

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: P975081

Luminaire Tested: FLR2-24-45HE-L950-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P975081
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-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

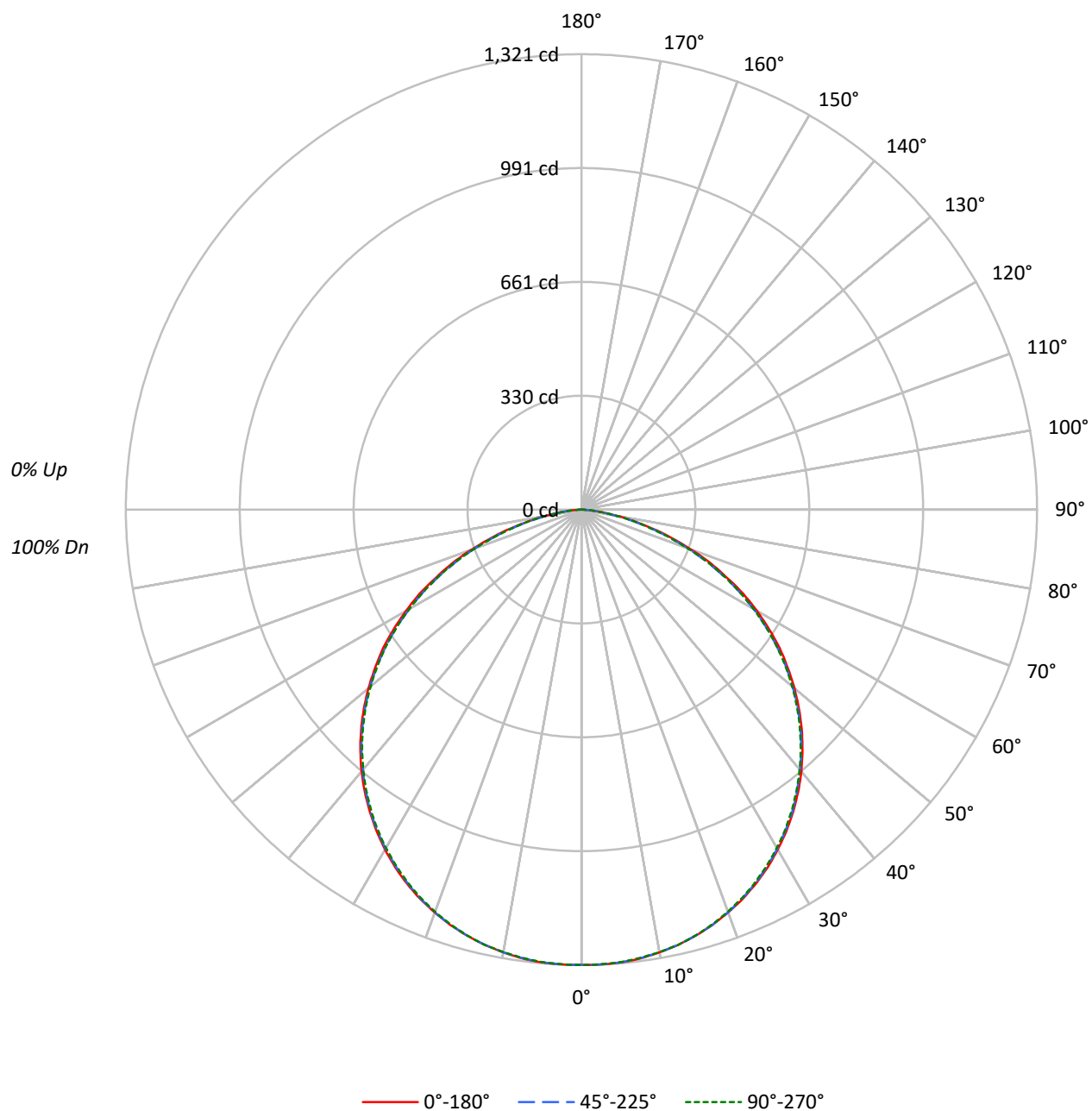
Lumens per Lamp: N/A
Luminaire Lumens: 3733.2 lumens
Efficiency: N/A
Efficacy: 107.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P975081

