

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: P974883

Luminaire Tested: FLR2-24-45HE-L840-CA125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974883
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: FLR2-24-45HE-L840-CA125
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

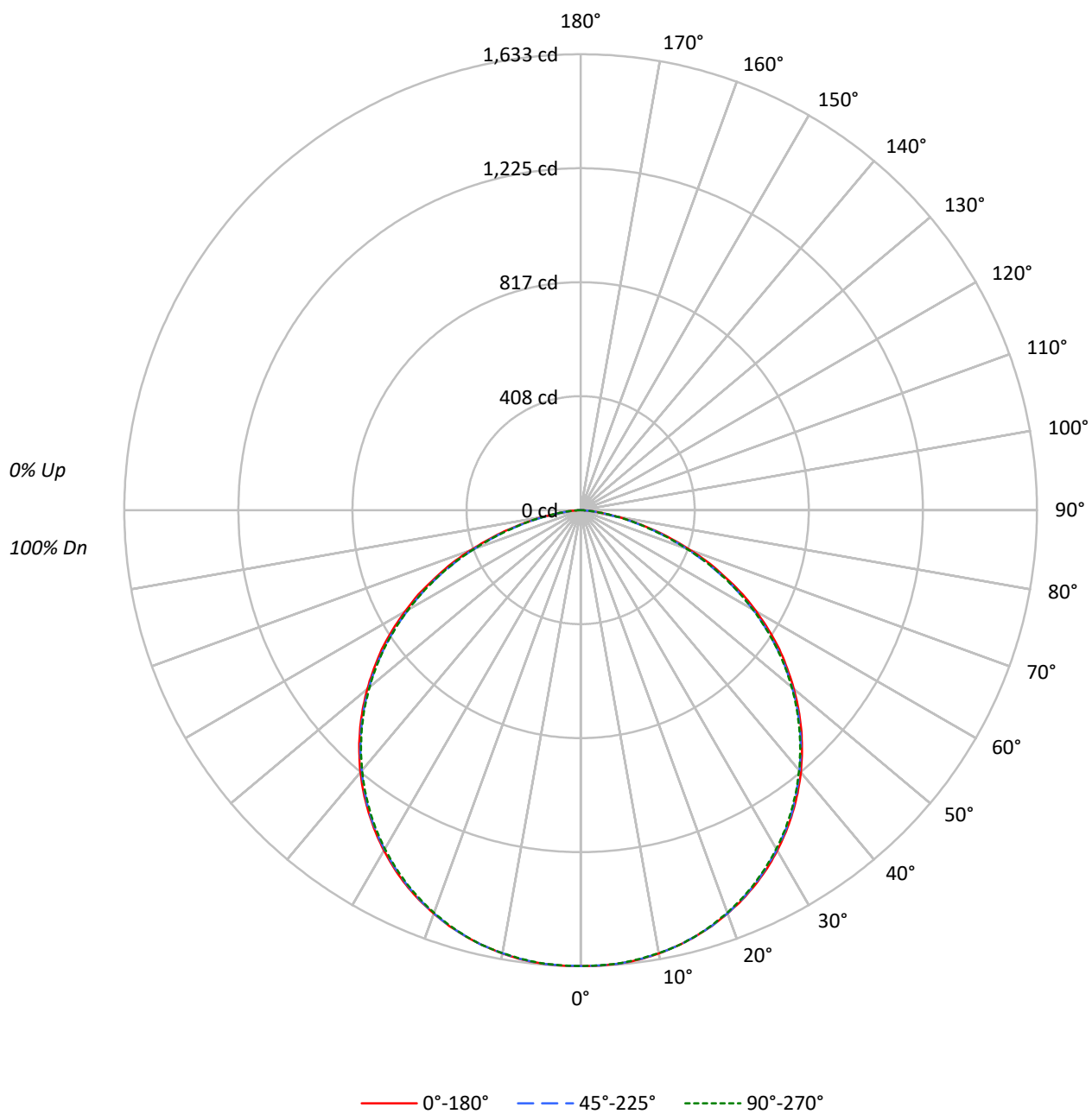
Lumens per Lamp: N/A
Luminaire Lumens: 4614.5 lumens
Efficiency: N/A
Efficacy: 133.0 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
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°	2197	2197	2197
5°	2201	2201	2200
10°	2203	2202	2201
15°	2203	2202	2202
20°	2201	2200	2197
25°	2197	2192	2189
30°	2187	2181	2176
35°	2173	2167	2159
40°	2154	2140	2137
45°	2126	2113	2107
50°	2086	2070	2064
55°	2037	2008	2005
60°	1951	1917	1917
65°	1826	1783	1789
70°	1643	1592	1588
75°	1380	1325	1319
80°	1008	958	999
85°	570	525	534

