

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: P973760

Luminaire Tested: FLR2-22-45HE-L830-CA125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973760
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: FLR2-22-45HE-L830-CA125
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

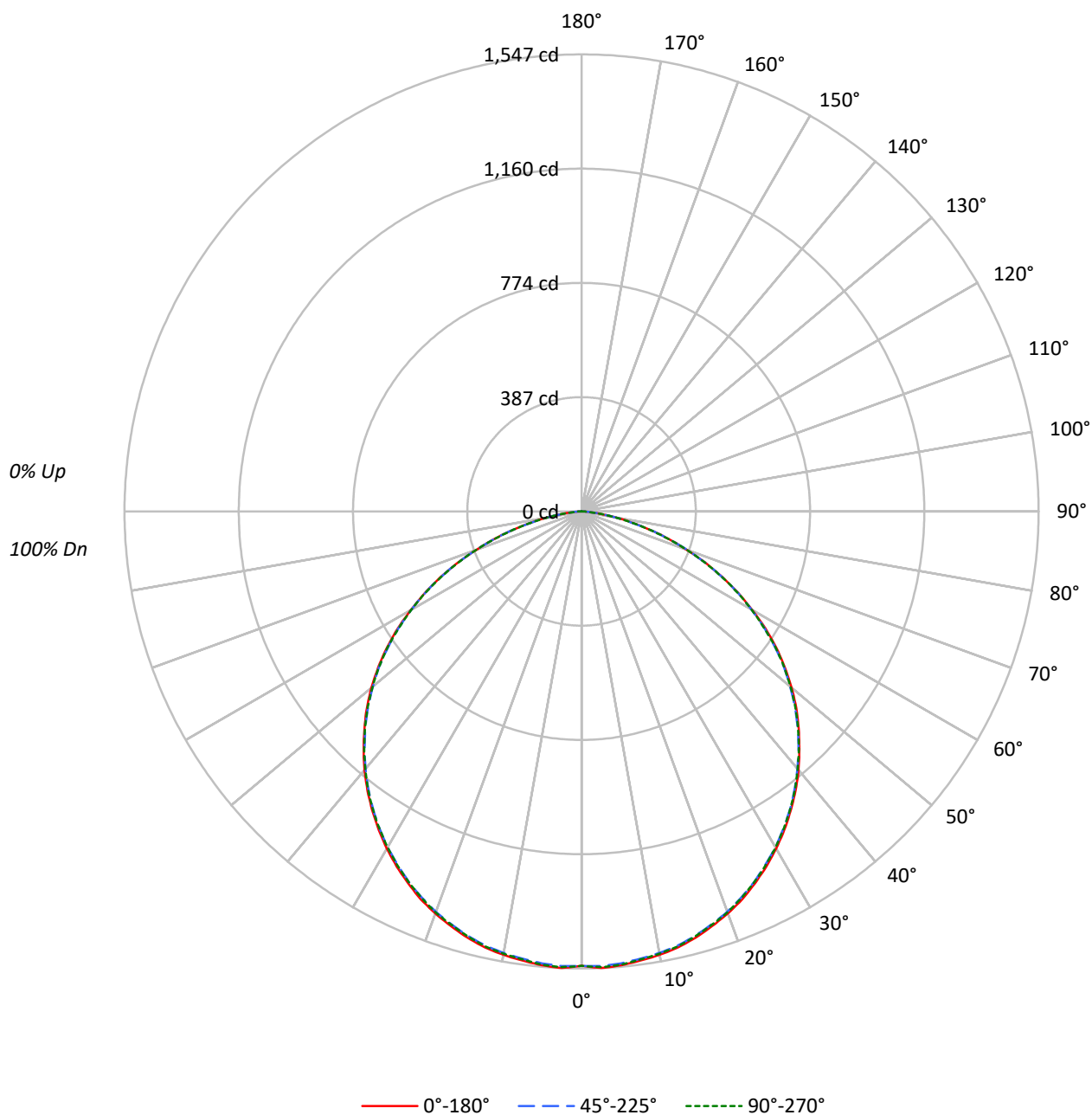
Lumens per Lamp: N/A
Luminaire Lumens: 4301.7 lumens
Efficiency: N/A
Efficacy: 118.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 36.2
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					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		
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85		
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71		
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60		
4	83	71	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44		
6	71	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39		
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34		
8	61	47	39	33	59	47	39	33	45	38	33	44	37	32	43	37	32	30		
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27		
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4139	4139	4139
5°	4165	4148	4160
10°	4164	4146	4154
15°	4161	4142	4148
20°	4147	4130	4136
25°	4124	4108	4110
30°	4095	4077	4080
35°	4057	4042	4045
40°	4015	3995	3998
45°	3956	3938	3945
50°	3886	3858	3866
55°	3775	3744	3757
60°	3590	3574	3574
65°	3352	3345	3333
70°	2968	2983	2975
75°	2499	2480	2460
80°	1796	1767	1753
85°	939	939	911

