

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: P688398

Luminaire Tested: FLR-HA-24-L3C3 (LOW)-35-CA125

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688398
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-24-L3C3 (LOW)-35-CA125
Description: Fail-Safe - FLR Fully Luminous Recessed 2X4 3500K Luminaire at Low Lumen setting for High Abuse
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

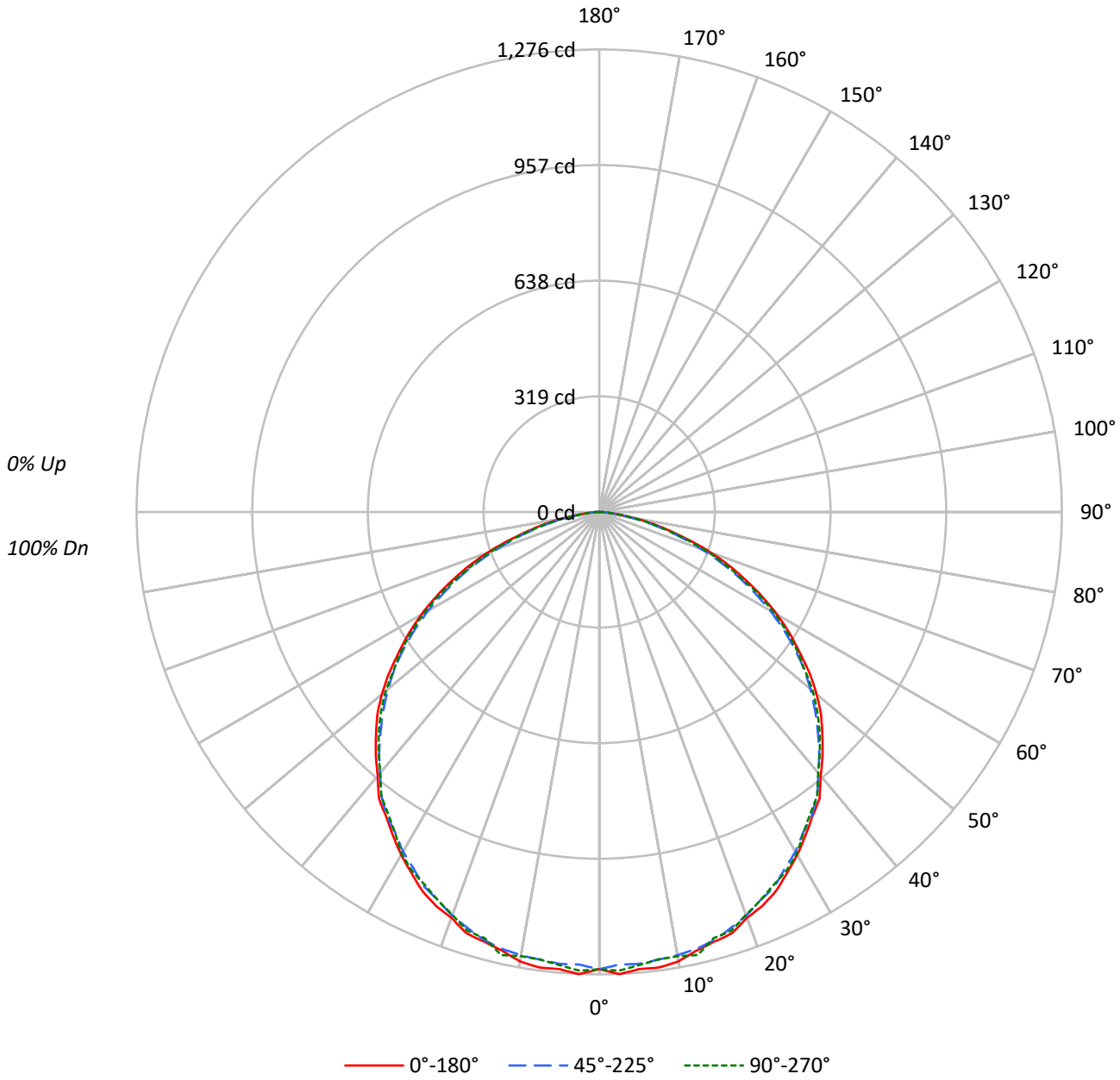
Lumens per Lamp: N/A
Luminaire Lumens: 3544.6 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 27.8
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°	1698	1698	1698
5°	1710	1690	1695
10°	1720	1697	1700
15°	1710	1704	1696
20°	1706	1697	1694
25°	1713	1695	1687
30°	1697	1681	1692
35°	1684	1679	1668
40°	1669	1652	1649
45°	1656	1621	1636
50°	1638	1591	1609
55°	1581	1545	1563
60°	1524	1466	1498
65°	1424	1345	1377
70°	1286	1181	1234
75°	1052	962	996
80°	754	676	705
85°	412	354	363

