

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: P974948

Luminaire Tested: FLR2-24-40HE-L940-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974948
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-L940-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

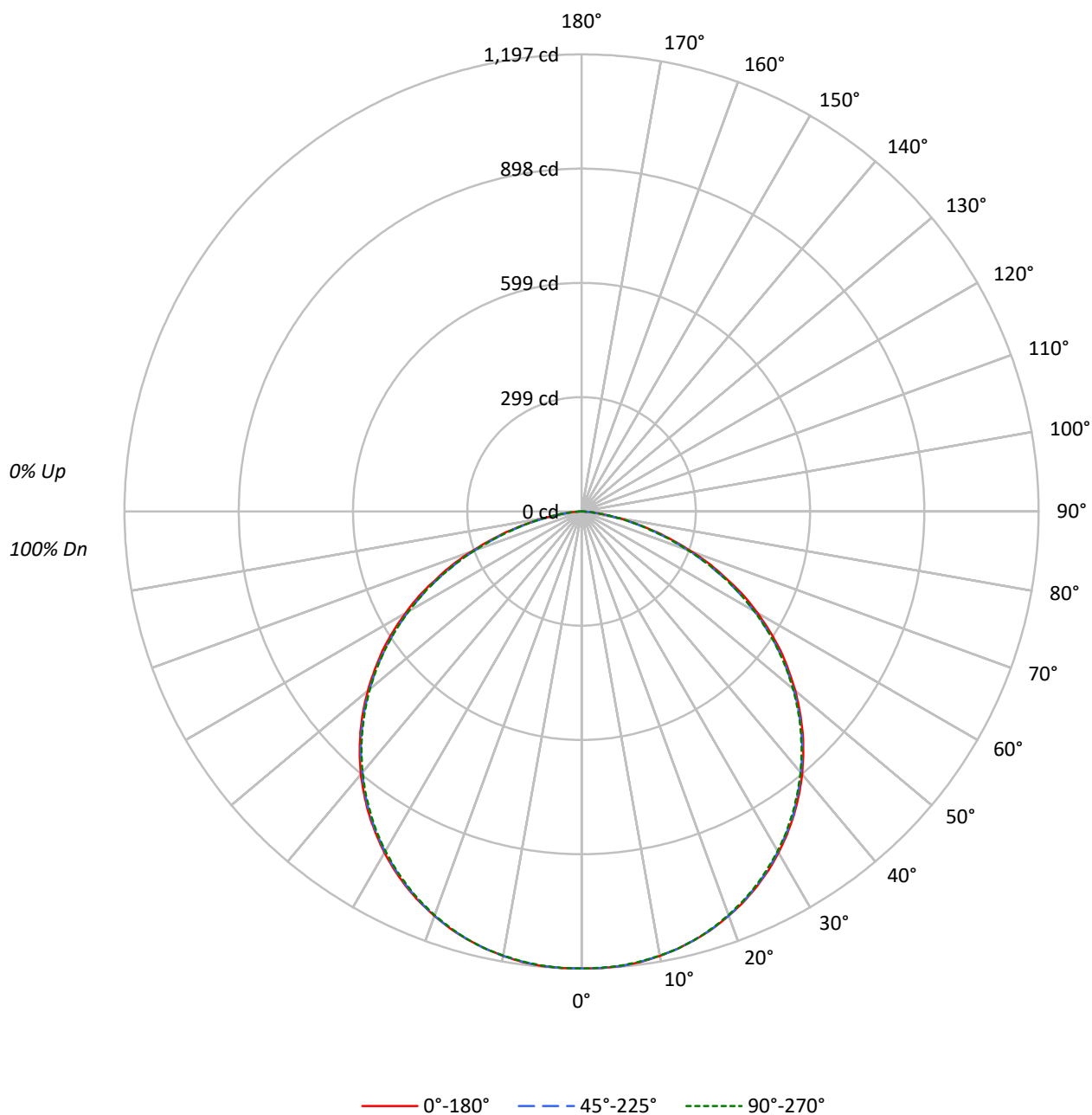
Lumens per Lamp: N/A
Luminaire Lumens: 3383.4 lumens
Efficiency: N/A
Efficacy: 113.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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		0
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		100
1	109	105	100	97	106	102	99	95	98	95	92		94	92	89		85
2	99	91	85	79	97	89	83	78	86	81	76		83	78	75		71
3	91	80	72	66	88	79	71	65	76	69	64		73	68	63		60
4	83	71	62	56	81	70	62	55	67	60	55		65	59	54		51
5	76	64	55	48	74	62	54	48	60	53	47		58	52	47		44
6	70	57	48	42	69	56	48	42	54	47	41		53	46	41		38
7	65	52	43	37	64	51	43	37	49	42	37		48	41	36		34
8	61	47	39	33	59	47	38	33	45	38	33		44	37	32		30
9	57	43	35	30	55	43	35	30	42	34	29		41	34	29		27
10	53	40	32	27	52	39	32	27	38	31	27		38	31	26		25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1611	1611	1611
5°	1614	1614	1613
10°	1615	1614	1614
15°	1616	1615	1615
20°	1614	1613	1611
25°	1611	1608	1605
30°	1604	1599	1596
35°	1593	1589	1583
40°	1579	1569	1567
45°	1559	1550	1545
50°	1529	1518	1513
55°	1493	1472	1470
60°	1431	1405	1405
65°	1339	1307	1311
70°	1205	1168	1164
75°	1012	971	967
80°	739	702	732
85°	418	384	391

