

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: P974828

Luminaire Tested: FLR2-24-45HE-L840-CP125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974828
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-CP125
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

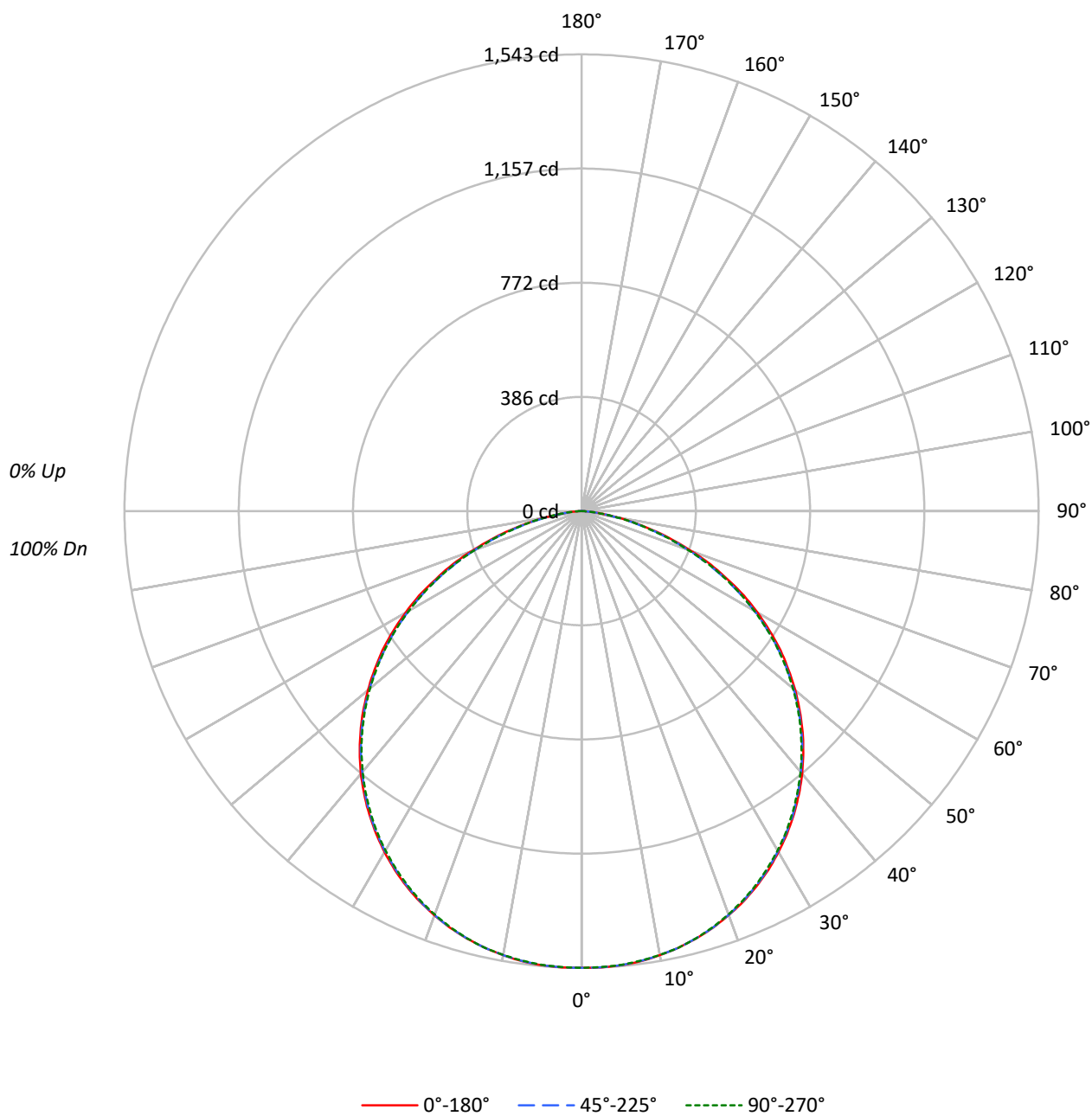
Lumens per Lamp: N/A
Luminaire Lumens: 4361.0 lumens
Efficiency: N/A
Efficacy: 125.7 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P974828

