

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: P974871

Luminaire Tested: FLR2-24-40HE-L840-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974871
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-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

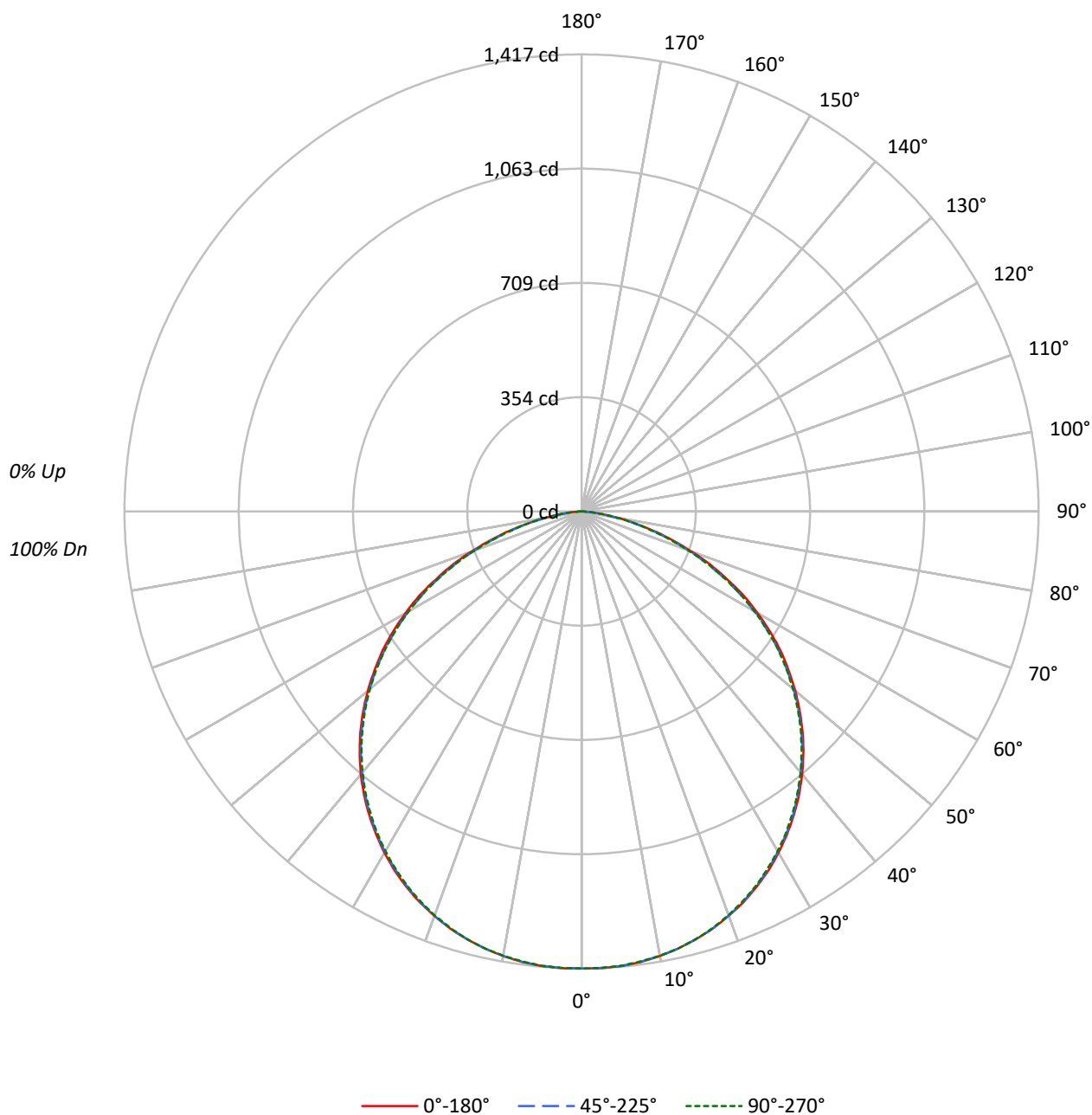
Lumens per Lamp: N/A
Luminaire Lumens: 4005.7 lumens
Efficiency: N/A
Efficacy: 134.0 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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		
1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85		
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71		
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51		
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44		
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38		
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34		
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30		
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	39	33	29	27		
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1907	1907	1907
5°	1911	1911	1909
10°	1912	1911	1911
15°	1913	1912	1912
20°	1911	1910	1907
25°	1907	1903	1900
30°	1899	1893	1889
35°	1886	1881	1874
40°	1870	1858	1855
45°	1845	1835	1829
50°	1811	1797	1792
55°	1768	1743	1741
60°	1694	1664	1664
65°	1585	1548	1553
70°	1426	1382	1378
75°	1198	1150	1145
80°	875	831	867
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°	387.6	9.7
20°-30°	590.9	14.8
30°-40°	715.9	17.9
40°-50°	743.7	18.6
50°-60°	665.3	16.6
60°-70°	484.9	12.1
70°-80°	240.1	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°	1113.0	27.8
0°-40°	1828.9	45.7
0°-60°	3237.8	80.8
