

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: P688380

Luminaire Tested: FLR-HA-22-L3C3 (HI)-35-CA125

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688380
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2303-938-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR-HA-22-L3C3 (HI)-35-CA125
Description: Fail-Safe - FLR Fully Luminous Recessed 2X2 3500K Luminaire at High Lumen setting for High Abuse
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

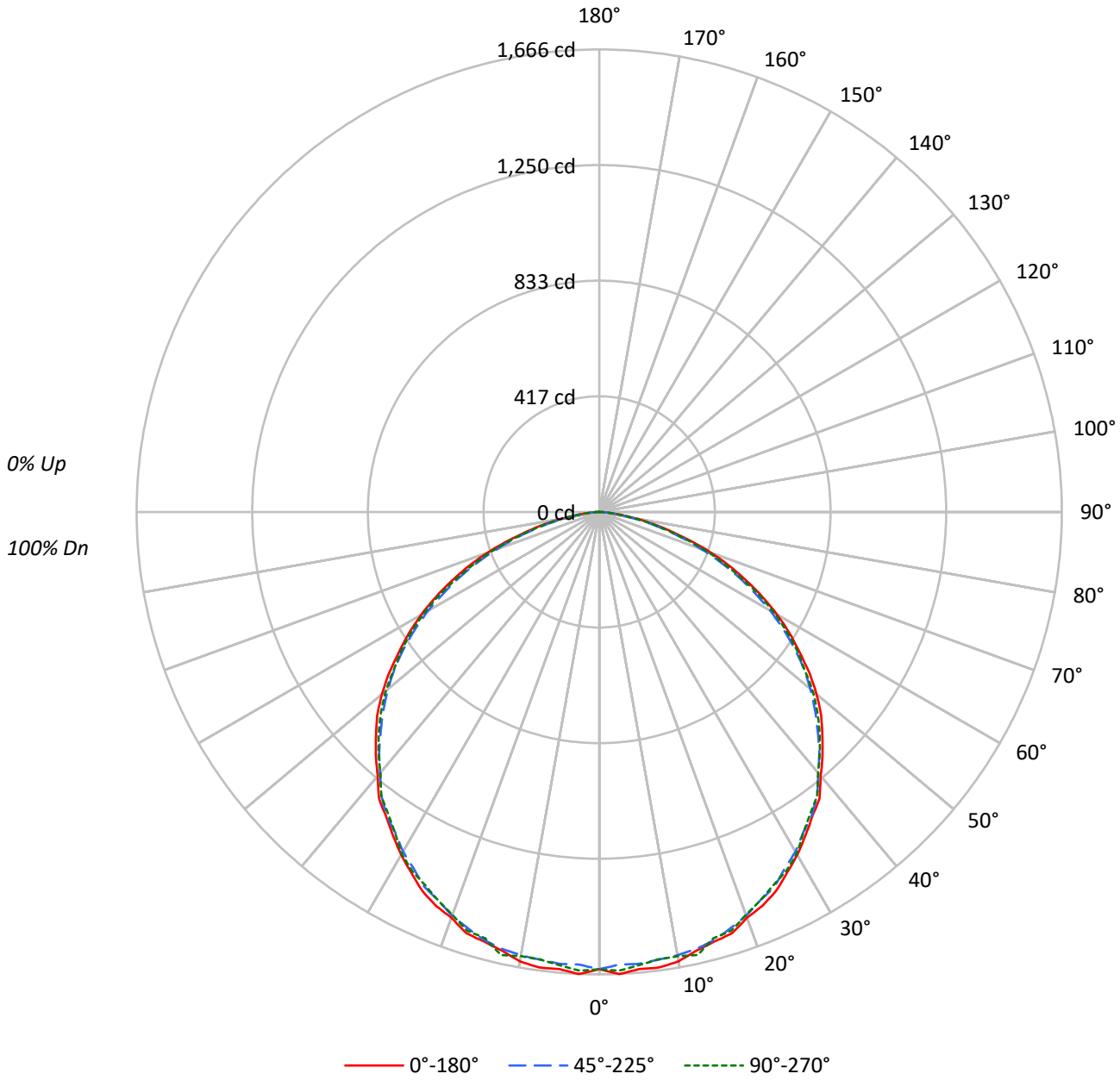
Lumens per Lamp: N/A
Luminaire Lumens: 4627.7 lumens
Efficiency: N/A
Efficacy: 114.0 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 40.6
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		
1	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85		
2	100	91	85	79	97	90	83	78	86	81	76	83	79	75	80	76	73	71		
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60		
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51		
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44		
6	71	57	48	42	69	56	48	42	55	47	41	53	46	41	51	45	41	39		
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34		
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	30		
9	57	43	35	30	55	43	35	30	42	35	29	41	34	29	40	34	29	27		
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4433	4433	4433
5°	4465	4414	4427
10°	4492	4430	4439
15°	4464	4450	4429
20°	4455	4432	4424
25°	4474	4425	4405
30°	4432	4390	4419
35°	4396	4385	4355
40°	4359	4313	4307
45°	4324	4233	4271
50°	4277	4155	4201
55°	4127	4033	4080
60°	3979	3827	3912
65°	3718	3512	3596
70°	3359	3085	3222
75°	2746	2513	2599
80°	1970	1764	1841
85°	1078	923	948

