

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: P974870

Luminaire Tested: FLR2-24-35HE-L840-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974870
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: FLR2-24-35HE-L840-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

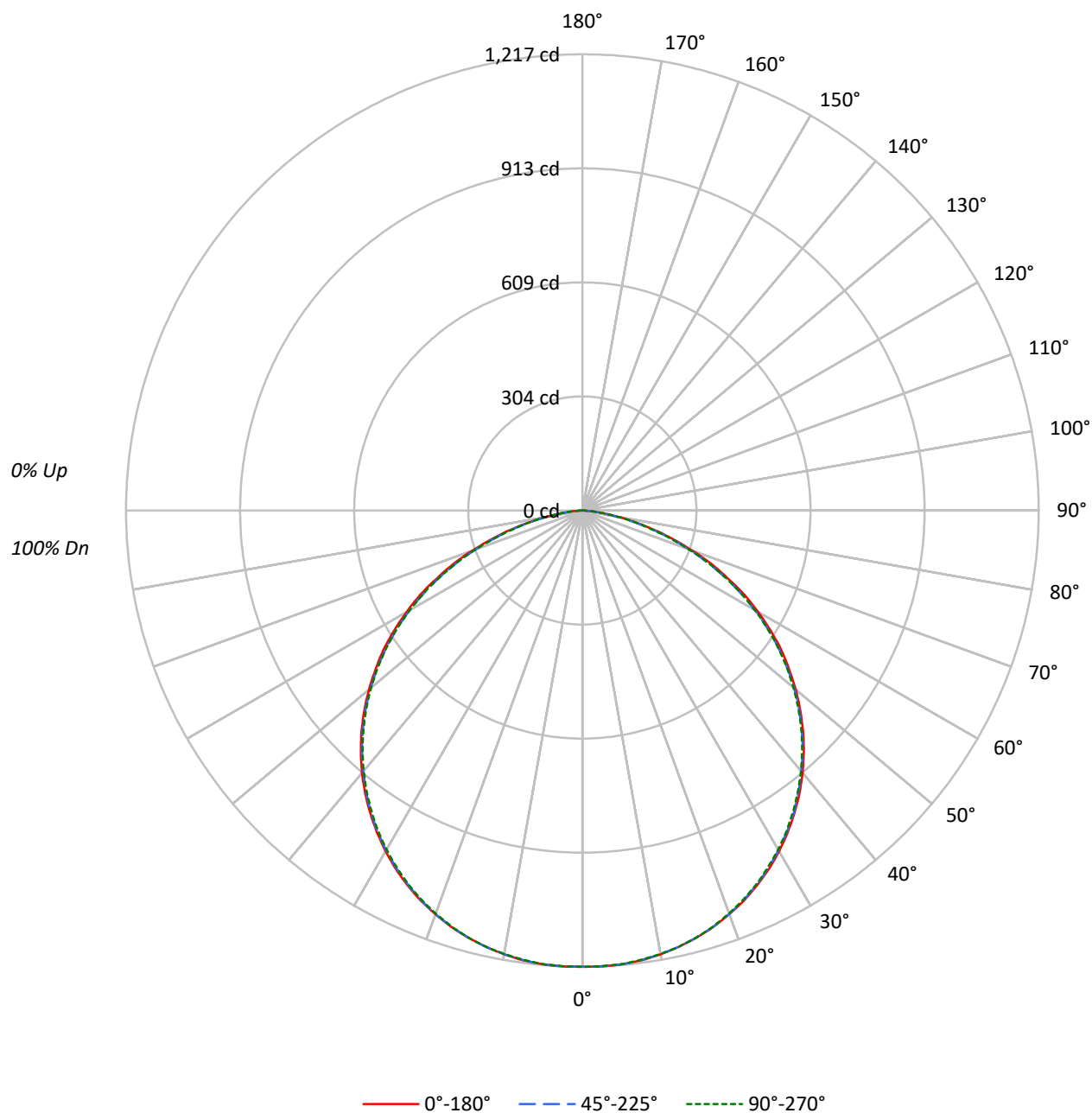
Lumens per Lamp: N/A
Luminaire Lumens: 3440.4 lumens
Efficiency: N/A
Efficacy: 134.4 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.6
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

