

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: P688190

Luminaire Tested: FLR-WL-24-L3C3 (LOW)-50-CP250

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688190  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2207-724-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/22/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR-WL-24-L3C3 (LOW)-50-CP250  
Description: Fail-Safe - FLR Fully Luminous Recessed 2X4 5000K Luminaire at Low Lumen setting for Wet location  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

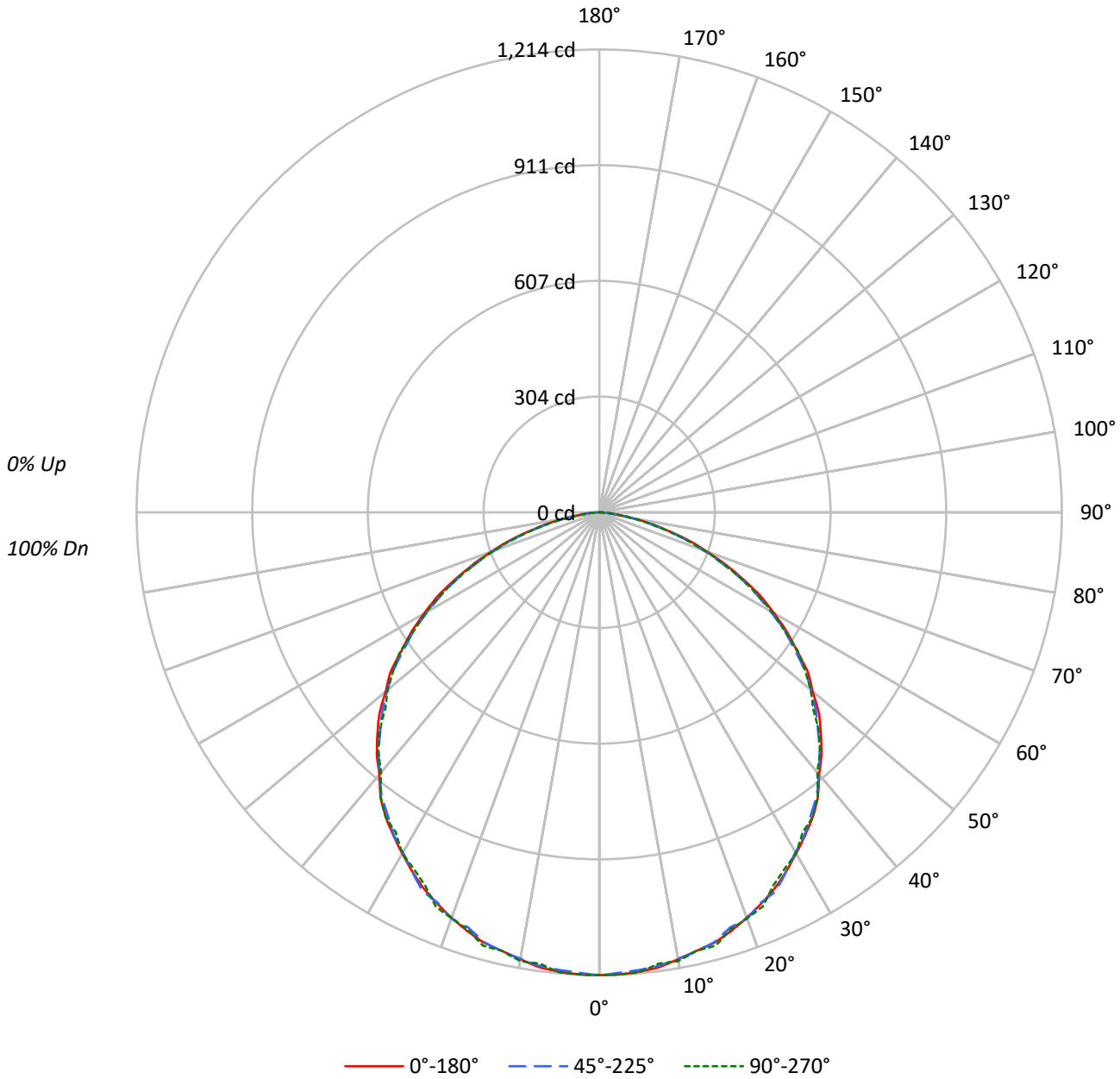
Lumens per Lamp: N/A  
Luminaire Lumens: 3365.8 lumens  
Efficiency: N/A  
Efficacy: 121.1 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 27.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
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				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85
2	100	92	85	79	97	90	84	78	86	81	77	83	79	75	80	76	73	71
3	91	81	73	66	88	79	72	66	76	70	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	46	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	35	30	55	43	35	30	42	35	30	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1634	1634	1634
5°	1634	1628	1636
10°	1626	1625	1633
15°	1629	1626	1640
20°	1621	1625	1622
25°	1617	1628	1603
30°	1606	1600	1605
35°	1605	1591	1605
40°	1576	1575	1564
45°	1565	1546	1553
50°	1530	1518	1517
55°	1486	1465	1495
60°	1425	1394	1410
65°	1329	1300	1302
70°	1178	1145	1157
75°	970	933	946
80°	680	665	675
85°	349	329	329

