

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: P974919

Luminaire Tested: FLR2-24-72HE-L940-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974919
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: FLR2-24-72HE-L940-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

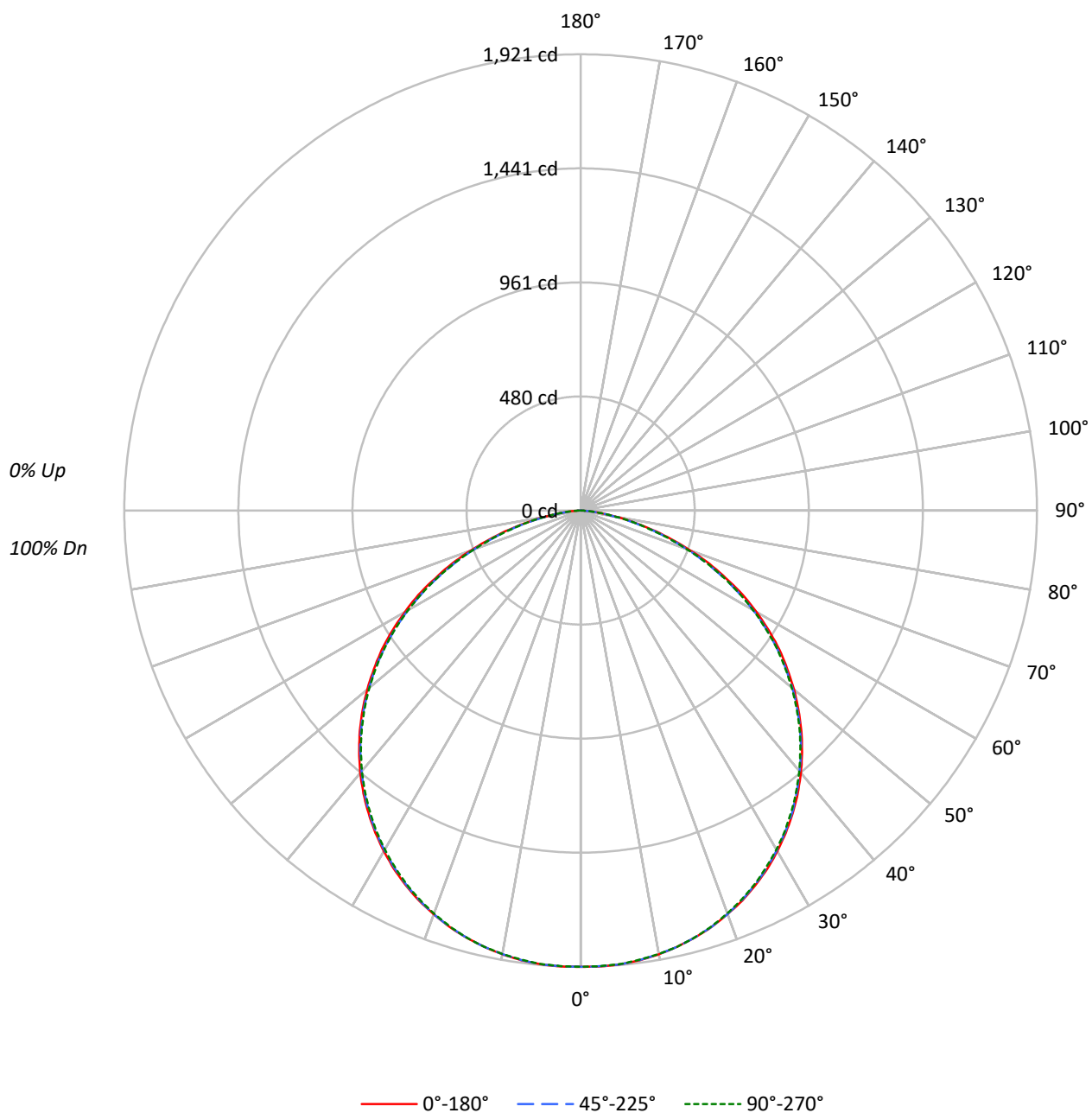
Lumens per Lamp: N/A
Luminaire Lumens: 5430.6 lumens
Efficiency: N/A
Efficacy: 101.3 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 53.6
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°	2585	2585	2585
5°	2591	2591	2589
10°	2592	2591	2590
15°	2593	2592	2592
20°	2590	2589	2585
25°	2585	2580	2576
30°	2574	2566	2561
35°	2557	2550	2541
40°	2535	2519	2515
45°	2502	2487	2479
50°	2455	2436	2429
55°	2397	2363	2360
60°	2297	2256	2256
65°	2149	2098	2105
70°	1934	1874	1869
75°	1624	1559	1552
80°	1186	1127	1175
85°	670	618	628

