

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: P974762

Luminaire Tested: FLR2-24-45HE-L935-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974762
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-3)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-24-45HE-L935-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

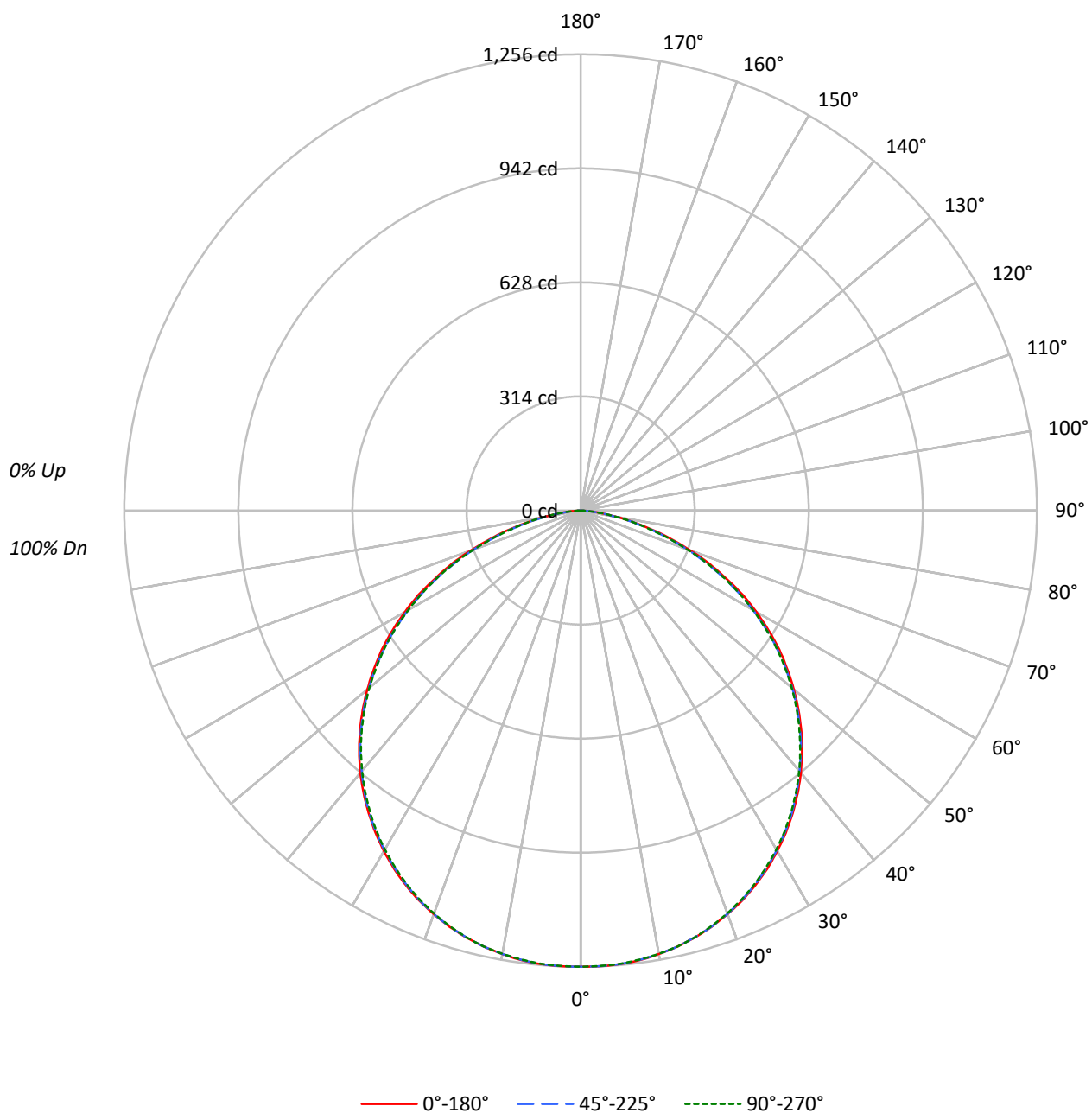
Lumens per Lamp: N/A
Luminaire Lumens: 3549.7 lumens
Efficiency: N/A
Efficacy: 102.3 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
Input Voltage (V):
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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	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	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85		85
2	99	91	85	79	97	89	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	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51		51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44		44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38		38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34		34
8	61	47	39	33	59	47	38	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	39	33	29	27		27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25		25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1690	1690	1690
5°	1693	1693	1692
10°	1694	1694	1693
15°	1695	1694	1694
20°	1693	1692	1690
25°	1690	1687	1684
30°	1682	1677	1674
35°	1671	1667	1661
40°	1657	1646	1644
45°	1635	1626	1621
50°	1604	1592	1587
55°	1567	1544	1542
60°	1501	1475	1475
65°	1405	1372	1376
70°	1264	1225	1221
75°	1061	1019	1014
80°	775	737	768
85°	438	403	411

