

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: P974953

Luminaire Tested: FLR2-24-80HE-L940-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974953
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: FLR2-24-80HE-L940-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

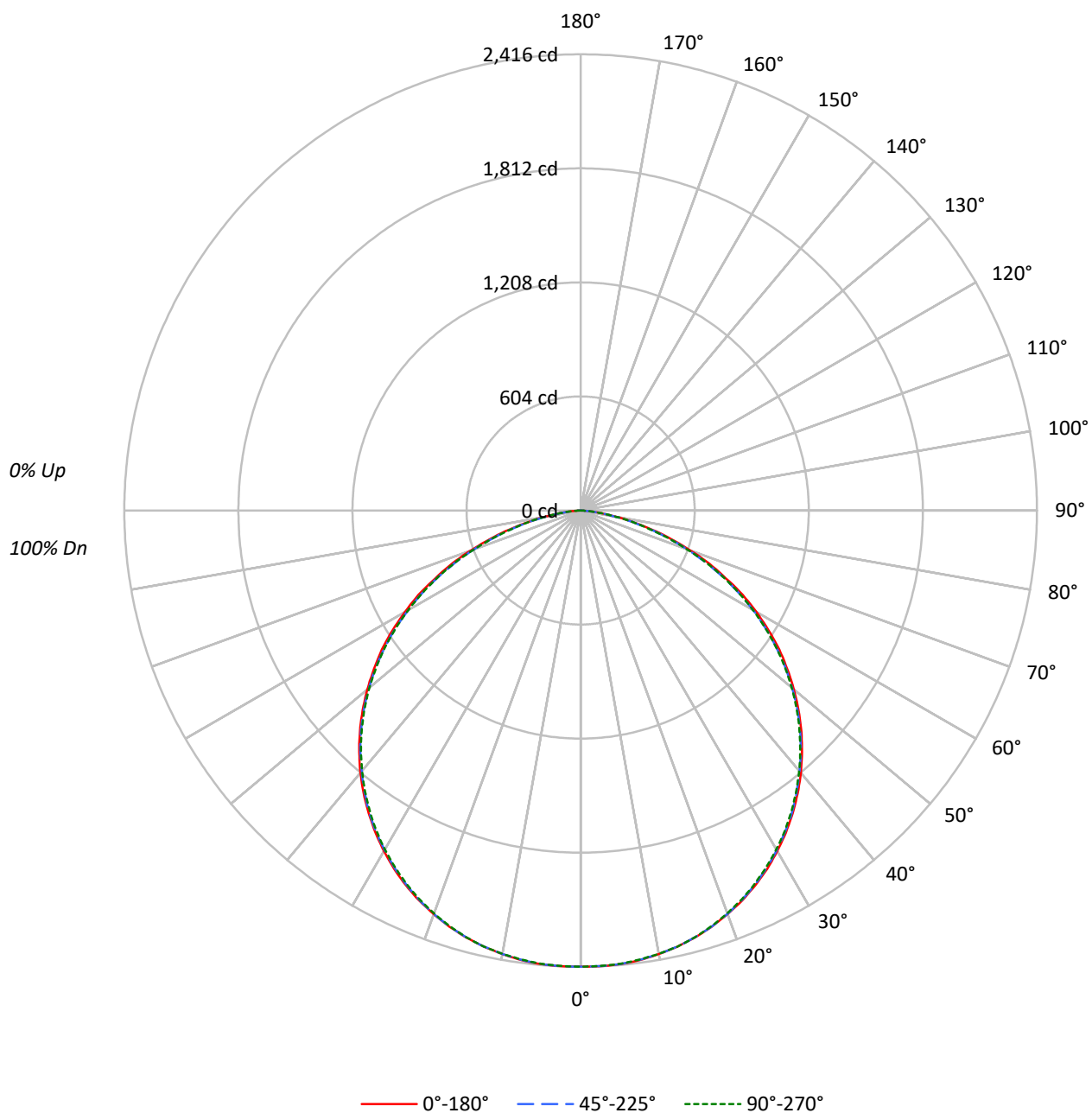
Lumens per Lamp: N/A
Luminaire Lumens: 6827.6 lumens
Efficiency: N/A
Efficacy: 107.5 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 63.5
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°	3250	3250	3250
5°	3257	3257	3255
10°	3259	3258	3257
15°	3260	3259	3259
20°	3257	3255	3250
25°	3250	3244	3239
30°	3236	3227	3220
35°	3215	3206	3195
40°	3186	3167	3162
45°	3145	3127	3117
50°	3086	3063	3054
55°	3013	2971	2966
60°	2888	2836	2836
65°	2702	2638	2647
70°	2431	2356	2349
75°	2041	1960	1951
80°	1491	1417	1478
85°	843	777	789

