

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: P973737

Luminaire Tested: FLR2-22-50HE-L830-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973737
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: FLR2-22-50HE-L830-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

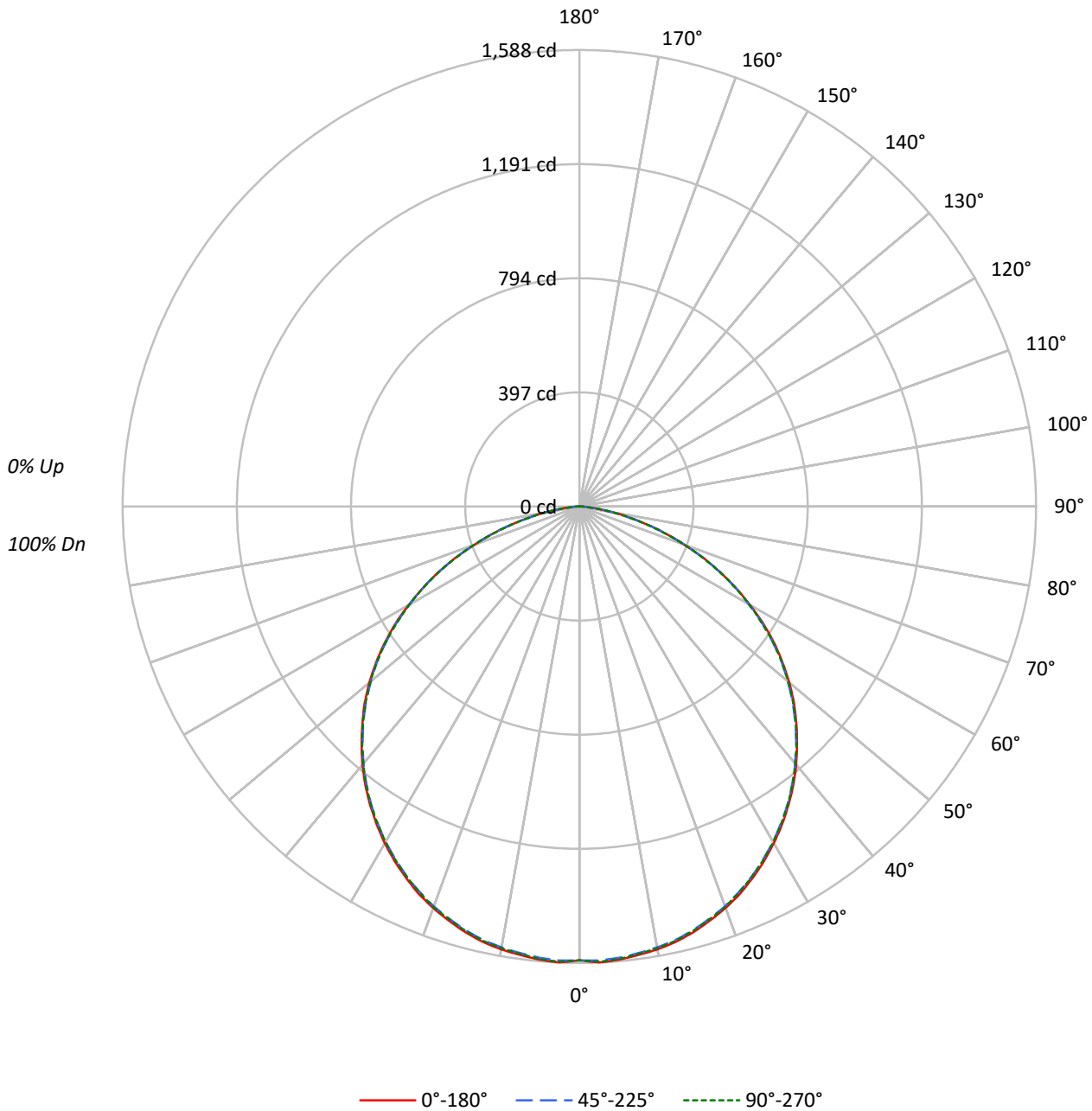
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4416.0 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): 40
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									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	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°	4249	4249	4249
5°	4276	4258	4271
10°	4275	4256	4264
15°	4272	4252	4258
20°	4257	4240	4245
25°	4234	4217	4219
30°	4204	4185	4188
35°	4165	4149	4153
40°	4122	4101	4105
45°	4061	4042	4050
50°	3989	3961	3969
55°	3876	3844	3857
60°	3685	3669	3669
65°	3440	3435	3422
70°	3046	3062	3054
75°	2566	2545	2525
80°	1844	1813	1799
85°	963	963	932

