

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: P973921

Luminaire Tested: FLR2-22-35HE-L840-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973921
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: FLR2-22-35HE-L840-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

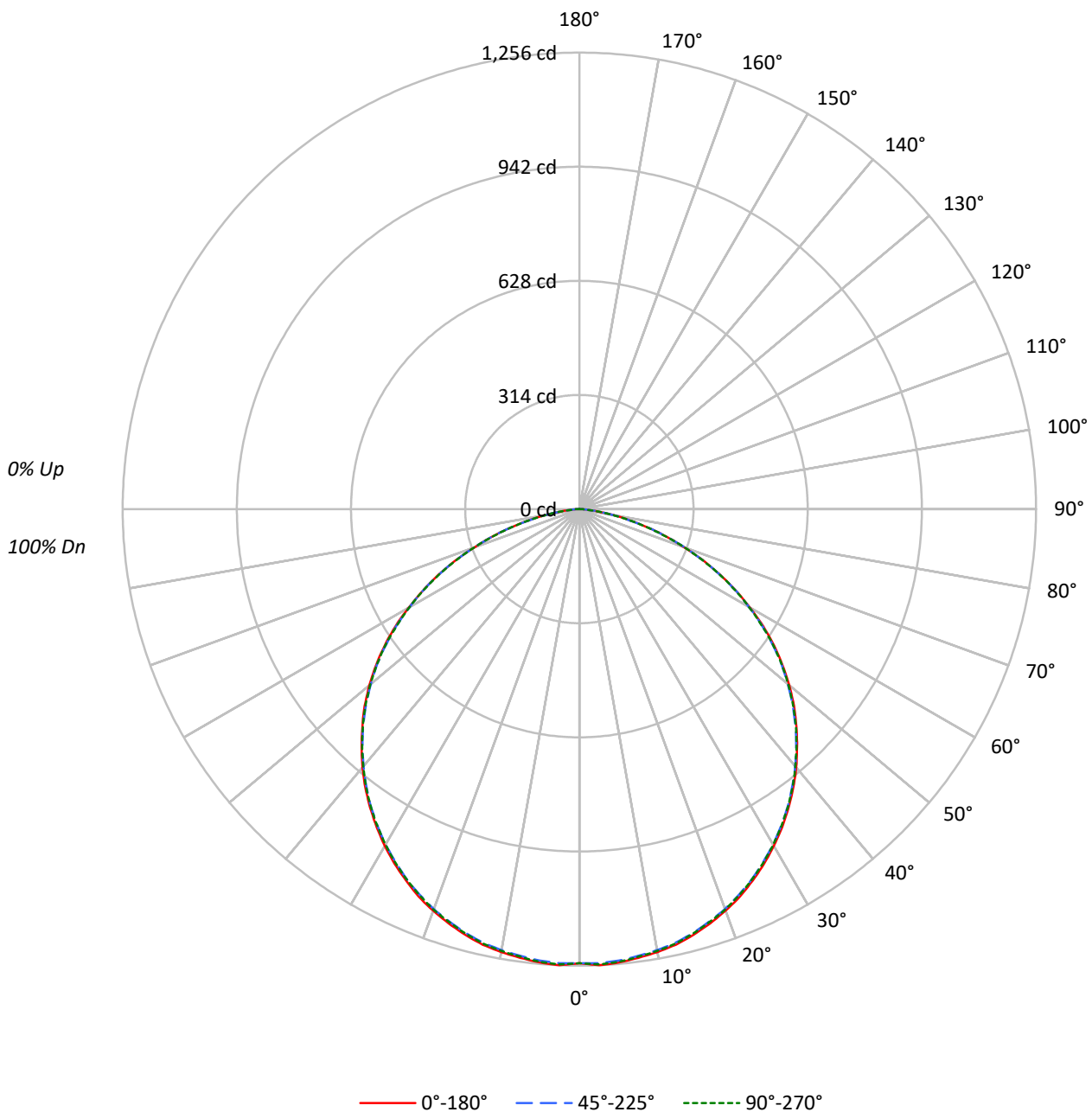
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3493.1 lumens
Efficiency: N/A
Efficacy: 128.4 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): 27.2
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°	3361	3361	3361
5°	3383	3368	3378
10°	3381	3367	3373
15°	3379	3364	3368
20°	3367	3354	3358
25°	3349	3335	3338
30°	3325	3311	3313
35°	3295	3282	3285
40°	3260	3244	3247
45°	3212	3197	3203
50°	3156	3133	3139
55°	3066	3041	3051
60°	2915	2902	2902
65°	2721	2716	2707
70°	2410	2422	2416
75°	2030	2013	1997
80°	1458	1435	1423
85°	763	763	738

