

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: P974951

Luminaire Tested: FLR2-24-65HE-L940-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974951
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: FLR2-24-65HE-L940-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

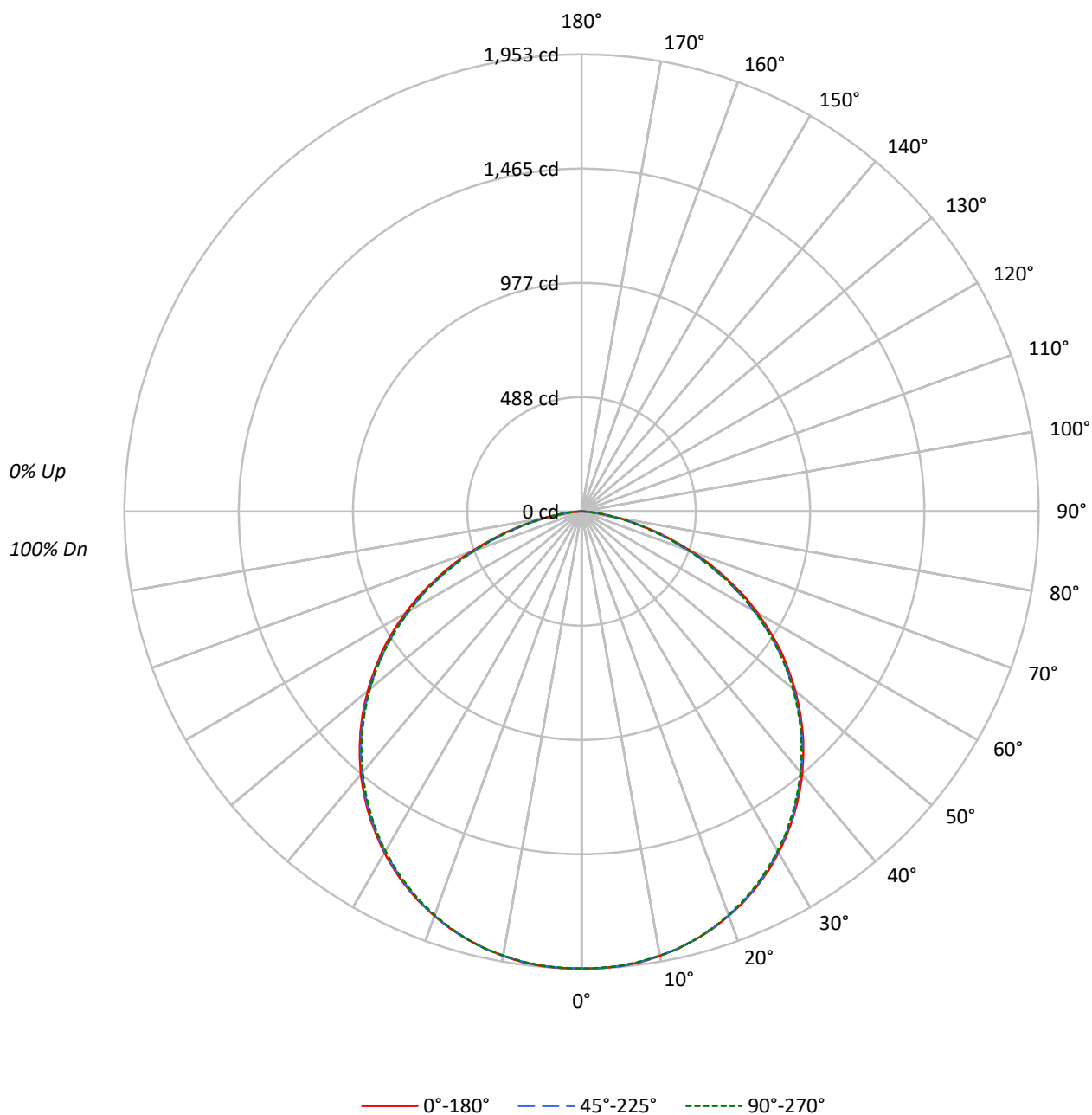
Lumens per Lamp: N/A
Luminaire Lumens: 5520.2 lumens
Efficiency: N/A
Efficacy: 110.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 49.9
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°	2628	2628	2628
5°	2633	2633	2631
10°	2635	2634	2633
15°	2636	2635	2635
20°	2633	2632	2628
25°	2628	2623	2619
30°	2616	2609	2603
35°	2599	2592	2583
40°	2576	2560	2557
45°	2543	2528	2520
50°	2495	2476	2469
55°	2436	2402	2399
60°	2335	2293	2293
65°	2184	2133	2140
70°	1966	1905	1899
75°	1651	1585	1577
80°	1206	1146	1195
85°	682	627	638