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2126 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.0	3.4
10°-20°	446.5	9.7
20°-30°	680.7	14.8
30°-40°	824.7	17.9
40°-50°	856.7	18.6
50°-60°	766.3	16.6
60°-70°	558.5	12.1
70°-80°	276.6	6.0
80°-90°	49.4	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°	1282.1	27.8
0°-40°	2106.8	45.7
0°-60°	3729.9	80.8
0°-90°	4614.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4614.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1633	1633	1633	1633	1633	
5°	1630	1630	1630	1630	1629	155
15°	1582	1581	1581	1582	1581	447
25°	1480	1478	1477	1476	1474	682
35°	1323	1321	1319	1317	1315	827
45°	1117	1115	1111	1108	1107	861
55°	868	862	856	856	855	773
65°	574	569	560	562	562	569
75°	265	261	255	260	254	283
85°	37	34	34	35	35	51
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1632.7	1632.7	1632.7	1632.7	1632.7
2.5°	1632.7	1632.1	1632.1	1632.7	1631.5
5°	1629.7	1630.3	1629.7	1629.7	1628.6
7.5°	1623.3	1622.7	1622.1	1622.7	1621.0
10°	1612.2	1612.2	1611.6	1612.2	1611.0
12.5°	1598.7	1598.7	1598.7	1599.3	1598.7
15°	1581.7	1581.1	1581.1	1582.3	1581.1
17.5°	1561.8	1561.2	1561.2	1560.6	1559.4
20°	1537.2	1537.2	1536.6	1536.0	1534.3
22.5°	1510.8	1510.2	1508.5	1508.5	1506.1
25°	1479.8	1478.0	1476.8	1476.3	1474.5
27.5°	1445.8	1443.5	1441.7	1440.5	1438.8
30°	1407.7	1405.4	1403.6	1401.9	1400.7
32.5°	1366.7	1365.5	1362.6	1362.0	1359.7
35°	1322.8	1321.0	1319.3	1316.9	1314.6
37.5°	1275.9	1274.2	1270.1	1268.9	1267.1
40°	1226.1	1223.8	1218.5	1218.5	1216.7
42.5°	1172.8	1170.5	1167.0	1164.6	1163.4
45°	1117.2	1114.8	1110.7	1108.4	1107.2
47.5°	1058.0	1056.2	1051.5	1049.8	1048.0
50°	996.5	994.1	988.9	987.7	985.9
52.5°	932.0	930.9	923.8	923.2	921.5
55°	868.2	861.7	855.9	855.9	854.7
57.5°	797.9	793.2	785.6	785.6	784.4
60°	725.2	721.1	712.4	713.5	712.4
62.5°	654.4	645.6	637.4	640.9	638.0
65°	573.5	568.8	560.0	562.4	561.8
67.5°	499.7	490.9	482.7	487.4	485.1
70°	417.7	413.0	404.8	409.5	403.6
72.5°	340.4	336.3	328.1	333.3	327.5
75°	265.4	261.3	254.8	259.5	253.7
77.5°	194.5	191.6	185.7	190.4	191.6
80°	130.1	126.5	123.6	127.7	128.9
82.5°	76.2	73.8	72.6	73.2	76.2
85°	36.9	34.0	34.0	34.6	34.6
87.5°	10.0	8.8	10.0	10.5	11.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)