

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: P973624

Luminaire Tested: FLR2-22-45-L840-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973624
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: FLR2-22-45-L840-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

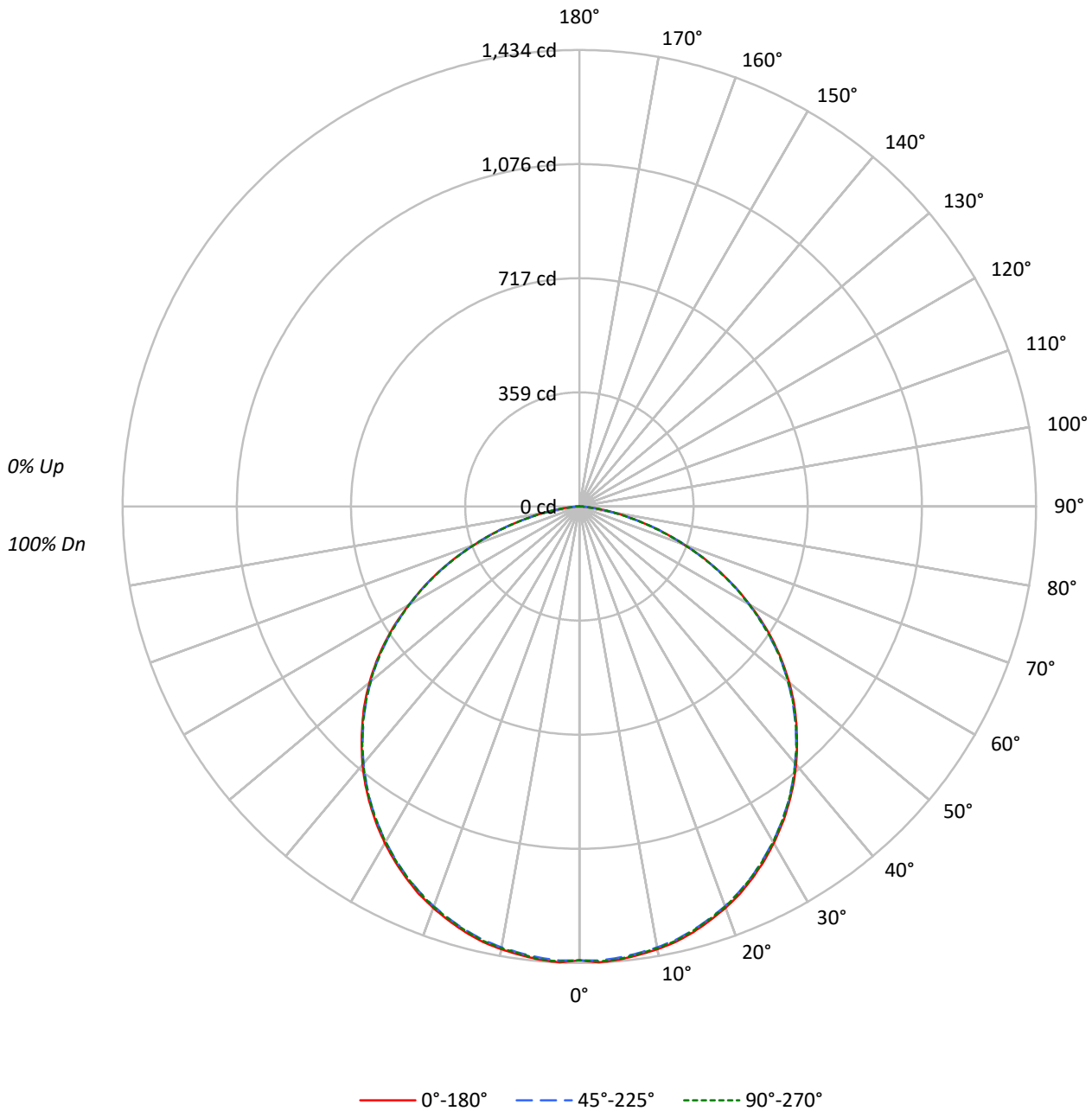
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3987.1 lumens
Efficiency: N/A
Efficacy: 110.4 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): 36.1
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									70									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	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°	3837	3837	3837
5°	3861	3844	3856
10°	3860	3843	3850
15°	3857	3840	3844
20°	3843	3828	3833
25°	3823	3807	3810
30°	3795	3779	3782
35°	3761	3746	3749
40°	3721	3703	3706
45°	3666	3650	3656
50°	3602	3576	3584
55°	3499	3470	3483
60°	3327	3313	3313
65°	3107	3101	3089
70°	2751	2765	2758
75°	2316	2298	2280
80°	1664	1638	1624
85°	871	871	843

