

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: P975102

Luminaire Tested: FLR2-24-40HE-L950-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P975102
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: FLR2-24-40HE-L950-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

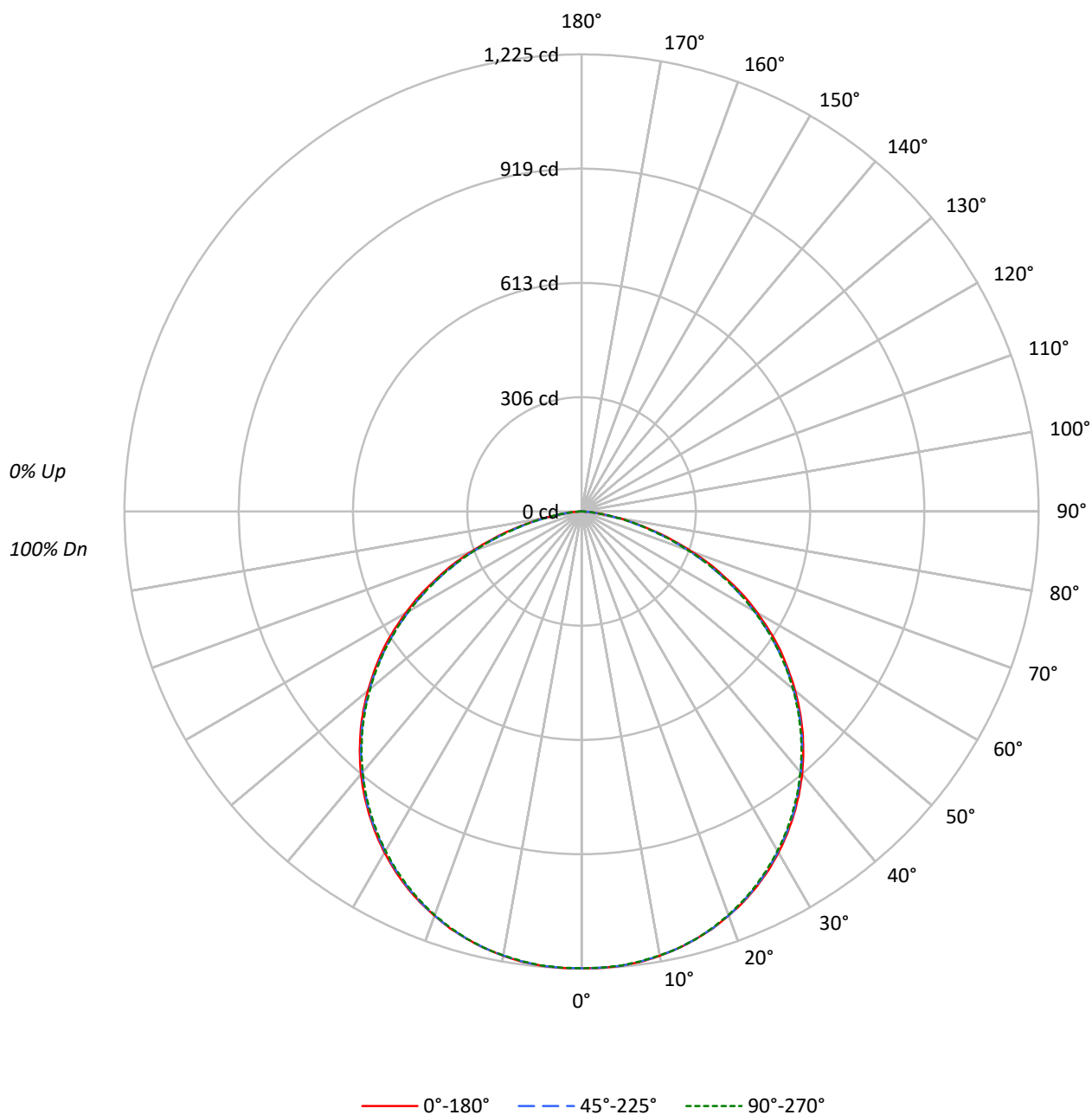
Lumens per Lamp: N/A
Luminaire Lumens: 3461.2 lumens
Efficiency: N/A
Efficacy: 115.8 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 29.9
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°	1648	1648	1648
5°	1651	1651	1650
10°	1652	1652	1651
15°	1653	1652	1652
20°	1651	1650	1648
25°	1648	1645	1642
30°	1640	1636	1632
35°	1630	1625	1620
40°	1615	1605	1603
45°	1595	1585	1580
50°	1564	1553	1548
55°	1528	1506	1504
60°	1464	1438	1438
65°	1370	1337	1342
70°	1233	1194	1191
75°	1035	993	989
80°	755	718	749
85°	428	394	400