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2543 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.4	3.4
10°-20°	534.1	9.7
20°-30°	814.3	14.8
30°-40°	986.6	17.9
40°-50°	1024.8	18.6
50°-60°	916.8	16.6
60°-70°	668.2	12.1
70°-80°	330.9	6.0
80°-90°	59.1	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°	1533.8	27.8
0°-40°	2520.4	45.7
0°-60°	4462.0	80.8
0°-90°	5520.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5520.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1953	1953	1953	1953	1953	
5°	1950	1950	1950	1950	1948	185
15°	1892	1892	1892	1893	1892	534
25°	1770	1768	1767	1766	1764	816
35°	1582	1580	1578	1575	1573	990
45°	1336	1334	1329	1326	1324	1030
55°	1039	1031	1024	1024	1022	925
65°	686	680	670	673	672	680
75°	318	313	305	310	303	339
85°	44	41	41	41	41	61
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1953.1	1953.1	1953.1	1953.1	1953.1
2.5°	1953.1	1952.4	1952.4	1953.1	1951.7
5°	1949.6	1950.3	1949.6	1949.6	1948.2
7.5°	1941.9	1941.2	1940.5	1941.2	1939.1
10°	1928.6	1928.6	1927.9	1928.6	1927.2
12.5°	1912.5	1912.5	1912.5	1913.2	1912.5
15°	1892.2	1891.5	1891.5	1892.9	1891.5
17.5°	1868.3	1867.6	1867.6	1866.9	1865.5
20°	1838.9	1838.9	1838.2	1837.5	1835.4
22.5°	1807.4	1806.7	1804.6	1804.6	1801.8
25°	1770.2	1768.1	1766.7	1766.0	1763.9
27.5°	1729.6	1726.8	1724.7	1723.3	1721.2
30°	1684.0	1681.2	1679.1	1677.0	1675.6
32.5°	1635.0	1633.6	1630.1	1629.4	1626.6
35°	1582.4	1580.3	1578.2	1575.4	1572.6
37.5°	1526.3	1524.2	1519.3	1517.9	1515.8
40°	1466.8	1464.0	1457.7	1457.7	1455.6
42.5°	1403.0	1400.2	1396.0	1393.2	1391.8
45°	1336.4	1333.6	1328.7	1325.9	1324.5
47.5°	1265.6	1263.5	1257.9	1255.8	1253.7
50°	1192.1	1189.3	1182.9	1181.5	1179.4
52.5°	1115.0	1113.6	1105.2	1104.5	1102.4
55°	1038.6	1030.9	1023.9	1023.9	1022.5
57.5°	954.5	948.9	939.8	939.8	938.4
60°	867.6	862.7	852.2	853.6	852.2
62.5°	782.8	772.3	762.5	766.7	763.2
65°	686.1	680.5	670.0	672.8	672.1
67.5°	597.8	587.3	577.5	583.1	580.3
70°	499.7	494.1	484.3	489.9	482.8
72.5°	407.2	402.3	392.4	398.8	391.7
75°	317.5	312.6	304.8	310.5	303.4
77.5°	232.7	229.2	222.2	227.8	229.2
80°	155.6	151.4	147.9	152.8	154.2
82.5°	91.1	88.3	86.9	87.6	91.1
85°	44.2	40.6	40.6	41.3	41.3
87.5°	11.9	10.5	11.9	12.6	13.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)