0°-90°	4005.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4005.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1417	1417	1417	1417	1417	
5°	1415	1415	1415	1415	1414	135
15°	1373	1372	1372	1374	1372	388
25°	1285	1283	1282	1282	1280	592
35°	1148	1147	1145	1143	1141	718
45°	970	968	964	962	961	747
55°	754	748	743	743	742	671
65°	498	494	486	488	488	494
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°	1417.3	1417.3	1417.3	1417.3	1417.3
2.5°	1417.3	1416.8	1416.8	1417.3	1416.3
5°	1414.7	1415.3	1414.7	1414.7	1413.7
7.5°	1409.1	1408.6	1408.1	1408.6	1407.1
10°	1399.5	1399.5	1399.0	1399.5	1398.5
12.5°	1387.8	1387.8	1387.8	1388.3	1387.8
15°	1373.0	1372.5	1372.5	1373.6	1372.5
17.5°	1355.8	1355.2	1355.2	1354.7	1353.7
20°	1334.4	1334.4	1333.9	1333.4	1331.9
22.5°	1311.5	1311.0	1309.5	1309.5	1307.4
25°	1284.6	1283.0	1282.0	1281.5	1280.0
27.5°	1255.1	1253.0	1251.5	1250.5	1249.0
30°	1222.0	1220.0	1218.4	1216.9	1215.9
32.5°	1186.4	1185.4	1182.9	1182.3	1180.3
35°	1148.3	1146.7	1145.2	1143.2	1141.2
37.5°	1107.6	1106.1	1102.5	1101.5	1100.0
40°	1064.4	1062.3	1057.8	1057.8	1056.2
42.5°	1018.1	1016.1	1013.0	1011.0	1009.9
45°	969.8	967.7	964.2	962.1	961.1
47.5°	918.4	916.9	912.8	911.3	909.8
50°	865.0	863.0	858.4	857.4	855.9
52.5°	809.1	808.1	802.0	801.5	799.9
55°	753.6	748.1	743.0	743.0	742.0
57.5°	692.6	688.6	681.9	681.9	680.9
60°	629.6	626.0	618.4	619.4	618.4
62.5°	568.0	560.4	553.3	556.3	553.8
65°	497.9	493.8	486.2	488.2	487.7
67.5°	433.8	426.2	419.0	423.1	421.1
70°	362.6	358.5	351.4	355.5	350.4
72.5°	295.5	291.9	284.8	289.4	284.3
75°	230.4	226.8	221.2	225.3	220.2
77.5°	168.8	166.3	161.2	165.3	166.3
80°	112.9	109.8	107.3	110.9	111.9
82.5°	66.1	64.1	63.1	63.6	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)