

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: P973738

Luminaire Tested: FLR2-22-60HE-L830-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973738
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-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

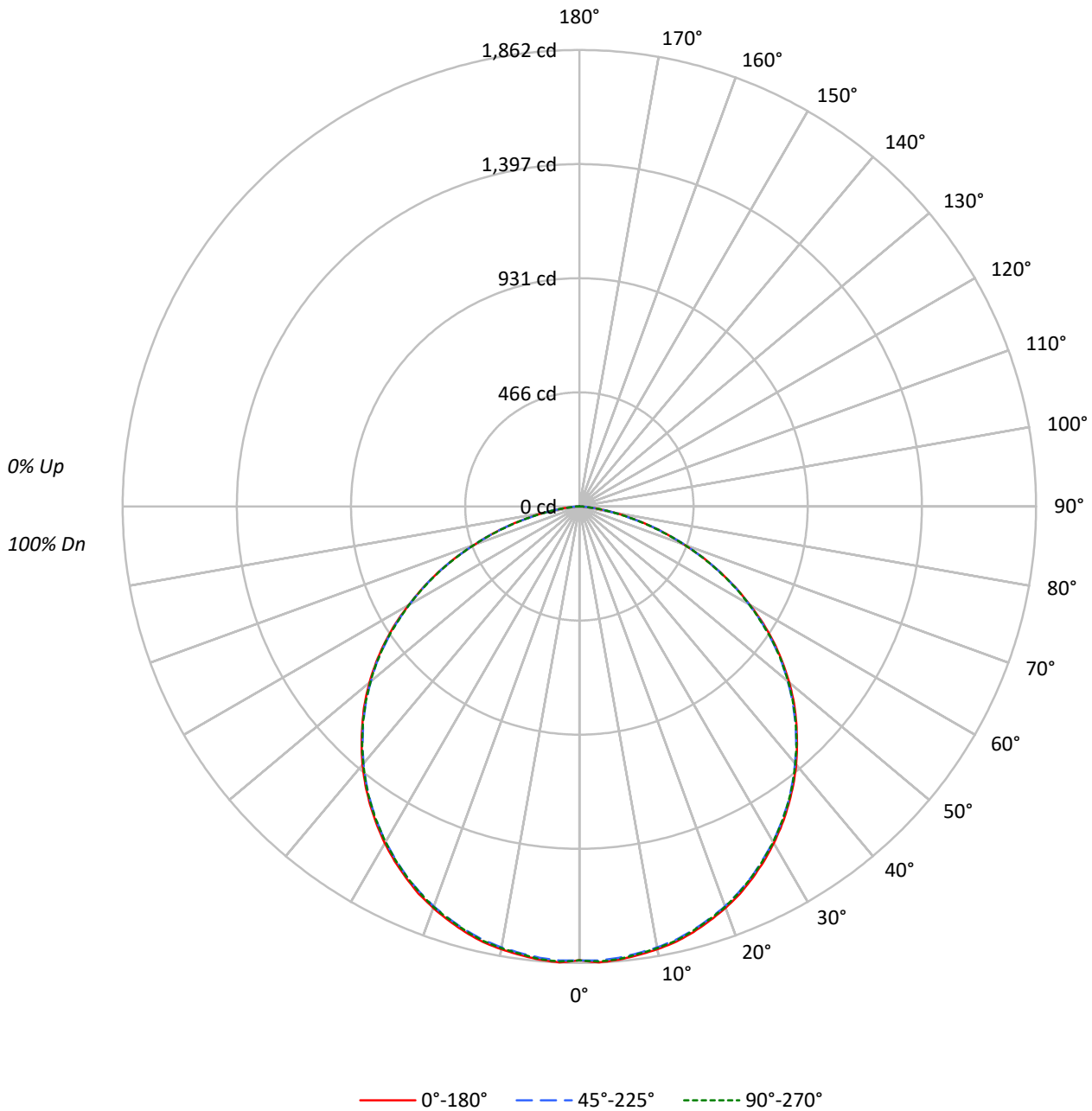
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5177.4 lumens
Efficiency: N/A
Efficacy: 109.2 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

