

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: P974860

Luminaire Tested: FLR2-24-40HE-L840-CP375

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974860
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-CP375
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

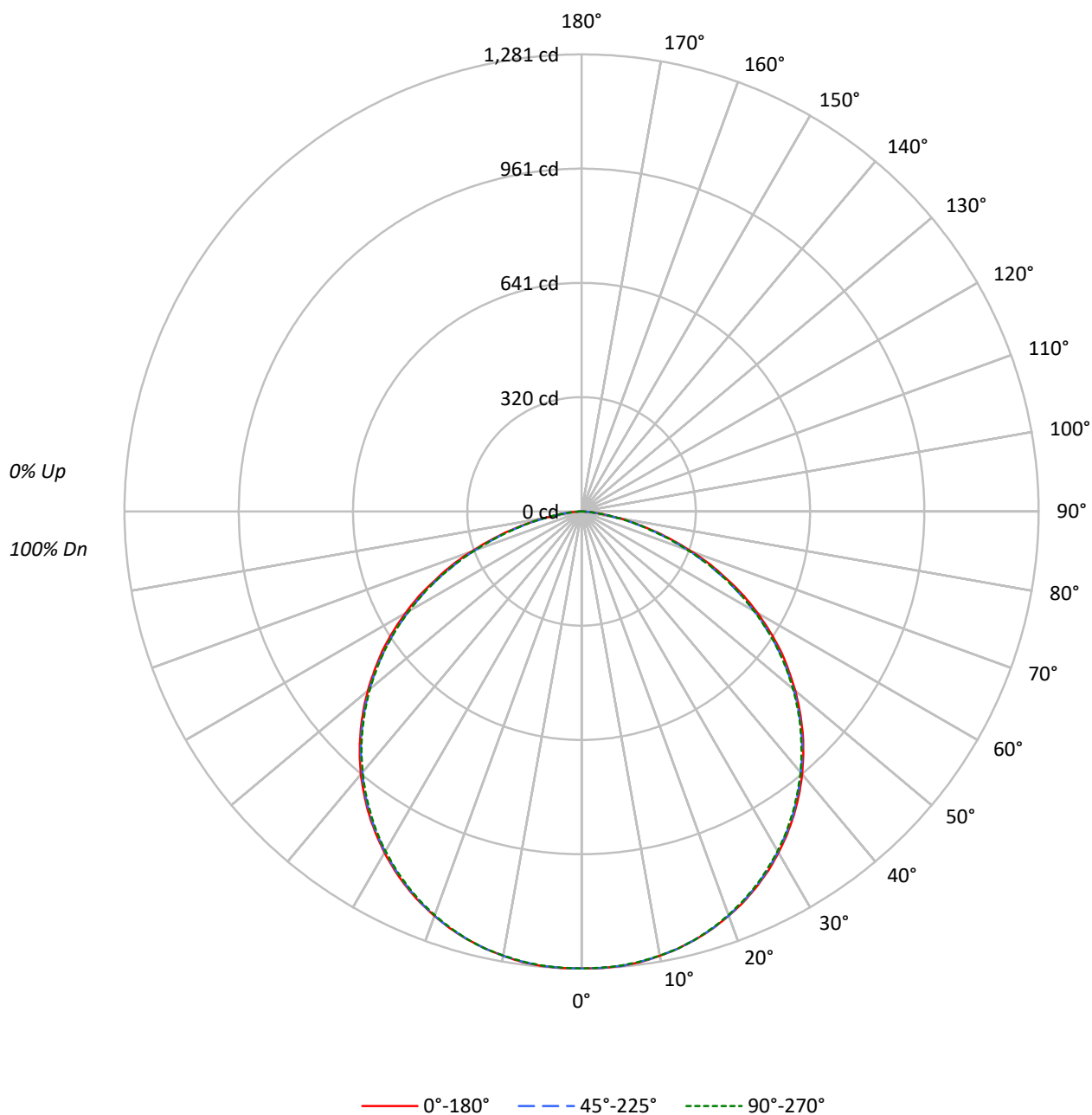
Lumens per Lamp: N/A
Luminaire Lumens: 3620.6 lumens
Efficiency: N/A
Efficacy: 121.1 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	1724	1724	1724
5°	1727	1727	1726
10°	1728	1728	1727
15°	1729	1728	1728
20°	1727	1726	1724
25°	1724	1720	1718
30°	1716	1711	1707
35°	1705	1700	1694
40°	1690	1679	1677
45°	1668	1658	1653
50°	1637	1624	1619
55°	1598	1575	1573
60°	1531	1504	1504
65°	1433	1399	1403
70°	1289	1249	1246
75°	1082	1039	1035
80°	790	752	783
85°	448	412	418

