

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: P973784

Luminaire Tested: FLR2-22-45HE-L930-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973784
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-L930-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

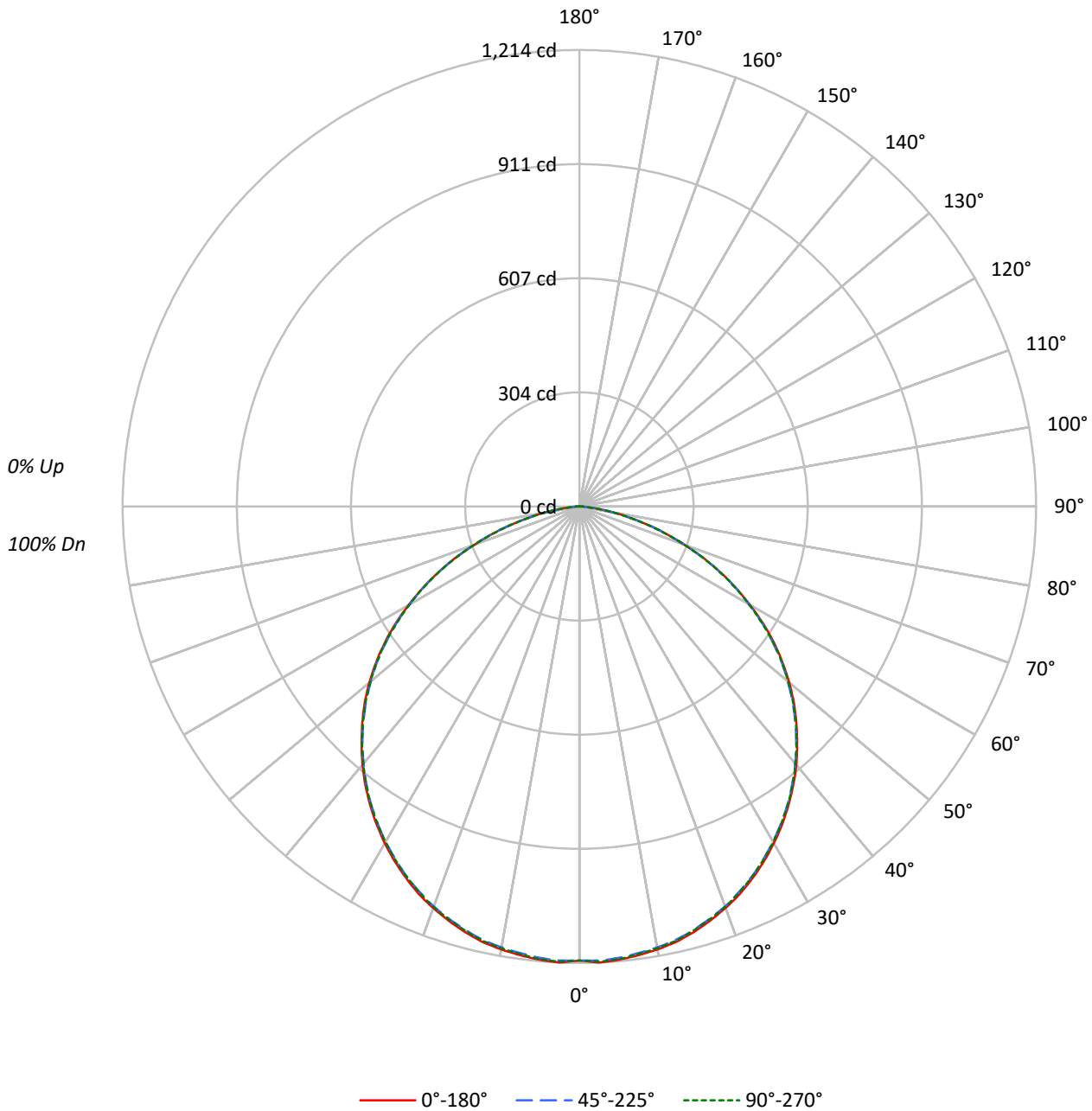
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3376.7 lumens
Efficiency: N/A
Efficacy: 93.3 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										
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°	3249	3249	3249
5°	3270	3256	3266
10°	3269	3254	3261
15°	3266	3252	3256
20°	3255	3242	3246
25°	3238	3224	3226
30°	3214	3200	3203
35°	3185	3173	3175
40°	3152	3136	3139
45°	3105	3091	3097
50°	3050	3028	3035
55°	2964	2939	2950
60°	2817	2806	2806
65°	2631	2626	2616
70°	2330	2341	2335
75°	1962	1946	1931
80°	1410	1387	1375
85°	738	738	713

