

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: P975103

Luminaire Tested: FLR2-24-45HE-L950-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P975103
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: FLR2-24-45HE-L950-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

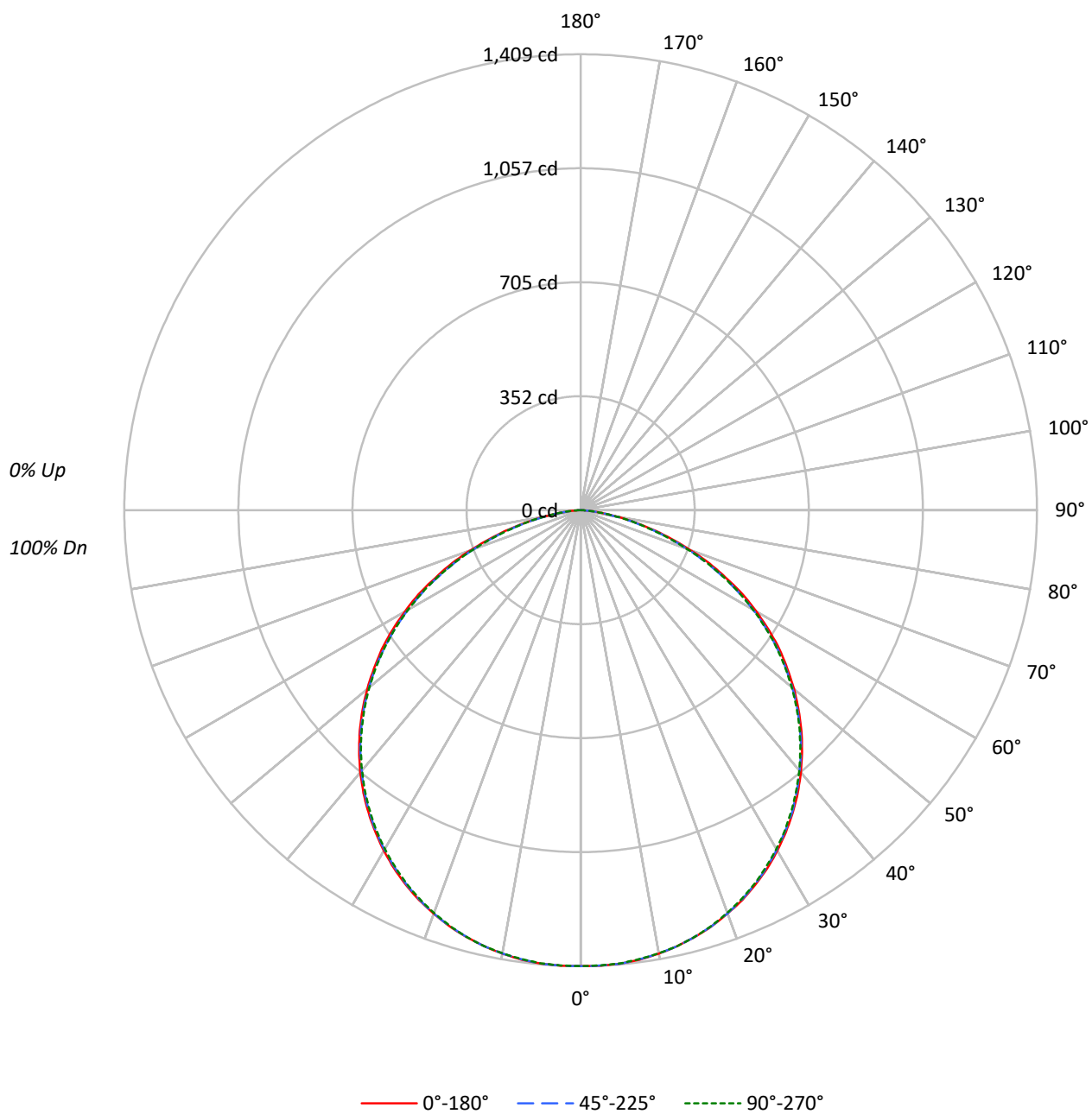
Lumens per Lamp: N/A
Luminaire Lumens: 3982.9 lumens
Efficiency: N/A
Efficacy: 114.8 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
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
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	109	105	100	97	106	102	99	95		98	95	92		94	92	89		91	89	87
2	99	91	85	79	97	89	83	78		86	81	76		83	78	75		80	76	73
3	91	80	72	66	88	79	71	65		76	69	64		73	68	63		70	66	62
4	83	71	62	56	81	70	62	55		67	60	55		65	59	54		63	57	53
5	76	64	55	48	74	62	54	48		60	53	47		58	52	47		56	51	46
6	70	57	48	42	69	56	48	42		54	47	41		53	46	41		51	45	41
7	65	52	43	37	64	51	43	37		49	42	37		48	41	36		47	41	36
8	61	47	39	33	59	47	38	33		45	38	33		44	37	32		43	37	32
9	57	43	35	30	55	43	35	30		42	34	29		41	34	29		39	33	29
10	53	40	32	27	52	39	32	27		38	31	27		38	31	26		37	31	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1896	1896	1896
5°	1900	1900	1899
10°	1901	1900	1900
15°	1902	1901	1901
20°	1900	1899	1896
25°	1896	1892	1889
30°	1888	1882	1878
35°	1875	1870	1864
40°	1859	1847	1845
45°	1835	1824	1819
50°	1800	1787	1781
55°	1758	1733	1730
60°	1685	1655	1655
65°	1576	1539	1544
70°	1418	1375	1371
75°	1191	1144	1138
80°	870	827	862
85°	492	452	460

