

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: P974853

Luminaire Tested: FLR2-24-72HE-L840-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974853
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-L840-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

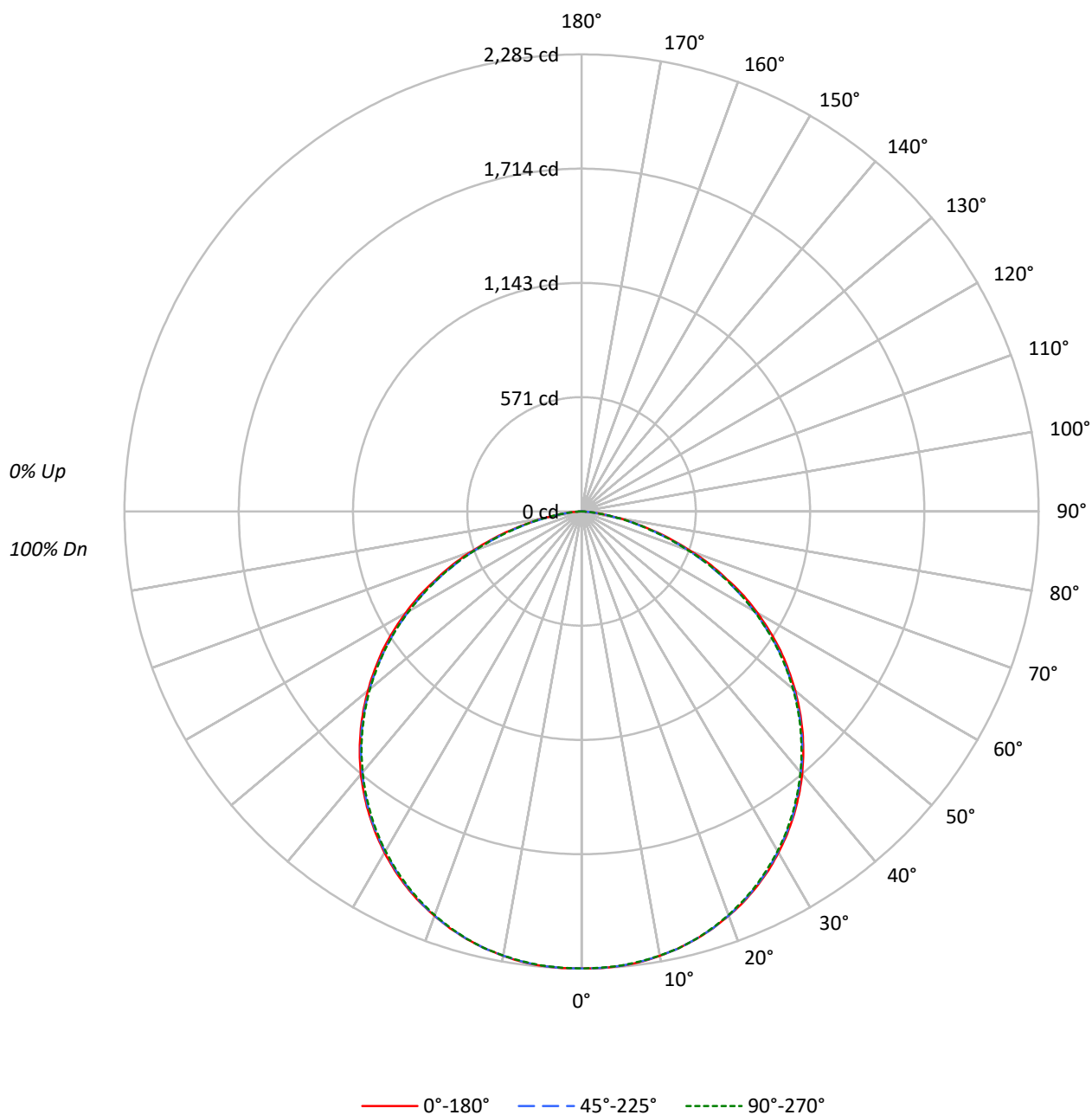
Lumens per Lamp: N/A
Luminaire Lumens: 6457.8 lumens
Efficiency: N/A
Efficacy: 120.5 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	3074	3074	3074
5°	3081	3081	3078
10°	3083	3081	3080
15°	3083	3082	3082
20°	3080	3079	3074
25°	3074	3068	3063
30°	3061	3052	3045
35°	3041	3033	3022
40°	3014	2995	2991
45°	2975	2958	2948
50°	2919	2897	2888
55°	2850	2810	2806
60°	2731	2683	2683
65°	2555	2495	2503
70°	2299	2229	2222
75°	1931	1854	1845
80°	1410	1340	1398
85°	797	735	747

