

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: P973880

Luminaire Tested: FLR2-22-45HE-L935-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973880
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-L935-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

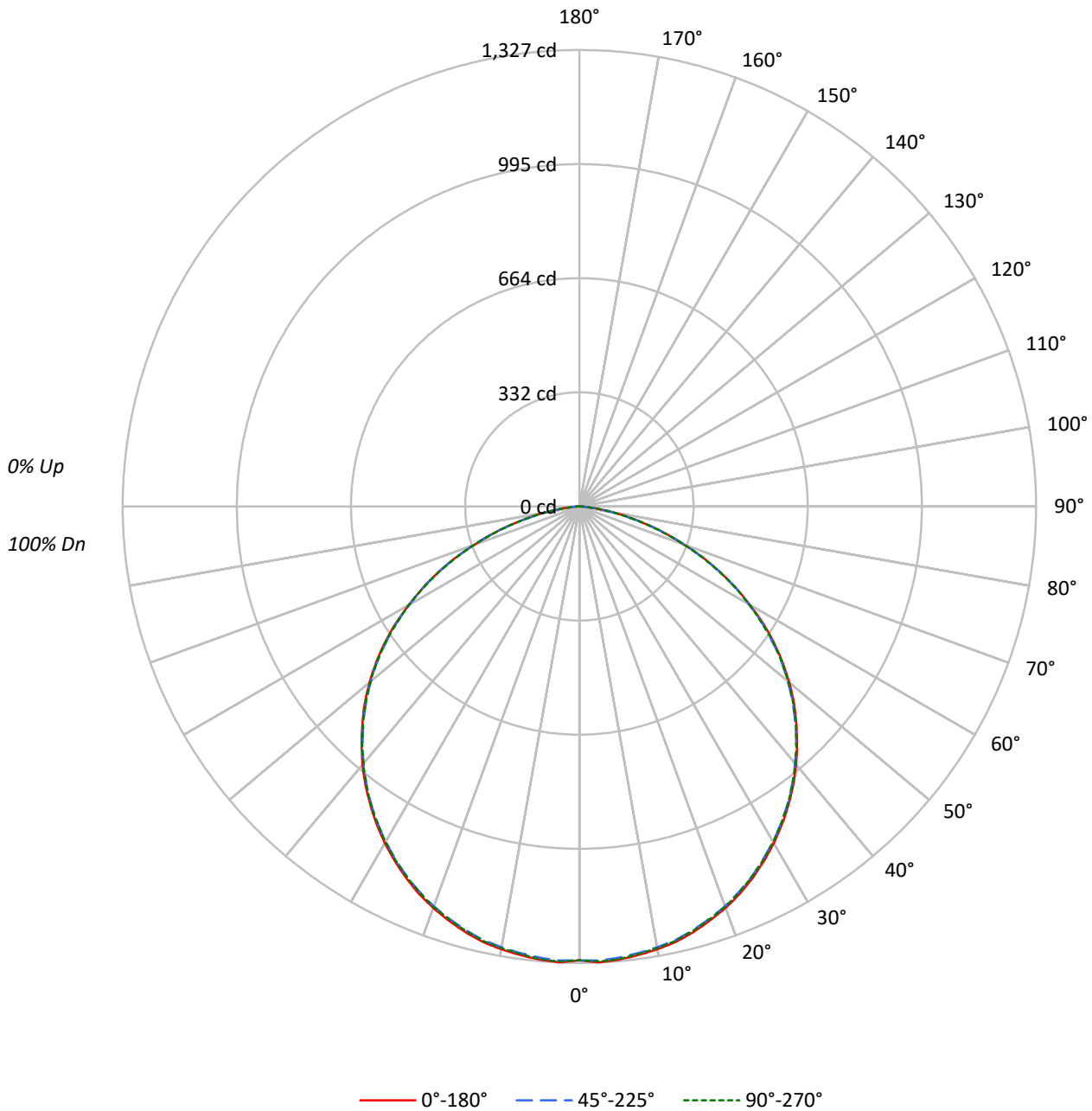
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3689.4 lumens
Efficiency: N/A
Efficacy: 101.9 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				10	
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	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°	3550	3550	3550
5°	3572	3557	3568
10°	3572	3556	3563
15°	3569	3553	3557
20°	3556	3542	3547
25°	3537	3523	3525
30°	3512	3497	3499
35°	3480	3467	3469
40°	3444	3426	3429
45°	3393	3377	3383
50°	3333	3309	3316
55°	3238	3211	3223
60°	3078	3066	3066
65°	2874	2869	2859
70°	2545	2558	2552
75°	2144	2126	2110
80°	1540	1516	1503
85°	806	806	781

