

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: P973965

Luminaire Tested: FLR2-22-50HE-L940-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973965
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-L940-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

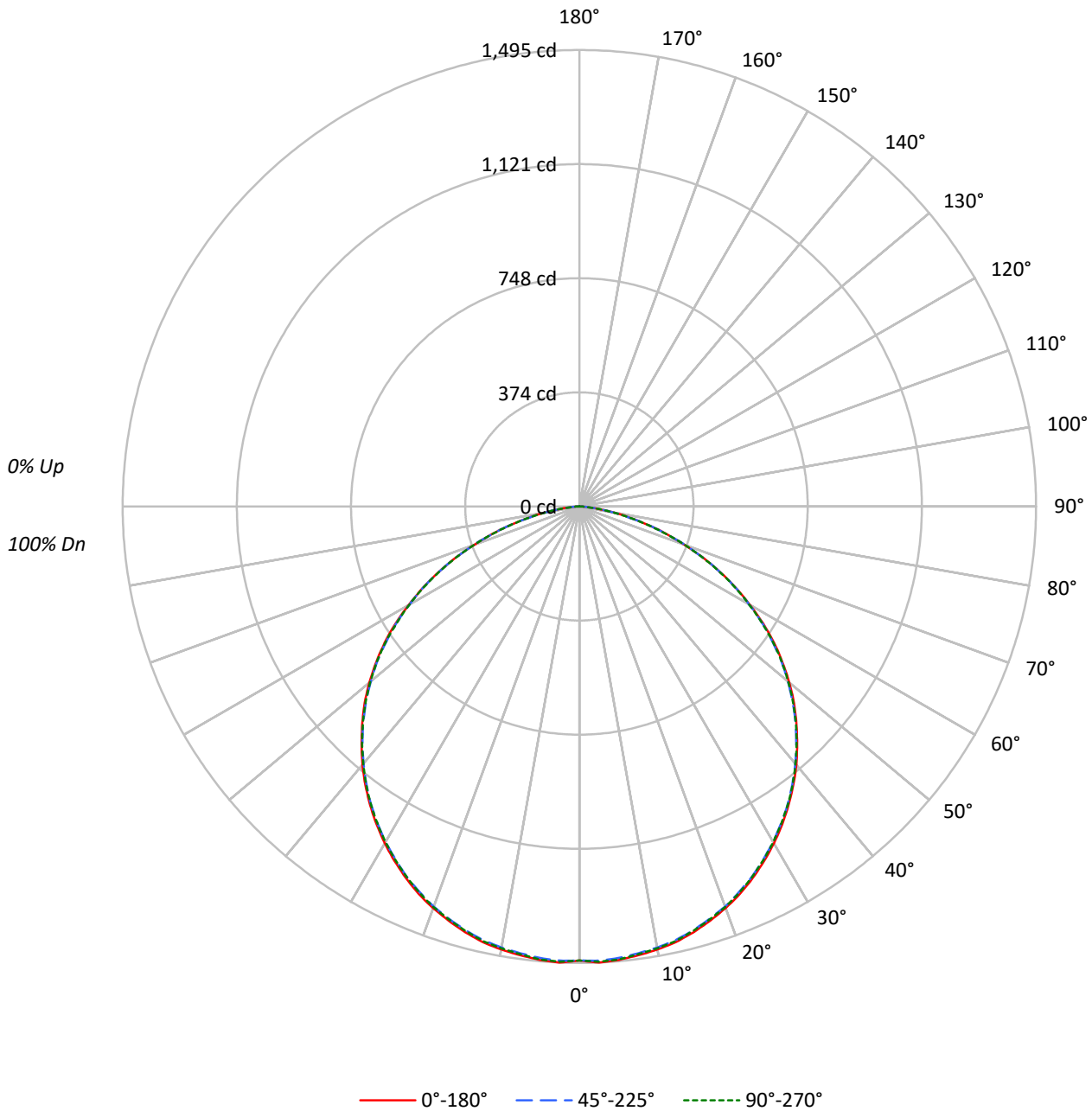
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4158.7 lumens
Efficiency: N/A
Efficacy: 104.0 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				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°	4002	4002	4002
5°	4027	4009	4022
10°	4026	4008	4016
15°	4023	4005	4010
20°	4009	3993	3998
25°	3987	3971	3974
30°	3959	3942	3944
35°	3923	3908	3911
40°	3882	3862	3866
45°	3824	3807	3814
50°	3757	3730	3738
55°	3650	3620	3633
60°	3470	3455	3455
65°	3240	3234	3223
70°	2869	2884	2877
75°	2416	2397	2378
80°	1737	1708	1694
85°	908	908	880

