

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: P973893

Luminaire Tested: FLR2-22-50HE-L840-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973893
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-L840-CP080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

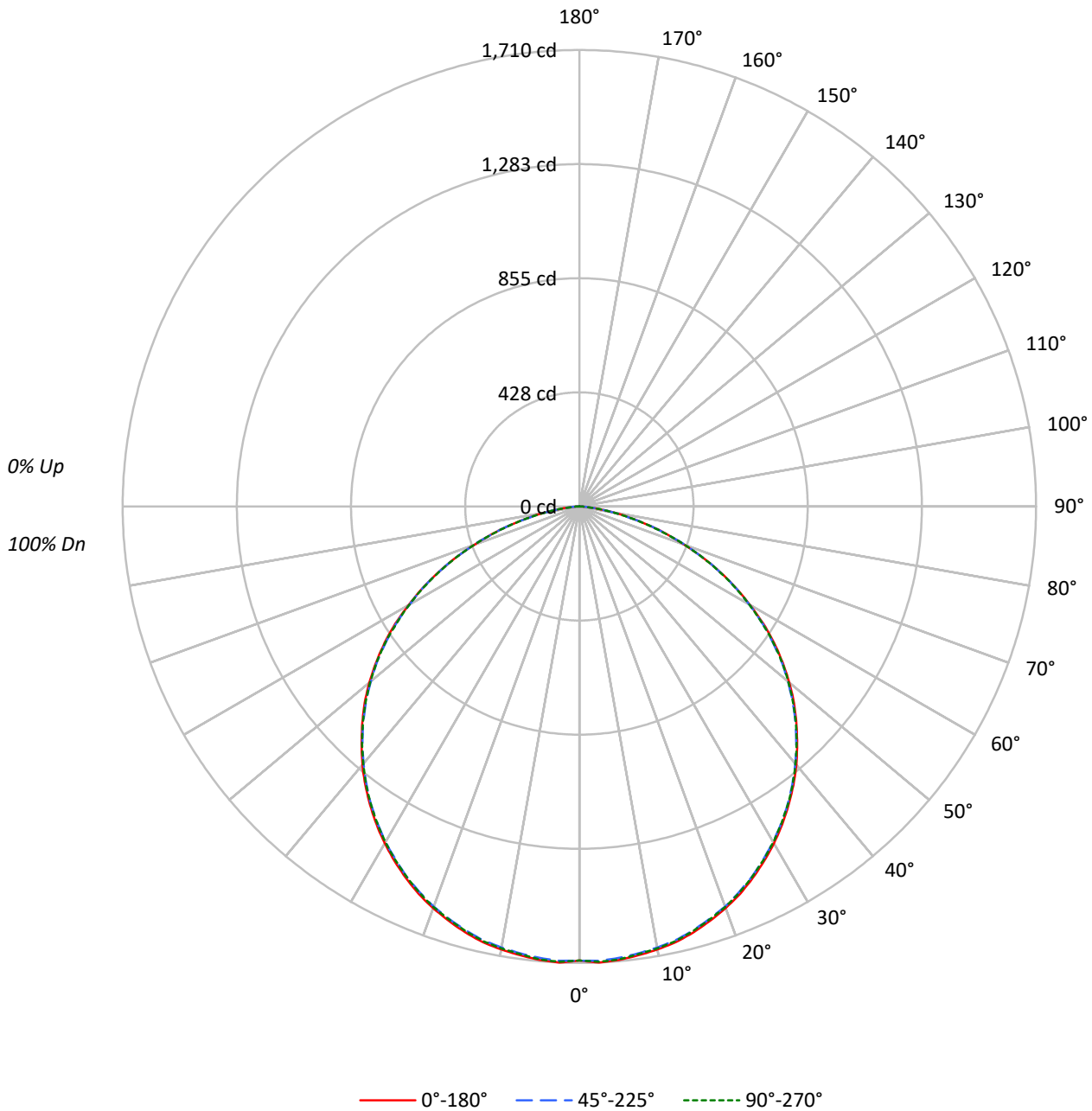
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4757.1 lumens
Efficiency: N/A
Efficacy: 118.9 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									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	100	100	100	100														
	1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85	85	85	85	85	85														
	2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71	71	71	71	71	71														
	3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60	60	60	60	60	60														
	4	83	71	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51	51	51	51	51	51														
	5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44	44	44	44	44	44														
	6	71	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39	39	39	39	39	39														
	7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34	34	34	34	34	34														
	8	61	47	39	33	59	47	39	33	45	38	33	44	37	32	43	37	32	30	30	30	30	30	30														
	9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27	27	27	27	27	27														
	10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25	25	25	25	25	25														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4578	4578	4578
5°	4606	4586	4601
10°	4605	4585	4594
15°	4601	4581	4587
20°	4586	4568	4574
25°	4561	4542	4545
30°	4528	4509	4512
35°	4487	4470	4473
40°	4440	4418	4422
45°	4375	4354	4362
50°	4297	4267	4276
55°	4175	4141	4155
60°	3970	3953	3953
65°	3706	3699	3686
70°	3282	3298	3290
75°	2764	2742	2720
80°	1987	1954	1937
85°	1037	1037	1007

