

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: P973862

Luminaire Tested: FLR2-22-45HE-L935-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973862
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-L935-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

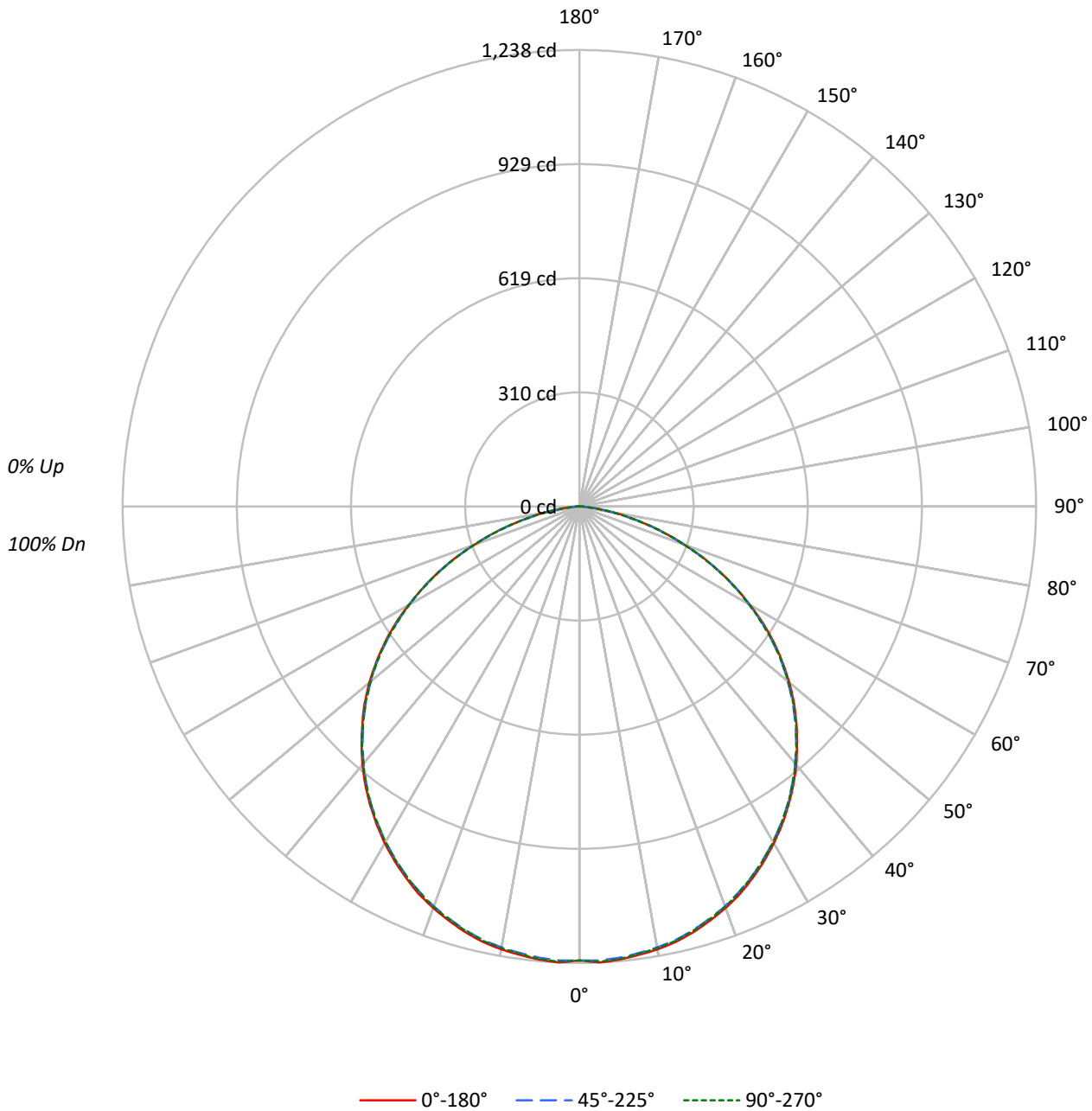
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3442.8 lumens
Efficiency: N/A
Efficacy: 95.1 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°	3313	3313	3313
5°	3334	3319	3330
10°	3333	3318	3324
15°	3330	3315	3319
20°	3318	3306	3310
25°	3301	3287	3290
30°	3277	3263	3265
35°	3247	3235	3237
40°	3214	3197	3200
45°	3166	3151	3157
50°	3110	3088	3094
55°	3022	2997	3007
60°	2873	2861	2861
65°	2683	2677	2668
70°	2375	2387	2381
75°	2000	1985	1968
80°	1438	1413	1402
85°	750	750	729