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1595 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.2	3.4
10°-20°	334.9	9.7
20°-30°	510.6	14.8
30°-40°	618.6	17.9
40°-50°	642.6	18.6
50°-60°	574.8	16.6
60°-70°	418.9	12.1
70°-80°	207.5	6.0
80°-90°	37.1	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°	961.7	27.8
0°-40°	1580.3	45.7
0°-60°	2797.7	80.8
0°-90°	3461.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3461.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1225	1225	1225	1225	1225	
5°	1222	1223	1222	1222	1222	116
15°	1186	1186	1186	1187	1186	335
25°	1110	1109	1108	1107	1106	512
35°	992	991	990	988	986	621
45°	838	836	833	831	830	646
55°	651	646	642	642	641	580
65°	430	427	420	422	421	426
75°	199	196	191	195	190	212
85°	28	26	26	26	26	38
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1224.6	1224.6	1224.6	1224.6	1224.6
2.5°	1224.6	1224.2	1224.2	1224.6	1223.8
5°	1222.4	1222.9	1222.4	1222.4	1221.6
7.5°	1217.6	1217.2	1216.7	1217.2	1215.9
10°	1209.3	1209.3	1208.8	1209.3	1208.4
12.5°	1199.2	1199.2	1199.2	1199.6	1199.2
15°	1186.4	1186.0	1186.0	1186.9	1186.0
17.5°	1171.5	1171.0	1171.0	1170.6	1169.7
20°	1153.0	1153.0	1152.6	1152.1	1150.8
22.5°	1133.2	1132.8	1131.5	1131.5	1129.7
25°	1110.0	1108.6	1107.8	1107.3	1106.0
27.5°	1084.5	1082.7	1081.4	1080.5	1079.2
30°	1055.9	1054.2	1052.8	1051.5	1050.6
32.5°	1025.2	1024.3	1022.1	1021.6	1019.9
35°	992.2	990.9	989.6	987.8	986.0
37.5°	957.0	955.7	952.6	951.8	950.5
40°	919.7	917.9	914.0	914.0	912.7
42.5°	879.7	877.9	875.3	873.6	872.7
45°	838.0	836.2	833.1	831.4	830.5
47.5°	793.6	792.3	788.7	787.4	786.1
50°	747.4	745.7	741.7	740.9	739.5
52.5°	699.1	698.2	693.0	692.5	691.2
55°	651.2	646.4	642.0	642.0	641.1
57.5°	598.5	595.0	589.3	589.3	588.4
60°	544.0	540.9	534.3	535.2	534.3
62.5°	490.8	484.2	478.1	480.7	478.5
65°	430.2	426.7	420.1	421.8	421.4
67.5°	374.8	368.2	362.1	365.6	363.8
70°	313.3	309.8	303.6	307.1	302.8
72.5°	255.3	252.2	246.1	250.0	245.6
75°	199.1	196.0	191.1	194.7	190.3
77.5°	145.9	143.7	139.3	142.8	143.7
80°	97.5	94.9	92.7	95.8	96.7
82.5°	57.1	55.4	54.5	54.9	57.1
85°	27.7	25.5	25.5	25.9	25.9
87.5°	7.5	6.6	7.5	7.9	8.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)