

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: P974530

Luminaire Tested: FLR2-24-40HE-L830-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974530
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-L830-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

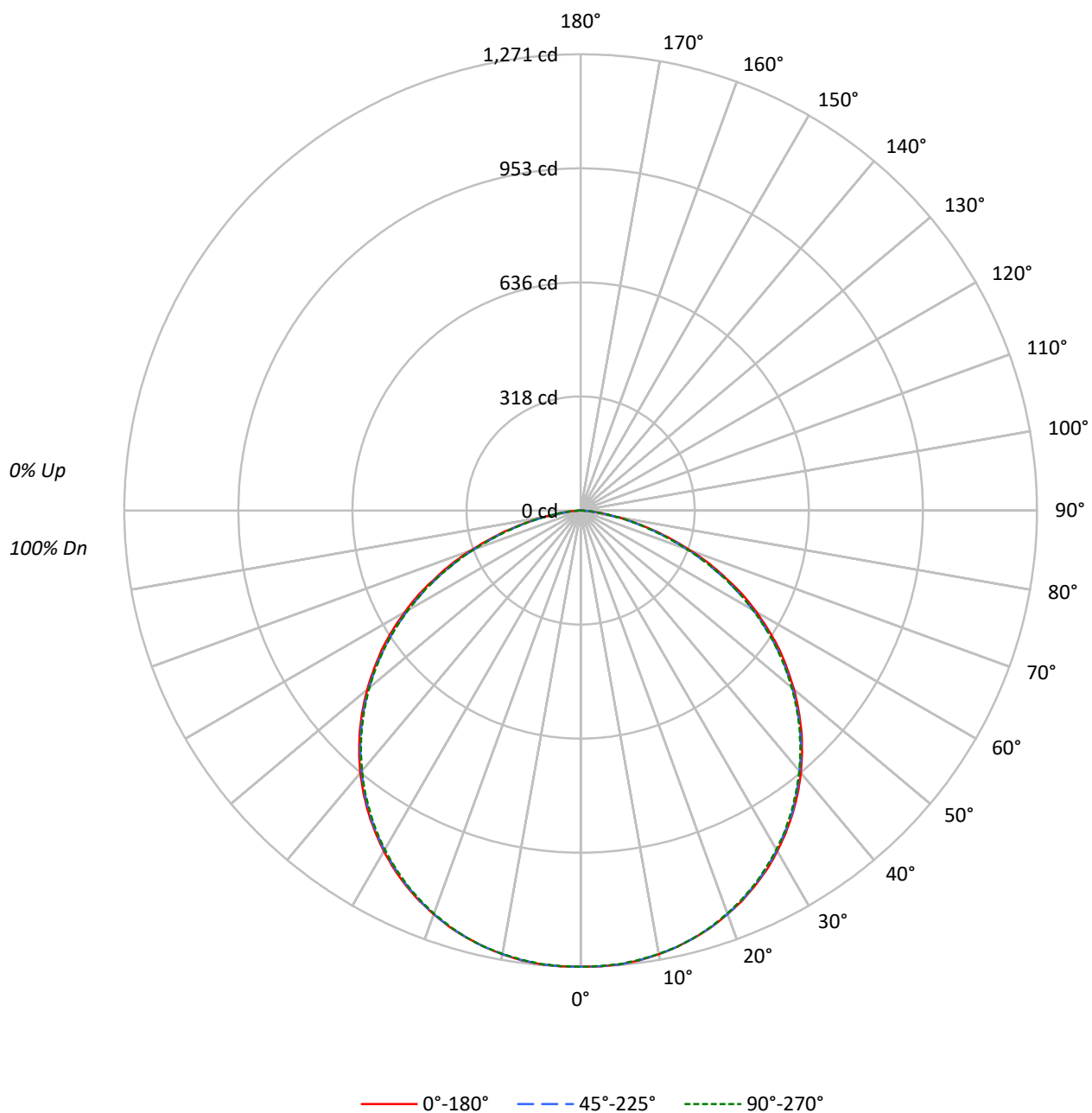
Lumens per Lamp: N/A
Luminaire Lumens: 3592.7 lumens
Efficiency: N/A
Efficacy: 120.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	1710	1710	1710
5°	1714	1714	1713
10°	1715	1714	1714
15°	1715	1715	1715
20°	1714	1713	1710
25°	1710	1707	1704
30°	1703	1698	1694
35°	1692	1687	1681
40°	1677	1666	1664
45°	1655	1646	1640
50°	1624	1612	1607
55°	1586	1563	1561
60°	1520	1492	1492
65°	1422	1388	1393
70°	1279	1240	1236
75°	1074	1031	1027
80°	785	745	777
85°	443	409	415