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4061 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.5	3.4
10°-20°	430.0	9.7
20°-30°	653.5	14.8
30°-40°	789.8	17.9
40°-50°	819.8	18.6
50°-60°	732.9	16.6
60°-70°	532.9	12.1
70°-80°	262.0	5.9
80°-90°	45.4	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°	1233.0	27.9
0°-40°	2022.8	45.8
0°-60°	3575.6	81.0
0°-90°	4416.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4416.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1579	1579	1579	1579	1579	
5°	1583	1564	1576	1570	1581	150
15°	1533	1516	1526	1522	1528	433
25°	1426	1410	1420	1417	1421	657
35°	1268	1259	1263	1264	1264	793
45°	1067	1062	1062	1064	1064	823
55°	826	821	819	821	822	736
65°	540	542	539	539	537	533
75°	247	249	245	246	243	262
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°	1579.1	1579.1	1579.1	1579.1	1579.1
2.5°	1587.9	1569.3	1581.0	1574.2	1584.9
5°	1583.0	1564.5	1576.2	1570.3	1581.0
7.5°	1574.2	1555.7	1567.4	1561.5	1570.3
10°	1564.5	1545.0	1557.6	1551.8	1560.6
12.5°	1551.8	1533.3	1545.0	1540.1	1547.9
15°	1533.3	1515.7	1526.4	1522.5	1528.4
17.5°	1510.8	1493.3	1504.0	1501.1	1505.9
20°	1486.4	1469.9	1480.6	1477.7	1482.5
22.5°	1459.1	1441.6	1451.3	1449.4	1453.3
25°	1426.0	1410.4	1420.1	1417.2	1421.1
27.5°	1390.8	1376.2	1384.0	1384.0	1386.0
30°	1352.8	1339.2	1347.0	1347.0	1347.9
32.5°	1311.8	1301.1	1306.0	1307.0	1307.0
35°	1268.0	1259.2	1263.1	1264.1	1264.1
37.5°	1222.1	1213.3	1216.3	1218.2	1218.2
40°	1173.3	1165.5	1167.5	1169.4	1168.5
42.5°	1120.7	1114.8	1115.8	1117.8	1117.8
45°	1067.0	1062.2	1062.2	1064.1	1064.1
47.5°	1012.4	1007.5	1005.6	1007.5	1007.5
50°	952.9	948.0	946.1	948.0	948.0
52.5°	890.5	885.6	885.6	885.6	886.6
55°	826.1	821.2	819.3	821.2	822.2
57.5°	757.8	755.9	753.0	753.9	751.0
60°	684.7	684.7	681.8	683.7	681.8
62.5°	613.5	615.4	612.5	612.5	610.6
65°	540.3	542.3	539.4	539.4	537.4
67.5°	465.2	468.2	464.3	464.3	462.3
70°	387.2	393.1	389.2	390.1	388.2
72.5°	317.0	319.9	316.0	316.0	314.1
75°	246.8	248.7	244.8	245.8	242.9
77.5°	177.5	180.4	176.5	177.5	176.5
80°	119.0	120.0	117.0	118.0	116.1
82.5°	69.2	70.2	69.2	68.3	67.3
85°	31.2	32.2	31.2	31.2	30.2
87.5°	7.8	7.8	7.8	7.8	7.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)