

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: P973952

Luminaire Tested: FLR2-22-45HE-L940-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973952
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-L940-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

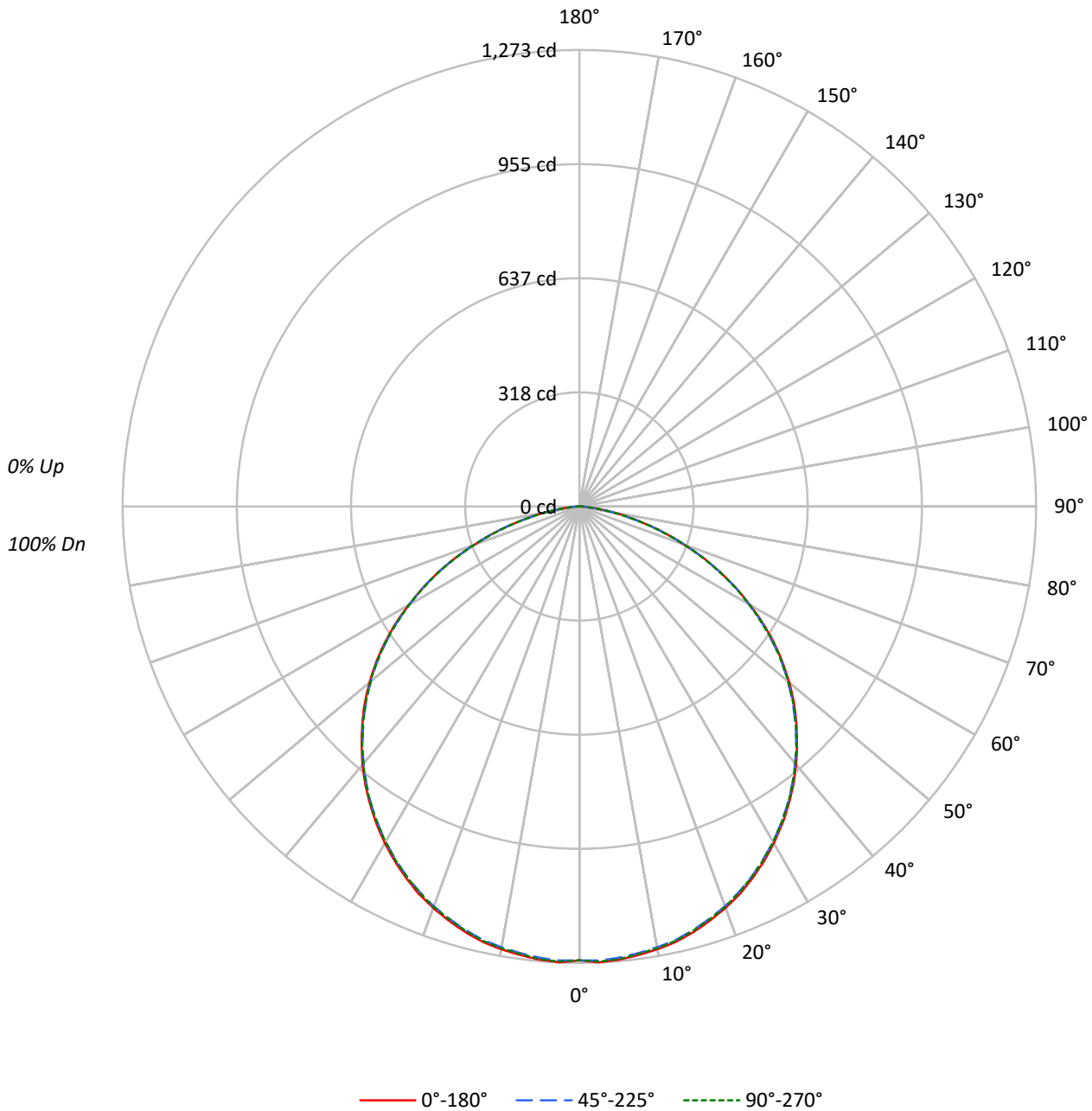
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3539.4 lumens
Efficiency: N/A
Efficacy: 97.8 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				20	
RC	80				70				50				30				10	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	
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°	3406	3406	3406
5°	3427	3412	3423
10°	3426	3411	3418
15°	3424	3408	3413
20°	3412	3398	3403
25°	3393	3380	3382
30°	3369	3355	3357
35°	3339	3326	3328
40°	3303	3287	3290
45°	3255	3240	3246
50°	3198	3175	3181
55°	3106	3081	3092
60°	2954	2941	2941
65°	2758	2753	2742
70°	2442	2454	2448
75°	2057	2040	2024
80°	1478	1454	1441
85°	772	772	747

