

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: P973958

Luminaire Tested: FLR2-22-45HE-L940-CP375

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973958
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-CP375
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

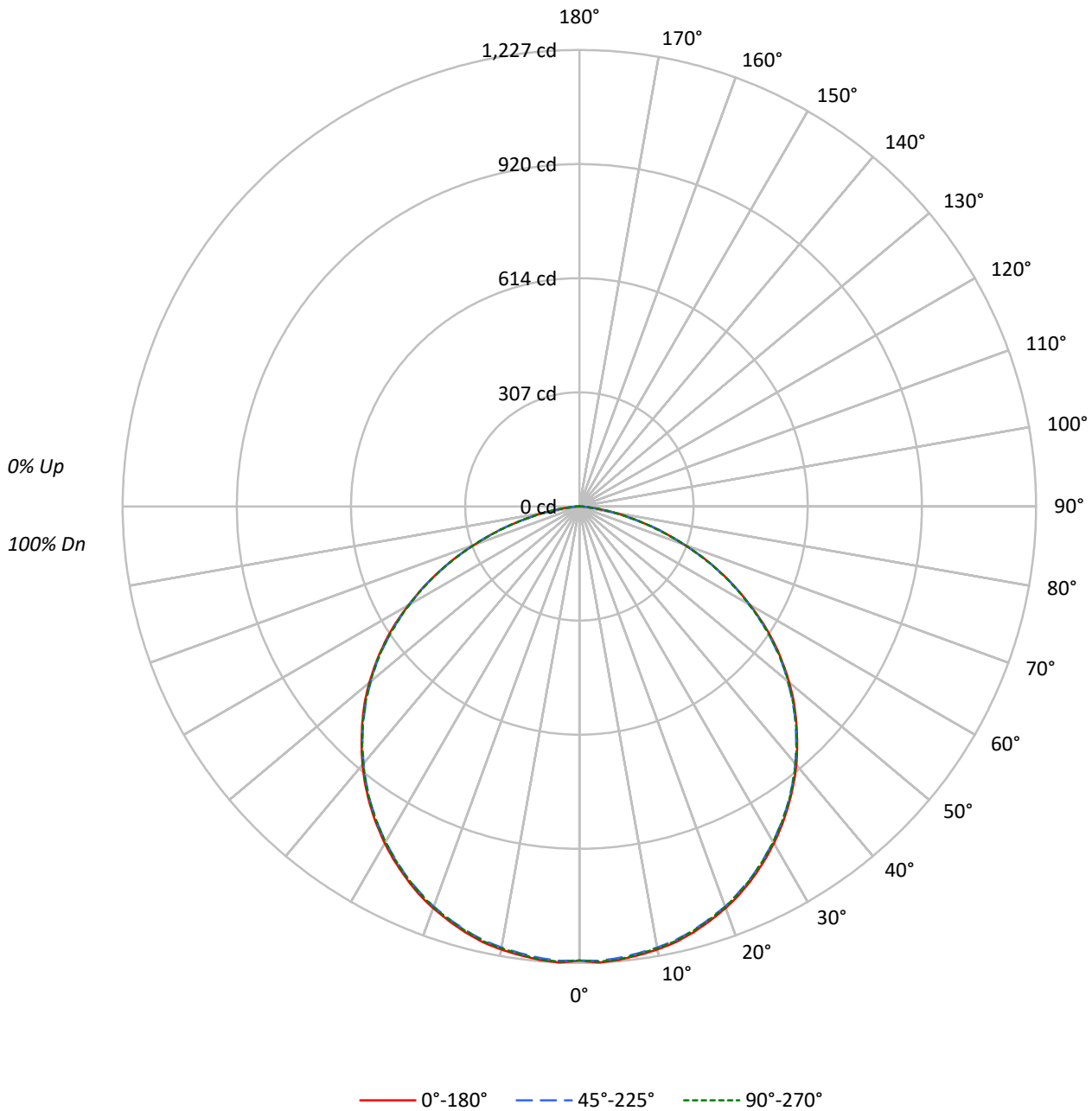
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3413.2 lumens
Efficiency: N/A
Efficacy: 94.3 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°	3284	3284	3284
5°	3305	3291	3301
10°	3304	3290	3296
15°	3302	3287	3291
20°	3290	3277	3281
25°	3272	3259	3261
30°	3249	3235	3237
35°	3219	3207	3210
40°	3186	3170	3172
45°	3138	3124	3130
50°	3083	3061	3068
55°	2996	2971	2981
60°	2848	2836	2836
65°	2659	2655	2645
70°	2355	2367	2360
75°	1983	1967	1952
80°	1426	1402	1390
85°	744	744	722

