

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: P688298

Luminaire Tested: FLR-HA-22-L3C3 (MED)-50-CP125

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688298
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2207-724-12)
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-CP125
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

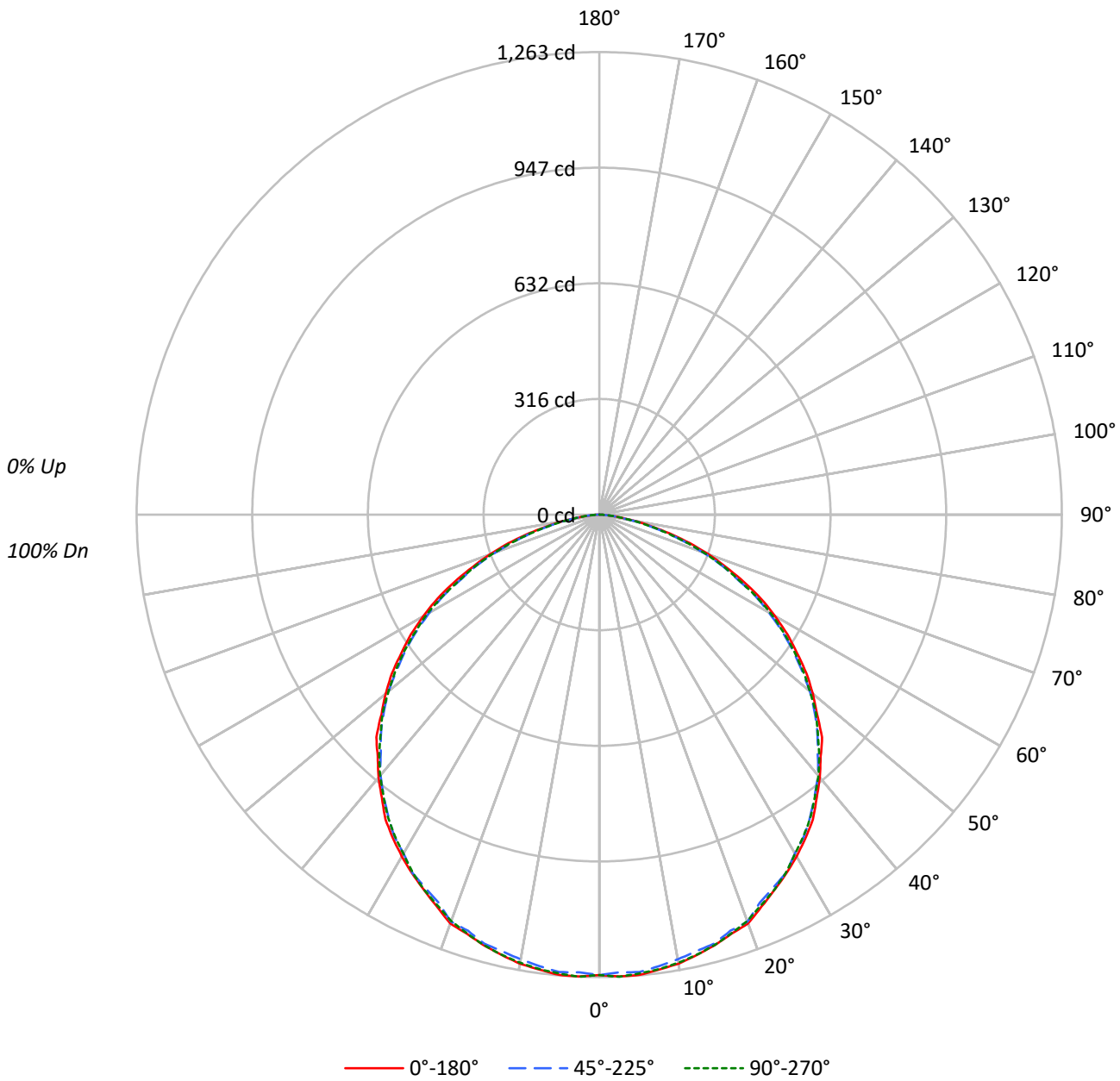
Lumens per Lamp: N/A
Luminaire Lumens: 3487.7 lumens
Efficiency: N/A
Efficacy: 115.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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	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	103	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	54	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	59	47	39	33	45	38	33	44	38	33	43	37	33	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	29	40	34	29	28
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°	3383	3383	3383
5°	3408	3387	3398
10°	3402	3370	3395
15°	3392	3379	3390
20°	3403	3388	3382
25°	3359	3337	3357
30°	3349	3320	3322
35°	3340	3301	3307
40°	3290	3264	3269
45°	3274	3206	3211
50°	3186	3142	3142
55°	3092	3024	3042
60°	2984	2880	2920
65°	2779	2636	2662
70°	2491	2350	2387
75°	2052	1929	1921
80°	1437	1354	1354
85°	778	695	695