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3255 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.8	3.4
10°-20°	344.6	9.7
20°-30°	523.7	14.8
30°-40°	633.0	17.9
40°-50°	657.1	18.6
50°-60°	587.4	16.6
60°-70°	427.1	12.1
70°-80°	210.0	5.9
80°-90°	36.4	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°	988.2	27.9
0°-40°	1621.3	45.8
0°-60°	2865.8	81.0
0°-90°	3539.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3539.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1266	1266	1266	1266	1266	
5°	1269	1254	1263	1259	1267	121
15°	1229	1215	1223	1220	1225	347
25°	1143	1130	1138	1136	1139	527
35°	1016	1009	1012	1013	1013	636
45°	855	851	851	853	853	660
55°	662	658	657	658	659	590
65°	433	435	432	432	431	427
75°	198	199	196	197	195	210
85°	25	26	25	25	24	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1265.6	1265.6	1265.6	1265.6	1265.6
2.5°	1272.7	1257.8	1267.2	1261.7	1270.3
5°	1268.8	1253.9	1263.3	1258.6	1267.2
7.5°	1261.7	1246.9	1256.3	1251.6	1258.6
10°	1253.9	1238.3	1248.4	1243.7	1250.8
12.5°	1243.7	1228.9	1238.3	1234.4	1240.6
15°	1228.9	1214.8	1223.4	1220.3	1225.0
17.5°	1210.9	1196.8	1205.4	1203.1	1207.0
20°	1191.4	1178.1	1186.7	1184.3	1188.2
22.5°	1169.5	1155.4	1163.2	1161.7	1164.8
25°	1142.9	1130.4	1138.2	1135.9	1139.0
27.5°	1114.8	1103.0	1109.3	1109.3	1110.9
30°	1084.3	1073.3	1079.6	1079.6	1080.4
32.5°	1051.4	1042.8	1046.7	1047.5	1047.5
35°	1016.3	1009.2	1012.4	1013.1	1013.1
37.5°	979.5	972.5	974.8	976.4	976.4
40°	940.4	934.2	935.7	937.3	936.5
42.5°	898.2	893.5	894.3	895.9	895.9
45°	855.2	851.3	851.3	852.9	852.9
47.5°	811.4	807.5	806.0	807.5	807.5
50°	763.8	759.8	758.3	759.8	759.8
52.5°	713.7	709.8	709.8	709.8	710.6
55°	662.1	658.2	656.7	658.2	659.0
57.5°	607.4	605.8	603.5	604.3	601.9
60°	548.8	548.8	546.4	548.0	546.4
62.5°	491.7	493.3	490.9	490.9	489.4
65°	433.1	434.6	432.3	432.3	430.7
67.5°	372.9	375.2	372.1	372.1	370.5
70°	310.4	315.0	311.9	312.7	311.1
72.5°	254.1	256.4	253.3	253.3	251.7
75°	197.8	199.3	196.2	197.0	194.7
77.5°	142.3	144.6	141.5	142.3	141.5
80°	95.4	96.2	93.8	94.6	93.0
82.5°	55.5	56.3	55.5	54.7	53.9
85°	25.0	25.8	25.0	25.0	24.2
87.5°	6.3	6.3	6.3	6.3	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)