

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: P974838

Luminaire Tested: FLR2-24-40HE-L840-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974838
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-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

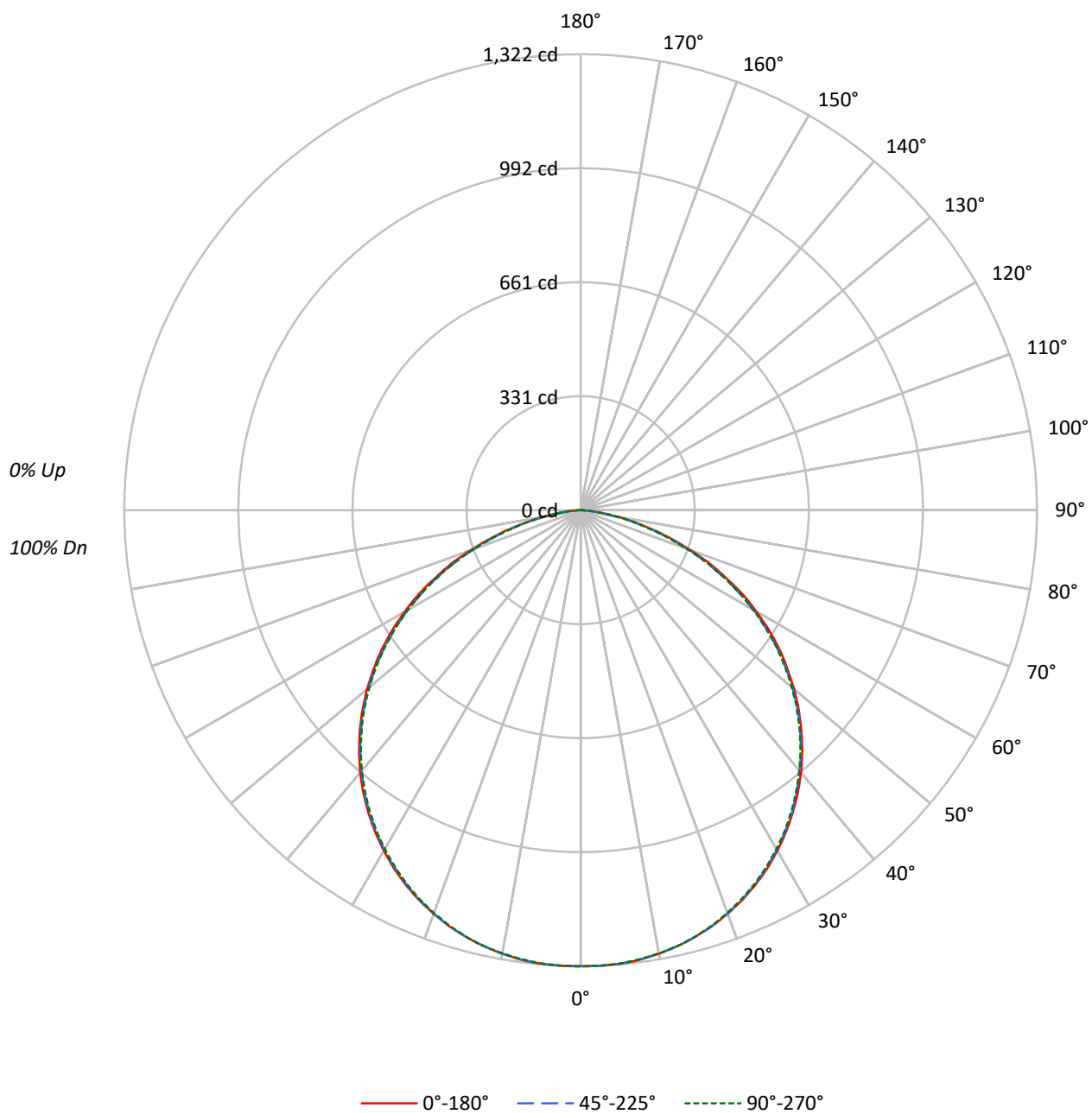
Lumens per Lamp: N/A
Luminaire Lumens: 3737.9 lumens
Efficiency: N/A
Efficacy: 125.0 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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		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°	1779	1779	1779
5°	1783	1783	1782
10°	1784	1784	1783
15°	1785	1784	1784
20°	1783	1782	1779
25°	1780	1776	1773
30°	1772	1766	1763
35°	1760	1755	1749
40°	1744	1734	1731
45°	1722	1712	1707
50°	1690	1677	1672
55°	1650	1626	1624
60°	1581	1553	1553
65°	1479	1444	1449
70°	1331	1290	1286
75°	1118	1073	1068
80°	816	776	809
85°	462	425	432

