

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: P973864

Luminaire Tested: FLR2-22-60HE-L935-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973864
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: FLR2-22-60HE-L935-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

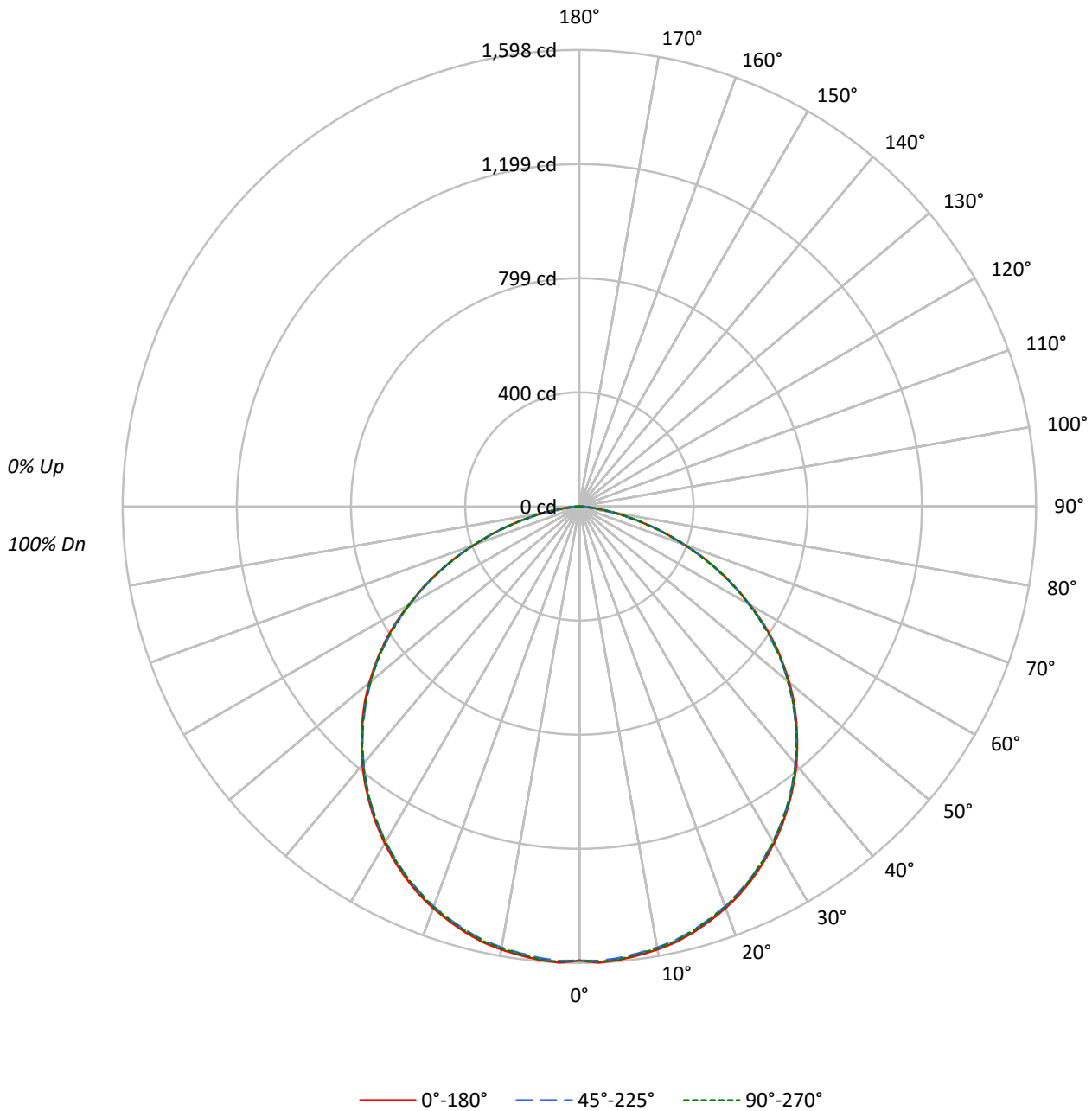
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4445.2 lumens
Efficiency: N/A
Efficacy: 93.8 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): 47.4
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	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°	4278	4278	4278
5°	4304	4286	4299
10°	4303	4285	4292
15°	4300	4281	4286
20°	4285	4268	4274
25°	4262	4244	4247
30°	4231	4213	4216
35°	4193	4177	4180
40°	4149	4128	4132
45°	4088	4069	4077
50°	4016	3987	3995
55°	3902	3869	3883
60°	3709	3694	3694
65°	3463	3457	3445
70°	3067	3082	3075
75°	2583	2562	2542
80°	1857	1826	1810
85°	969	969	939

