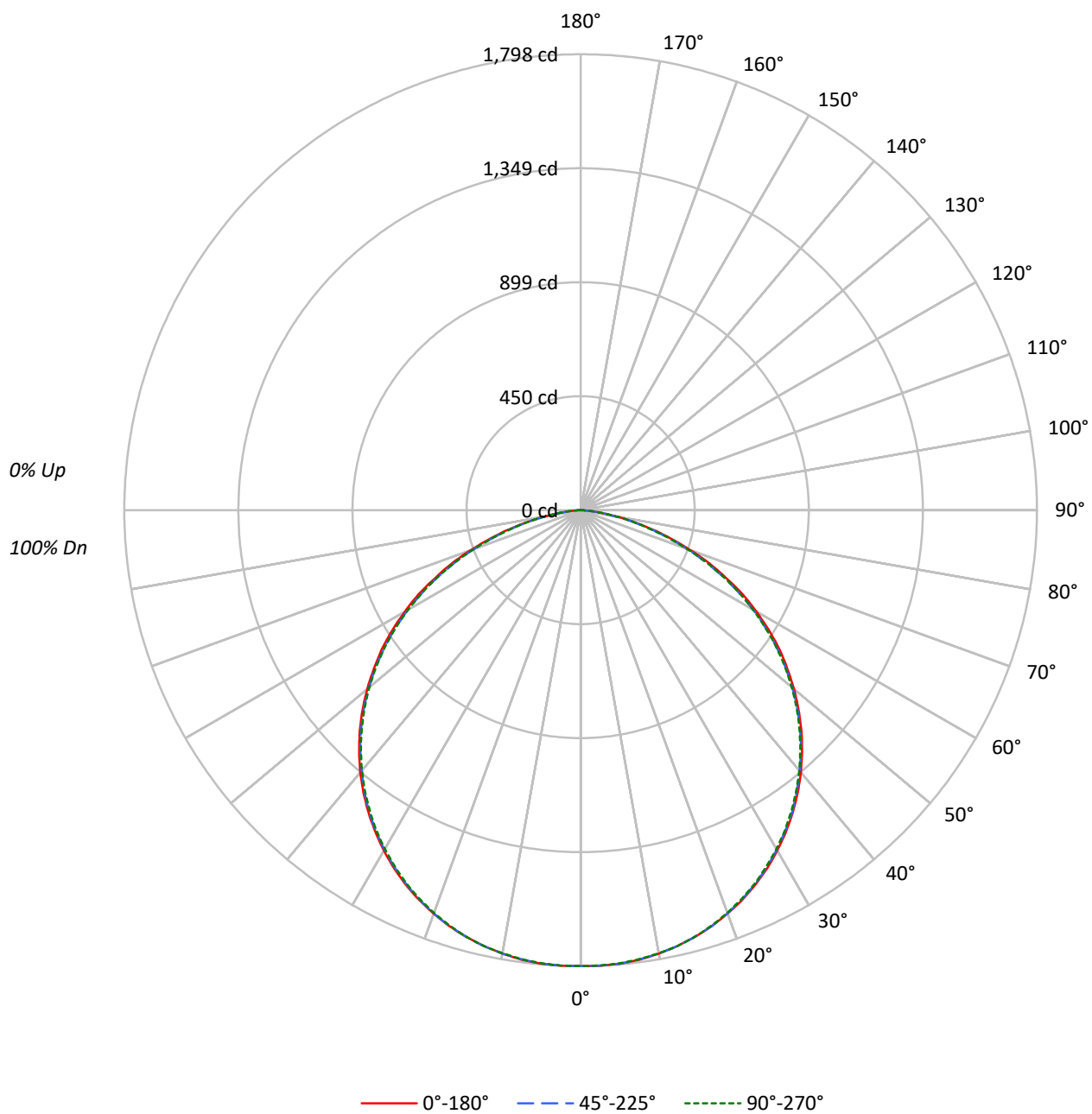
Lumens per Lamp: N/A
Luminaire Lumens: 5082.2 lumens
Efficiency: N/A
Efficacy: 123.1 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.3
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°	2419	2419	2419
5°	2424	2424	2423
10°	2426	2425	2424
15°	2427	2426	2426
20°	2424	2423	2420
25°	2420	2415	2411
30°	2409	2402	2397
35°	2393	2387	2378
40°	2372	2357	2354
45°	2341	2328	2320
50°	2297	2280	2273
55°	2243	2211	2208
60°	2150	2111	2111
65°	2011	1964	1970
70°	1810	1754	1749
75°	1520	1459	1452
80°	1110	1055	1099
85°	627	577	588

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2341 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.7	3.4
10°-20°	491.7	9.7
20°-30°	749.7	14.8
30°-40°	908.3	17.9
40°-50°	943.5	18.6
50°-60°	844.0	16.6
60°-70°	615.1	12.1
70°-80°	304.6	6.0
80°-90°	54.5	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°	1412.1	27.8
0°-40°	2320.4	45.7
0°-60°	4107.9	80.8
0°-90°	5082.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5082.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1798	1798	1798	1798	1798	
5°	1795	1796	1795	1795	1794	171
15°	1742	1741	1741	1743	1741	492
25°	1630	1628	1627	1626	1624	751
35°	1457	1455	1453	1450	1448	911
45°	1230	1228	1223	1221	1219	948
55°	956	949	943	943	941	852
65°	632	626	617	619	619	626
75°	292	288	281	286	279	312
85°	41	37	37	38	38	56
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1798.2	1798.2	1798.2	1798.2	1798.2
