

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: P973520

Luminaire Tested: FLR2-22-45-L830-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973520
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-L830-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

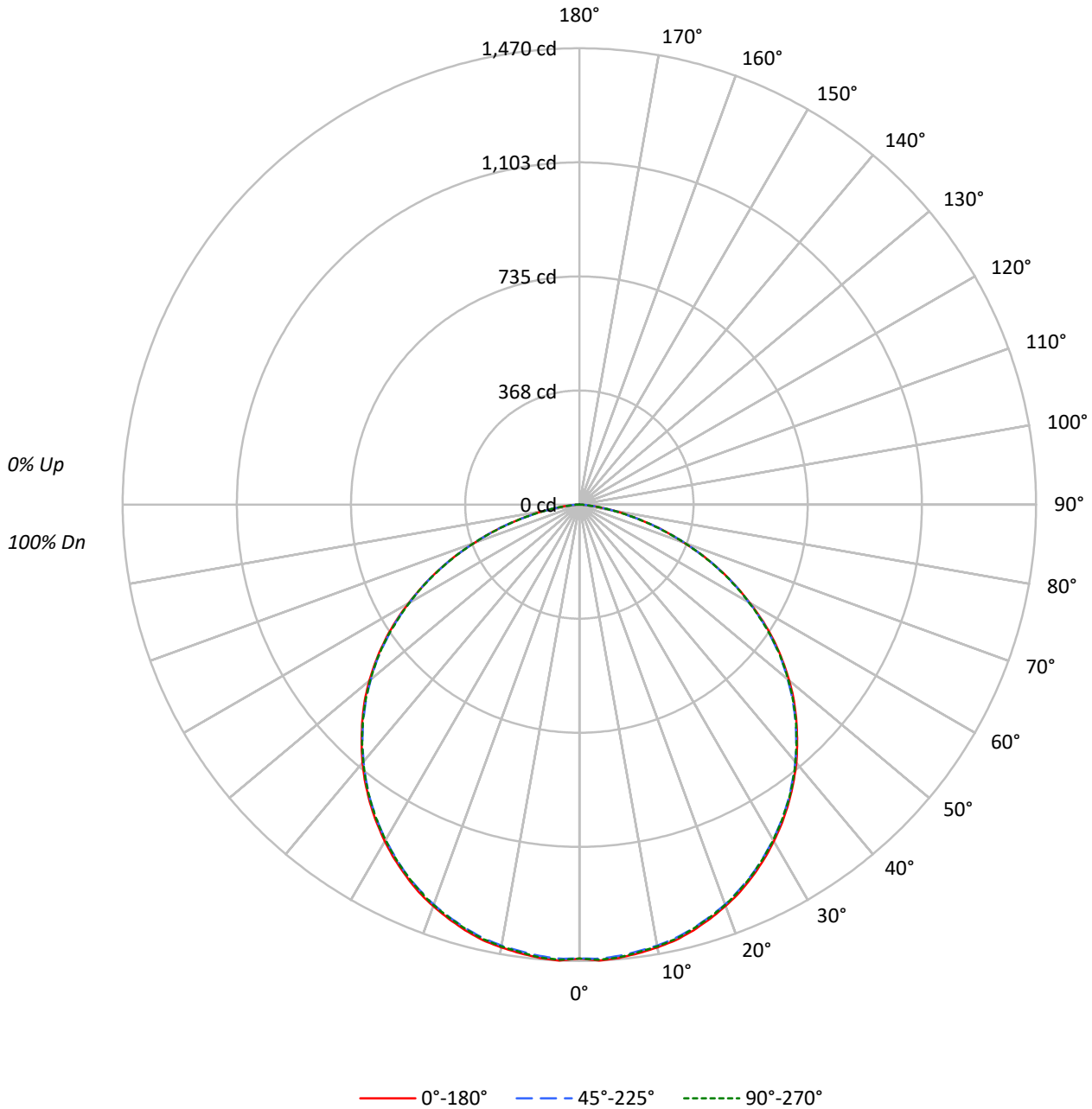
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4088.7 lumens
Efficiency: N/A
Efficacy: 113.3 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°	3934	3934	3934
5°	3959	3942	3954
10°	3958	3941	3948
15°	3955	3937	3942
20°	3941	3926	3931
25°	3920	3904	3907
30°	3892	3875	3878
35°	3857	3842	3845
40°	3816	3797	3801
45°	3760	3742	3749
50°	3694	3667	3675
55°	3589	3559	3572
60°	3412	3397	3397
65°	3186	3180	3168
70°	2821	2835	2828
75°	2376	2357	2338
80°	1708	1680	1666
85°	892	892	865