TEST NUMBER: P974870

CATALOG NUMBER: FLR2-24-35HE-L840-CA080

Luminous Intensity Polar Plot



TEST NUMBER: P974870

CATALOG NUMBER: FLR2-24-35HE-L840-CA080

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°	1638	1638	1638
5°	1641	1641	1640
10°	1642	1642	1641
15°	1643	1642	1642
20°	1641	1640	1638
25°	1638	1635	1632
30°	1631	1626	1622
35°	1620	1616	1610
40°	1606	1596	1593
45°	1585	1576	1571
50°	1555	1543	1539
55°	1518	1497	1495
60°	1455	1429	1429
65°	1361	1330	1334
70°	1225	1187	1184
75°	1029	988	983
80°	752	714	745
85°	425	391	398

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1585 cd/sqm

TEST NUMBER: P974870
CATALOG NUMBER: FLR2-24-35HE-L840-CA080

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.5	3.4
10°-20°	332.9	9.7
20°-30°	507.5	14.8
30°-40°	614.9	17.9
40°-50°	638.7	18.6
50°-60°	571.4	16.6
60°-70°	416.4	12.1
70°-80°	206.2	6.0
80°-90°	36.9	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°	955.9	27.8
0°-40°	1570.8	45.7
0°-60°	2780.9	80.8
0°-90°	3440.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3440.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1217	1217	1217	1217	1217	
5°	1215	1216	1215	1215	1214	116
15°	1179	1179	1179	1180	1179	333
25°	1103	1102	1101	1101	1099	508
35°	986	985	984	982	980	617
45°	833	831	828	826	826	642
55°	647	642	638	638	637	577
65°	428	424	418	419	419	424
75°	198	195	190	194	189	211
85°	28	25	25	26	26	38
90°	0	0	0	0	0	

TEST NUMBER: P974870

CATALOG NUMBER: FLR2-24-35HE-L840-CA080

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1217.3	1217.3	1217.3	1217.3	1217.3
2.5°	1217.3	1216.8	1216.8	1217.3	1216.4
5°	1215.1	1215.5	1215.1	1215.1	1214.2
7.5°	1210.3	1209.8	1209.4	1209.8	1208.5
10°	1202.0	1202.0	1201.6	1202.0	1201.1
12.5°	1191.9	1191.9	1191.9	1192.4	1191.9
15°	1179.3	1178.8	1178.8	1179.7	1178.8
17.5°	1164.4	1164.0	1164.0	1163.6	1162.7
20°	1146.1	1146.1	1145.6	1145.2	1143.9
22.5°	1126.4	1126.0	1124.7	1124.7	1122.9
25°	1103.3	1102.0	1101.1	1100.7	1099.3
27.5°	1077.9	1076.2	1074.9	1074.0	1072.7
30°	1049.6	1047.8	1046.5	1045.2	1044.3
32.5°	1019.0	1018.1	1015.9	1015.5	1013.7
35°	986.2	984.9	983.6	981.9	980.1
37.5°	951.3	950.0	946.9	946.0	944.7
40°	914.2	912.4	908.5	908.5	907.2
42.5°	874.4	872.7	870.0	868.3	867.4
45°	832.9	831.2	828.1	826.4	825.5
47.5°	788.8	787.5	784.0	782.7	781.4
50°	742.9	741.2	737.3	736.4	735.1
52.5°	694.9	694.0	688.8	688.3	687.0
55°	647.3	642.5	638.1	638.1	637.2
57.5°	594.9	591.4	585.7	585.7	584.8
60°	540.7	537.7	531.1	532.0	531.1
62.5°	487.9	481.3	475.2	477.8	475.6
65°	427.6	424.1	417.6	419.3	418.9
67.5°	372.6	366.0	359.9	363.4	361.6
70°	311.4	307.9	301.8	305.3	300.9
72.5°	253.8	250.7	244.6	248.5	244.2
75°	197.9	194.8	190.0	193.5	189.1
77.5°	145.0	142.8	138.5	141.9	142.8
80°	97.0	94.3	92.2	95.2	96.1
82.5°	56.8	55.0	54.2	54.6	56.8
85°	27.5	25.3	25.3	25.8	25.8
87.5°	7.4	6.6	7.4	7.9	8.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)