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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	100	100	100	100		
	1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85	85	85	85	85	85		
	2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71	71	71	71	71	71		
	3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60	60	60	60	60	60		
	4	83	71	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51	51	51	51	51	51		
	5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44	44	44	44	44	44		
	6	71	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39	39	39	39	39	39		
	7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34	34	34	34	34	34		
	8	61	47	39	33	59	47	39	33	45	38	33	44	37	32	43	37	32	30	30	30	30	30	30		
	9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27	27	27	27	27	27		
	10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25	25	25	25	25	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4982	4982	4982
5°	5013	4992	5007
10°	5012	4990	4999
15°	5008	4986	4992
20°	4991	4971	4978
25°	4964	4944	4947
30°	4928	4907	4911
35°	4884	4865	4868
40°	4833	4808	4812
45°	4761	4739	4748
50°	4677	4644	4653
55°	4544	4507	4523
60°	4321	4302	4302
65°	4034	4027	4012
70°	3572	3590	3581
75°	3008	2984	2960
80°	2162	2126	2109
85°	1130	1130	1093

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4761 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.3	3.4
10°-20°	504.2	9.7
20°-30°	766.1	14.8
30°-40°	926.0	17.9
40°-50°	961.2	18.6
50°-60°	859.3	16.6
60°-70°	624.8	12.1
70°-80°	307.2	5.9
80°-90°	53.3	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°	1445.6	27.9
0°-40°	2371.6	45.8
0°-60°	4192.1	81.0
0°-90°	5177.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5177.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1851	1851	1851	1851	1851	
5°	1856	1834	1848	1841	1854	176
15°	1798	1777	1790	1785	1792	507
25°	1672	1654	1665	1662	1666	771
35°	1487	1476	1481	1482	1482	930
45°	1251	1245	1245	1248	1248	965
55°	969	963	961	963	964	863
65°	634	636	632	632	630	625
75°	289	292	287	288	285	307
85°	37	38	37	37	35	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1851.4	1851.4	1851.4	1851.4	1851.4
2.5°	1861.7	1839.9	1853.7	1845.7	1858.2
5°	1855.9	1834.2	1847.9	1841.1	1853.7
7.5°	1845.7	1823.9	1837.6	1830.8	1841.1
10°	1834.2	1811.3	1826.2	1819.4	1829.6
12.5°	1819.4	1797.6	1811.3	1805.6	1814.8
15°	1797.6	1777.0	1789.6	1785.0	1791.9
17.5°	1771.3	1750.7	1763.3	1759.9	1765.6
20°	1742.7	1723.3	1735.9	1732.4	1738.2
22.5°	1710.7	1690.1	1701.6	1699.3	1703.9
25°	1671.8	1653.5	1665.0	1661.5	1666.1
27.5°	1630.7	1613.5	1622.7	1622.7	1625.0
30°	1586.1	1570.1	1579.2	1579.2	1580.4
32.5°	1538.0	1525.5	1531.2	1532.3	1532.3
35°	1486.6	1476.3	1480.9	1482.0	1482.0
37.5°	1432.8	1422.5	1426.0	1428.3	1428.3
40°	1375.7	1366.5	1368.8	1371.1	1369.9
42.5°	1313.9	1307.1	1308.2	1310.5	1310.5
45°	1251.0	1245.3	1245.3	1247.6	1247.6
47.5°	1187.0	1181.3	1179.0	1181.3	1181.3
50°	1117.2	1111.5	1109.2	1111.5	1111.5
52.5°	1044.0	1038.3	1038.3	1038.3	1039.5
55°	968.6	962.9	960.6	962.9	964.0
57.5°	888.5	886.2	882.8	883.9	880.5
60°	802.8	802.8	799.3	801.6	799.3
62.5°	719.3	721.6	718.1	718.1	715.8
65°	633.5	635.8	632.4	632.4	630.1
67.5°	545.5	548.9	544.3	544.3	542.0
70°	454.0	460.8	456.3	457.4	455.1
72.5°	371.6	375.1	370.5	370.5	368.2
75°	289.3	291.6	287.0	288.2	284.7
77.5°	208.1	211.6	207.0	208.1	207.0
80°	139.5	140.7	137.2	138.4	136.1
82.5°	81.2	82.3	81.2	80.0	78.9
85°	36.6	37.7	36.6	36.6	35.4
87.5°	9.1	9.1	9.1	9.1	9.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)