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3760 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.4	3.4
10°-20°	398.1	9.7
20°-30°	605.0	14.8
30°-40°	731.3	17.9
40°-50°	759.1	18.6
50°-60°	678.6	16.6
60°-70°	493.4	12.1
70°-80°	242.7	5.9
80°-90°	42.1	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°	1141.6	27.9
0°-40°	1872.9	45.8
0°-60°	3310.6	81.0
0°-90°	4088.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4088.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1462	1462	1462	1462	1462	
5°	1466	1448	1459	1454	1464	139
15°	1420	1403	1413	1410	1415	401
25°	1320	1306	1315	1312	1316	609
35°	1174	1166	1170	1170	1170	734
45°	988	983	983	985	985	762
55°	765	760	759	760	761	682
65°	500	502	499	499	498	493
75°	228	230	227	228	225	243
85°	29	30	29	29	28	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1462.1	1462.1	1462.1	1462.1	1462.1
2.5°	1470.2	1453.0	1463.9	1457.5	1467.5
5°	1465.7	1448.5	1459.3	1453.9	1463.9
7.5°	1457.5	1440.4	1451.2	1445.8	1453.9
10°	1448.5	1430.4	1442.2	1436.8	1444.9
12.5°	1436.8	1419.6	1430.4	1425.9	1433.2
15°	1419.6	1403.4	1413.3	1409.7	1415.1
17.5°	1398.8	1382.6	1392.5	1389.8	1394.3
20°	1376.3	1360.9	1370.8	1368.1	1372.7
22.5°	1351.0	1334.7	1343.8	1341.9	1345.6
25°	1320.3	1305.8	1314.9	1312.1	1315.8
27.5°	1287.8	1274.2	1281.4	1281.4	1283.2
30°	1252.5	1239.9	1247.1	1247.1	1248.0
32.5°	1214.6	1204.7	1209.2	1210.1	1210.1
35°	1174.0	1165.9	1169.5	1170.4	1170.4
37.5°	1131.5	1123.4	1126.1	1127.9	1127.9
40°	1086.4	1079.2	1081.0	1082.8	1081.9
42.5°	1037.6	1032.2	1033.1	1034.9	1034.9
45°	987.9	983.4	983.4	985.2	985.2
47.5°	937.4	932.9	931.1	932.9	932.9
50°	882.3	877.8	876.0	877.8	877.8
52.5°	824.5	820.0	820.0	820.0	820.9
55°	764.9	760.4	758.6	760.4	761.3
57.5°	701.7	699.9	697.2	698.1	695.4
60°	633.9	633.9	631.2	633.0	631.2
62.5°	568.0	569.8	567.1	567.1	565.3
65°	500.3	502.1	499.4	499.4	497.6
67.5°	430.8	433.5	429.9	429.9	428.1
70°	358.5	363.9	360.3	361.2	359.4
72.5°	293.5	296.2	292.6	292.6	290.8
75°	228.5	230.3	226.7	227.6	224.9
77.5°	164.4	167.1	163.5	164.4	163.5
80°	110.2	111.1	108.4	109.3	107.5
82.5°	64.1	65.0	64.1	63.2	62.3
85°	28.9	29.8	28.9	28.9	28.0
87.5°	7.2	7.2	7.2	7.2	7.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)