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3105 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.3	3.4
10°-20°	328.8	9.7
20°-30°	499.7	14.8
30°-40°	603.9	17.9
40°-50°	626.9	18.6
50°-60°	560.4	16.6
60°-70°	407.5	12.1
70°-80°	200.4	5.9
80°-90°	34.8	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°	942.8	27.9
0°-40°	1546.7	45.8
0°-60°	2734.1	81.0
0°-90°	3376.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3376.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1207	1207	1207	1207	1207	
5°	1210	1196	1205	1201	1209	115
15°	1172	1159	1167	1164	1169	331
25°	1090	1078	1086	1084	1087	503
35°	970	963	966	967	967	607
45°	816	812	812	814	814	629
55°	632	628	626	628	629	563
65°	413	415	412	412	411	407
75°	189	190	187	188	186	200
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°	1207.4	1207.4	1207.4	1207.4	1207.4
2.5°	1214.2	1200.0	1208.9	1203.7	1211.9
5°	1210.4	1196.3	1205.2	1200.7	1208.9
7.5°	1203.7	1189.5	1198.5	1194.0	1200.7
10°	1196.3	1181.3	1191.0	1186.6	1193.3
12.5°	1186.6	1172.4	1181.3	1177.6	1183.6
15°	1172.4	1159.0	1167.2	1164.2	1168.7
17.5°	1155.2	1141.8	1150.0	1147.8	1151.5
20°	1136.6	1123.9	1132.1	1129.9	1133.6
22.5°	1115.7	1102.3	1109.7	1108.3	1111.2
25°	1090.4	1078.4	1085.9	1083.6	1086.6
27.5°	1063.5	1052.3	1058.3	1058.3	1059.8
30°	1034.4	1024.0	1029.9	1029.9	1030.7
32.5°	1003.1	994.9	998.6	999.4	999.4
35°	969.5	962.8	965.8	966.6	966.6
37.5°	934.5	927.8	930.0	931.5	931.5
40°	897.2	891.2	892.7	894.2	893.5
42.5°	856.9	852.4	853.2	854.7	854.7
45°	815.9	812.2	812.2	813.7	813.7
47.5°	774.1	770.4	768.9	770.4	770.4
50°	728.6	724.9	723.4	724.9	724.9
52.5°	680.9	677.2	677.2	677.2	677.9
55°	631.7	628.0	626.5	628.0	628.7
57.5°	579.5	578.0	575.8	576.5	574.3
60°	523.5	523.5	521.3	522.8	521.3
62.5°	469.1	470.6	468.4	468.4	466.9
65°	413.2	414.7	412.4	412.4	410.9
67.5°	355.7	358.0	355.0	355.0	353.5
70°	296.1	300.6	297.6	298.3	296.8
72.5°	242.4	244.6	241.6	241.6	240.1
75°	188.7	190.2	187.2	187.9	185.7
77.5°	135.7	138.0	135.0	135.7	135.0
80°	91.0	91.7	89.5	90.2	88.7
82.5°	53.0	53.7	53.0	52.2	51.5
85°	23.9	24.6	23.9	23.9	23.1
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)