

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: P688028

Luminaire Tested: FLR-HA-22-L3C3 (MED)-50-CP375

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688028
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2207-724-15)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR-HA-22-L3C3 (MED)-50-CP375
Description: Fail-Safe - FLR Fully Luminous Recessed 2X2 5000K Luminaire at Midium Lumen setting for High Abuse
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

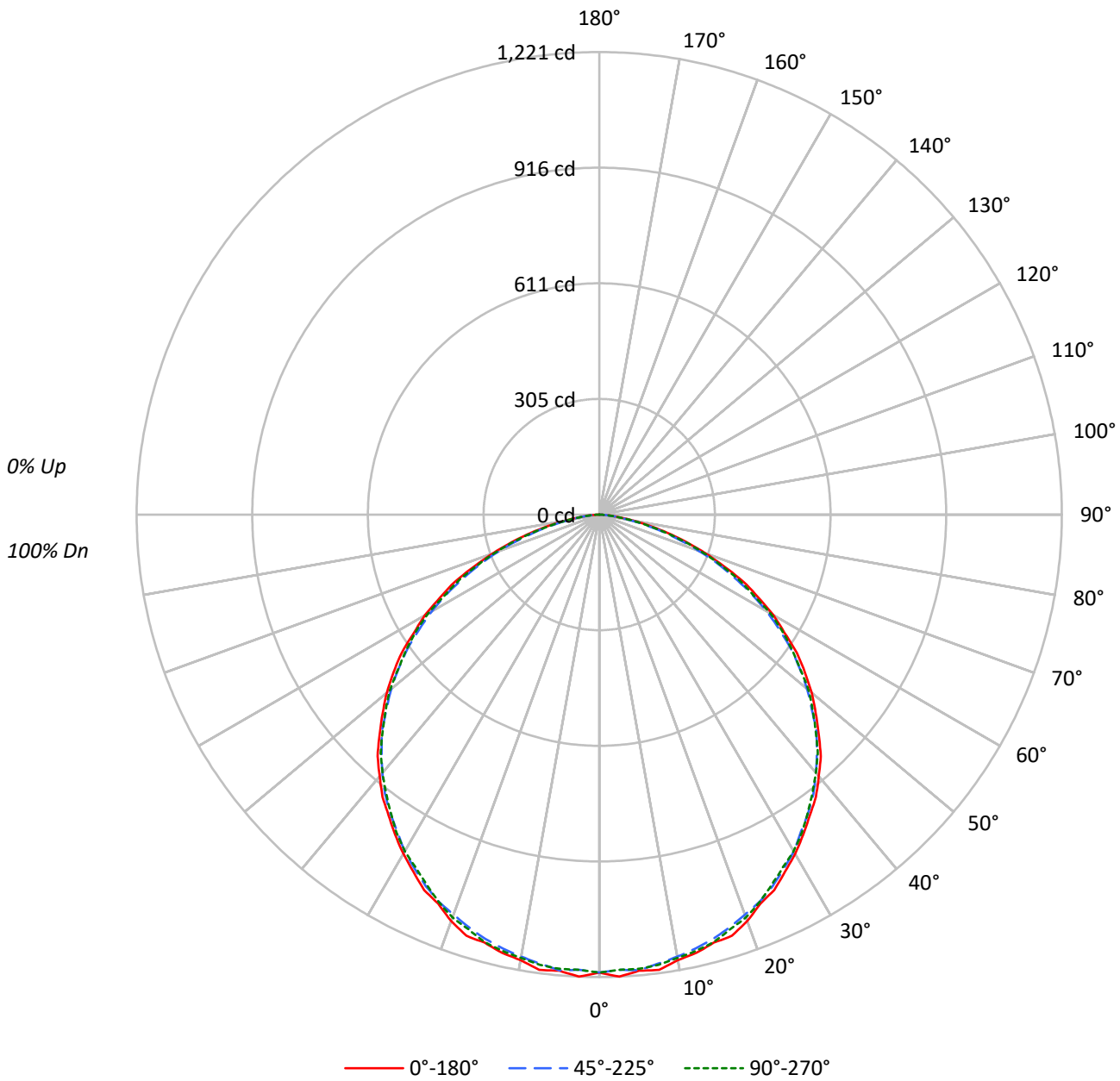
Lumens per Lamp: N/A
Luminaire Lumens: 3332.0 lumens
Efficiency: N/A
Efficacy: 110.7 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 30.1
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	103	99	96	98	95	93	94	92	90	91	89	87	85	85	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	71	71	71
3	91	81	73	66	88	79	72	66	76	70	65	73	68	63	71	66	62	60	60	60
4	83	72	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51	51	51
5	77	64	55	48	75	63	54	48	61	53	48	59	52	47	57	51	47	45	45	45
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39	39	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34	34	34
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31	31	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28	28	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25	25	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3253	3253	3253
5°	3266	3262	3251
10°	3263	3238	3247
15°	3259	3231	3255
20°	3270	3219	3242
25°	3247	3214	3200
30°	3213	3190	3188
35°	3184	3160	3153
40°	3167	3127	3125
45°	3118	3086	3075
50°	3064	3000	3020
55°	2987	2897	2912
60°	2859	2742	2806
65°	2678	2506	2586
70°	2345	2194	2278
75°	1942	1750	1845
80°	1376	1232	1283
85°	695	614	655

