

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: P688382

Luminaire Tested: FLR-HA-22-L3C3 (HI)-50-CA125

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688382
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)-50-CA125
Description: Fail-Safe - FLR Fully Luminous Recessed 2X2 5000K Luminaire at High Lumen setting for High Abuse
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

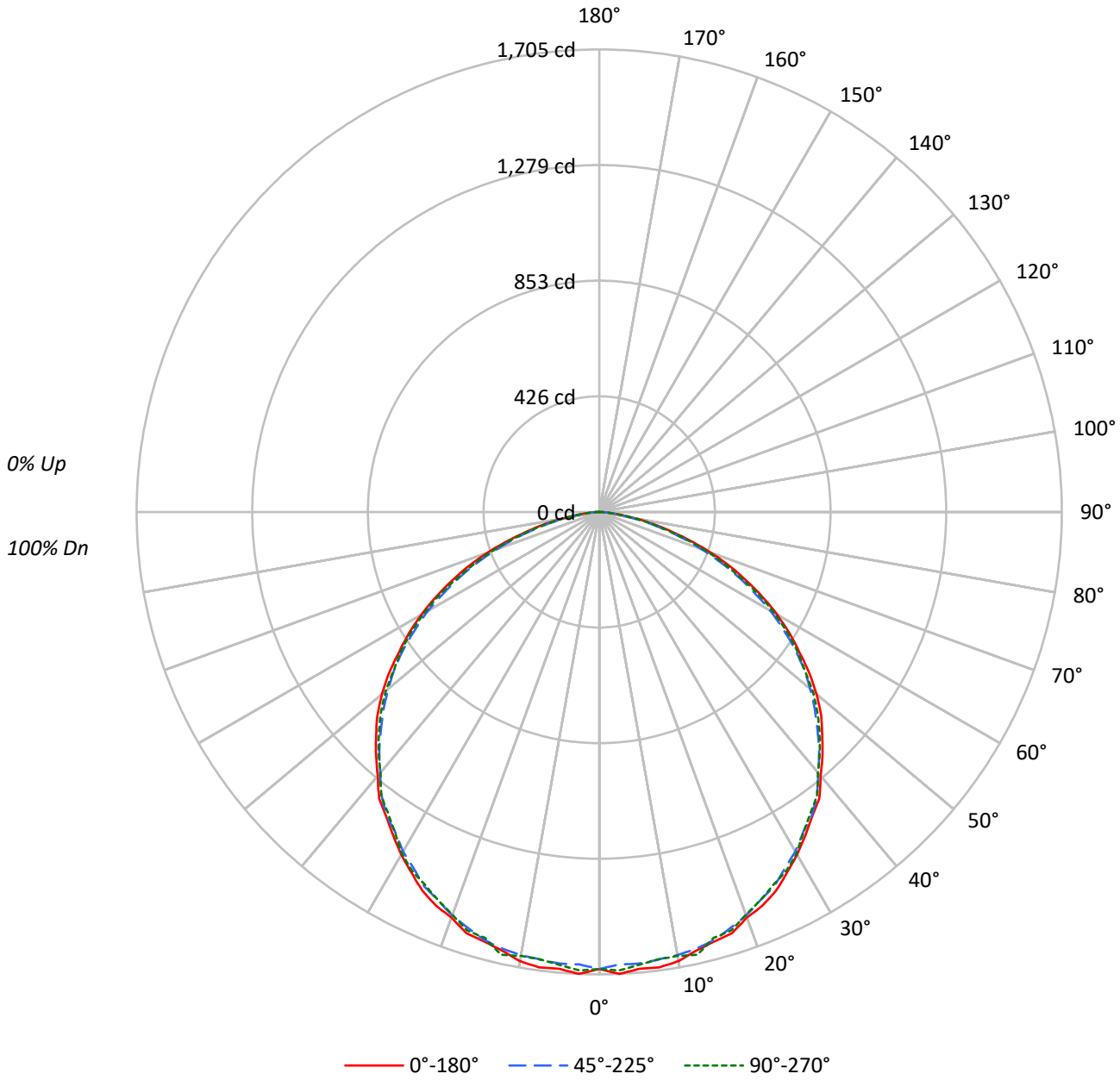
Lumens per Lamp: N/A
Luminaire Lumens: 4734.0 lumens
Efficiency: N/A
Efficacy: 116.9 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 40.5
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	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°	4534	4534	4534
5°	4568	4515	4529
10°	4595	4532	4542
15°	4566	4552	4531
20°	4558	4533	4526
25°	4577	4526	4506
30°	4534	4491	4520
35°	4497	4486	4455
40°	4460	4412	4406
45°	4424	4330	4369
50°	4376	4251	4297
55°	4222	4126	4174
60°	4070	3915	4001
65°	3804	3592	3679
70°	3437	3156	3296
75°	2809	2571	2660
80°	2015	1804	1883
85°	1102	945	969