CATALOG NUMBER: FLR2-24-45HE-L840-CP125

Luminous Intensity Polar Plot



TEST NUMBER: P974828

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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°	2076	2076	2076
5°	2080	2080	2079
10°	2082	2081	2080
15°	2082	2081	2081
20°	2080	2079	2076
25°	2076	2072	2069
30°	2067	2061	2057
35°	2053	2048	2041
40°	2035	2023	2020
45°	2009	1997	1991
50°	1971	1956	1950
55°	1925	1898	1895
60°	1844	1812	1812
65°	1726	1685	1690
70°	1553	1505	1501
75°	1304	1252	1246
80°	952	905	944
85°	539	496	505

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2009 cd/sqm

TEST NUMBER: P974828

CATALOG NUMBER: FLR2-24-45HE-L840-CP125

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.5	3.4
10°-20°	421.9	9.7
20°-30°	643.3	14.8
30°-40°	779.4	17.9
40°-50°	809.6	18.6
50°-60°	724.2	16.6
60°-70°	527.9	12.1
70°-80°	261.4	6.0
80°-90°	46.7	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°	1211.7	27.8
0°-40°	1991.1	45.7
0°-60°	3525.0	80.8
0°-90°	4361.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4361.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1543	1543	1543	1543	1543	
5°	1540	1541	1540	1540	1539	146
15°	1495	1494	1494	1495	1494	422
25°	1398	1397	1396	1395	1394	645
35°	1250	1248	1247	1245	1242	782
45°	1056	1054	1050	1048	1046	814
55°	820	814	809	809	808	731
65°	542	538	529	532	531	537
75°	251	247	241	245	240	267
85°	35	32	32	33	33	48
90°	0	0	0	0	0	

TEST NUMBER: P974828

CATALOG NUMBER: FLR2-24-45HE-L840-CP125

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1543.0	1543.0	1543.0	1543.0	1543.0
2.5°	1543.0	1542.4	1542.4	1543.0	1541.9
5°	1540.2	1540.8	1540.2	1540.2	1539.1
7.5°	1534.1	1533.6	1533.0	1533.6	1531.9
10°	1523.6	1523.6	1523.1	1523.6	1522.5
12.5°	1510.9	1510.9	1510.9	1511.4	1510.9
15°	1494.8	1494.3	1494.3	1495.4	1494.3
17.5°	1476.0	1475.5	1475.5	1474.9	1473.8
20°	1452.8	1452.8	1452.2	1451.6	1450.0
22.5°	1427.8	1427.3	1425.6	1425.6	1423.4
25°	1398.5	1396.8	1395.7	1395.2	1393.5
27.5°	1366.4	1364.2	1362.5	1361.4	1359.7
30°	1330.4	1328.2	1326.5	1324.9	1323.8
32.5°	1291.6	1290.5	1287.8	1287.2	1285.0
35°	1250.1	1248.5	1246.8	1244.6	1242.4
37.5°	1205.8	1204.2	1200.3	1199.2	1197.5
40°	1158.8	1156.6	1151.6	1151.6	1149.9
42.5°	1108.4	1106.2	1102.9	1100.6	1099.5
45°	1055.8	1053.6	1049.7	1047.5	1046.4
47.5°	999.9	998.2	993.8	992.1	990.5
50°	941.7	939.5	934.5	933.4	931.8
52.5°	880.8	879.7	873.1	872.5	870.9
55°	820.5	814.4	808.9	808.9	807.8
57.5°	754.1	749.6	742.4	742.4	741.3
60°	685.4	681.5	673.2	674.3	673.2
62.5°	618.4	610.1	602.4	605.7	602.9
65°	542.0	537.6	529.3	531.5	530.9
67.5°	472.3	464.0	456.2	460.6	458.4
70°	394.7	390.3	382.6	387.0	381.5
72.5°	321.7	317.8	310.0	315.0	309.5
75°	250.8	246.9	240.8	245.3	239.7
77.5°	183.8	181.0	175.5	179.9	181.0
80°	122.9	119.6	116.8	120.7	121.8
82.5°	72.0	69.8	68.7	69.2	72.0
85°	34.9	32.1	32.1	32.7	32.7
87.5°	9.4	8.3	9.4	10.0	10.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)