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4375 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.1	3.4
10°-20°	463.2	9.7
20°-30°	703.9	14.8
30°-40°	850.8	17.9
40°-50°	883.2	18.6
50°-60°	789.6	16.6
60°-70°	574.0	12.1
70°-80°	282.3	5.9
80°-90°	48.9	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°	1328.2	27.9
0°-40°	2179.1	45.8
0°-60°	3851.8	81.0
0°-90°	4757.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4757.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1701	1701	1701	1701	1701	
5°	1705	1685	1698	1692	1703	162
15°	1652	1633	1644	1640	1646	466
25°	1536	1519	1530	1527	1531	708
35°	1366	1356	1361	1362	1362	855
45°	1150	1144	1144	1146	1146	887
55°	890	885	883	885	886	793
65°	582	584	581	581	579	574
75°	266	268	264	265	262	282
85°	34	35	34	34	33	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1701.1	1701.1	1701.1	1701.1	1701.1
2.5°	1710.5	1690.6	1703.2	1695.8	1707.4
5°	1705.3	1685.3	1697.9	1691.6	1703.2
7.5°	1695.8	1675.9	1688.5	1682.2	1691.6
10°	1685.3	1664.3	1678.0	1671.7	1681.1
12.5°	1671.7	1651.7	1664.3	1659.0	1667.5
15°	1651.7	1632.8	1644.3	1640.1	1646.4
17.5°	1627.5	1608.6	1620.2	1617.0	1622.3
20°	1601.3	1583.4	1595.0	1591.8	1597.1
22.5°	1571.8	1552.9	1563.4	1561.3	1565.5
25°	1536.1	1519.3	1529.8	1526.7	1530.9
27.5°	1498.3	1482.5	1490.9	1490.9	1493.0
30°	1457.3	1442.6	1451.0	1451.0	1452.1
32.5°	1413.2	1401.6	1406.9	1407.9	1407.9
35°	1365.9	1356.4	1360.6	1361.7	1361.7
37.5°	1316.5	1307.1	1310.2	1312.3	1312.3
40°	1264.0	1255.6	1257.7	1259.8	1258.7
42.5°	1207.2	1200.9	1202.0	1204.1	1204.1
45°	1149.5	1144.2	1144.2	1146.3	1146.3
47.5°	1090.6	1085.4	1083.3	1085.4	1085.4
50°	1026.5	1021.3	1019.2	1021.3	1021.3
52.5°	959.3	954.0	954.0	954.0	955.1
55°	889.9	884.7	882.6	884.7	885.7
57.5°	816.4	814.3	811.1	812.2	809.0
60°	737.6	737.6	734.4	736.5	734.4
62.5°	660.9	663.0	659.8	659.8	657.7
65°	582.1	584.2	581.0	581.0	578.9
67.5°	501.2	504.3	500.1	500.1	498.0
70°	417.1	423.4	419.2	420.3	418.2
72.5°	341.5	344.6	340.4	340.4	338.3
75°	265.8	267.9	263.7	264.8	261.6
77.5°	191.2	194.4	190.2	191.2	190.2
80°	128.2	129.2	126.1	127.1	125.0
82.5°	74.6	75.6	74.6	73.5	72.5
85°	33.6	34.7	33.6	33.6	32.6
87.5°	8.4	8.4	8.4	8.4	8.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)