

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: P973756

Luminaire Tested: FLR2-22-60HE-L830-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973756
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-2)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-22-60HE-L830-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

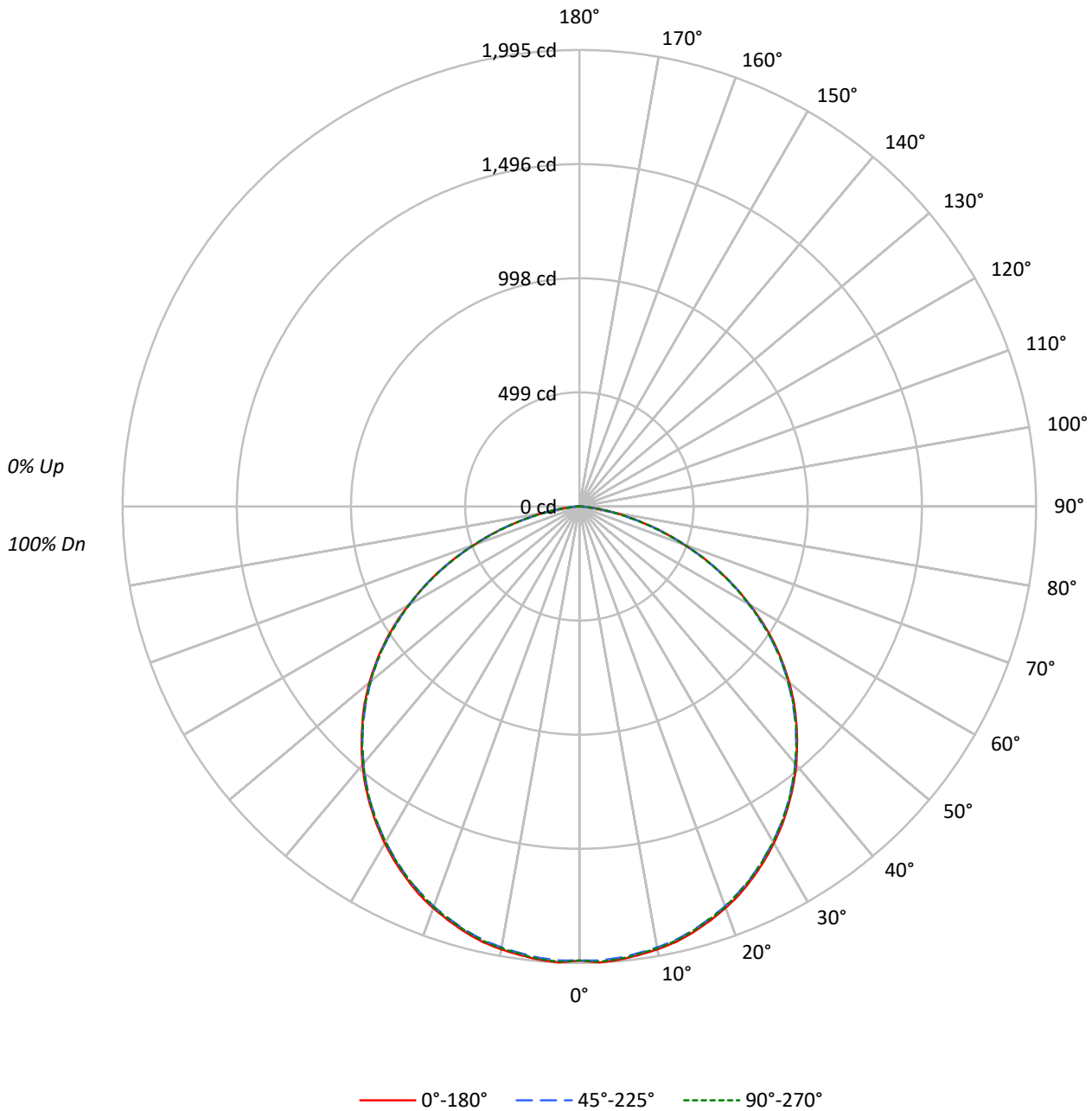
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5548.3 lumens
Efficiency: N/A
Efficacy: 117.1 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 47.4
Input Voltage (V): 120
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: P973756
CATALOG NUMBER: FLR2-22-60HE-L830-CA080

