

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: P974849

Luminaire Tested: FLR2-24-40HE-L840-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974849
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-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

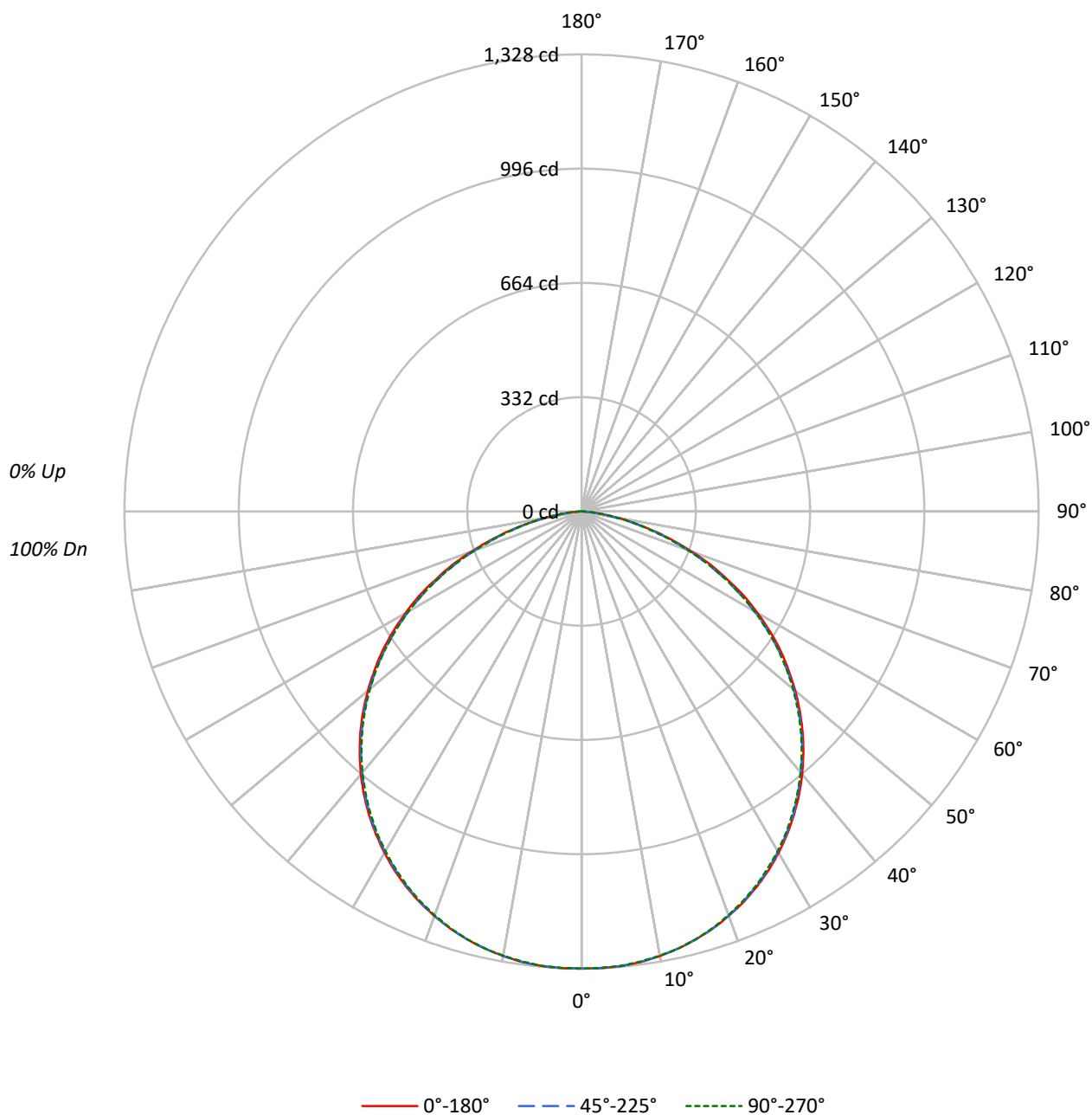
Lumens per Lamp: N/A
Luminaire Lumens: 3754.5 lumens
Efficiency: N/A
Efficacy: 125.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	1787	1787	1787
5°	1791	1791	1790
10°	1792	1791	1791
15°	1793	1792	1792
20°	1791	1790	1787
25°	1787	1784	1781
30°	1780	1774	1771
35°	1768	1763	1757
40°	1752	1741	1739
45°	1730	1720	1714
50°	1697	1684	1679
55°	1657	1634	1631
60°	1588	1560	1560
65°	1486	1451	1455
70°	1337	1296	1292
75°	1122	1078	1073
80°	820	779	813
85°	463	426	434

