

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: P973696

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

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973696
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-L950-CP080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

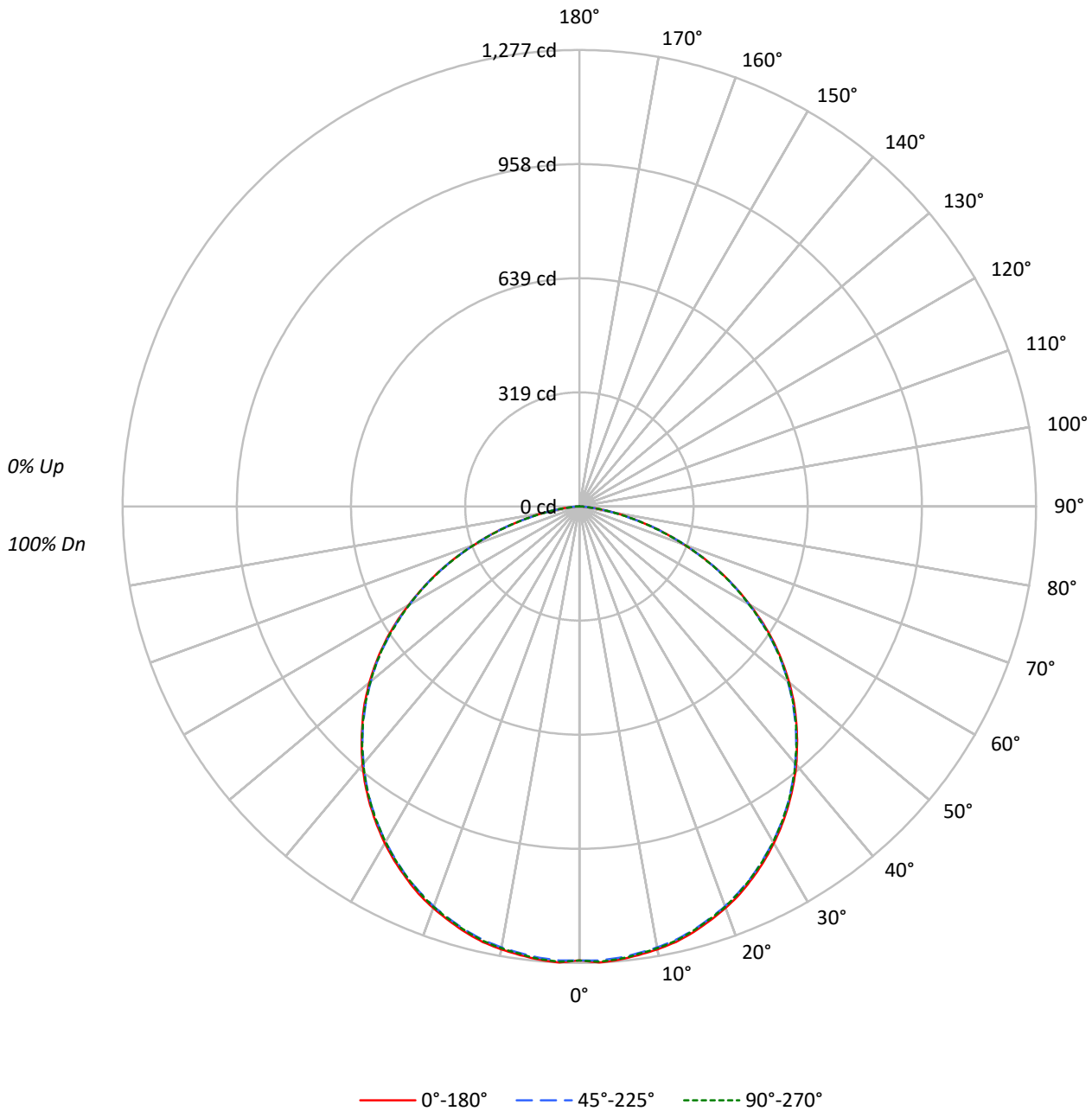
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3551.5 lumens
Efficiency: N/A
Efficacy: 98.4 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 (A_{in}): 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	0
RW	70	50	30	10	70	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
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°	3417	3417	3417
5°	3439	3424	3435
10°	3438	3423	3429
15°	3435	3420	3424
20°	3423	3410	3414
25°	3405	3391	3393
30°	3381	3366	3368
35°	3350	3337	3340
40°	3315	3298	3301
45°	3266	3251	3257
50°	3208	3185	3192
55°	3117	3091	3103
60°	2964	2951	2951
65°	2767	2762	2752
70°	2450	2463	2456
75°	2064	2047	2031
80°	1483	1458	1446
85°	775	775	750