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1722 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.5	3.4
10°-20°	361.7	9.7
20°-30°	551.4	14.8
30°-40°	668.1	17.9
40°-50°	693.9	18.6
50°-60°	620.8	16.6
60°-70°	452.4	12.1
70°-80°	224.1	6.0
80°-90°	40.0	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°	1038.6	27.8
0°-40°	1706.6	45.7
0°-60°	3021.4	80.8
0°-90°	3737.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3737.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1322	1322	1322	1322	1322	
5°	1320	1321	1320	1320	1319	126
15°	1281	1281	1281	1282	1281	362
25°	1199	1197	1196	1196	1194	552
35°	1072	1070	1069	1067	1065	670
45°	905	903	900	898	897	697
55°	703	698	693	693	692	627
65°	465	461	454	456	455	461
75°	215	212	206	210	206	229
85°	30	28	28	28	28	41
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1322.5	1322.5	1322.5	1322.5	1322.5
2.5°	1322.5	1322.1	1322.1	1322.5	1321.6
5°	1320.2	1320.6	1320.2	1320.2	1319.2
7.5°	1315.0	1314.5	1314.0	1314.5	1313.1
10°	1305.9	1305.9	1305.5	1305.9	1305.0
12.5°	1295.0	1295.0	1295.0	1295.5	1295.0
15°	1281.3	1280.8	1280.8	1281.7	1280.8
17.5°	1265.1	1264.7	1264.7	1264.2	1263.2
20°	1245.2	1245.2	1244.7	1244.2	1242.8
22.5°	1223.8	1223.4	1221.9	1221.9	1220.0
25°	1198.7	1197.3	1196.3	1195.8	1194.4
27.5°	1171.2	1169.3	1167.8	1166.9	1165.5
30°	1140.3	1138.4	1137.0	1135.6	1134.6
32.5°	1107.1	1106.2	1103.8	1103.3	1101.4
35°	1071.5	1070.1	1068.7	1066.8	1064.9
37.5°	1033.5	1032.1	1028.8	1027.9	1026.4
40°	993.2	991.3	987.0	987.0	985.6
42.5°	950.0	948.1	945.3	943.4	942.4
45°	904.9	903.1	899.7	897.8	896.9
47.5°	857.0	855.6	851.8	850.4	849.0
50°	807.2	805.3	801.0	800.1	798.7
52.5°	755.0	754.0	748.4	747.9	746.5
55°	703.3	698.0	693.3	693.3	692.4
57.5°	646.3	642.5	636.4	636.4	635.4
60°	587.5	584.2	577.0	578.0	577.0
62.5°	530.1	522.9	516.3	519.1	516.8
65°	464.6	460.8	453.7	455.6	455.1
67.5°	404.8	397.7	391.0	394.8	392.9
70°	338.3	334.6	327.9	331.7	327.0
72.5°	275.7	272.4	265.7	270.0	265.3
75°	215.0	211.6	206.4	210.2	205.5
77.5°	157.5	155.2	150.4	154.2	155.2
80°	105.3	102.5	100.1	103.4	104.4
82.5°	61.7	59.8	58.8	59.3	61.7
85°	29.9	27.5	27.5	28.0	28.0
87.5°	8.1	7.1	8.1	8.5	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)