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3666 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.0	3.4
10°-20°	388.2	9.7
20°-30°	590.0	14.8
30°-40°	713.1	17.9
40°-50°	740.2	18.6
50°-60°	661.8	16.6
60°-70°	481.1	12.1
70°-80°	236.6	5.9
80°-90°	41.0	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°	1113.2	27.9
0°-40°	1826.4	45.8
0°-60°	3228.3	81.0
0°-90°	3987.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3987.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1426	1426	1426	1426	1426	
5°	1429	1412	1423	1418	1428	136
15°	1384	1368	1378	1375	1380	391
25°	1288	1273	1282	1280	1283	593
35°	1145	1137	1140	1141	1141	716
45°	963	959	959	961	961	743
55°	746	742	740	742	742	665
65°	488	490	487	487	485	481
75°	223	225	221	222	219	236
85°	28	29	28	28	27	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1425.7	1425.7	1425.7	1425.7	1425.7
2.5°	1433.7	1416.9	1427.5	1421.3	1431.0
5°	1429.3	1412.5	1423.1	1417.8	1427.5
7.5°	1421.3	1404.6	1415.2	1409.9	1417.8
10°	1412.5	1394.9	1406.4	1401.1	1409.0
12.5°	1401.1	1384.3	1394.9	1390.5	1397.6
15°	1384.3	1368.5	1378.2	1374.7	1379.9
17.5°	1364.1	1348.2	1357.9	1355.3	1359.7
20°	1342.1	1327.1	1336.8	1334.1	1338.6
22.5°	1317.4	1301.6	1310.4	1308.6	1312.1
25°	1287.5	1273.4	1282.2	1279.5	1283.1
27.5°	1255.8	1242.6	1249.6	1249.6	1251.4
30°	1221.4	1209.1	1216.1	1216.1	1217.0
32.5°	1184.4	1174.8	1179.2	1180.0	1180.0
35°	1144.8	1136.9	1140.4	1141.3	1141.3
37.5°	1103.4	1095.5	1098.1	1099.9	1099.9
40°	1059.4	1052.3	1054.1	1055.9	1055.0
42.5°	1011.8	1006.6	1007.4	1009.2	1009.2
45°	963.4	959.0	959.0	960.8	960.8
47.5°	914.1	909.7	907.9	909.7	909.7
50°	860.4	856.0	854.2	856.0	856.0
52.5°	804.0	799.6	799.6	799.6	800.5
55°	745.9	741.5	739.7	741.5	742.4
57.5°	684.2	682.5	679.8	680.7	678.1
60°	618.2	618.2	615.6	617.3	615.6
62.5°	553.9	555.7	553.0	553.0	551.3
65°	487.9	489.6	487.0	487.0	485.2
67.5°	420.1	422.7	419.2	419.2	417.4
70°	349.6	354.9	351.4	352.3	350.5
72.5°	286.2	288.8	285.3	285.3	283.6
75°	222.8	224.6	221.0	221.9	219.3
77.5°	160.3	162.9	159.4	160.3	159.4
80°	107.4	108.3	105.7	106.6	104.8
82.5°	62.5	63.4	62.5	61.6	60.8
85°	28.2	29.1	28.2	28.2	27.3
87.5°	7.0	7.0	7.0	7.0	7.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)