

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: P974816

Luminaire Tested: FLR2-24-40HE-L840-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974816
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-L840-CP080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

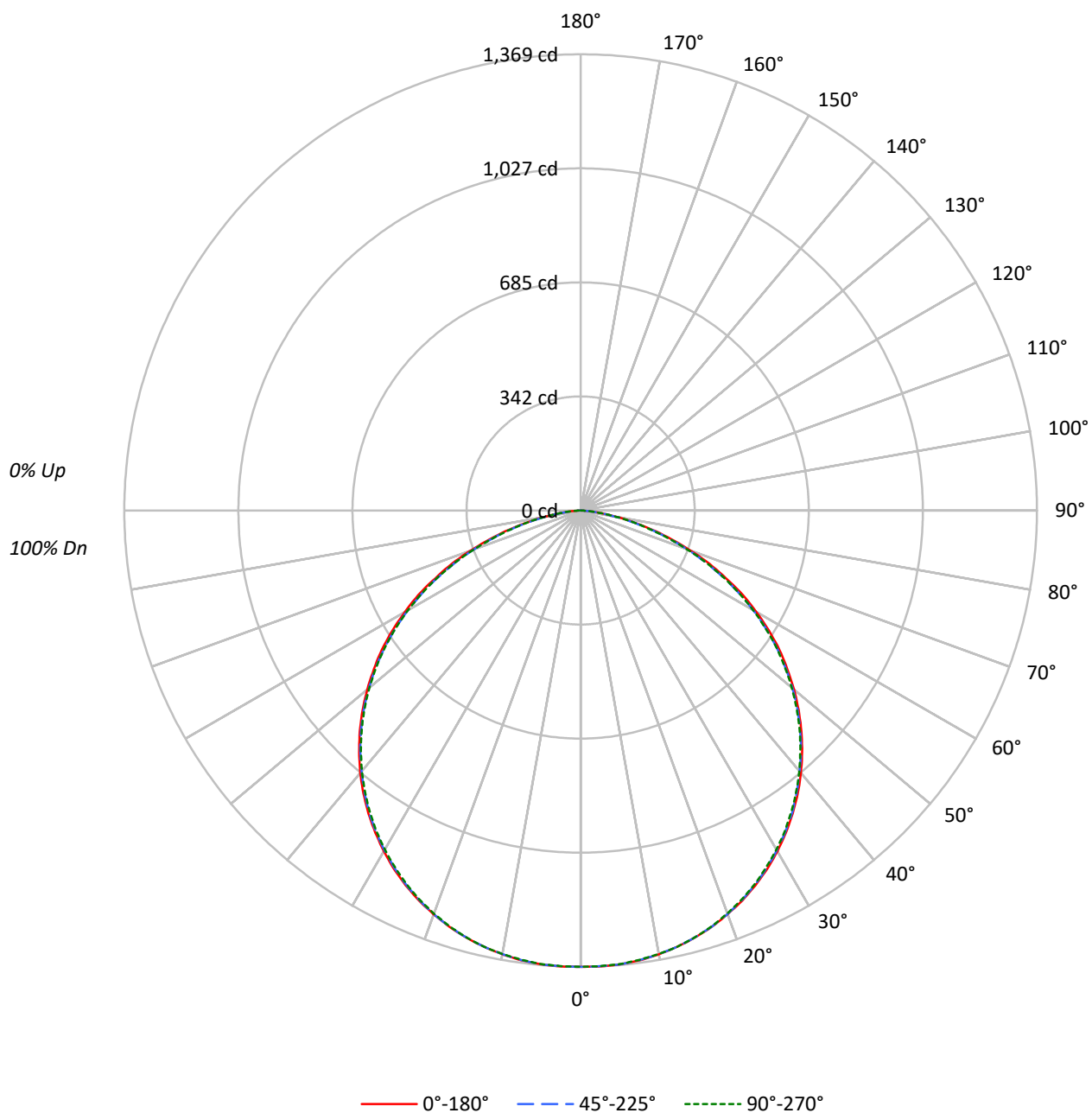
Lumens per Lamp: N/A
Luminaire Lumens: 3870.3 lumens
Efficiency: N/A
Efficacy: 129.4 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	1843	1843	1843
5°	1846	1846	1845
10°	1847	1847	1846
15°	1848	1847	1847
20°	1846	1845	1842
25°	1843	1839	1836
30°	1834	1829	1825
35°	1822	1817	1811
40°	1806	1795	1792
45°	1783	1773	1767
50°	1750	1736	1731
55°	1708	1684	1682
60°	1637	1608	1608
65°	1531	1495	1500
70°	1378	1336	1332
75°	1157	1111	1106
80°	845	804	838
85°	479	440	448