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1835 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.8	3.4
10°-20°	385.4	9.7
20°-30°	587.5	14.8
30°-40°	711.8	17.9
40°-50°	739.4	18.6
50°-60°	661.5	16.6
60°-70°	482.1	12.1
70°-80°	238.7	6.0
80°-90°	42.7	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°	1106.7	27.8
0°-40°	1818.5	45.7
0°-60°	3219.4	80.8
0°-90°	3982.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3982.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1409	1409	1409	1409	1409	
5°	1407	1407	1407	1407	1406	134
15°	1365	1365	1365	1366	1365	385
25°	1277	1276	1275	1274	1273	589
35°	1142	1140	1139	1137	1135	714
45°	964	962	959	957	956	743
55°	749	744	739	739	738	668
65°	495	491	483	485	485	491
75°	229	226	220	224	219	244
85°	32	29	29	30	30	44
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1409.2	1409.2	1409.2	1409.2	1409.2
2.5°	1409.2	1408.7	1408.7	1409.2	1408.2
5°	1406.7	1407.2	1406.7	1406.7	1405.7
7.5°	1401.1	1400.6	1400.1	1400.6	1399.1
10°	1391.5	1391.5	1391.0	1391.5	1390.5
12.5°	1379.9	1379.9	1379.9	1380.4	1379.9
15°	1365.2	1364.7	1364.7	1365.8	1364.7
17.5°	1348.1	1347.6	1347.6	1347.0	1346.0
20°	1326.8	1326.8	1326.3	1325.8	1324.3
22.5°	1304.1	1303.6	1302.0	1302.0	1300.0
25°	1277.3	1275.7	1274.7	1274.2	1272.7
27.5°	1247.9	1245.9	1244.4	1243.4	1241.9
30°	1215.1	1213.0	1211.5	1210.0	1209.0
32.5°	1179.7	1178.7	1176.1	1175.6	1173.6
35°	1141.8	1140.2	1138.7	1136.7	1134.7
37.5°	1101.3	1099.8	1096.2	1095.2	1093.7
40°	1058.3	1056.3	1051.7	1051.7	1050.2
42.5°	1012.3	1010.3	1007.2	1005.2	1004.2
45°	964.3	962.2	958.7	956.7	955.7
47.5°	913.2	911.7	907.6	906.1	904.6
50°	860.1	858.1	853.5	852.5	851.0
52.5°	804.5	803.5	797.4	796.9	795.4
55°	749.4	743.8	738.8	738.8	737.7
57.5°	688.7	684.6	678.1	678.1	677.1
60°	626.0	622.5	614.9	615.9	614.9
62.5°	564.8	557.2	550.1	553.2	550.7
65°	495.0	491.0	483.4	485.4	484.9
67.5°	431.3	423.7	416.7	420.7	418.7
70°	360.5	356.5	349.4	353.4	348.4
72.5°	293.8	290.2	283.2	287.7	282.7
75°	229.1	225.5	220.0	224.0	218.9
77.5°	167.9	165.3	160.3	164.3	165.3
80°	112.3	109.2	106.7	110.2	111.2
82.5°	65.7	63.7	62.7	63.2	65.7
85°	31.9	29.3	29.3	29.8	29.8
87.5°	8.6	7.6	8.6	9.1	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)