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1559 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.6	3.4
10°-20°	327.4	9.7
20°-30°	499.1	14.8
30°-40°	604.7	17.9
40°-50°	628.1	18.6
50°-60°	561.9	16.6
60°-70°	409.5	12.1
70°-80°	202.8	6.0
80°-90°	36.2	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°	940.1	27.8
0°-40°	1544.8	45.7
0°-60°	2734.8	80.8
0°-90°	3383.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3383.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1197	1197	1197	1197	1197	
5°	1195	1195	1195	1195	1194	114
15°	1160	1159	1159	1160	1159	327
25°	1085	1084	1083	1082	1081	500
35°	970	969	967	966	964	607
45°	819	817	814	813	812	631
55°	637	632	628	628	627	567
65°	420	417	411	412	412	417
75°	195	192	187	190	186	207
85°	27	25	25	25	25	37
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1197.1	1197.1	1197.1	1197.1	1197.1
2.5°	1197.1	1196.7	1196.7	1197.1	1196.3
5°	1195.0	1195.4	1195.0	1195.0	1194.1
7.5°	1190.3	1189.8	1189.4	1189.8	1188.5
10°	1182.1	1182.1	1181.7	1182.1	1181.2
12.5°	1172.2	1172.2	1172.2	1172.6	1172.2
15°	1159.8	1159.3	1159.3	1160.2	1159.3
17.5°	1145.2	1144.7	1144.7	1144.3	1143.4
20°	1127.1	1127.1	1126.7	1126.3	1125.0
22.5°	1107.8	1107.4	1106.1	1106.1	1104.3
25°	1085.0	1083.7	1082.9	1082.4	1081.1
27.5°	1060.1	1058.4	1057.1	1056.2	1054.9
30°	1032.2	1030.5	1029.2	1027.9	1027.0
32.5°	1002.1	1001.3	999.1	998.7	997.0
35°	969.9	968.6	967.3	965.6	963.9
37.5°	935.5	934.2	931.2	930.4	929.1
40°	899.0	897.3	893.4	893.4	892.2
42.5°	859.9	858.2	855.6	853.9	853.1
45°	819.1	817.4	814.4	812.7	811.8
47.5°	775.7	774.5	771.0	769.7	768.4
50°	730.6	728.9	725.1	724.2	722.9
52.5°	683.4	682.5	677.4	677.0	675.7
55°	636.6	631.9	627.6	627.6	626.7
57.5°	585.0	581.6	576.0	576.0	575.2
60°	531.8	528.8	522.3	523.2	522.3
62.5°	479.8	473.4	467.3	469.9	467.8
65°	420.5	417.1	410.6	412.4	411.9
67.5°	366.4	360.0	353.9	357.4	355.7
70°	306.3	302.8	296.8	300.2	296.0
72.5°	249.6	246.6	240.5	244.4	240.1
75°	194.6	191.6	186.8	190.3	186.0
77.5°	142.6	140.5	136.2	139.6	140.5
80°	95.4	92.8	90.6	93.6	94.5
82.5°	55.8	54.1	53.3	53.7	55.8
85°	27.1	24.9	24.9	25.3	25.3
87.5°	7.3	6.4	7.3	7.7	8.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)