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4324 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.2	3.4
10°-20°	450.1	9.7
20°-30°	685.0	14.8
30°-40°	830.6	17.9
40°-50°	863.6	18.7
50°-60°	771.8	16.7
60°-70°	556.4	12.0
70°-80°	268.1	5.8
80°-90°	45.9	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°	1291.3	27.9
0°-40°	2121.9	45.9
0°-60°	3757.3	81.2
0°-90°	4627.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4627.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1647	1647	1647	1647	1647	
5°	1653	1639	1634	1642	1639	158
15°	1602	1591	1597	1587	1590	453
25°	1507	1484	1490	1483	1484	692
35°	1338	1323	1335	1326	1326	839
45°	1136	1121	1112	1117	1122	877
55°	880	868	860	857	870	789
65°	584	570	552	556	565	578
75°	264	257	242	244	250	284
85°	35	32	30	31	31	49
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1647.2	1647.2	1647.2	1647.2	1647.2
2.5°	1666.3	1653.0	1632.2	1642.2	1653.8
5°	1653.0	1638.9	1633.9	1642.2	1638.9
7.5°	1655.5	1633.9	1627.2	1636.4	1626.4
10°	1643.8	1624.7	1621.4	1625.6	1624.7
12.5°	1618.9	1614.8	1612.3	1605.6	1634.7
15°	1602.3	1590.7	1597.3	1587.4	1589.8
17.5°	1591.5	1564.1	1572.4	1570.7	1581.5
20°	1555.8	1549.1	1547.5	1542.5	1545.0
22.5°	1535.9	1520.1	1515.1	1513.4	1515.1
25°	1506.8	1483.5	1490.2	1482.7	1483.5
27.5°	1465.2	1439.5	1447.8	1447.0	1458.6
30°	1426.2	1407.1	1412.9	1407.9	1422.1
32.5°	1382.2	1365.6	1368.1	1367.2	1368.9
35°	1338.2	1323.2	1334.8	1326.5	1325.7
37.5°	1302.4	1272.5	1288.3	1279.2	1289.2
40°	1241.0	1229.3	1227.7	1221.9	1226.0
42.5°	1190.3	1175.4	1172.9	1176.2	1176.2
45°	1136.3	1121.4	1112.2	1117.2	1122.2
47.5°	1084.0	1064.9	1053.3	1055.7	1065.7
50°	1021.7	996.8	992.6	995.9	1003.4
52.5°	954.4	934.5	928.7	927.8	931.1
55°	879.6	868.0	859.7	857.2	869.7
57.5°	812.4	794.9	785.0	789.1	800.7
60°	739.3	720.2	711.0	714.4	726.8
62.5°	662.9	643.7	629.6	636.3	650.4
65°	583.9	569.8	551.5	555.7	564.8
67.5°	507.5	491.7	472.6	475.1	485.1
70°	426.9	410.3	392.1	396.2	409.5
72.5°	342.2	331.4	314.8	316.5	328.1
75°	264.1	256.7	241.7	244.2	250.0
77.5°	196.0	186.1	174.4	176.9	184.4
80°	127.1	123.8	113.8	115.5	118.8
82.5°	72.3	72.3	68.1	66.5	70.6
85°	34.9	32.4	29.9	30.7	30.7
87.5°	8.3	9.1	8.3	7.5	8.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)