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3393 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.9	3.4
10°-20°	359.3	9.7
20°-30°	545.9	14.8
30°-40°	659.9	17.9
40°-50°	684.9	18.6
50°-60°	612.3	16.6
60°-70°	445.2	12.1
70°-80°	218.9	5.9
80°-90°	38.0	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°	1030.1	27.9
0°-40°	1690.0	45.8
0°-60°	2987.3	81.0
0°-90°	3689.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3689.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1319	1319	1319	1319	1319	
5°	1322	1307	1317	1312	1321	126
15°	1281	1266	1275	1272	1277	361
25°	1191	1178	1186	1184	1187	549
35°	1059	1052	1055	1056	1056	663
45°	892	887	887	889	889	688
55°	690	686	684	686	687	615
65°	451	453	451	451	449	445
75°	206	208	204	205	203	219
85°	26	27	26	26	25	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1319.3	1319.3	1319.3	1319.3	1319.3
2.5°	1326.6	1311.1	1320.9	1315.2	1324.2
5°	1322.5	1307.1	1316.8	1311.9	1320.9
7.5°	1315.2	1299.7	1309.5	1304.6	1311.9
10°	1307.1	1290.8	1301.3	1296.5	1303.8
12.5°	1296.5	1281.0	1290.8	1286.7	1293.2
15°	1281.0	1266.3	1275.3	1272.0	1276.9
17.5°	1262.2	1247.6	1256.5	1254.1	1258.2
20°	1241.9	1228.0	1237.0	1234.5	1238.6
22.5°	1219.0	1204.4	1212.5	1210.9	1214.2
25°	1191.3	1178.3	1186.5	1184.0	1187.3
27.5°	1162.0	1149.8	1156.3	1156.3	1157.9
30°	1130.2	1118.8	1125.3	1125.3	1126.2
32.5°	1096.0	1087.0	1091.1	1091.9	1091.9
35°	1059.3	1052.0	1055.3	1056.1	1056.1
37.5°	1021.0	1013.7	1016.1	1017.8	1017.8
40°	980.3	973.8	975.4	977.0	976.2
42.5°	936.3	931.4	932.2	933.8	933.8
45°	891.5	887.4	887.4	889.0	889.0
47.5°	845.8	841.8	840.1	841.8	841.8
50°	796.1	792.1	790.4	792.1	792.1
52.5°	744.0	739.9	739.9	739.9	740.7
55°	690.2	686.1	684.5	686.1	686.9
57.5°	633.2	631.5	629.1	629.9	627.5
60°	572.0	572.0	569.6	571.2	569.6
62.5°	512.6	514.2	511.7	511.7	510.1
65°	451.4	453.1	450.6	450.6	449.0
67.5°	388.7	391.1	387.9	387.9	386.2
70°	323.5	328.4	325.1	325.9	324.3
72.5°	264.8	267.3	264.0	264.0	262.4
75°	206.2	207.8	204.5	205.3	202.9
77.5°	148.3	150.8	147.5	148.3	147.5
80°	99.4	100.2	97.8	98.6	97.0
82.5°	57.9	58.7	57.9	57.0	56.2
85°	26.1	26.9	26.1	26.1	25.3
87.5°	6.5	6.5	6.5	6.5	6.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)