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1783 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.0	3.4
10°-20°	374.5	9.7
20°-30°	570.9	14.8
30°-40°	691.7	17.9
40°-50°	718.5	18.6
50°-60°	642.8	16.6
60°-70°	468.5	12.1
70°-80°	232.0	6.0
80°-90°	41.5	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°	1075.4	27.8
0°-40°	1767.1	45.7
0°-60°	3128.4	80.8
0°-90°	3870.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3870.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1369	1369	1369	1369	1369	
5°	1367	1367	1367	1367	1366	130
15°	1327	1326	1326	1327	1326	375
25°	1241	1240	1239	1238	1237	572
35°	1110	1108	1106	1104	1103	694
45°	937	935	932	930	929	722
55°	728	723	718	718	717	649
65°	481	477	470	472	471	477
75°	223	219	214	218	213	237
85°	31	28	28	29	29	43
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1369.4	1369.4	1369.4	1369.4	1369.4
2.5°	1369.4	1368.9	1368.9	1369.4	1368.4
5°	1366.9	1367.4	1366.9	1366.9	1365.9
7.5°	1361.5	1361.0	1360.5	1361.0	1359.6
10°	1352.2	1352.2	1351.7	1352.2	1351.2
12.5°	1340.9	1340.9	1340.9	1341.4	1340.9
15°	1326.6	1326.1	1326.1	1327.1	1326.1
17.5°	1309.9	1309.4	1309.4	1308.9	1308.0
20°	1289.3	1289.3	1288.8	1288.3	1286.8
22.5°	1267.2	1266.7	1265.2	1265.2	1263.3
25°	1241.1	1239.7	1238.7	1238.2	1236.7
27.5°	1212.6	1210.7	1209.2	1208.2	1206.7
30°	1180.7	1178.7	1177.3	1175.8	1174.8
32.5°	1146.3	1145.3	1142.9	1142.4	1140.4
35°	1109.5	1108.0	1106.5	1104.5	1102.6
37.5°	1070.2	1068.7	1065.2	1064.3	1062.8
40°	1028.4	1026.4	1022.0	1022.0	1020.5
42.5°	983.7	981.7	978.8	976.8	975.8
45°	937.0	935.0	931.6	929.6	928.6
47.5°	887.4	885.9	882.0	880.5	879.0
50°	835.8	833.8	829.4	828.4	826.9
52.5°	781.7	780.7	774.9	774.4	772.9
55°	728.2	722.8	717.9	717.9	716.9
57.5°	669.2	665.3	658.9	658.9	657.9
60°	608.3	604.8	597.5	598.5	597.5
62.5°	548.8	541.5	534.6	537.5	535.1
65°	481.0	477.1	469.7	471.7	471.2
67.5°	419.1	411.7	404.9	408.8	406.8
70°	350.3	346.4	339.5	343.5	338.5
72.5°	285.5	282.0	275.2	279.6	274.7
75°	222.6	219.1	213.7	217.7	212.8
77.5°	163.1	160.7	155.8	159.7	160.7
80°	109.1	106.1	103.7	107.1	108.1
82.5°	63.9	61.9	60.9	61.4	63.9
85°	31.0	28.5	28.5	29.0	29.0
87.5°	8.4	7.4	8.4	8.8	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)