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1565 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.8	3.4
10°-20°	329.4	9.8
20°-30°	500.8	14.9
30°-40°	605.7	18.0
40°-50°	627.6	18.6
50°-60°	560.2	16.6
60°-70°	402.3	12.0
70°-80°	193.0	5.7
80°-90°	32.0	1.0
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°	945.0	28.1
0°-40°	1550.6	46.1
0°-60°	2738.5	81.4
0°-90°	3365.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3365.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1214	1214	1214	1214	1214	
5°	1210	1214	1205	1206	1211	115
15°	1169	1170	1167	1167	1178	329
25°	1089	1087	1097	1083	1080	502
35°	977	969	968	965	977	609
45°	823	817	812	812	816	634
55°	634	626	625	623	638	568
65°	418	405	408	403	409	413
75°	186	174	179	179	182	202
85°	23	21	21	21	21	33
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1214.3	1214.3	1214.3	1214.3	1214.3
2.5°	1213.7	1215.0	1209.1	1207.9	1213.7
5°	1209.8	1213.7	1205.3	1205.9	1211.1
7.5°	1204.0	1201.4	1200.1	1204.6	1194.3
10°	1190.4	1196.2	1189.1	1185.9	1195.6
12.5°	1178.8	1179.5	1180.1	1181.4	1178.2
15°	1169.1	1170.4	1167.2	1167.2	1177.5
17.5°	1151.7	1154.3	1142.0	1149.8	1147.2
20°	1132.4	1129.8	1134.9	1133.0	1133.0
22.5°	1111.1	1111.1	1108.5	1109.8	1120.1
25°	1089.1	1086.6	1096.9	1083.3	1080.1
27.5°	1062.7	1060.1	1062.7	1055.6	1054.3
30°	1033.6	1027.2	1029.8	1030.4	1033.0
32.5°	1005.3	998.8	1003.3	998.8	994.3
35°	976.9	969.1	968.5	964.6	976.9
37.5°	942.7	934.3	937.5	925.2	942.0
40°	897.5	892.3	896.9	893.0	890.4
42.5°	864.0	858.1	856.2	853.6	857.5
45°	822.7	816.9	812.3	811.7	816.2
47.5°	782.7	767.8	771.7	765.9	760.7
50°	731.0	727.2	725.2	719.4	724.6
52.5°	691.0	676.8	680.1	674.9	680.7
55°	633.6	626.5	624.6	623.3	637.5
57.5°	583.9	574.9	576.2	573.0	574.9
60°	529.7	521.3	518.1	517.5	523.9
62.5°	478.8	461.3	463.9	463.3	466.5
65°	417.5	405.2	408.4	402.6	409.1
67.5°	358.7	346.5	347.8	346.5	349.7
70°	299.4	285.8	291.0	288.4	294.2
72.5°	247.8	231.6	236.2	231.6	236.8
75°	186.5	174.2	179.4	179.4	182.0
77.5°	137.4	126.5	130.3	129.0	131.6
80°	87.8	83.2	85.8	83.9	87.1
82.5°	50.3	47.1	47.1	48.4	49.0
85°	22.6	21.3	21.3	21.3	21.3
87.5°	5.8	5.8	5.8	5.8	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)