

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: P973940

Luminaire Tested: FLR2-22-45HE-L940-CP125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973940
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-CP125
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

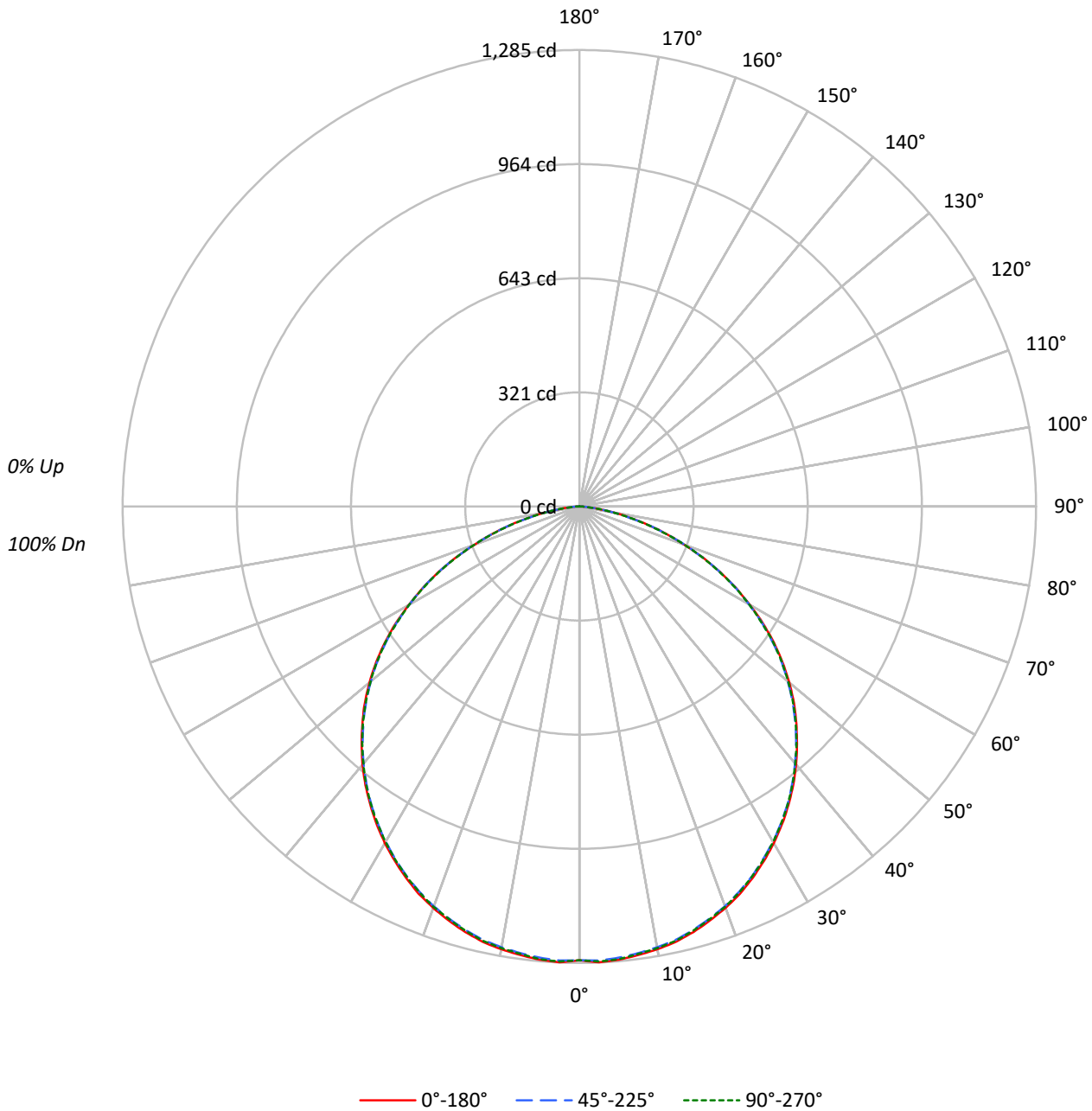
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3572.6 lumens
Efficiency: N/A
Efficacy: 98.7 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									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															
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°	3438	3438	3438
5°	3460	3445	3455
10°	3459	3443	3450
15°	3456	3440	3445
20°	3444	3430	3435
25°	3425	3411	3414
30°	3401	3386	3388
35°	3370	3357	3360
40°	3335	3318	3321
45°	3285	3270	3276
50°	3227	3204	3211
55°	3136	3110	3121
60°	2981	2969	2969
65°	2784	2779	2769
70°	2465	2477	2471
75°	2075	2060	2043
80°	1492	1468	1455
85°	781	781	756