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3166 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.6	3.4
10°-20°	335.2	9.7
20°-30°	509.4	14.8
30°-40°	615.8	17.9
40°-50°	639.1	18.6
50°-60°	571.4	16.6
60°-70°	415.5	12.1
70°-80°	204.3	5.9
80°-90°	35.4	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°	961.3	27.9
0°-40°	1577.0	45.8
0°-60°	2787.6	81.0
0°-90°	3442.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3442.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1231	1231	1231	1231	1231	
5°	1234	1220	1229	1224	1233	117
15°	1195	1182	1190	1187	1192	337
25°	1112	1100	1107	1105	1108	512
35°	988	982	985	986	986	618
45°	832	828	828	830	830	642
55°	644	640	639	640	641	574
65°	421	423	420	420	419	415
75°	192	194	191	192	189	204
85°	24	25	24	24	24	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1231.1	1231.1	1231.1	1231.1	1231.1
2.5°	1237.9	1223.5	1232.6	1227.3	1235.6
5°	1234.1	1219.7	1228.8	1224.2	1232.6
7.5°	1227.3	1212.8	1222.0	1217.4	1224.2
10°	1219.7	1204.5	1214.4	1209.8	1216.6
12.5°	1209.8	1195.3	1204.5	1200.7	1206.8
15°	1195.3	1181.7	1190.0	1187.0	1191.5
17.5°	1177.9	1164.2	1172.5	1170.3	1174.1
20°	1158.8	1145.9	1154.3	1152.0	1155.8
22.5°	1137.6	1123.9	1131.5	1130.0	1133.0
25°	1111.7	1099.5	1107.1	1104.9	1107.9
27.5°	1084.3	1072.9	1079.0	1079.0	1080.5
30°	1054.7	1044.0	1050.1	1050.1	1050.9
32.5°	1022.7	1014.4	1018.2	1018.9	1018.9
35°	988.5	981.7	984.7	985.5	985.5
37.5°	952.8	945.9	948.2	949.7	949.7
40°	914.8	908.7	910.2	911.7	911.0
42.5°	873.7	869.1	869.9	871.4	871.4
45°	831.9	828.1	828.1	829.6	829.6
47.5°	789.3	785.5	784.0	785.5	785.5
50°	742.9	739.1	737.6	739.1	739.1
52.5°	694.2	690.4	690.4	690.4	691.2
55°	644.1	640.3	638.7	640.3	641.0
57.5°	590.8	589.3	587.0	587.8	585.5
60°	533.8	533.8	531.5	533.0	531.5
62.5°	478.3	479.8	477.5	477.5	476.0
65°	421.3	422.8	420.5	420.5	419.0
67.5°	362.7	365.0	362.0	362.0	360.4
70°	301.9	306.4	303.4	304.2	302.6
72.5°	247.1	249.4	246.4	246.4	244.8
75°	192.4	193.9	190.9	191.6	189.3
77.5°	138.4	140.7	137.6	138.4	137.6
80°	92.8	93.5	91.2	92.0	90.5
82.5°	54.0	54.7	54.0	53.2	52.5
85°	24.3	25.1	24.3	24.3	23.6
87.5°	6.1	6.1	6.1	6.1	6.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)