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3212 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.3	3.4
10°-20°	340.1	9.7
20°-30°	516.9	14.8
30°-40°	624.8	17.9
40°-50°	648.5	18.6
50°-60°	579.8	16.6
60°-70°	421.5	12.1
70°-80°	207.3	5.9
80°-90°	36.0	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°	975.3	27.9
0°-40°	1600.1	45.8
0°-60°	2828.3	81.0
0°-90°	3493.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3493.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1249	1249	1249	1249	1249	
5°	1252	1238	1247	1242	1251	119
15°	1213	1199	1207	1204	1209	342
25°	1128	1116	1123	1121	1124	520
35°	1003	996	999	1000	1000	627
45°	844	840	840	842	842	651
55°	654	650	648	650	650	582
65°	427	429	427	427	425	422
75°	195	197	194	194	192	207
85°	25	26	25	25	24	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1249.1	1249.1	1249.1	1249.1	1249.1
2.5°	1256.0	1241.4	1250.6	1245.2	1253.7
5°	1252.2	1237.5	1246.8	1242.1	1250.6
7.5°	1245.2	1230.6	1239.8	1235.2	1242.1
10°	1237.5	1222.1	1232.1	1227.5	1234.4
12.5°	1227.5	1212.8	1222.1	1218.2	1224.4
15°	1212.8	1198.9	1207.4	1204.3	1209.0
17.5°	1195.1	1181.2	1189.7	1187.4	1191.2
20°	1175.8	1162.7	1171.1	1168.8	1172.7
22.5°	1154.2	1140.3	1148.0	1146.5	1149.5
25°	1127.9	1115.6	1123.3	1121.0	1124.1
27.5°	1100.2	1088.6	1094.8	1094.8	1096.3
30°	1070.1	1059.3	1065.5	1065.5	1066.2
32.5°	1037.7	1029.2	1033.0	1033.8	1033.8
35°	1003.0	996.0	999.1	999.9	999.9
37.5°	966.7	959.8	962.1	963.6	963.6
40°	928.1	922.0	923.5	925.0	924.3
42.5°	886.5	881.8	882.6	884.1	884.1
45°	844.0	840.2	840.2	841.7	841.7
47.5°	800.8	797.0	795.4	797.0	797.0
50°	753.8	749.9	748.4	749.9	749.9
52.5°	704.4	700.5	700.5	700.5	701.3
55°	653.5	649.6	648.1	649.6	650.4
57.5°	599.5	597.9	595.6	596.4	594.1
60°	541.6	541.6	539.3	540.8	539.3
62.5°	485.3	486.8	484.5	484.5	483.0
65°	427.4	429.0	426.6	426.6	425.1
67.5°	368.0	370.3	367.2	367.2	365.7
70°	306.3	310.9	307.8	308.6	307.1
72.5°	250.7	253.1	250.0	250.0	248.4
75°	195.2	196.7	193.6	194.4	192.1
77.5°	140.4	142.7	139.6	140.4	139.6
80°	94.1	94.9	92.6	93.4	91.8
82.5°	54.8	55.5	54.8	54.0	53.2
85°	24.7	25.5	24.7	24.7	23.9
87.5°	6.2	6.2	6.2	6.2	6.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)