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3118 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.4	3.4
10°-20°	328.4	9.9
20°-30°	498.7	15.0
30°-40°	601.8	18.1
40°-50°	623.9	18.7
50°-60°	552.7	16.6
60°-70°	394.5	11.8
70°-80°	186.9	5.6
80°-90°	30.6	0.9
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°	941.5	28.3
0°-40°	1543.3	46.3
0°-60°	2719.9	81.6
0°-90°	3332.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3332.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1209	1209	1209	1209	1209	
5°	1209	1203	1208	1199	1204	115
15°	1170	1163	1160	1166	1168	332
25°	1094	1076	1082	1083	1078	503
35°	969	959	962	958	960	608
45°	819	808	811	808	808	633
55°	637	619	617	615	621	566
65°	421	394	394	396	406	411
75°	187	172	168	172	178	199
85°	22	20	20	19	21	33
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1208.9	1208.9	1208.9	1208.9	1208.9
2.5°	1220.8	1199.6	1202.9	1205.6	1202.9
5°	1208.9	1202.9	1207.6	1199.0	1203.6
7.5°	1212.2	1197.6	1195.6	1193.0	1199.0
10°	1194.3	1185.7	1185.0	1189.7	1188.4
12.5°	1185.0	1177.8	1173.8	1174.5	1179.8
15°	1169.8	1163.2	1159.9	1166.5	1168.5
17.5°	1165.8	1142.7	1142.7	1144.0	1148.0
20°	1142.0	1126.8	1124.1	1126.8	1132.1
22.5°	1111.5	1106.2	1106.2	1108.2	1106.9
25°	1093.6	1075.8	1082.4	1083.0	1077.7
27.5°	1062.5	1055.9	1054.6	1051.9	1049.9
30°	1034.0	1023.4	1026.7	1026.7	1026.1
32.5°	1002.2	994.9	991.6	992.3	995.6
35°	969.1	959.2	961.8	957.8	959.8
37.5°	939.3	926.0	928.7	926.7	924.7
40°	901.5	890.9	890.3	887.0	889.6
42.5°	865.8	850.5	849.9	850.5	853.8
45°	819.4	807.5	810.8	808.1	808.1
47.5°	775.0	767.1	761.1	761.8	764.4
50°	732.0	716.7	716.7	711.4	721.4
52.5°	684.3	669.0	667.0	669.0	667.7
55°	636.6	618.7	617.4	614.7	620.7
57.5°	578.9	561.7	563.0	564.4	573.0
60°	531.3	508.1	509.4	510.7	521.3
62.5°	472.3	453.1	452.4	454.4	457.1
65°	420.6	393.5	393.5	396.1	406.1
67.5°	355.1	338.5	337.8	341.1	345.1
70°	298.1	278.9	278.9	282.8	289.5
72.5°	241.1	225.2	222.6	228.5	233.2
75°	186.8	171.6	168.3	172.2	177.5
77.5°	133.8	123.9	121.2	125.2	126.5
80°	88.8	80.2	79.5	81.5	82.8
82.5°	51.0	45.7	43.7	45.7	46.4
85°	22.5	20.5	19.9	19.2	21.2
87.5°	5.3	5.3	5.3	5.3	6.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)