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
RC	80									70									50									30									10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	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	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85						85														
2	99	91	85	79	97	90	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	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51						51														
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44						44														
6	71	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39						39														
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34						34														
8	61	47	39	33	59	47	39	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	40	34	29	27						27														
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25						25														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5339	5339	5339
5°	5373	5349	5366
10°	5371	5347	5358
15°	5367	5343	5350
20°	5348	5327	5334
25°	5320	5298	5301
30°	5281	5258	5262
35°	5233	5213	5217
40°	5179	5153	5157
45°	5102	5079	5088
50°	5012	4976	4986
55°	4870	4830	4846
60°	4630	4610	4610
65°	4323	4315	4299
70°	3828	3847	3837
75°	3223	3198	3172
80°	2317	2280	2259
85°	1210	1210	1173

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5102 cd/sqm



TEST NUMBER: P973756
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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.9	3.4
10°-20°	540.3	9.7
20°-30°	821.0	14.8
30°-40°	992.4	17.9
40°-50°	1030.0	18.6
50°-60°	920.9	16.6
60°-70°	669.5	12.1
70°-80°	329.2	5.9
80°-90°	57.1	1.0
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°	1549.2	27.9
0°-40°	2541.5	45.8
0°-60°	4492.4	81.0
0°-90°	5548.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5548.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1984	1984	1984	1984	1984	
5°	1989	1966	1980	1973	1986	189
15°	1926	1904	1918	1913	1920	544
25°	1792	1772	1784	1781	1786	826
35°	1593	1582	1587	1588	1588	997
45°	1341	1334	1334	1337	1337	1034
55°	1038	1032	1029	1032	1033	925
65°	679	681	678	678	675	670
75°	310	312	308	309	305	329
85°	39	40	39	39	38	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1984.0	1984.0	1984.0	1984.0	1984.0
2.5°	1995.0	1971.7	1986.4	1977.9	1991.3
5°	1988.9	1965.6	1980.3	1973.0	1986.4
7.5°	1977.9	1954.6	1969.3	1961.9	1973.0
10°	1965.6	1941.1	1957.0	1949.7	1960.7
12.5°	1949.7	1926.4	1941.1	1935.0	1944.8
15°	1926.4	1904.3	1917.8	1912.9	1920.3
17.5°	1898.2	1876.2	1889.6	1886.0	1892.1
20°	1867.6	1846.7	1860.2	1856.5	1862.7
22.5°	1833.3	1811.2	1823.5	1821.0	1825.9
25°	1791.6	1772.0	1784.2	1780.6	1785.5
27.5°	1747.5	1729.1	1738.9	1738.9	1741.4
30°	1699.7	1682.5	1692.3	1692.3	1693.6
32.5°	1648.2	1634.7	1640.9	1642.1	1642.1
35°	1593.1	1582.0	1587.0	1588.2	1588.2
37.5°	1535.5	1524.5	1528.1	1530.6	1530.6
40°	1474.2	1464.4	1466.9	1469.3	1468.1
42.5°	1408.0	1400.7	1401.9	1404.4	1404.4
45°	1340.6	1334.5	1334.5	1337.0	1337.0
47.5°	1272.0	1265.9	1263.4	1265.9	1265.9
50°	1197.3	1191.1	1188.7	1191.1	1191.1
52.5°	1118.8	1112.7	1112.7	1112.7	1113.9
55°	1038.0	1031.8	1029.4	1031.8	1033.0
57.5°	952.2	949.7	946.0	947.3	943.6
60°	860.3	860.3	856.6	859.0	856.6
62.5°	770.8	773.3	769.6	769.6	767.1
65°	678.9	681.3	677.7	677.7	675.2
67.5°	584.5	588.2	583.3	583.3	580.9
70°	486.5	493.9	489.0	490.2	487.7
72.5°	398.3	401.9	397.0	397.0	394.6
75°	310.0	312.5	307.6	308.8	305.1
77.5°	223.0	226.7	221.8	223.0	221.8
80°	149.5	150.7	147.1	148.3	145.8
82.5°	87.0	88.2	87.0	85.8	84.6
85°	39.2	40.4	39.2	39.2	38.0
87.5°	9.8	9.8	9.8	9.8	9.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)