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1656 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.6	3.4
10°-20°	344.8	9.7
20°-30°	524.7	14.8
30°-40°	636.2	17.9
40°-50°	661.5	18.7
50°-60°	591.2	16.7
60°-70°	426.2	12.0
70°-80°	205.4	5.8
80°-90°	35.2	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°	989.1	27.9
0°-40°	1625.3	45.9
0°-60°	2877.9	81.2
0°-90°	3544.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3544.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1262	1262	1262	1262	1262	
5°	1266	1255	1252	1258	1255	121
15°	1227	1218	1224	1216	1218	347
25°	1154	1136	1141	1136	1136	530
35°	1025	1014	1022	1016	1015	643
45°	870	859	852	856	860	672
55°	674	665	658	657	666	604
65°	447	436	422	426	433	443
75°	202	197	185	187	192	218
85°	27	25	23	24	24	37
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1261.7	1261.7	1261.7	1261.7	1261.7
2.5°	1276.3	1266.1	1250.2	1257.8	1266.7
5°	1266.1	1255.3	1251.5	1257.8	1255.3
7.5°	1268.0	1251.5	1246.4	1253.4	1245.7
10°	1259.1	1244.5	1241.9	1245.1	1244.5
12.5°	1240.0	1236.8	1234.9	1229.8	1252.1
15°	1227.3	1218.4	1223.5	1215.8	1217.8
17.5°	1219.0	1198.0	1204.4	1203.1	1211.4
20°	1191.7	1186.6	1185.3	1181.5	1183.4
22.5°	1176.4	1164.3	1160.5	1159.2	1160.5
25°	1154.1	1136.3	1141.4	1135.7	1136.3
27.5°	1122.3	1102.6	1109.0	1108.3	1117.2
30°	1092.4	1077.8	1082.2	1078.4	1089.2
32.5°	1058.7	1046.0	1047.9	1047.2	1048.5
35°	1025.0	1013.5	1022.4	1016.1	1015.4
37.5°	997.6	974.7	986.8	979.8	987.4
40°	950.5	941.6	940.4	935.9	939.1
42.5°	911.7	900.3	898.4	900.9	900.9
45°	870.4	858.9	851.9	855.7	859.6
47.5°	830.3	815.7	806.7	808.7	816.3
50°	782.6	763.5	760.3	762.8	768.6
52.5°	731.0	715.8	711.3	710.7	713.2
55°	673.8	664.9	658.5	656.6	666.1
57.5°	622.2	608.9	601.2	604.4	613.3
60°	566.2	551.6	544.6	547.2	556.7
62.5°	507.7	493.1	482.3	487.4	498.2
65°	447.3	436.5	422.5	425.6	432.6
67.5°	388.7	376.7	362.0	363.9	371.6
70°	327.0	314.3	300.3	303.5	313.7
72.5°	262.1	253.9	241.1	242.4	251.3
75°	202.3	196.6	185.1	187.1	191.5
77.5°	150.2	142.5	133.6	135.5	141.2
80°	97.3	94.8	87.2	88.4	91.0
82.5°	55.4	55.4	52.2	50.9	54.1
85°	26.7	24.8	22.9	23.5	23.5
87.5°	6.4	7.0	6.4	5.7	6.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)