CATALOG NUMBER: FLR2-24-45HE-L950-CP250

Luminous Intensity Polar Plot



TEST NUMBER: P975081

CATALOG NUMBER: FLR2-24-45HE-L950-CP250

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°	1777	1777	1777
5°	1781	1781	1779
10°	1782	1781	1781
15°	1782	1782	1782
20°	1781	1780	1777
25°	1777	1774	1771
30°	1769	1764	1761
35°	1758	1753	1747
40°	1742	1731	1729
45°	1720	1710	1704
50°	1688	1675	1670
55°	1648	1624	1622
60°	1579	1551	1551
65°	1477	1443	1447
70°	1329	1288	1284
75°	1116	1072	1067
80°	815	775	808
85°	462	425	432

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1720 cd/sqm

TEST NUMBER: P975081
 CATALOG NUMBER: FLR2-24-45HE-L950-CP250

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.4	3.4
10°-20°	361.2	9.7
20°-30°	550.7	14.8
30°-40°	667.2	17.9
40°-50°	693.1	18.6
50°-60°	620.0	16.6
60°-70°	451.9	12.1
70°-80°	223.8	6.0
80°-90°	40.0	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°	1037.3	27.8
0°-40°	1704.5	45.7
0°-60°	3017.5	80.8
0°-90°	3733.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3733.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1321	1321	1321	1321	1321	
5°	1318	1319	1318	1318	1318	125
15°	1280	1279	1279	1280	1279	361
25°	1197	1196	1195	1194	1193	552
35°	1070	1069	1067	1065	1064	669
45°	904	902	899	897	896	697
55°	702	697	692	692	692	626
65°	464	460	453	455	454	460
75°	215	211	206	210	205	229
85°	30	28	28	28	28	41
90°	0	0	0	0	0	

TEST NUMBER: P975081

CATALOG NUMBER: FLR2-24-45HE-L950-CP250

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1320.9	1320.9	1320.9	1320.9	1320.9
2.5°	1320.9	1320.4	1320.4	1320.9	1319.9
5°	1318.5	1319.0	1318.5	1318.5	1317.5
7.5°	1313.3	1312.8	1312.3	1312.8	1311.4
10°	1304.3	1304.3	1303.8	1304.3	1303.3
12.5°	1293.4	1293.4	1293.4	1293.8	1293.4
15°	1279.6	1279.2	1279.2	1280.1	1279.2
17.5°	1263.5	1263.0	1263.0	1262.6	1261.6
20°	1243.6	1243.6	1243.1	1242.7	1241.2
22.5°	1222.3	1221.8	1220.4	1220.4	1218.5
25°	1197.2	1195.7	1194.8	1194.3	1192.9
27.5°	1169.7	1167.8	1166.4	1165.4	1164.0
30°	1138.9	1137.0	1135.6	1134.1	1133.2
32.5°	1105.7	1104.7	1102.4	1101.9	1100.0
35°	1070.1	1068.7	1067.3	1065.4	1063.5
37.5°	1032.2	1030.8	1027.5	1026.5	1025.1
40°	991.9	990.1	985.8	985.8	984.4
42.5°	948.8	946.9	944.1	942.2	941.2
45°	903.8	901.9	898.6	896.7	895.7
47.5°	855.9	854.5	850.7	849.3	847.9
50°	806.2	804.3	800.0	799.1	797.6
52.5°	754.0	753.1	747.4	746.9	745.5
55°	702.4	697.2	692.4	692.4	691.5
57.5°	645.5	641.7	635.5	635.5	634.6
60°	586.7	583.4	576.3	577.3	576.3
62.5°	529.4	522.3	515.6	518.5	516.1
65°	464.0	460.2	453.1	455.0	454.5
67.5°	404.3	397.2	390.5	394.3	392.4
70°	337.9	334.1	327.5	331.3	326.5
72.5°	275.4	272.0	265.4	269.7	264.9
75°	214.7	211.4	206.2	210.0	205.2
77.5°	157.3	155.0	150.2	154.0	155.0
80°	105.2	102.4	100.0	103.3	104.3
82.5°	61.6	59.7	58.8	59.2	61.6
85°	29.9	27.5	27.5	28.0	28.0
87.5°	8.1	7.1	8.1	8.5	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)