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1655 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.7	3.4
10°-20°	347.6	9.7
20°-30°	530.0	14.8
30°-40°	642.1	17.9
40°-50°	667.0	18.6
50°-60°	596.7	16.6
60°-70°	434.9	12.1
70°-80°	215.3	6.0
80°-90°	38.5	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°	998.3	27.8
0°-40°	1640.4	45.7
0°-60°	2904.0	80.8
0°-90°	3592.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3592.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1271	1271	1271	1271	1271	
5°	1269	1269	1269	1269	1268	121
15°	1232	1231	1231	1232	1231	348
25°	1152	1151	1150	1149	1148	531
35°	1030	1028	1027	1025	1024	644
45°	870	868	865	863	862	670
55°	676	671	666	666	666	602
65°	446	443	436	438	437	443
75°	207	203	198	202	198	220
85°	29	26	26	27	27	40
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1271.2	1271.2	1271.2	1271.2	1271.2
2.5°	1271.2	1270.7	1270.7	1271.2	1270.3
5°	1268.9	1269.4	1268.9	1268.9	1268.0
7.5°	1263.9	1263.4	1263.0	1263.4	1262.1
10°	1255.2	1255.2	1254.8	1255.2	1254.3
12.5°	1244.7	1244.7	1244.7	1245.2	1244.7
15°	1231.5	1231.0	1231.0	1232.0	1231.0
17.5°	1216.0	1215.5	1215.5	1215.1	1214.2
20°	1196.8	1196.8	1196.4	1195.9	1194.6
22.5°	1176.3	1175.9	1174.5	1174.5	1172.7
25°	1152.1	1150.8	1149.9	1149.4	1148.0
27.5°	1125.7	1123.9	1122.5	1121.6	1120.2
30°	1096.0	1094.2	1092.8	1091.5	1090.6
32.5°	1064.1	1063.2	1060.9	1060.5	1058.6
35°	1029.9	1028.5	1027.2	1025.3	1023.5
37.5°	993.4	992.0	988.9	987.9	986.6
40°	954.6	952.8	948.7	948.7	947.3
42.5°	913.1	911.3	908.6	906.8	905.8
45°	869.8	868.0	864.8	863.0	862.1
47.5°	823.7	822.4	818.7	817.4	816.0
50°	775.8	774.0	769.9	769.0	767.6
52.5°	725.7	724.8	719.3	718.8	717.5
55°	676.0	670.9	666.4	666.4	665.5
57.5°	621.2	617.6	611.6	611.6	610.7
60°	564.7	561.5	554.6	555.5	554.6
62.5°	509.5	502.6	496.2	499.0	496.7
65°	446.5	442.9	436.0	437.9	437.4
67.5°	389.1	382.2	375.8	379.5	377.7
70°	325.2	321.6	315.2	318.8	314.3
72.5°	265.0	261.8	255.4	259.5	255.0
75°	206.6	203.4	198.4	202.1	197.5
77.5°	151.4	149.1	144.6	148.2	149.1
80°	101.3	98.5	96.2	99.4	100.3
82.5°	59.3	57.5	56.6	57.0	59.3
85°	28.7	26.5	26.5	26.9	26.9
87.5°	7.8	6.8	7.8	8.2	8.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)