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3956 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.7	3.4
10°-20°	418.9	9.7
20°-30°	636.6	14.8
30°-40°	769.4	17.9
40°-50°	798.6	18.6
50°-60°	714.0	16.6
60°-70°	519.1	12.1
70°-80°	255.3	5.9
80°-90°	44.3	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°	1201.1	27.9
0°-40°	1970.5	45.8
0°-60°	3483.1	81.0
0°-90°	4301.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4301.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1538	1538	1538	1538	1538	
5°	1542	1524	1535	1530	1540	147
15°	1494	1476	1487	1483	1489	421
25°	1389	1374	1383	1380	1384	640
35°	1235	1227	1230	1231	1231	773
45°	1039	1035	1035	1037	1037	802
55°	805	800	798	800	801	717
65°	526	528	525	525	524	519
75°	240	242	238	239	237	255
85°	30	31	30	30	30	44
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1538.2	1538.2	1538.2	1538.2	1538.2
2.5°	1546.8	1528.7	1540.1	1533.5	1543.9
5°	1542.0	1524.0	1535.4	1529.7	1540.1
7.5°	1533.5	1515.4	1526.8	1521.1	1529.7
10°	1524.0	1505.0	1517.3	1511.6	1520.2
12.5°	1511.6	1493.6	1505.0	1500.2	1507.8
15°	1493.6	1476.5	1486.9	1483.1	1488.8
17.5°	1471.7	1454.6	1465.1	1462.2	1467.0
20°	1448.0	1431.8	1442.3	1439.4	1444.2
22.5°	1421.4	1404.3	1413.8	1411.9	1415.7
25°	1389.1	1373.9	1383.4	1380.5	1384.3
27.5°	1354.9	1340.6	1348.2	1348.2	1350.1
30°	1317.8	1304.5	1312.1	1312.1	1313.0
32.5°	1277.9	1267.4	1272.2	1273.1	1273.1
35°	1235.1	1226.6	1230.4	1231.3	1231.3
37.5°	1190.5	1181.9	1184.8	1186.7	1186.7
40°	1143.0	1135.4	1137.3	1139.2	1138.2
42.5°	1091.7	1086.0	1086.9	1088.8	1088.8
45°	1039.4	1034.7	1034.7	1036.6	1036.6
47.5°	986.2	981.5	979.6	981.5	981.5
50°	928.3	923.5	921.6	923.5	923.5
52.5°	867.4	862.7	862.7	862.7	863.6
55°	804.7	800.0	798.1	800.0	800.9
57.5°	738.2	736.3	733.5	734.4	731.6
60°	667.0	667.0	664.1	666.0	664.1
62.5°	597.6	599.5	596.7	596.7	594.8
65°	526.4	528.3	525.4	525.4	523.5
67.5°	453.2	456.1	452.3	452.3	450.4
70°	377.2	382.9	379.1	380.0	378.1
72.5°	308.8	311.6	307.8	307.8	305.9
75°	240.4	242.3	238.5	239.4	236.6
77.5°	172.9	175.8	172.0	172.9	172.0
80°	115.9	116.9	114.0	115.0	113.1
82.5°	67.5	68.4	67.5	66.5	65.6
85°	30.4	31.4	30.4	30.4	29.5
87.5°	7.6	7.6	7.6	7.6	7.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)