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3145 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.3	3.4
10°-20°	660.6	9.7
20°-30°	1007.2	14.8
30°-40°	1220.3	17.9
40°-50°	1267.5	18.6
50°-60°	1133.9	16.6
60°-70°	826.4	12.1
70°-80°	409.3	6.0
80°-90°	73.2	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°	1897.1	27.8
0°-40°	3117.3	45.7
0°-60°	5518.8	80.8
0°-90°	6827.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6827.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2416	2416	2416	2416	2416	
5°	2411	2412	2411	2411	2410	229
15°	2340	2340	2340	2341	2340	661
25°	2190	2187	2185	2184	2182	1009
35°	1957	1955	1952	1948	1945	1224
45°	1653	1650	1643	1640	1638	1274
55°	1285	1275	1266	1266	1265	1145
65°	849	842	829	832	831	841
75°	393	387	377	384	375	419
85°	55	50	50	51	51	76
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2415.7	2415.7	2415.7	2415.7	2415.7
2.5°	2415.7	2414.9	2414.9	2415.7	2414.0
5°	2411.4	2412.3	2411.4	2411.4	2409.7
7.5°	2401.9	2401.0	2400.1	2401.0	2398.4
10°	2385.4	2385.4	2384.5	2385.4	2383.7
12.5°	2365.5	2365.5	2365.5	2366.3	2365.5
15°	2340.3	2339.5	2339.5	2341.2	2339.5
17.5°	2310.9	2310.0	2310.0	2309.1	2307.4
20°	2274.5	2274.5	2273.6	2272.7	2270.1
22.5°	2235.5	2234.6	2232.0	2232.0	2228.5
25°	2189.5	2186.9	2185.2	2184.3	2181.7
27.5°	2139.2	2135.8	2133.2	2131.4	2128.8
30°	2082.9	2079.4	2076.8	2074.2	2072.5
32.5°	2022.2	2020.5	2016.2	2015.3	2011.8
35°	1957.2	1954.6	1952.0	1948.5	1945.1
37.5°	1887.9	1885.3	1879.2	1877.5	1874.9
40°	1814.2	1810.7	1802.9	1802.9	1800.3
42.5°	1735.3	1731.8	1726.6	1723.2	1721.4
45°	1653.0	1649.5	1643.4	1640.0	1638.2
47.5°	1565.4	1562.8	1555.9	1553.3	1550.7
50°	1474.4	1470.9	1463.1	1461.4	1458.8
52.5°	1379.1	1377.3	1366.9	1366.1	1363.5
55°	1284.6	1275.0	1266.4	1266.4	1264.6
57.5°	1180.6	1173.6	1162.4	1162.4	1160.6
60°	1073.1	1067.0	1054.0	1055.8	1054.0
62.5°	968.2	955.2	943.1	948.3	943.9
65°	848.6	841.7	828.7	832.1	831.3
67.5°	739.4	726.4	714.2	721.2	717.7
70°	618.0	611.1	599.0	605.9	597.2
72.5°	503.6	497.5	485.4	493.2	484.5
75°	392.7	386.6	377.1	384.0	375.3
77.5°	287.8	283.4	274.8	281.7	283.4
80°	192.4	187.2	182.9	189.0	190.7
82.5°	112.7	109.2	107.5	108.3	112.7
85°	54.6	50.3	50.3	51.1	51.1
87.5°	14.7	13.0	14.7	15.6	16.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)