

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: P973910

Luminaire Tested: FLR2-22-45HE-L840-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973910
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: FLR2-22-45HE-L840-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

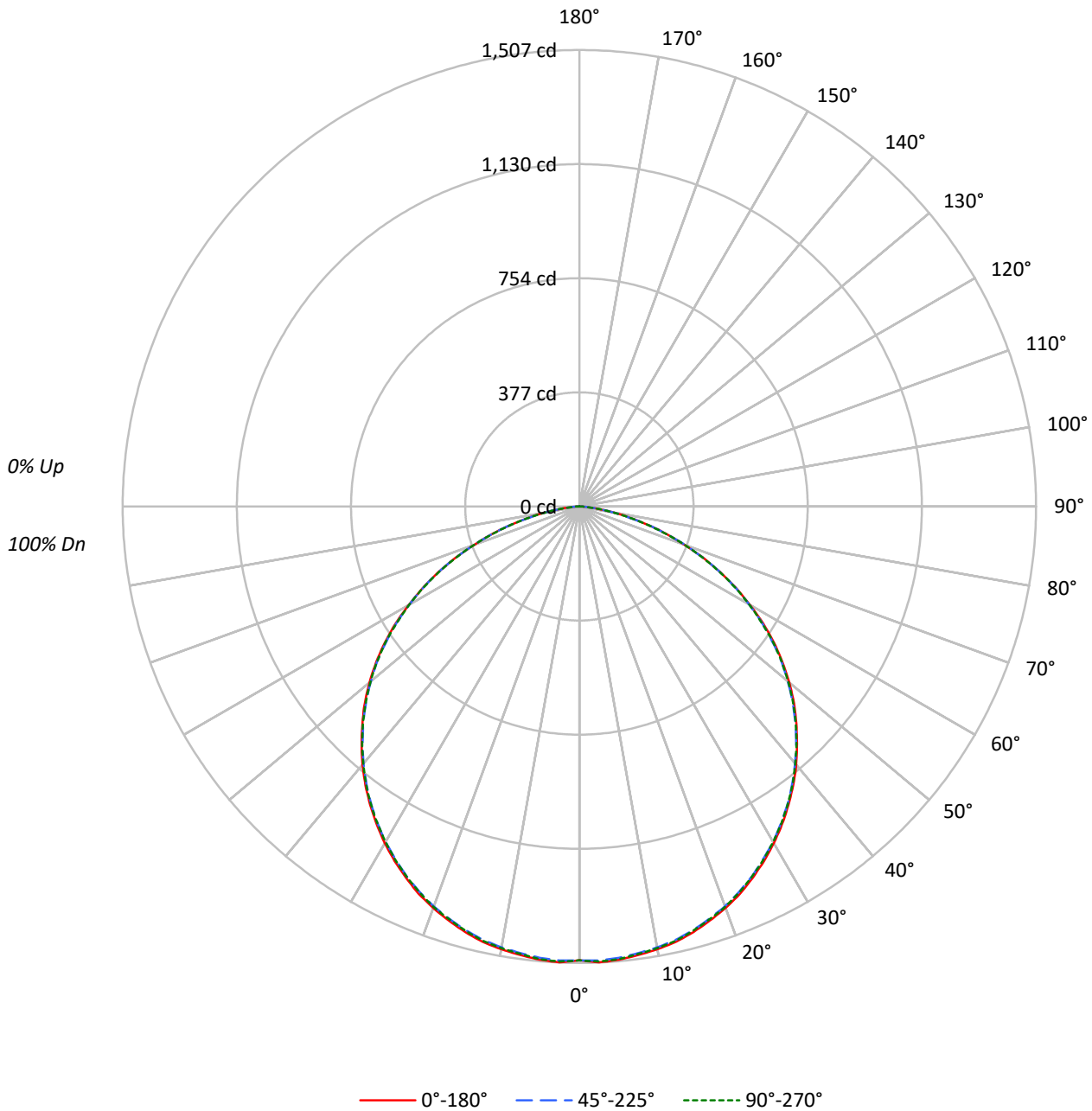
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4190.3 lumens
Efficiency: N/A
Efficacy: 115.8 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): 36.2
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°	4032	4032	4032
5°	4058	4040	4052
10°	4056	4039	4046
15°	4053	4035	4040
20°	4039	4023	4029
25°	4018	4001	4004
30°	3989	3971	3974
35°	3953	3937	3940
40°	3911	3892	3895
45°	3853	3836	3843
50°	3785	3758	3766
55°	3678	3647	3660
60°	3497	3482	3482
65°	3265	3259	3247
70°	2891	2906	2899
75°	2435	2415	2397
80°	1750	1722	1706
85°	914	914	886