2.5°	1798.2	1797.5	1797.5	1798.2	1796.9
5°	1795.0	1795.6	1795.0	1795.0	1793.7
7.5°	1787.9	1787.2	1786.6	1787.2	1785.3
10°	1775.6	1775.6	1775.0	1775.6	1774.3
12.5°	1760.8	1760.8	1760.8	1761.4	1760.8
15°	1742.0	1741.4	1741.4	1742.7	1741.4
17.5°	1720.1	1719.5	1719.5	1718.8	1717.5
20°	1693.0	1693.0	1692.4	1691.7	1689.8
22.5°	1664.0	1663.3	1661.4	1661.4	1658.8
25°	1629.8	1627.8	1626.6	1625.9	1624.0
27.5°	1592.4	1589.8	1587.8	1586.6	1584.6
30°	1550.4	1547.8	1545.9	1544.0	1542.7
32.5°	1505.3	1504.0	1500.7	1500.1	1497.5
35°	1456.9	1454.9	1453.0	1450.4	1447.8
37.5°	1405.3	1403.3	1398.8	1397.5	1395.6
40°	1350.4	1347.8	1342.0	1342.0	1340.1
42.5°	1291.7	1289.1	1285.2	1282.7	1281.4
45°	1230.4	1227.8	1223.3	1220.7	1219.4
47.5°	1165.2	1163.3	1158.1	1156.2	1154.3
50°	1097.5	1094.9	1089.1	1087.8	1085.9
52.5°	1026.5	1025.2	1017.5	1016.8	1014.9
55°	956.2	949.1	942.6	942.6	941.4
57.5°	878.8	873.6	865.2	865.2	863.9
60°	798.8	794.2	784.6	785.9	784.6
62.5°	720.7	711.0	702.0	705.9	702.6
65°	631.7	626.5	616.8	619.4	618.7
67.5°	550.4	540.7	531.6	536.8	534.2
70°	460.0	454.9	445.8	451.0	444.5
72.5°	374.9	370.3	361.3	367.1	360.7
75°	292.3	287.8	280.7	285.8	279.4
77.5°	214.2	211.0	204.5	209.7	211.0
80°	143.2	139.4	136.1	140.7	141.9
82.5°	83.9	81.3	80.0	80.7	83.9
85°	40.6	37.4	37.4	38.1	38.1
87.5°	11.0	9.7	11.0	11.6	12.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)