

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: P974513

Luminaire Tested: FLR2-24-80HE-L830-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974513
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-L830-CP080
Description: SHAPER SENSE CIRCLE
LIGHT LEVEL 2
Light Source:
Ballast/Driver: -

Summary

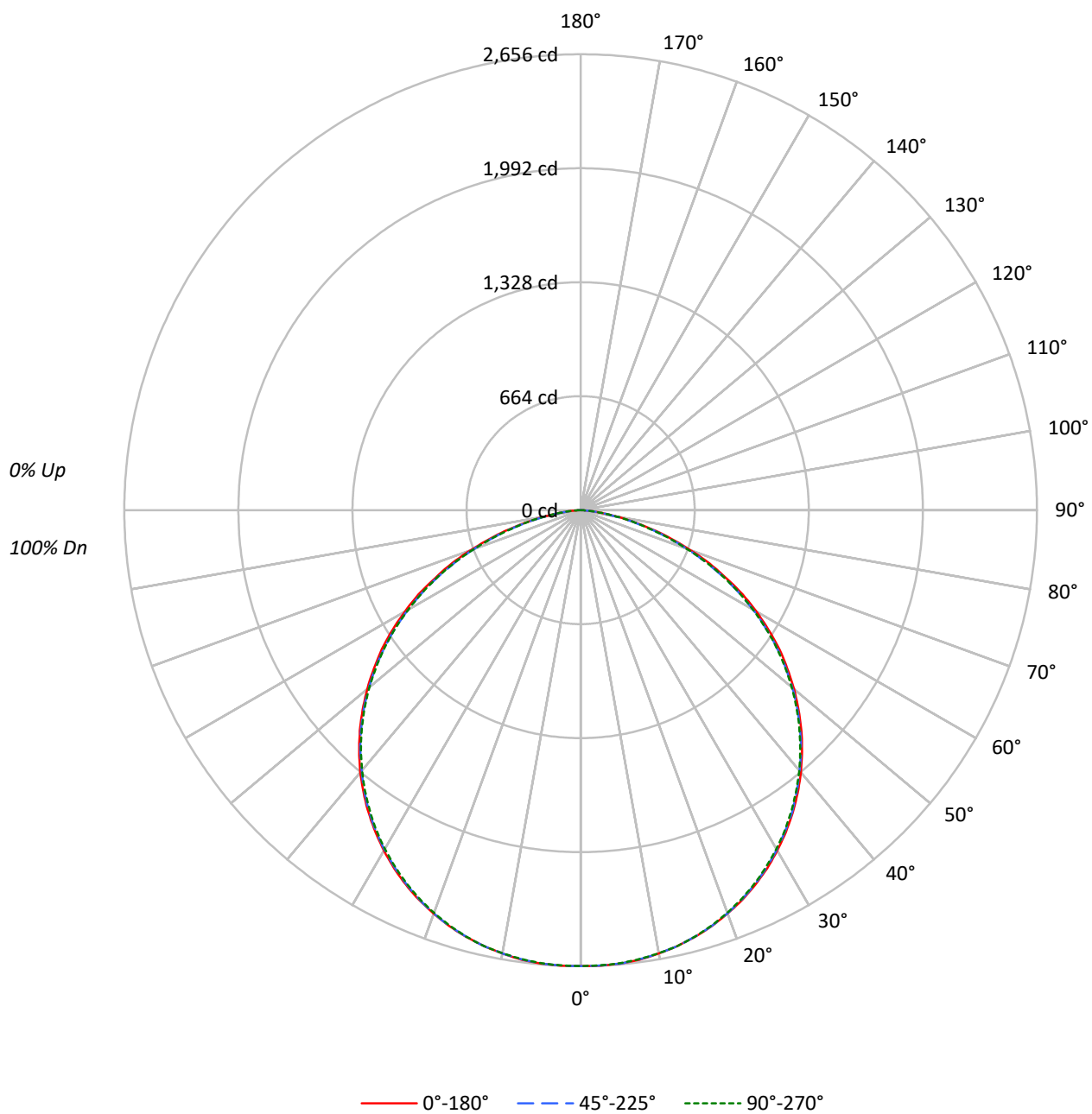
Lumens per Lamp: N/A
Luminaire Lumens: 7506.8 lumens
Efficiency: N/A
Efficacy: 118.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P974513

