

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: P974018

Luminaire Tested: FLR2-22-45HE-L950-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974018
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-L950-CP080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

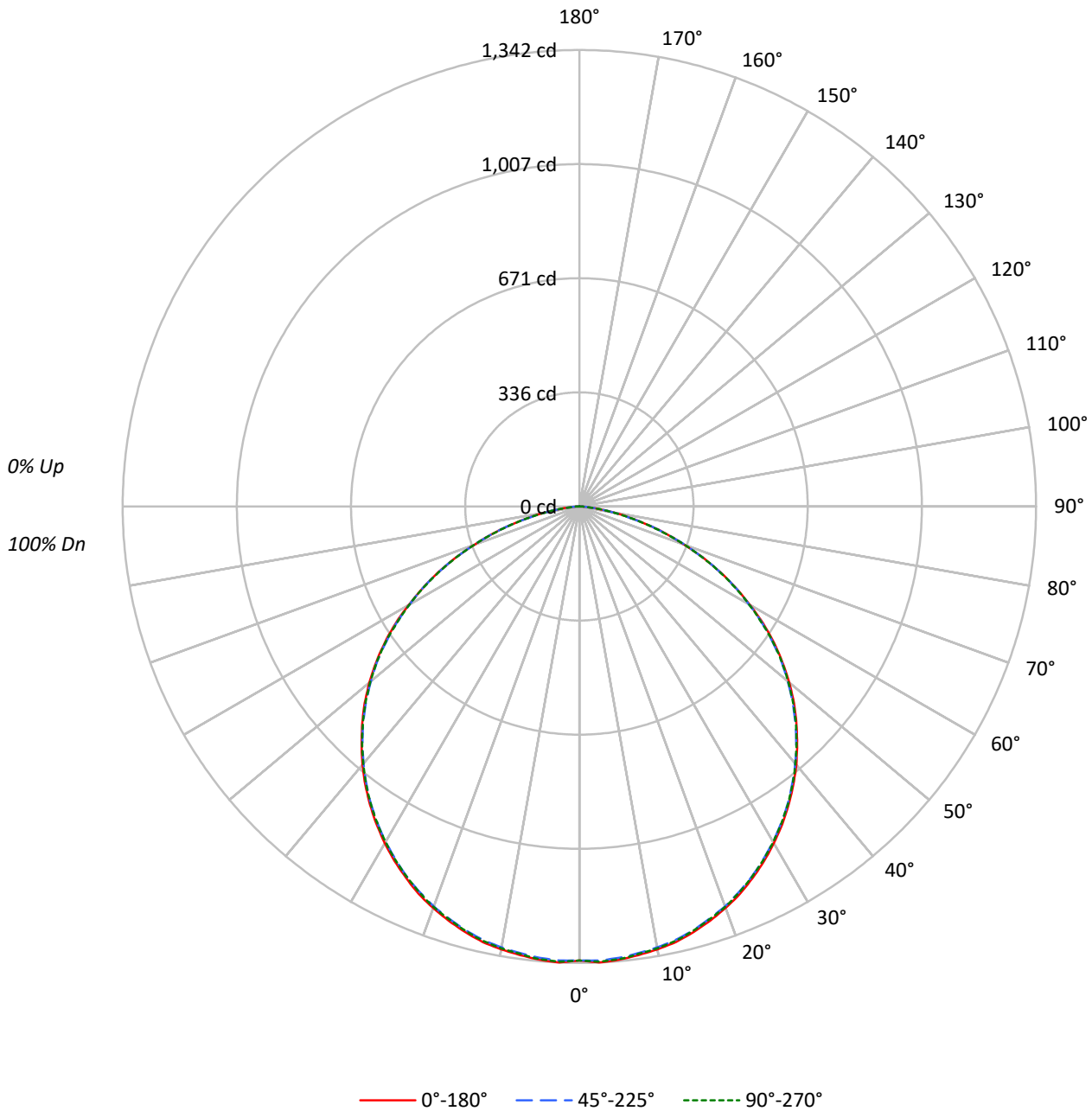
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3732.4 lumens
Efficiency: N/A
Efficacy: 103.1 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): 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									
RC	80									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	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°	3592	3592	3592
5°	3614	3599	3610
10°	3613	3597	3604
15°	3610	3594	3599
20°	3598	3584	3588
25°	3578	3564	3566
30°	3553	3538	3540
35°	3521	3507	3510
40°	3484	3466	3469
45°	3432	3416	3423
50°	3372	3347	3355
55°	3276	3249	3261
60°	3115	3101	3101
65°	2908	2903	2892
70°	2575	2588	2581
75°	2169	2151	2135
80°	1559	1533	1520
85°	815	815	790