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3853 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.9	3.4
10°-20°	408.0	9.7
20°-30°	620.1	14.8
30°-40°	749.5	17.9
40°-50°	777.9	18.6
50°-60°	695.5	16.6
60°-70°	505.7	12.1
70°-80°	248.7	5.9
80°-90°	43.1	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°	1170.0	27.9
0°-40°	1919.5	45.8
0°-60°	3392.9	81.0
0°-90°	4190.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4190.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1498	1498	1498	1498	1498	
5°	1502	1484	1496	1490	1500	143
15°	1455	1438	1448	1445	1450	411
25°	1353	1338	1348	1345	1348	624
35°	1203	1195	1198	1200	1200	753
45°	1012	1008	1008	1010	1010	781
55°	784	779	777	779	780	699
65°	513	515	512	512	510	506
75°	234	236	232	233	230	249
85°	30	30	30	30	29	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1498.4	1498.4	1498.4	1498.4	1498.4
2.5°	1506.7	1489.1	1500.2	1493.8	1503.9
5°	1502.1	1484.5	1495.6	1490.1	1500.2
7.5°	1493.8	1476.2	1487.3	1481.7	1490.1
10°	1484.5	1466.0	1478.0	1472.5	1480.8
12.5°	1472.5	1454.9	1466.0	1461.4	1468.8
15°	1454.9	1438.2	1448.4	1444.7	1450.3
17.5°	1433.6	1417.0	1427.1	1424.4	1429.0
20°	1410.5	1394.7	1404.9	1402.1	1406.8
22.5°	1384.6	1367.9	1377.2	1375.3	1379.0
25°	1353.1	1338.3	1347.5	1344.8	1348.5
27.5°	1319.8	1305.9	1313.3	1313.3	1315.1
30°	1283.7	1270.7	1278.1	1278.1	1279.0
32.5°	1244.8	1234.6	1239.3	1240.2	1240.2
35°	1203.2	1194.8	1198.5	1199.5	1199.5
37.5°	1159.7	1151.3	1154.1	1156.0	1156.0
40°	1113.4	1106.0	1107.8	1109.7	1108.8
42.5°	1063.4	1057.9	1058.8	1060.6	1060.6
45°	1012.5	1007.9	1007.9	1009.7	1009.7
47.5°	960.7	956.0	954.2	956.0	956.0
50°	904.2	899.6	897.7	899.6	899.6
52.5°	845.0	840.4	840.4	840.4	841.3
55°	783.9	779.3	777.4	779.3	780.2
57.5°	719.1	717.3	714.5	715.4	712.6
60°	649.7	649.7	646.9	648.8	646.9
62.5°	582.1	584.0	581.2	581.2	579.4
65°	512.7	514.6	511.8	511.8	510.0
67.5°	441.5	444.2	440.5	440.5	438.7
70°	367.4	373.0	369.3	370.2	368.4
72.5°	300.8	303.6	299.9	299.9	298.0
75°	234.2	236.0	232.3	233.2	230.5
77.5°	168.4	171.2	167.5	168.4	167.5
80°	112.9	113.8	111.1	112.0	110.1
82.5°	65.7	66.6	65.7	64.8	63.9
85°	29.6	30.5	29.6	29.6	28.7
87.5°	7.4	7.4	7.4	7.4	7.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)