

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: P687888

Luminaire Tested: FLR-MC-24-L3C3 (LOW)-35-CA08

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P687888
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2303-938-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR-MC-24-L3C3 (LOW)-35-CA08
Description: Fail-Safe - FLR Fully Luminous Recessed 2X4 3500K Luminaire at Low Lumen setting for Medical/Cleanroom
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

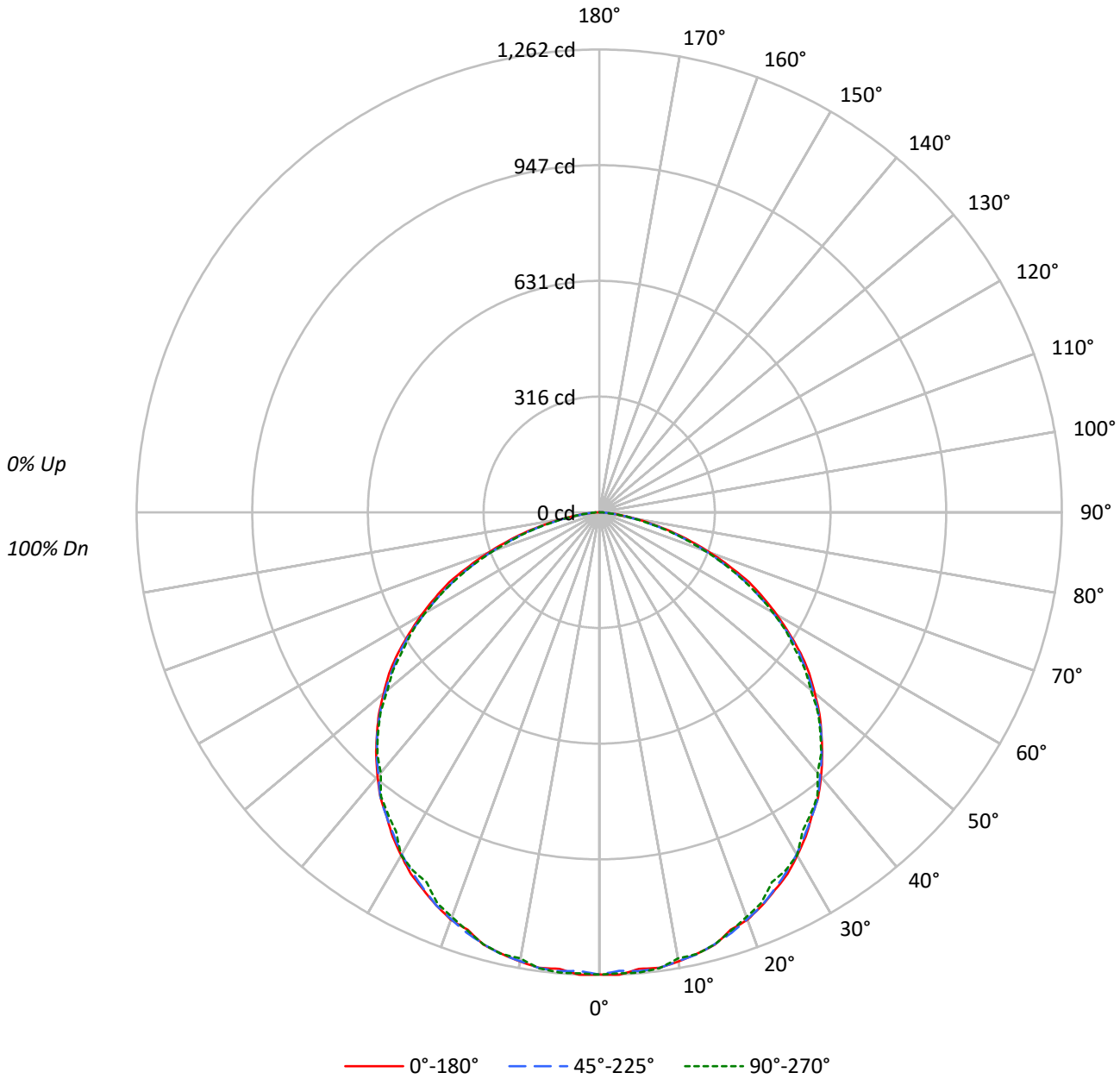
Lumens per Lamp: N/A
Luminaire Lumens: 3540.8 lumens
Efficiency: N/A
Efficacy: 127.4 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85	85	85
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71	71	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60	60	60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51	51	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44	44	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39	39	39
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34	34	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30	30	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27	27	27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	27	37	31	26	25	25	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1696	1696	1696
5°	1688	1697	1702
10°	1700	1698	1688
15°	1700	1698	1699
20°	1693	1691	1682
25°	1686	1682	1653
30°	1679	1674	1678
35°	1661	1662	1650
40°	1653	1645	1627
45°	1632	1630	1624
50°	1606	1594	1577
55°	1573	1558	1529
60°	1505	1473	1473
65°	1436	1378	1363
70°	1264	1214	1199
75°	1055	1002	1012
80°	755	710	705
85°	394	363	383

