

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: P973704

Luminaire Tested: FLR2-22-45-L950-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973704
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: FLR2-22-45-L950-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

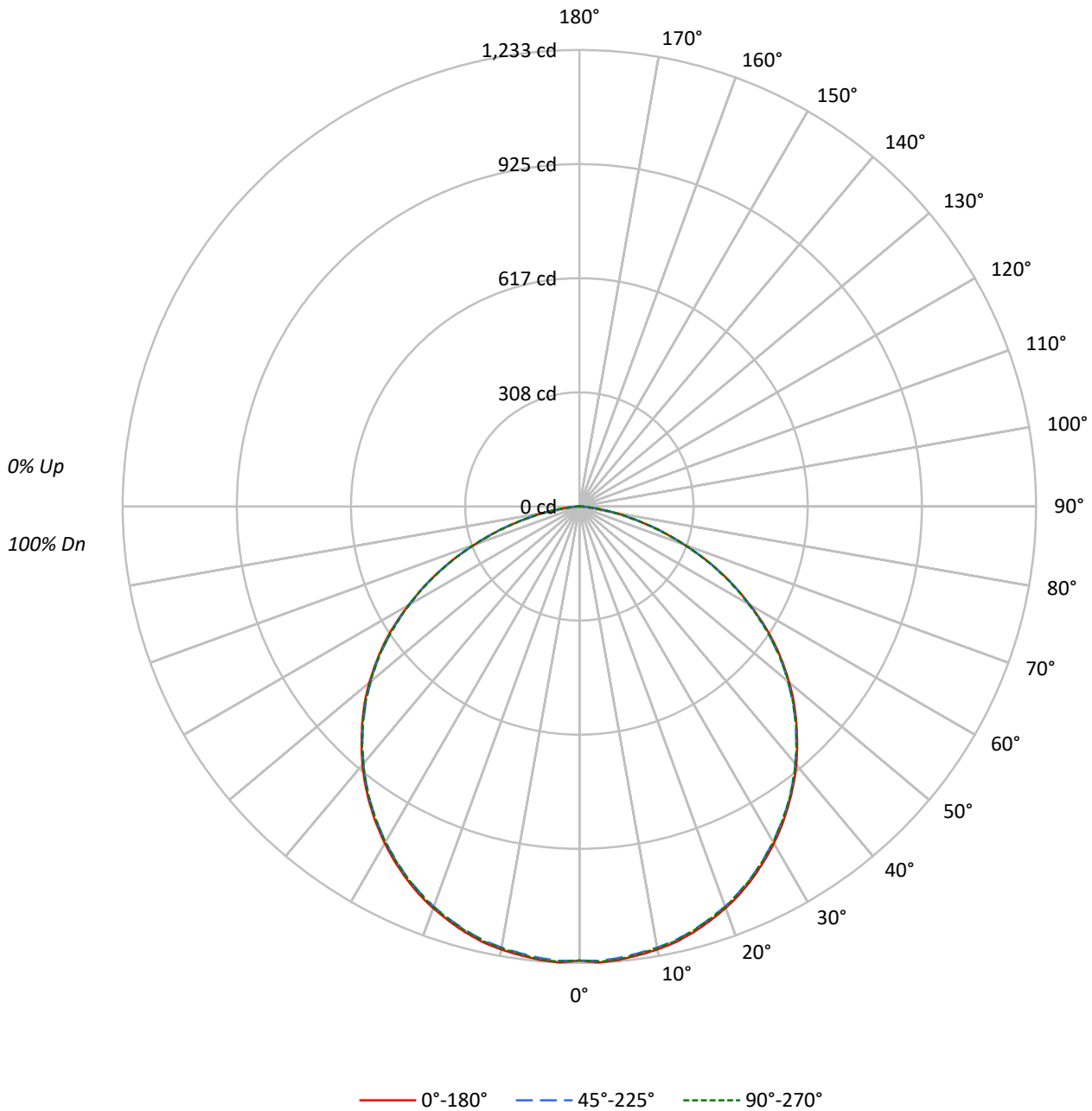
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3430.0 lumens
Efficiency: N/A
Efficacy: 95.0 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): 36.1
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	0
RW	70	50	30	10	70	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
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°	3300	3300	3300
5°	3321	3307	3317
10°	3320	3306	3312
15°	3318	3303	3307
20°	3306	3293	3298
25°	3289	3275	3277
30°	3265	3251	3253
35°	3235	3223	3225
40°	3202	3185	3188
45°	3154	3140	3145
50°	3098	3076	3083
55°	3011	2986	2996
60°	2862	2850	2850
65°	2672	2667	2658
70°	2367	2378	2372
75°	1993	1978	1961
80°	1432	1409	1398
85°	747	747	726