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1635 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.2	3.4
10°-20°	343.4	9.7
20°-30°	523.6	14.8
30°-40°	634.4	17.9
40°-50°	659.0	18.6
50°-60°	589.5	16.6
60°-70°	429.6	12.1
70°-80°	212.8	6.0
80°-90°	38.0	1.1
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°	986.3	27.8
0°-40°	1620.7	45.7
0°-60°	2869.2	80.8
0°-90°	3549.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3549.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1256	1256	1256	1256	1256	
5°	1254	1254	1254	1254	1253	119
15°	1217	1216	1216	1217	1216	344
25°	1138	1137	1136	1136	1134	525
35°	1018	1016	1015	1013	1011	636
45°	859	858	854	853	852	662
55°	668	663	658	658	658	595
65°	441	438	431	433	432	437
75°	204	201	196	200	195	218
85°	28	26	26	27	27	39
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1255.9	1255.9	1255.9	1255.9	1255.9
2.5°	1255.9	1255.5	1255.5	1255.9	1255.0
5°	1253.7	1254.1	1253.7	1253.7	1252.8
7.5°	1248.7	1248.3	1247.8	1248.3	1246.9
10°	1240.2	1240.2	1239.7	1240.2	1239.3
12.5°	1229.8	1229.8	1229.8	1230.2	1229.8
15°	1216.7	1216.3	1216.3	1217.2	1216.3
17.5°	1201.4	1201.0	1201.0	1200.5	1199.6
20°	1182.5	1182.5	1182.0	1181.6	1180.2
22.5°	1162.2	1161.8	1160.4	1160.4	1158.6
25°	1138.3	1137.0	1136.1	1135.6	1134.3
27.5°	1112.2	1110.4	1109.0	1108.1	1106.8
30°	1082.9	1081.1	1079.7	1078.4	1077.5
32.5°	1051.3	1050.4	1048.2	1047.7	1045.9
35°	1017.5	1016.2	1014.8	1013.0	1011.2
37.5°	981.5	980.1	977.0	976.1	974.7
40°	943.2	941.4	937.3	937.3	936.0
42.5°	902.2	900.4	897.7	895.9	895.0
45°	859.4	857.6	854.4	852.6	851.7
47.5°	813.9	812.5	808.9	807.5	806.2
50°	766.5	764.7	760.7	759.8	758.4
52.5°	717.0	716.1	710.7	710.2	708.9
55°	667.8	662.9	658.4	658.4	657.5
57.5°	613.8	610.2	604.3	604.3	603.4
60°	557.9	554.7	548.0	548.9	548.0
62.5°	503.4	496.6	490.3	493.0	490.7
65°	441.2	437.6	430.8	432.6	432.2
67.5°	384.4	377.6	371.3	374.9	373.1
70°	321.3	317.7	311.4	315.0	310.5
72.5°	261.8	258.7	252.4	256.4	251.9
75°	204.1	201.0	196.0	199.6	195.1
77.5°	149.6	147.4	142.9	146.5	147.4
80°	100.0	97.3	95.1	98.2	99.1
82.5°	58.6	56.8	55.9	56.3	58.6
85°	28.4	26.1	26.1	26.6	26.6
87.5°	7.7	6.8	7.7	8.1	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)