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1730 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.1	3.4
10°-20°	363.3	9.7
20°-30°	553.8	14.8
30°-40°	671.0	17.9
40°-50°	697.0	18.6
50°-60°	623.5	16.6
60°-70°	454.4	12.1
70°-80°	225.1	6.0
80°-90°	40.2	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°	1043.2	27.8
0°-40°	1714.2	45.7
0°-60°	3034.8	80.8
0°-90°	3754.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3754.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1328	1328	1328	1328	1328	
5°	1326	1326	1326	1326	1325	126
15°	1287	1286	1286	1287	1286	363
25°	1204	1203	1202	1201	1200	555
35°	1076	1075	1073	1072	1070	673
45°	909	907	904	902	901	700
55°	706	701	696	696	695	629
65°	467	463	456	458	457	463
75°	216	213	207	211	206	230
85°	30	28	28	28	28	42
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1328.4	1328.4	1328.4	1328.4	1328.4
2.5°	1328.4	1327.9	1327.9	1328.4	1327.4
5°	1326.0	1326.5	1326.0	1326.0	1325.1
7.5°	1320.8	1320.3	1319.8	1320.3	1318.9
10°	1311.7	1311.7	1311.2	1311.7	1310.8
12.5°	1300.8	1300.8	1300.8	1301.2	1300.8
15°	1286.9	1286.5	1286.5	1287.4	1286.5
17.5°	1270.7	1270.3	1270.3	1269.8	1268.8
20°	1250.7	1250.7	1250.2	1249.8	1248.3
22.5°	1229.3	1228.8	1227.4	1227.4	1225.4
25°	1204.0	1202.6	1201.6	1201.1	1199.7
27.5°	1176.4	1174.4	1173.0	1172.1	1170.6
30°	1145.4	1143.5	1142.0	1140.6	1139.7
32.5°	1112.0	1111.1	1108.7	1108.2	1106.3
35°	1076.3	1074.8	1073.4	1071.5	1069.6
37.5°	1038.1	1036.7	1033.4	1032.4	1031.0
40°	997.6	995.7	991.4	991.4	990.0
42.5°	954.2	952.3	949.5	947.6	946.6
45°	909.0	907.1	903.7	901.8	900.9
47.5°	860.8	859.4	855.6	854.1	852.7
50°	810.8	808.9	804.6	803.6	802.2
52.5°	758.3	757.4	751.7	751.2	749.8
55°	706.4	701.1	696.4	696.4	695.4
57.5°	649.2	645.4	639.2	639.2	638.2
60°	590.1	586.7	579.6	580.6	579.6
62.5°	532.4	525.3	518.6	521.4	519.1
65°	466.6	462.8	455.7	457.6	457.1
67.5°	406.6	399.4	392.8	396.6	394.7
70°	339.8	336.0	329.4	333.2	328.4
72.5°	276.9	273.6	266.9	271.2	266.4
75°	215.9	212.6	207.3	211.2	206.4
77.5°	158.2	155.9	151.1	154.9	155.9
80°	105.8	103.0	100.6	103.9	104.9
82.5°	62.0	60.1	59.1	59.6	62.0
85°	30.0	27.6	27.6	28.1	28.1
87.5°	8.1	7.1	8.1	8.6	9.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)