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 1636 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.5	3.4
10°-20°	343.5	9.7
20°-30°	522.6	14.8
30°-40°	633.2	17.9
40°-50°	659.3	18.6
50°-60°	590.3	16.7
60°-70°	428.6	12.1
70°-80°	208.1	5.9
80°-90°	35.8	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°	985.5	27.8
0°-40°	1618.7	45.7
0°-60°	2868.3	81.0
0°-90°	3540.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3540.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1261	1261	1261	1261	1261	
5°	1250	1257	1256	1254	1260	119
15°	1220	1218	1219	1210	1220	343
25°	1136	1138	1133	1131	1114	524
35°	1011	1017	1012	1015	1005	635
45°	858	860	856	852	853	662
55°	671	666	664	657	652	597
65°	451	439	433	431	428	440
75°	203	198	193	193	195	216
85°	26	26	24	24	25	38
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1260.6	1260.6	1260.6	1260.6	1260.6
2.5°	1262.5	1261.8	1251.6	1256.1	1258.6
5°	1249.7	1257.4	1256.1	1253.6	1259.9
7.5°	1252.9	1249.7	1253.6	1252.9	1254.2
10°	1244.0	1240.8	1242.7	1243.4	1235.7
12.5°	1233.2	1231.3	1234.5	1237.0	1233.8
15°	1220.5	1217.9	1219.2	1210.3	1219.8
17.5°	1193.7	1200.1	1202.0	1196.9	1196.3
20°	1182.3	1180.4	1181.0	1179.1	1174.7
22.5°	1160.7	1168.3	1160.7	1156.8	1153.7
25°	1135.8	1138.4	1133.3	1131.4	1113.6
27.5°	1112.3	1111.7	1105.9	1105.9	1100.8
30°	1080.5	1076.0	1077.3	1072.2	1079.8
32.5°	1048.7	1049.3	1043.6	1045.5	1031.5
35°	1011.1	1016.8	1011.8	1014.9	1004.8
37.5°	980.6	976.8	980.6	975.5	977.4
40°	941.1	939.8	936.7	937.9	926.5
42.5°	900.4	898.5	897.9	895.3	895.9
45°	857.8	859.7	856.5	852.0	853.3
47.5°	815.1	817.0	811.3	805.6	809.4
50°	767.4	768.7	761.7	759.8	753.4
52.5°	722.2	716.5	712.7	709.5	708.9
55°	670.7	665.6	664.3	656.7	651.6
57.5°	613.4	612.1	608.3	602.6	605.1
60°	559.3	554.2	547.2	546.0	547.2
62.5°	504.0	498.2	489.3	491.9	489.3
65°	451.2	439.1	432.7	431.4	428.2
67.5°	383.7	374.8	369.7	367.8	369.1
70°	321.3	320.7	308.6	306.7	304.8
72.5°	260.9	255.8	248.8	248.2	247.5
75°	203.0	198.5	192.8	193.4	194.7
77.5°	146.4	141.9	136.8	138.7	136.2
80°	97.4	96.1	91.6	91.0	91.0
82.5°	57.9	55.4	52.8	52.8	53.5
85°	25.5	26.1	23.5	23.5	24.8
87.5°	6.4	7.0	6.4	6.4	6.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)