

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: P974949

Luminaire Tested: FLR2-24-45HE-L940-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974949
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-L940-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

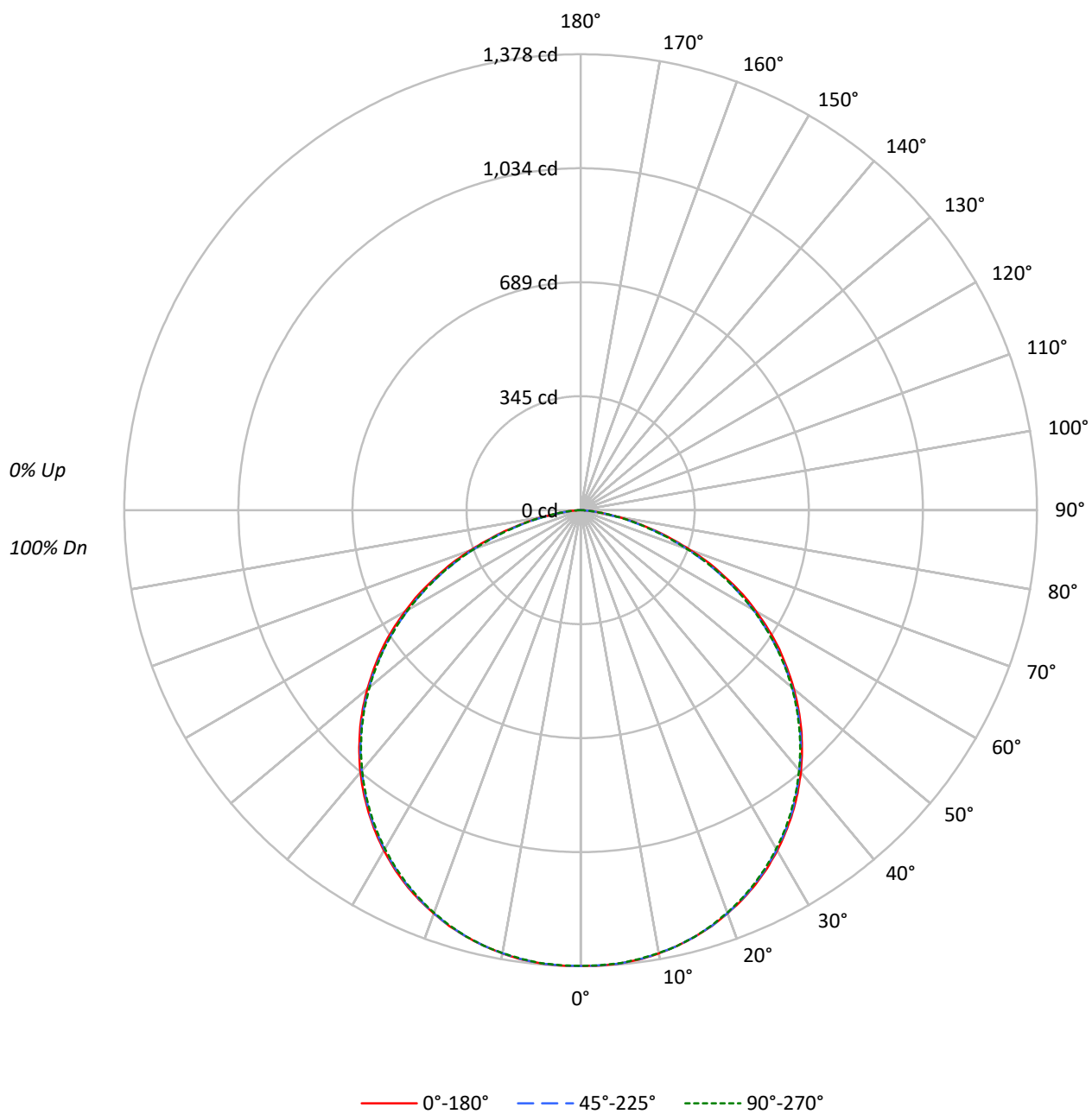
Lumens per Lamp: N/A
Luminaire Lumens: 3893.5 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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: P974949