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1668 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.6	3.4
10°-20°	350.3	9.7
20°-30°	534.1	14.8
30°-40°	647.1	17.9
40°-50°	672.2	18.6
50°-60°	601.3	16.6
60°-70°	438.2	12.1
70°-80°	217.0	6.0
80°-90°	38.8	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°	1006.0	27.8
0°-40°	1653.1	45.7
0°-60°	2926.5	80.8
0°-90°	3620.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3620.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1281	1281	1281	1281	1281	
5°	1279	1279	1279	1279	1278	122
15°	1241	1241	1241	1242	1241	350
25°	1161	1160	1159	1158	1157	535
35°	1038	1036	1035	1033	1031	649
45°	876	875	872	870	869	675
55°	681	676	672	672	671	607
65°	450	446	439	441	441	446
75°	208	205	200	204	199	222
85°	29	27	27	27	27	40
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1281.0	1281.0	1281.0	1281.0	1281.0
2.5°	1281.0	1280.6	1280.6	1281.0	1280.1
5°	1278.7	1279.2	1278.7	1278.7	1277.8
7.5°	1273.7	1273.2	1272.8	1273.2	1271.8
10°	1264.9	1264.9	1264.5	1264.9	1264.0
12.5°	1254.4	1254.4	1254.4	1254.8	1254.4
15°	1241.0	1240.6	1240.6	1241.5	1240.6
17.5°	1225.4	1225.0	1225.0	1224.5	1223.6
20°	1206.1	1206.1	1205.7	1205.2	1203.8
22.5°	1185.4	1185.0	1183.6	1183.6	1181.7
25°	1161.1	1159.7	1158.8	1158.3	1156.9
27.5°	1134.4	1132.6	1131.2	1130.3	1128.9
30°	1104.5	1102.7	1101.3	1099.9	1099.0
32.5°	1072.4	1071.4	1069.1	1068.7	1066.8
35°	1037.9	1036.5	1035.1	1033.3	1031.4
37.5°	1001.1	999.7	996.5	995.6	994.2
40°	962.0	960.2	956.1	956.1	954.7
42.5°	920.2	918.4	915.6	913.8	912.9
45°	876.5	874.7	871.5	869.6	868.7
47.5°	830.1	828.7	825.1	823.7	822.3
50°	781.9	780.0	775.9	775.0	773.6
52.5°	731.3	730.4	724.9	724.4	723.0
55°	681.2	676.1	671.5	671.5	670.6
57.5°	626.0	622.4	616.4	616.4	615.5
60°	569.0	565.8	558.9	559.8	558.9
62.5°	513.4	506.5	500.1	502.9	500.6
65°	450.0	446.3	439.4	441.3	440.8
67.5°	392.1	385.2	378.7	382.4	380.6
70°	327.7	324.1	317.6	321.3	316.7
72.5°	267.1	263.8	257.4	261.5	256.9
75°	208.2	205.0	199.9	203.6	199.0
77.5°	152.6	150.3	145.7	149.4	150.3
80°	102.0	99.3	97.0	100.2	101.1
82.5°	59.8	57.9	57.0	57.5	59.8
85°	29.0	26.7	26.7	27.1	27.1
87.5°	7.8	6.9	7.8	8.3	8.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)