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3824 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.8	3.4
10°-20°	405.0	9.7
20°-30°	615.4	14.8
30°-40°	743.8	17.9
40°-50°	772.0	18.6
50°-60°	690.2	16.6
60°-70°	501.8	12.1
70°-80°	246.8	5.9
80°-90°	42.8	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°	1161.2	27.9
0°-40°	1905.0	45.8
0°-60°	3367.3	81.0
0°-90°	4158.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4158.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1487	1487	1487	1487	1487	
5°	1491	1473	1484	1479	1489	142
15°	1444	1427	1438	1434	1439	407
25°	1343	1328	1337	1335	1338	619
35°	1194	1186	1190	1190	1190	747
45°	1005	1000	1000	1002	1002	775
55°	778	773	772	773	774	693
65°	509	511	508	508	506	502
75°	232	234	230	232	229	247
85°	29	30	29	29	28	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1487.1	1487.1	1487.1	1487.1	1487.1
2.5°	1495.4	1477.9	1488.9	1482.5	1492.6
5°	1490.8	1473.3	1484.3	1478.8	1488.9
7.5°	1482.5	1465.0	1476.1	1470.6	1478.8
10°	1473.3	1454.9	1466.9	1461.4	1469.6
12.5°	1461.4	1443.9	1454.9	1450.4	1457.7
15°	1443.9	1427.4	1437.5	1433.8	1439.3
17.5°	1422.8	1406.3	1416.4	1413.6	1418.2
20°	1399.8	1384.2	1394.3	1391.6	1396.2
22.5°	1374.1	1357.6	1366.8	1364.9	1368.6
25°	1342.9	1328.2	1337.4	1334.6	1338.3
27.5°	1309.8	1296.0	1303.4	1303.4	1305.2
30°	1274.0	1261.1	1268.5	1268.5	1269.4
32.5°	1235.4	1225.3	1229.9	1230.8	1230.8
35°	1194.1	1185.8	1189.5	1190.4	1190.4
37.5°	1150.9	1142.6	1145.4	1147.2	1147.2
40°	1105.0	1097.6	1099.5	1101.3	1100.4
42.5°	1055.4	1049.9	1050.8	1052.6	1052.6
45°	1004.9	1000.3	1000.3	1002.1	1002.1
47.5°	953.4	948.8	947.0	948.8	948.8
50°	897.4	892.8	891.0	892.8	892.8
52.5°	838.6	834.0	834.0	834.0	834.9
55°	778.0	773.4	771.6	773.4	774.3
57.5°	713.7	711.9	709.1	710.0	707.3
60°	644.8	644.8	642.0	643.9	642.0
62.5°	577.8	579.6	576.8	576.8	575.0
65°	508.9	510.7	507.9	507.9	506.1
67.5°	438.1	440.9	437.2	437.2	435.4
70°	364.7	370.2	366.5	367.4	365.6
72.5°	298.5	301.3	297.6	297.6	295.8
75°	232.4	234.2	230.5	231.5	228.7
77.5°	167.2	169.9	166.3	167.2	166.3
80°	112.1	113.0	110.2	111.1	109.3
82.5°	65.2	66.1	65.2	64.3	63.4
85°	29.4	30.3	29.4	29.4	28.5
87.5°	7.3	7.3	7.3	7.3	7.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)