CATALOG NUMBER: FLR2-24-45HE-L940-CA080

Luminous Intensity Polar Plot



TEST NUMBER: P974949

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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°	1854	1854	1854
5°	1857	1857	1856
10°	1859	1858	1857
15°	1859	1858	1858
20°	1857	1856	1854
25°	1854	1850	1847
30°	1845	1840	1836
35°	1833	1828	1822
40°	1817	1806	1803
45°	1794	1783	1778
50°	1760	1747	1741
55°	1718	1694	1692
60°	1647	1618	1618
65°	1541	1504	1509
70°	1386	1344	1340
75°	1164	1118	1112
80°	850	808	842
85°	480	443	451

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1794 cd/sqm

TEST NUMBER: P974949

CATALOG NUMBER: FLR2-24-45HE-L940-CA080

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.8	3.4
10°-20°	376.7	9.7
20°-30°	574.3	14.8
30°-40°	695.9	17.9
40°-50°	722.8	18.6
50°-60°	646.6	16.6
60°-70°	471.3	12.1
70°-80°	233.4	6.0
80°-90°	41.7	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°	1081.8	27.8
0°-40°	1777.7	45.7
0°-60°	3147.1	80.8
0°-90°	3893.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3893.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1378	1378	1378	1378	1378	
5°	1375	1376	1375	1375	1374	131
15°	1335	1334	1334	1335	1334	377
25°	1249	1247	1246	1246	1244	575
35°	1116	1115	1113	1111	1109	698
45°	943	941	937	935	934	726
55°	732	727	722	722	721	653
65°	484	480	472	474	474	480
75°	224	220	215	219	214	239
85°	31	29	29	29	29	43
90°	0	0	0	0	0	

TEST NUMBER: P974949

CATALOG NUMBER: FLR2-24-45HE-L940-CA080

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1377.6	1377.6	1377.6	1377.6	1377.6
2.5°	1377.6	1377.1	1377.1	1377.6	1376.6
5°	1375.1	1375.6	1375.1	1375.1	1374.1
7.5°	1369.7	1369.2	1368.7	1369.2	1367.7
10°	1360.3	1360.3	1359.8	1360.3	1359.3
12.5°	1348.9	1348.9	1348.9	1349.4	1348.9
15°	1334.6	1334.1	1334.1	1335.1	1334.1
17.5°	1317.8	1317.3	1317.3	1316.8	1315.8
20°	1297.0	1297.0	1296.5	1296.0	1294.5
22.5°	1274.8	1274.3	1272.8	1272.8	1270.8
25°	1248.6	1247.1	1246.1	1245.6	1244.1
27.5°	1219.9	1217.9	1216.4	1215.4	1214.0
30°	1187.8	1185.8	1184.3	1182.8	1181.8
32.5°	1153.2	1152.2	1149.7	1149.2	1147.2
35°	1116.1	1114.6	1113.1	1111.2	1109.2
37.5°	1076.6	1075.1	1071.6	1070.6	1069.1
40°	1034.5	1032.6	1028.1	1028.1	1026.6
42.5°	989.6	987.6	984.6	982.6	981.6
45°	942.6	940.6	937.2	935.2	934.2
47.5°	892.7	891.2	887.2	885.8	884.3
50°	840.8	838.8	834.4	833.4	831.9
52.5°	786.4	785.4	779.5	779.0	777.5
55°	732.5	727.1	722.1	722.1	721.2
57.5°	673.2	669.3	662.8	662.8	661.8
60°	611.9	608.5	601.1	602.0	601.1
62.5°	552.1	544.7	537.8	540.7	538.3
65°	483.9	480.0	472.5	474.5	474.0
67.5°	421.6	414.2	407.3	411.2	409.3
70°	352.4	348.5	341.6	345.5	340.6
72.5°	287.2	283.7	276.8	281.2	276.3
75°	223.9	220.5	215.0	219.0	214.0
77.5°	164.1	161.6	156.7	160.6	161.6
80°	109.7	106.8	104.3	107.8	108.7
82.5°	64.3	62.3	61.3	61.8	64.3
85°	31.1	28.7	28.7	29.2	29.2
87.5°	8.4	7.4	8.4	8.9	9.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)