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3274 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.2	3.4
10°-20°	342.1	9.8
20°-30°	520.0	14.9
30°-40°	629.0	18.0
40°-50°	651.1	18.7
50°-60°	578.5	16.6
60°-70°	415.6	11.9
70°-80°	198.8	5.7
80°-90°	33.5	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°	981.4	28.1
0°-40°	1610.3	46.2
0°-60°	2839.9	81.4
0°-90°	3487.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3487.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1257	1257	1257	1257	1257	
5°	1262	1253	1254	1255	1258	120
15°	1217	1210	1213	1210	1217	344
25°	1131	1125	1124	1129	1131	523
35°	1017	1010	1005	1004	1007	634
45°	860	848	842	840	844	658
55°	659	652	644	640	648	590
65°	436	432	414	403	418	431
75°	197	194	186	170	185	212
85°	25	24	22	21	22	36
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1257.2	1257.2	1257.2	1257.2	1257.2
2.5°	1262.5	1253.2	1251.2	1263.1	1263.1
5°	1261.8	1253.2	1253.9	1255.2	1257.8
7.5°	1253.2	1248.6	1243.9	1248.6	1251.9
10°	1245.2	1234.6	1233.3	1235.3	1242.6
12.5°	1232.0	1220.1	1221.4	1224.7	1231.3
15°	1217.4	1209.5	1212.8	1210.1	1216.8
17.5°	1200.2	1200.2	1191.6	1189.6	1199.5
20°	1188.3	1171.7	1183.0	1173.0	1181.0
22.5°	1158.5	1149.2	1146.5	1154.5	1154.5
25°	1131.3	1125.4	1124.0	1128.7	1130.7
27.5°	1105.5	1102.2	1103.5	1102.8	1102.8
30°	1077.7	1069.1	1068.4	1068.4	1069.1
32.5°	1047.9	1041.9	1041.2	1037.3	1039.2
35°	1016.7	1010.1	1004.8	1003.5	1006.8
37.5°	975.0	967.0	966.4	967.7	967.7
40°	936.6	928.0	929.3	924.7	930.6
42.5°	894.9	887.6	882.9	881.6	888.9
45°	860.4	847.8	842.5	839.9	843.8
47.5°	806.1	802.8	797.5	792.8	802.1
50°	761.1	763.0	750.5	745.8	750.5
52.5°	713.4	704.8	696.1	688.2	701.4
55°	659.1	652.4	644.5	640.5	648.5
57.5°	609.4	602.1	590.2	580.9	594.8
60°	554.4	547.8	535.2	525.3	542.5
62.5°	498.1	490.8	478.9	463.0	480.9
65°	436.5	431.9	414.0	403.4	418.0
67.5°	374.2	371.6	361.0	343.1	364.3
70°	316.6	311.3	298.7	282.8	303.4
72.5°	259.6	250.4	241.1	225.9	243.1
75°	197.4	194.1	185.5	169.6	184.8
77.5°	143.1	139.8	133.8	121.9	133.8
80°	92.7	92.1	87.4	78.8	87.4
82.5°	53.0	53.0	49.7	46.4	49.7
85°	25.2	23.8	22.5	21.2	22.5
87.5°	6.6	6.6	6.6	6.6	7.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)