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4088 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.5	3.4
10°-20°	432.9	9.7
20°-30°	657.8	14.8
30°-40°	795.1	17.9
40°-50°	825.3	18.6
50°-60°	737.8	16.6
60°-70°	536.4	12.1
70°-80°	263.8	5.9
80°-90°	45.8	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°	1241.2	27.9
0°-40°	2036.2	45.8
0°-60°	3599.3	81.0
0°-90°	4445.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4445.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1590	1590	1590	1590	1590	
5°	1594	1575	1587	1581	1592	151
15°	1543	1526	1536	1533	1538	436
25°	1435	1420	1430	1427	1430	662
35°	1276	1268	1272	1272	1272	799
45°	1074	1069	1069	1071	1071	829
55°	832	827	825	827	828	741
65°	544	546	543	543	541	536
75°	248	250	246	247	244	264
85°	31	32	31	31	30	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1589.6	1589.6	1589.6	1589.6	1589.6
2.5°	1598.4	1579.7	1591.5	1584.7	1595.5
5°	1593.5	1574.8	1586.6	1580.7	1591.5
7.5°	1584.7	1566.0	1577.8	1571.9	1580.7
10°	1574.8	1555.2	1568.0	1562.1	1570.9
12.5°	1562.1	1543.4	1555.2	1550.3	1558.1
15°	1543.4	1525.7	1536.5	1532.6	1538.5
17.5°	1520.8	1503.2	1514.0	1511.0	1515.9
20°	1496.3	1479.6	1490.4	1487.5	1492.4
22.5°	1468.8	1451.1	1460.9	1459.0	1462.9
25°	1435.4	1419.7	1429.5	1426.6	1430.5
27.5°	1400.1	1385.3	1393.2	1393.2	1395.2
30°	1361.8	1348.0	1355.9	1355.9	1356.9
32.5°	1320.5	1309.7	1314.7	1315.6	1315.6
35°	1276.4	1267.5	1271.5	1272.4	1272.4
37.5°	1230.2	1221.4	1224.3	1226.3	1226.3
40°	1181.1	1173.3	1175.2	1177.2	1176.2
42.5°	1128.1	1122.2	1123.2	1125.2	1125.2
45°	1074.1	1069.2	1069.2	1071.2	1071.2
47.5°	1019.1	1014.2	1012.3	1014.2	1014.2
50°	959.2	954.3	952.4	954.3	954.3
52.5°	896.4	891.5	891.5	891.5	892.5
55°	831.6	826.7	824.7	826.7	827.7
57.5°	762.9	760.9	758.0	758.9	756.0
60°	689.2	689.2	686.3	688.3	686.3
62.5°	617.6	619.5	616.6	616.6	614.6
65°	543.9	545.9	542.9	542.9	541.0
67.5°	468.3	471.3	467.3	467.3	465.4
70°	389.8	395.7	391.7	392.7	390.8
72.5°	319.1	322.0	318.1	318.1	316.1
75°	248.4	250.4	246.4	247.4	244.5
77.5°	178.7	181.6	177.7	178.7	177.7
80°	119.8	120.8	117.8	118.8	116.8
82.5°	69.7	70.7	69.7	68.7	67.7
85°	31.4	32.4	31.4	31.4	30.4
87.5°	7.9	7.9	7.9	7.9	7.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)