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2502 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.4	3.4
10°-20°	525.4	9.7
20°-30°	801.1	14.8
30°-40°	970.6	17.9
40°-50°	1008.2	18.6
50°-60°	901.9	16.6
60°-70°	657.3	12.1
70°-80°	325.5	6.0
80°-90°	58.2	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°	1508.9	27.8
0°-40°	2479.5	45.7
0°-60°	4389.6	80.8
0°-90°	5430.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5430.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1921	1921	1921	1921	1921	
5°	1918	1919	1918	1918	1917	182
15°	1862	1861	1861	1862	1861	526
25°	1742	1739	1738	1737	1735	803
35°	1557	1555	1553	1550	1547	974
45°	1315	1312	1307	1304	1303	1013
55°	1022	1014	1007	1007	1006	910
65°	675	669	659	662	661	669
75°	312	308	300	305	298	333
85°	43	40	40	41	41	60
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1921.4	1921.4	1921.4	1921.4	1921.4
2.5°	1921.4	1920.8	1920.8	1921.4	1920.1
5°	1918.0	1918.7	1918.0	1918.0	1916.6
7.5°	1910.4	1909.7	1909.0	1909.7	1907.7
10°	1897.3	1897.3	1896.6	1897.3	1895.9
12.5°	1881.5	1881.5	1881.5	1882.2	1881.5
15°	1861.5	1860.8	1860.8	1862.2	1860.8
17.5°	1838.0	1837.3	1837.3	1836.6	1835.3
20°	1809.1	1809.1	1808.4	1807.7	1805.6
22.5°	1778.0	1777.4	1775.3	1775.3	1772.5
25°	1741.5	1739.4	1738.1	1737.4	1735.3
27.5°	1701.5	1698.8	1696.7	1695.3	1693.2
30°	1656.7	1653.9	1651.9	1649.8	1648.4
32.5°	1608.4	1607.1	1603.6	1602.9	1600.2
35°	1556.7	1554.7	1552.6	1549.8	1547.1
37.5°	1501.6	1499.5	1494.7	1493.3	1491.2
40°	1443.0	1440.2	1434.0	1434.0	1432.0
42.5°	1380.2	1377.5	1373.3	1370.6	1369.2
45°	1314.7	1312.0	1307.2	1304.4	1303.0
47.5°	1245.1	1243.0	1237.5	1235.5	1233.4
50°	1172.7	1170.0	1163.8	1162.4	1160.3
52.5°	1096.9	1095.5	1087.2	1086.5	1084.5
55°	1021.7	1014.2	1007.3	1007.3	1005.9
57.5°	939.0	933.5	924.5	924.5	923.1
60°	853.5	848.7	838.3	839.7	838.3
62.5°	770.1	759.8	750.1	754.2	750.8
65°	675.0	669.4	659.1	661.9	661.2
67.5°	588.1	577.7	568.1	573.6	570.8
70°	491.6	486.0	476.4	481.9	475.0
72.5°	400.6	395.7	386.1	392.3	385.4
75°	312.3	307.5	299.9	305.4	298.5
77.5°	228.9	225.4	218.6	224.1	225.4
80°	153.1	148.9	145.5	150.3	151.7
82.5°	89.6	86.9	85.5	86.2	89.6
85°	43.4	40.0	40.0	40.7	40.7
87.5°	11.7	10.3	11.7	12.4	13.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)