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3266 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.3	3.4
10°-20°	345.8	9.7
20°-30°	525.5	14.8
30°-40°	635.2	17.9
40°-50°	659.3	18.6
50°-60°	589.4	16.6
60°-70°	428.6	12.1
70°-80°	210.8	5.9
80°-90°	36.6	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°	991.6	27.9
0°-40°	1626.8	45.8
0°-60°	2875.6	81.0
0°-90°	3551.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3551.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1270	1270	1270	1270	1270	
5°	1273	1258	1268	1263	1272	121
15°	1233	1219	1228	1224	1229	348
25°	1147	1134	1142	1140	1143	529
35°	1020	1013	1016	1017	1017	638
45°	858	854	854	856	856	662
55°	664	660	659	660	661	592
65°	435	436	434	434	432	429
75°	198	200	197	198	195	211
85°	25	26	25	25	24	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1269.9	1269.9	1269.9	1269.9	1269.9
2.5°	1277.0	1262.1	1271.5	1266.0	1274.7
5°	1273.1	1258.2	1267.6	1262.9	1271.5
7.5°	1266.0	1251.1	1260.5	1255.8	1262.9
10°	1258.2	1242.5	1252.7	1248.0	1255.0
12.5°	1248.0	1233.1	1242.5	1238.6	1244.8
15°	1233.1	1219.0	1227.6	1224.5	1229.2
17.5°	1215.0	1200.9	1209.5	1207.2	1211.1
20°	1195.4	1182.1	1190.7	1188.4	1192.3
22.5°	1173.5	1159.3	1167.2	1165.6	1168.8
25°	1146.8	1134.2	1142.1	1139.7	1142.9
27.5°	1118.6	1106.8	1113.1	1113.1	1114.6
30°	1088.0	1077.0	1083.3	1083.3	1084.0
32.5°	1055.0	1046.4	1050.3	1051.1	1051.1
35°	1019.7	1012.7	1015.8	1016.6	1016.6
37.5°	982.9	975.8	978.1	979.7	979.7
40°	943.6	937.4	938.9	940.5	939.7
42.5°	901.3	896.6	897.4	898.9	898.9
45°	858.1	854.2	854.2	855.8	855.8
47.5°	814.2	810.3	808.7	810.3	810.3
50°	766.4	762.4	760.9	762.4	762.4
52.5°	716.2	712.2	712.2	712.2	713.0
55°	664.4	660.5	658.9	660.5	661.3
57.5°	609.5	607.9	605.6	606.3	604.0
60°	550.7	550.7	548.3	549.9	548.3
62.5°	493.4	495.0	492.6	492.6	491.0
65°	434.6	436.1	433.8	433.8	432.2
67.5°	374.2	376.5	373.4	373.4	371.8
70°	311.4	316.1	313.0	313.8	312.2
72.5°	254.9	257.3	254.1	254.1	252.6
75°	198.5	200.0	196.9	197.7	195.3
77.5°	142.8	145.1	142.0	142.8	142.0
80°	95.7	96.5	94.1	94.9	93.3
82.5°	55.7	56.5	55.7	54.9	54.1
85°	25.1	25.9	25.1	25.1	24.3
87.5°	6.3	6.3	6.3	6.3	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)