

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: P688041

Luminaire Tested: FLR-HA-24-L3C3 (MED)-35-CP375

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688041
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2207-724-15)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR-HA-24-L3C3 (MED)-35-CP375
Description: Fail-Safe - FLR Fully Luminous Recessed 2X4 3500K Luminaire at Medium Lumen setting for High Abuse
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

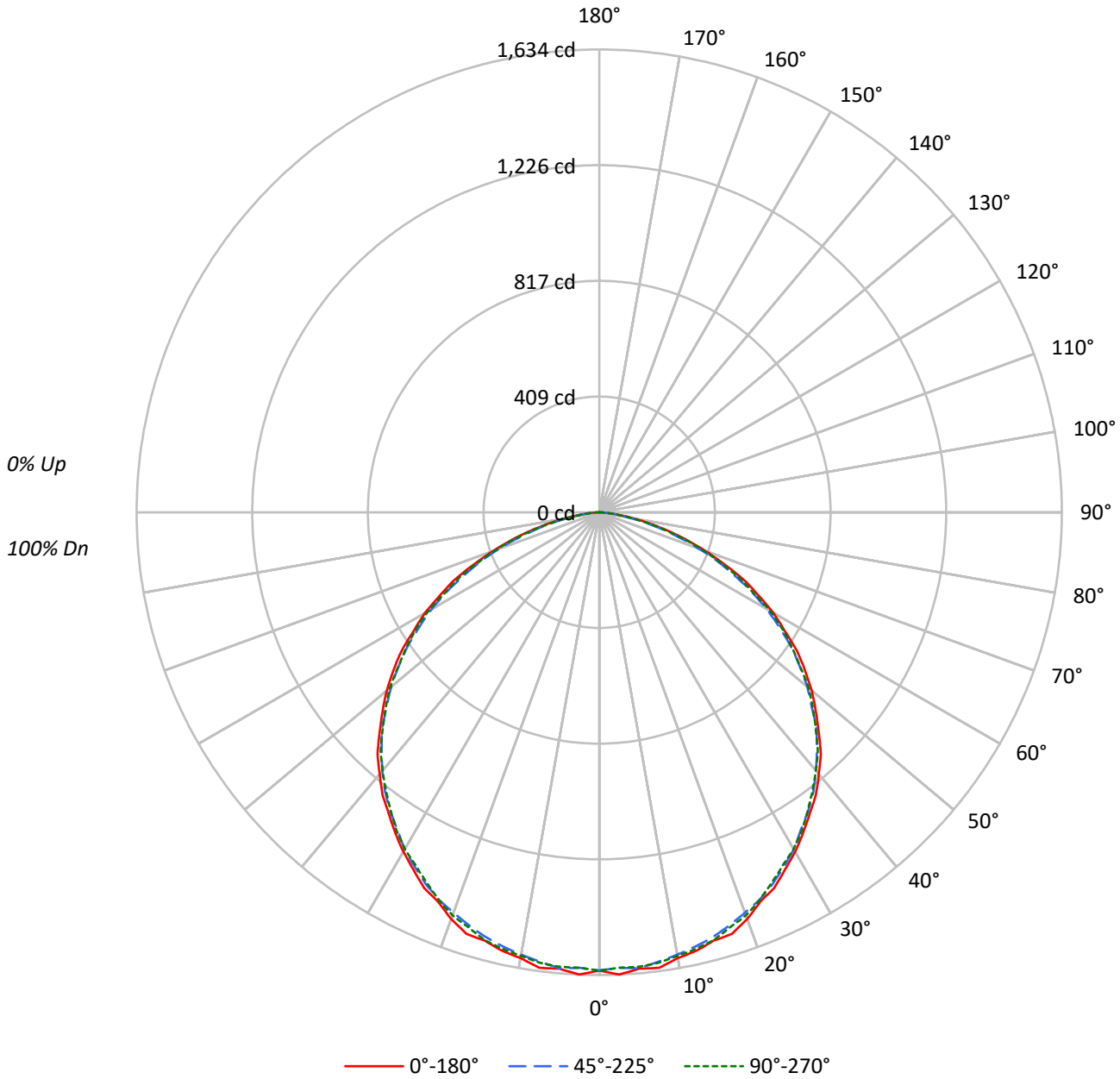
Lumens per Lamp: N/A
Luminaire Lumens: 4459.3 lumens
Efficiency: N/A
Efficacy: 112.3 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 39.7
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	96	98	95	93	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	71
3	91	81	73	66	88	79	72	66	76	70	65	73	68	63	71	66	62	60
4	83	72	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	48	75	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	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	46	38	33	44	38	33	43	37	33	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	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°	2177	2177	2177
5°	2185	2183	2176
10°	2184	2167	2173
15°	2181	2162	2178
20°	2188	2154	2169
25°	2173	2151	2141
30°	2150	2135	2133
35°	2130	2114	2110
40°	2119	2093	2091
45°	2087	2065	2058
50°	2051	2008	2021
55°	1998	1938	1949
60°	1913	1834	1877
65°	1792	1677	1730
70°	1569	1468	1524
75°	1300	1171	1235
80°	921	824	859
85°	465	411	438

