

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: P688381

Luminaire Tested: FLR-HA-22-L3C3 (HI)-40-CA125

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688381
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)-40-CA125
Description: Fail-Safe - FLR Fully Luminous Recessed 2X2 4000K Luminaire at High Lumen setting for High Abuse
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

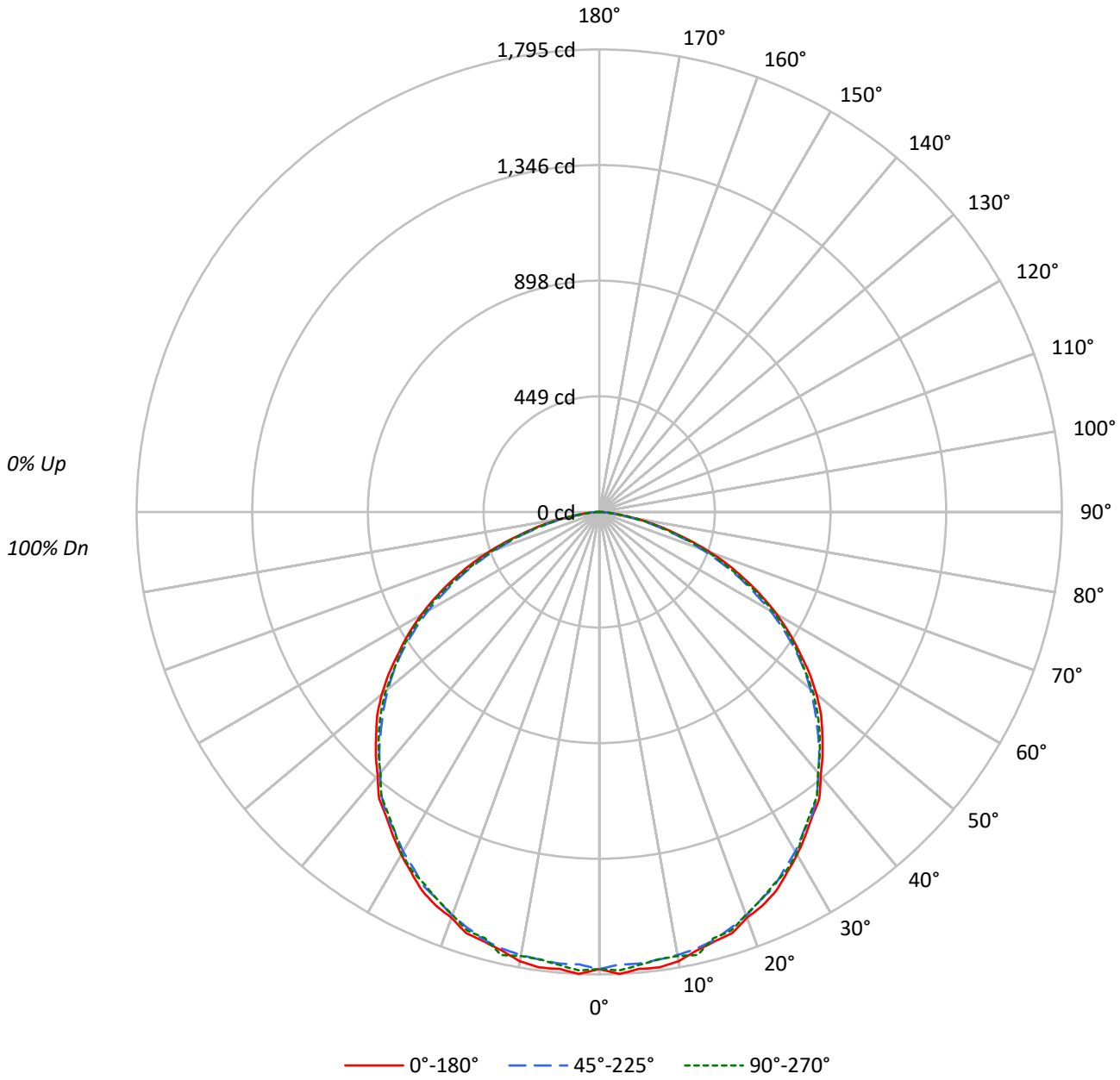
Lumens per Lamp: N/A
Luminaire Lumens: 4985.1 lumens
Efficiency: N/A
Efficacy: 129.5 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 38.5
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