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3154 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.1	3.4
10°-20°	334.0	9.7
20°-30°	507.6	14.8
30°-40°	613.5	17.9
40°-50°	636.8	18.6
50°-60°	569.3	16.6
60°-70°	413.9	12.1
70°-80°	203.6	5.9
80°-90°	35.3	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°	957.7	27.9
0°-40°	1571.2	45.8
0°-60°	2777.2	81.0
0°-90°	3430.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3430.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1226	1226	1226	1226	1226	
5°	1230	1215	1224	1220	1228	117
15°	1191	1177	1186	1183	1187	336
25°	1108	1096	1103	1101	1104	510
35°	985	978	981	982	982	616
45°	829	825	825	826	826	639
55°	642	638	636	638	639	572
65°	420	421	419	419	417	414
75°	192	193	190	191	189	203
85°	24	25	24	24	24	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1226.5	1226.5	1226.5	1226.5	1226.5
2.5°	1233.3	1218.9	1228.0	1222.7	1231.1
5°	1229.5	1215.1	1224.2	1219.7	1228.0
7.5°	1222.7	1208.3	1217.4	1212.9	1219.7
10°	1215.1	1200.0	1209.8	1205.3	1212.1
12.5°	1205.3	1190.9	1200.0	1196.2	1202.3
15°	1190.9	1177.3	1185.6	1182.6	1187.1
17.5°	1173.5	1159.8	1168.2	1165.9	1169.7
20°	1154.5	1141.7	1150.0	1147.7	1151.5
22.5°	1133.3	1119.7	1127.3	1125.8	1128.8
25°	1107.6	1095.5	1103.0	1100.8	1103.8
27.5°	1080.3	1068.9	1075.0	1075.0	1076.5
30°	1050.8	1040.1	1046.2	1046.2	1047.0
32.5°	1018.9	1010.6	1014.4	1015.1	1015.1
35°	984.8	978.0	981.1	981.8	981.8
37.5°	949.2	942.4	944.7	946.2	946.2
40°	911.4	905.3	906.8	908.3	907.6
42.5°	870.5	865.9	866.7	868.2	868.2
45°	828.8	825.0	825.0	826.5	826.5
47.5°	786.4	782.6	781.1	782.6	782.6
50°	740.1	736.4	734.8	736.4	736.4
52.5°	691.7	687.9	687.9	687.9	688.6
55°	641.7	637.9	636.4	637.9	638.6
57.5°	588.6	587.1	584.8	585.6	583.3
60°	531.8	531.8	529.5	531.1	529.5
62.5°	476.5	478.0	475.8	475.8	474.2
65°	419.7	421.2	418.9	418.9	417.4
67.5°	361.4	363.6	360.6	360.6	359.1
70°	300.8	305.3	302.3	303.0	301.5
72.5°	246.2	248.5	245.5	245.5	243.9
75°	191.7	193.2	190.2	190.9	188.6
77.5°	137.9	140.2	137.1	137.9	137.1
80°	92.4	93.2	90.9	91.7	90.2
82.5°	53.8	54.5	53.8	53.0	52.3
85°	24.2	25.0	24.2	24.2	23.5
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)