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4424 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.8	3.4
10°-20°	460.5	9.7
20°-30°	700.7	14.8
30°-40°	849.7	17.9
40°-50°	883.4	18.7
50°-60°	789.5	16.7
60°-70°	569.2	12.0
70°-80°	274.3	5.8
80°-90°	46.9	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°	1321.0	27.9
0°-40°	2170.7	45.9
0°-60°	3843.6	81.2
0°-90°	4734.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4734.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1685	1685	1685	1685	1685	
5°	1691	1676	1671	1680	1676	161
15°	1639	1627	1634	1624	1626	464
25°	1541	1518	1524	1517	1518	708
35°	1369	1354	1366	1357	1356	858
45°	1162	1147	1138	1143	1148	897
55°	900	888	880	877	890	807
65°	597	583	564	568	578	591
75°	270	263	247	250	256	291
85°	36	33	31	31	31	50
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1685.0	1685.0	1685.0	1685.0	1685.0
2.5°	1704.6	1691.0	1669.7	1679.9	1691.8
5°	1691.0	1676.5	1671.4	1679.9	1676.5
7.5°	1693.5	1671.4	1664.6	1674.0	1663.8
10°	1681.6	1662.1	1658.7	1662.9	1662.1
12.5°	1656.1	1651.9	1649.3	1642.5	1672.3
15°	1639.1	1627.2	1634.0	1623.8	1626.4
17.5°	1628.1	1600.0	1608.5	1606.8	1617.9
20°	1591.5	1584.7	1583.0	1577.9	1580.5
22.5°	1571.1	1555.0	1549.9	1548.2	1549.9
25°	1541.4	1517.6	1524.4	1516.8	1517.6
27.5°	1498.9	1472.6	1481.1	1480.2	1492.1
30°	1459.0	1439.4	1445.4	1440.3	1454.7
32.5°	1413.9	1397.0	1399.5	1398.7	1400.4
35°	1368.9	1353.6	1365.5	1357.0	1356.2
37.5°	1332.4	1301.8	1317.9	1308.6	1318.8
40°	1269.5	1257.6	1255.9	1249.9	1254.2
42.5°	1217.7	1202.4	1199.8	1203.2	1203.2
45°	1162.4	1147.1	1137.8	1142.9	1148.0
47.5°	1108.9	1089.3	1077.5	1080.0	1090.2
50°	1045.2	1019.7	1015.4	1018.8	1026.5
52.5°	976.3	955.9	950.0	949.1	952.5
55°	899.9	888.0	879.5	876.9	889.7
57.5°	831.0	813.2	803.0	807.2	819.1
60°	756.3	736.7	727.4	730.8	743.5
62.5°	678.1	658.5	644.1	650.9	665.3
65°	597.4	582.9	564.2	568.5	577.8
67.5°	519.2	503.0	483.5	486.0	496.2
70°	436.8	419.8	401.1	405.3	418.9
72.5°	350.1	339.0	322.0	323.7	335.6
75°	270.2	262.6	247.3	249.8	255.8
77.5°	200.5	190.3	178.4	181.0	188.6
80°	130.0	126.6	116.4	118.1	121.5
82.5°	73.9	73.9	69.7	68.0	72.2
85°	35.7	33.1	30.6	31.4	31.4
87.5°	8.5	9.3	8.5	7.6	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)