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2975 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.9	3.4
10°-20°	624.8	9.7
20°-30°	952.6	14.8
30°-40°	1154.2	17.9
40°-50°	1198.9	18.6
50°-60°	1072.5	16.6
60°-70°	781.6	12.1
70°-80°	387.1	6.0
80°-90°	69.2	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°	1794.3	27.8
0°-40°	2948.5	45.7
0°-60°	5219.9	80.8
0°-90°	6457.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6457.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2285	2285	2285	2285	2285	
5°	2281	2282	2281	2281	2279	217
15°	2214	2213	2213	2214	2213	625
25°	2071	2068	2067	2066	2064	954
35°	1851	1849	1846	1843	1840	1158
45°	1563	1560	1554	1551	1550	1205
55°	1215	1206	1198	1198	1196	1082
65°	803	796	784	787	786	796
75°	371	366	357	363	355	396
85°	52	48	48	48	48	72
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2284.9	2284.9	2284.9	2284.9	2284.9
2.5°	2284.9	2284.1	2284.1	2284.9	2283.3
5°	2280.8	2281.6	2280.8	2280.8	2279.2
7.5°	2271.8	2271.0	2270.1	2271.0	2268.5
10°	2256.2	2256.2	2255.4	2256.2	2254.6
12.5°	2237.3	2237.3	2237.3	2238.2	2237.3
15°	2213.6	2212.7	2212.7	2214.4	2212.7
17.5°	2185.7	2184.9	2184.9	2184.1	2182.4
20°	2151.3	2151.3	2150.4	2149.6	2147.2
22.5°	2114.4	2113.5	2111.1	2111.1	2107.8
25°	2070.9	2068.5	2066.8	2066.0	2063.5
27.5°	2023.4	2020.1	2017.6	2016.0	2013.5
30°	1970.1	1966.8	1964.3	1961.9	1960.2
32.5°	1912.7	1911.0	1906.9	1906.1	1902.8
35°	1851.2	1848.7	1846.3	1843.0	1839.7
37.5°	1785.6	1783.2	1777.4	1775.8	1773.3
40°	1715.9	1712.6	1705.3	1705.3	1702.8
42.5°	1641.3	1638.0	1633.1	1629.8	1628.2
45°	1563.4	1560.2	1554.4	1551.1	1549.5
47.5°	1480.6	1478.2	1471.6	1469.2	1466.7
50°	1394.5	1391.3	1383.9	1382.2	1379.8
52.5°	1304.4	1302.7	1292.9	1292.1	1289.6
55°	1215.0	1206.0	1197.8	1197.8	1196.1
57.5°	1116.6	1110.1	1099.4	1099.4	1097.8
60°	1015.0	1009.2	996.9	998.6	996.9
62.5°	915.8	903.5	892.0	896.9	892.8
65°	802.6	796.1	783.8	787.0	786.2
67.5°	699.3	687.0	675.5	682.1	678.8
70°	584.5	578.0	566.5	573.1	564.9
72.5°	476.3	470.6	459.1	466.5	458.3
75°	371.4	365.6	356.6	363.2	355.0
77.5°	272.2	268.1	259.9	266.4	268.1
80°	182.0	177.1	173.0	178.7	180.4
82.5°	106.6	103.3	101.7	102.5	106.6
85°	51.6	47.6	47.6	48.4	48.4
87.5°	13.9	12.3	13.9	14.8	15.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)