CATALOG NUMBER: FLR2-24-80HE-L830-CP080

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°	3574	3574	3574
5°	3581	3581	3578
10°	3583	3582	3581
15°	3584	3583	3583
20°	3581	3579	3574
25°	3574	3567	3561
30°	3558	3548	3540
35°	3535	3525	3513
40°	3503	3482	3477
45°	3458	3438	3427
50°	3393	3367	3357
55°	3313	3266	3262
60°	3175	3119	3119
65°	2970	2901	2910
70°	2673	2591	2583
75°	2244	2155	2145
80°	1640	1558	1625
85°	926	854	868

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3458 cd/sqm

TEST NUMBER: P974513
CATALOG NUMBER: FLR2-24-80HE-L830-CP080

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.1	3.4
10°-20°	726.3	9.7
20°-30°	1107.4	14.8
30°-40°	1341.7	17.9
40°-50°	1393.6	18.6
50°-60°	1246.7	16.6
60°-70°	908.6	12.1
70°-80°	450.0	6.0
80°-90°	80.4	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°	2085.8	27.8
0°-40°	3427.4	45.7
0°-60°	6067.8	80.8
0°-90°	7506.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7506.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2656	2656	2656	2656	2656	
5°	2651	2652	2651	2651	2649	252
15°	2573	2572	2572	2574	2572	726
25°	2407	2404	2402	2402	2399	1109
35°	2152	2149	2146	2142	2139	1346
45°	1817	1814	1807	1803	1801	1401
55°	1412	1402	1392	1392	1390	1258
65°	933	925	911	915	914	925
75°	432	425	415	422	413	460
85°	60	55	55	56	56	83
90°	0	0	0	0	0	

TEST NUMBER: P974513

CATALOG NUMBER: FLR2-24-80HE-L830-CP080

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2656.0	2656.0	2656.0	2656.0	2656.0
2.5°	2656.0	2655.1	2655.1	2656.0	2654.1
5°	2651.3	2652.2	2651.3	2651.3	2649.4
7.5°	2640.8	2639.8	2638.9	2639.8	2637.0
10°	2622.7	2622.7	2621.7	2622.7	2620.8
12.5°	2600.8	2600.8	2600.8	2601.7	2600.8
15°	2573.1	2572.2	2572.2	2574.1	2572.2
17.5°	2540.7	2539.8	2539.8	2538.8	2536.9
20°	2500.7	2500.7	2499.7	2498.8	2495.9
22.5°	2457.8	2456.9	2454.0	2454.0	2450.2
25°	2407.3	2404.4	2402.5	2401.6	2398.7
27.5°	2352.0	2348.2	2345.4	2343.4	2340.6
30°	2290.1	2286.3	2283.4	2280.6	2278.6
32.5°	2223.4	2221.5	2216.7	2215.7	2211.9
35°	2151.9	2149.0	2146.2	2142.4	2138.6
37.5°	2075.7	2072.8	2066.1	2064.2	2061.4
40°	1994.6	1990.8	1982.3	1982.3	1979.4
42.5°	1907.9	1904.1	1898.4	1894.6	1892.7
45°	1817.4	1813.6	1806.9	1803.1	1801.2
47.5°	1721.1	1718.3	1710.7	1707.8	1704.9
50°	1621.1	1617.3	1608.7	1606.8	1603.9
52.5°	1516.2	1514.3	1502.9	1501.9	1499.1
55°	1412.4	1401.9	1392.3	1392.3	1390.4
57.5°	1298.0	1290.4	1278.0	1278.0	1276.1
60°	1179.8	1173.2	1158.9	1160.8	1158.9
62.5°	1064.5	1050.2	1036.9	1042.6	1037.8
65°	933.0	925.4	911.1	914.9	913.9
67.5°	812.9	798.6	785.3	792.9	789.1
70°	679.5	671.9	658.5	666.2	656.6
72.5°	553.7	547.0	533.7	542.3	532.7
75°	431.7	425.0	414.6	422.2	412.7
77.5°	316.4	311.6	302.1	309.7	311.6
80°	211.6	205.8	201.1	207.8	209.7
82.5°	123.9	120.1	118.2	119.1	123.9
85°	60.0	55.3	55.3	56.2	56.2
87.5°	16.2	14.3	16.2	17.2	18.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)