TEST NUMBER: P688381
CATALOG NUMBER: FLR-HA-22-L3C3 (HI)-40-CA125

Luminous Intensity Polar Plot



TEST NUMBER: P688381

CATALOG NUMBER: FLR-HA-22-L3C3 (HI)-40-CA125

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°	4775	4775	4775
5°	4810	4754	4769
10°	4839	4773	4782
15°	4809	4794	4771
20°	4799	4774	4766
25°	4820	4766	4745
30°	4774	4729	4760
35°	4735	4724	4691
40°	4696	4646	4639
45°	4658	4560	4601
50°	4608	4477	4525
55°	4446	4345	4395
60°	4286	4122	4214
65°	4005	3783	3875
70°	3618	3323	3471
75°	2958	2707	2800
80°	2122	1900	1984
85°	1161	994	1022

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4658 cd/sqm

TEST NUMBER: P688381
 CATALOG NUMBER: FLR-HA-22-L3C3 (HI)-40-CA125

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.2	3.4
10°-20°	484.9	9.7
20°-30°	737.9	14.8
30°-40°	894.7	17.9
40°-50°	930.3	18.7
50°-60°	831.4	16.7
60°-70°	599.4	12.0
70°-80°	288.8	5.8
80°-90°	49.4	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°	1391.0	27.9
0°-40°	2285.8	45.9
0°-60°	4047.5	81.2
0°-90°	4985.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4985.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1774	1774	1774	1774	1774	
5°	1781	1765	1760	1769	1765	170
15°	1726	1714	1721	1710	1713	488
25°	1623	1598	1605	1597	1598	746
35°	1442	1425	1438	1429	1428	904
45°	1224	1208	1198	1204	1209	945
55°	948	935	926	923	937	850
65°	629	614	594	599	608	623
75°	284	276	260	263	269	306
85°	38	35	32	33	33	52
90°	0	0	0	0	0	

TEST NUMBER: P688381

CATALOG NUMBER: FLR-HA-22-L3C3 (HI)-40-CA125

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1774.4	1774.4	1774.4	1774.4	1774.4
2.5°	1795.0	1780.6	1758.3	1769.0	1781.5
5°	1780.6	1765.4	1760.1	1769.0	1765.4
7.5°	1783.3	1760.1	1752.9	1762.7	1752.0
10°	1770.8	1750.2	1746.6	1751.1	1750.2
12.5°	1744.0	1739.5	1736.8	1729.6	1761.0
15°	1726.1	1713.5	1720.7	1710.0	1712.6
17.5°	1714.4	1684.9	1693.8	1692.1	1703.7
20°	1675.9	1668.8	1667.0	1661.6	1664.3
22.5°	1654.5	1637.5	1632.1	1630.3	1632.1
25°	1623.2	1598.1	1605.3	1597.2	1598.1
27.5°	1578.4	1550.7	1559.6	1558.7	1571.3
30°	1536.4	1515.8	1522.0	1516.7	1531.9
32.5°	1488.9	1471.0	1473.7	1472.8	1474.6
35°	1441.5	1425.4	1437.9	1429.0	1428.1
37.5°	1403.0	1370.8	1387.8	1378.0	1388.7
40°	1336.8	1324.3	1322.5	1316.2	1320.7
42.5°	1282.2	1266.1	1263.4	1267.0	1267.0
45°	1224.1	1208.0	1198.1	1203.5	1208.9
47.5°	1167.7	1147.1	1134.6	1137.3	1148.0
50°	1100.6	1073.8	1069.3	1072.9	1080.9
52.5°	1028.1	1006.6	1000.4	999.5	1003.1
55°	947.6	935.1	926.1	923.4	936.8
57.5°	875.1	856.3	845.6	850.1	862.6
60°	796.4	775.8	765.9	769.5	782.9
62.5°	714.0	693.5	678.3	685.4	700.6
65°	629.0	613.8	594.1	598.6	608.5
67.5°	546.7	529.7	509.1	511.8	522.6
70°	459.9	442.0	422.3	426.8	441.1
72.5°	368.7	357.0	339.1	340.9	353.4
75°	284.5	276.5	260.4	263.1	269.3
77.5°	211.2	200.4	187.9	190.6	198.6
80°	136.9	133.3	122.6	124.4	128.0
82.5°	77.8	77.8	73.4	71.6	76.1
85°	37.6	34.9	32.2	33.1	33.1
87.5°	8.9	9.8	8.9	8.1	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)