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3285 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.0	3.4
10°-20°	347.9	9.7
20°-30°	528.7	14.8
30°-40°	639.0	17.9
40°-50°	663.2	18.6
50°-60°	593.0	16.6
60°-70°	431.1	12.1
70°-80°	212.0	5.9
80°-90°	36.8	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°	997.5	27.9
0°-40°	1636.5	45.8
0°-60°	2892.7	81.0
0°-90°	3572.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3572.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1278	1278	1278	1278	1278	
5°	1281	1266	1275	1270	1279	122
15°	1240	1226	1235	1232	1236	350
25°	1154	1141	1149	1146	1150	532
35°	1026	1019	1022	1023	1023	642
45°	863	859	859	861	861	666
55°	668	664	663	664	665	596
65°	437	439	436	436	435	431
75°	200	201	198	199	196	212
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°	1277.5	1277.5	1277.5	1277.5	1277.5
2.5°	1284.6	1269.6	1279.1	1273.6	1282.3
5°	1280.7	1265.7	1275.2	1270.4	1279.1
7.5°	1273.6	1258.6	1268.1	1263.3	1270.4
10°	1265.7	1249.9	1260.2	1255.4	1262.5
12.5°	1255.4	1240.4	1249.9	1246.0	1252.3
15°	1240.4	1226.2	1234.9	1231.8	1236.5
17.5°	1222.3	1208.1	1216.8	1214.4	1218.3
20°	1202.6	1189.1	1197.8	1195.5	1199.4
22.5°	1180.5	1166.3	1174.2	1172.6	1175.7
25°	1153.6	1141.0	1148.9	1146.5	1149.7
27.5°	1125.2	1113.4	1119.7	1119.7	1121.3
30°	1094.5	1083.4	1089.7	1089.7	1090.5
32.5°	1061.3	1052.6	1056.6	1057.4	1057.4
35°	1025.8	1018.7	1021.9	1022.7	1022.7
37.5°	988.7	981.6	984.0	985.6	985.6
40°	949.3	943.0	944.5	946.1	945.3
42.5°	906.7	901.9	902.7	904.3	904.3
45°	863.3	859.3	859.3	860.9	860.9
47.5°	819.1	815.1	813.5	815.1	815.1
50°	770.9	767.0	765.4	767.0	767.0
52.5°	720.4	716.5	716.5	716.5	717.3
55°	668.4	664.4	662.8	664.4	665.2
57.5°	613.1	611.5	609.2	610.0	607.6
60°	553.9	553.9	551.6	553.1	551.6
62.5°	496.3	497.9	495.5	495.5	494.0
65°	437.2	438.7	436.4	436.4	434.8
67.5°	376.4	378.8	375.6	375.6	374.0
70°	313.3	318.0	314.8	315.6	314.1
72.5°	256.5	258.8	255.7	255.7	254.1
75°	199.6	201.2	198.1	198.8	196.5
77.5°	143.6	146.0	142.8	143.6	142.8
80°	96.3	97.1	94.7	95.5	93.9
82.5°	56.0	56.8	56.0	55.2	54.4
85°	25.3	26.0	25.3	25.3	24.5
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)