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3138 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.6	3.4
10°-20°	332.4	9.7
20°-30°	505.1	14.8
30°-40°	610.5	17.9
40°-50°	633.6	18.6
50°-60°	566.5	16.6
60°-70°	411.9	12.1
70°-80°	202.5	5.9
80°-90°	35.1	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°	953.0	27.9
0°-40°	1563.5	45.8
0°-60°	2763.6	81.0
0°-90°	3413.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3413.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1220	1220	1220	1220	1220	
5°	1224	1209	1218	1214	1222	116
15°	1185	1172	1180	1177	1181	334
25°	1102	1090	1098	1095	1098	508
35°	980	973	976	977	977	613
45°	825	821	821	822	822	636
55°	638	635	633	635	636	569
65°	418	419	417	417	415	412
75°	191	192	189	190	188	202
85°	24	25	24	24	23	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1220.5	1220.5	1220.5	1220.5	1220.5
2.5°	1227.3	1213.0	1222.0	1216.7	1225.0
5°	1223.5	1209.2	1218.2	1213.7	1222.0
7.5°	1216.7	1202.4	1211.5	1206.9	1213.7
10°	1209.2	1194.1	1203.9	1199.4	1206.2
12.5°	1199.4	1185.1	1194.1	1190.3	1196.4
15°	1185.1	1171.5	1179.8	1176.8	1181.3
17.5°	1167.7	1154.2	1162.5	1160.2	1164.0
20°	1148.9	1136.1	1144.4	1142.1	1145.9
22.5°	1127.8	1114.2	1121.7	1120.2	1123.3
25°	1102.1	1090.1	1097.6	1095.4	1098.4
27.5°	1075.0	1063.7	1069.7	1069.7	1071.2
30°	1045.6	1035.1	1041.1	1041.1	1041.8
32.5°	1013.9	1005.7	1009.4	1010.2	1010.2
35°	980.0	973.2	976.3	977.0	977.0
37.5°	944.6	937.8	940.1	941.6	941.6
40°	906.9	900.9	902.4	903.9	903.1
42.5°	866.2	861.7	862.4	863.9	863.9
45°	824.7	821.0	821.0	822.5	822.5
47.5°	782.5	778.7	777.2	778.7	778.7
50°	736.5	732.8	731.2	732.8	732.8
52.5°	688.3	684.5	684.5	684.5	685.3
55°	638.5	634.8	633.2	634.8	635.5
57.5°	585.8	584.2	582.0	582.7	580.5
60°	529.2	529.2	526.9	528.5	526.9
62.5°	474.2	475.7	473.4	473.4	471.9
65°	417.6	419.1	416.9	416.9	415.4
67.5°	359.6	361.9	358.8	358.8	357.3
70°	299.3	303.8	300.8	301.5	300.0
72.5°	245.0	247.3	244.3	244.3	242.7
75°	190.7	192.2	189.2	190.0	187.7
77.5°	137.2	139.5	136.4	137.2	136.4
80°	92.0	92.7	90.5	91.2	89.7
82.5°	53.5	54.3	53.5	52.8	52.0
85°	24.1	24.9	24.1	24.1	23.4
87.5°	6.0	6.0	6.0	6.0	6.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)