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2087 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.1	3.4
10°-20°	439.5	9.9
20°-30°	667.4	15.0
30°-40°	805.4	18.1
40°-50°	835.0	18.7
50°-60°	739.7	16.6
60°-70°	528.0	11.8
70°-80°	250.1	5.6
80°-90°	41.0	0.9
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°	1260.0	28.3
0°-40°	2065.4	46.3
0°-60°	3640.2	81.6
0°-90°	4459.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4459.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1618	1618	1618	1618	1618	
5°	1618	1610	1616	1605	1611	154
15°	1566	1557	1552	1561	1564	444
25°	1464	1440	1449	1449	1442	673
35°	1297	1284	1287	1282	1285	813
45°	1097	1081	1085	1082	1082	847
55°	852	828	826	823	831	758
65°	563	527	527	530	543	550
75°	250	230	225	230	238	266
85°	30	28	27	26	28	45
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1617.9	1617.9	1617.9	1617.9	1617.9
2.5°	1633.8	1605.5	1609.9	1613.5	1609.9
5°	1617.9	1609.9	1616.1	1604.6	1610.8
7.5°	1622.3	1602.8	1600.2	1596.6	1604.6
10°	1598.4	1586.9	1586.0	1592.2	1590.4
12.5°	1586.0	1576.2	1570.9	1571.8	1578.9
15°	1565.6	1556.7	1552.3	1561.1	1563.8
17.5°	1560.3	1529.2	1529.2	1531.0	1536.3
20°	1528.3	1508.0	1504.4	1508.0	1515.0
22.5°	1487.6	1480.5	1480.5	1483.1	1481.4
25°	1463.6	1439.7	1448.6	1449.4	1442.4
27.5°	1422.0	1413.1	1411.3	1407.8	1405.1
30°	1383.8	1369.7	1374.1	1374.1	1373.2
32.5°	1341.3	1331.5	1327.1	1328.0	1332.4
35°	1297.0	1283.7	1287.2	1281.9	1284.6
37.5°	1257.1	1239.3	1242.9	1240.2	1237.6
40°	1206.5	1192.4	1191.5	1187.0	1190.6
42.5°	1158.7	1138.3	1137.4	1138.3	1142.7
45°	1096.6	1080.7	1085.1	1081.5	1081.5
47.5°	1037.2	1026.6	1018.6	1019.5	1023.0
50°	979.6	959.2	959.2	952.1	965.4
52.5°	915.8	895.4	892.7	895.4	893.6
55°	851.9	828.0	826.2	822.7	830.7
57.5°	774.8	751.8	753.5	755.3	766.8
60°	711.0	680.0	681.7	683.5	697.7
62.5°	632.1	606.4	605.5	608.1	611.7
65°	562.9	526.6	526.6	530.1	543.4
67.5°	475.2	453.0	452.1	456.6	461.9
70°	398.9	373.2	373.2	378.5	387.4
72.5°	322.7	301.4	297.9	305.8	312.1
75°	250.0	229.6	225.2	230.5	237.6
77.5°	179.1	165.8	162.2	167.6	169.3
80°	118.8	107.3	106.4	109.0	110.8
82.5°	68.3	61.2	58.5	61.2	62.1
85°	30.1	27.5	26.6	25.7	28.4
87.5°	7.1	7.1	7.1	7.1	8.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)