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3432 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.4	3.4
10°-20°	363.5	9.7
20°-30°	552.3	14.8
30°-40°	667.6	17.9
40°-50°	692.9	18.6
50°-60°	619.5	16.6
60°-70°	450.4	12.1
70°-80°	221.5	5.9
80°-90°	38.4	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°	1042.1	27.9
0°-40°	1709.7	45.8
0°-60°	3022.1	81.0
0°-90°	3732.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3732.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1335	1335	1335	1335	1335	
5°	1338	1322	1332	1327	1336	127
15°	1296	1281	1290	1287	1292	366
25°	1205	1192	1200	1198	1201	556
35°	1072	1064	1068	1068	1068	670
45°	902	898	898	899	899	696
55°	698	694	692	694	695	622
65°	457	458	456	456	454	450
75°	209	210	207	208	205	221
85°	26	27	26	26	26	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1334.7	1334.7	1334.7	1334.7	1334.7
2.5°	1342.1	1326.4	1336.3	1330.5	1339.6
5°	1338.0	1322.3	1332.2	1327.2	1336.3
7.5°	1330.5	1314.9	1324.8	1319.8	1327.2
10°	1322.3	1305.8	1316.5	1311.6	1319.0
12.5°	1311.6	1295.9	1305.8	1301.7	1308.3
15°	1295.9	1281.1	1290.2	1286.9	1291.8
17.5°	1277.0	1262.1	1271.2	1268.7	1272.8
20°	1256.4	1242.3	1251.4	1248.9	1253.1
22.5°	1233.3	1218.4	1226.7	1225.0	1228.3
25°	1205.2	1192.1	1200.3	1197.8	1201.1
27.5°	1175.6	1163.2	1169.8	1169.8	1171.4
30°	1143.4	1131.9	1138.5	1138.5	1139.3
32.5°	1108.8	1099.7	1103.8	1104.7	1104.7
35°	1071.7	1064.3	1067.6	1068.4	1068.4
37.5°	1032.9	1025.5	1028.0	1029.6	1029.6
40°	991.7	985.1	986.8	988.4	987.6
42.5°	947.2	942.3	943.1	944.7	944.7
45°	901.9	897.7	897.7	899.4	899.4
47.5°	855.7	851.6	849.9	851.6	851.6
50°	805.4	801.3	799.6	801.3	801.3
52.5°	752.7	748.5	748.5	748.5	749.4
55°	698.2	694.1	692.5	694.1	695.0
57.5°	640.5	638.9	636.4	637.2	634.8
60°	578.7	578.7	576.2	577.9	576.2
62.5°	518.5	520.2	517.7	517.7	516.1
65°	456.7	458.4	455.9	455.9	454.2
67.5°	393.2	395.7	392.4	392.4	390.8
70°	327.3	332.2	328.9	329.8	328.1
72.5°	267.9	270.4	267.1	267.1	265.4
75°	208.6	210.2	206.9	207.7	205.3
77.5°	150.0	152.5	149.2	150.0	149.2
80°	100.6	101.4	98.9	99.7	98.1
82.5°	58.5	59.4	58.5	57.7	56.9
85°	26.4	27.2	26.4	26.4	25.6
87.5°	6.6	6.6	6.6	6.6	6.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)