

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: P688022

Luminaire Tested: FLR-HA-22-L3C3 (HI)-50-CP375

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688022
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-22-L3C3 (HI)-50-CP375
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

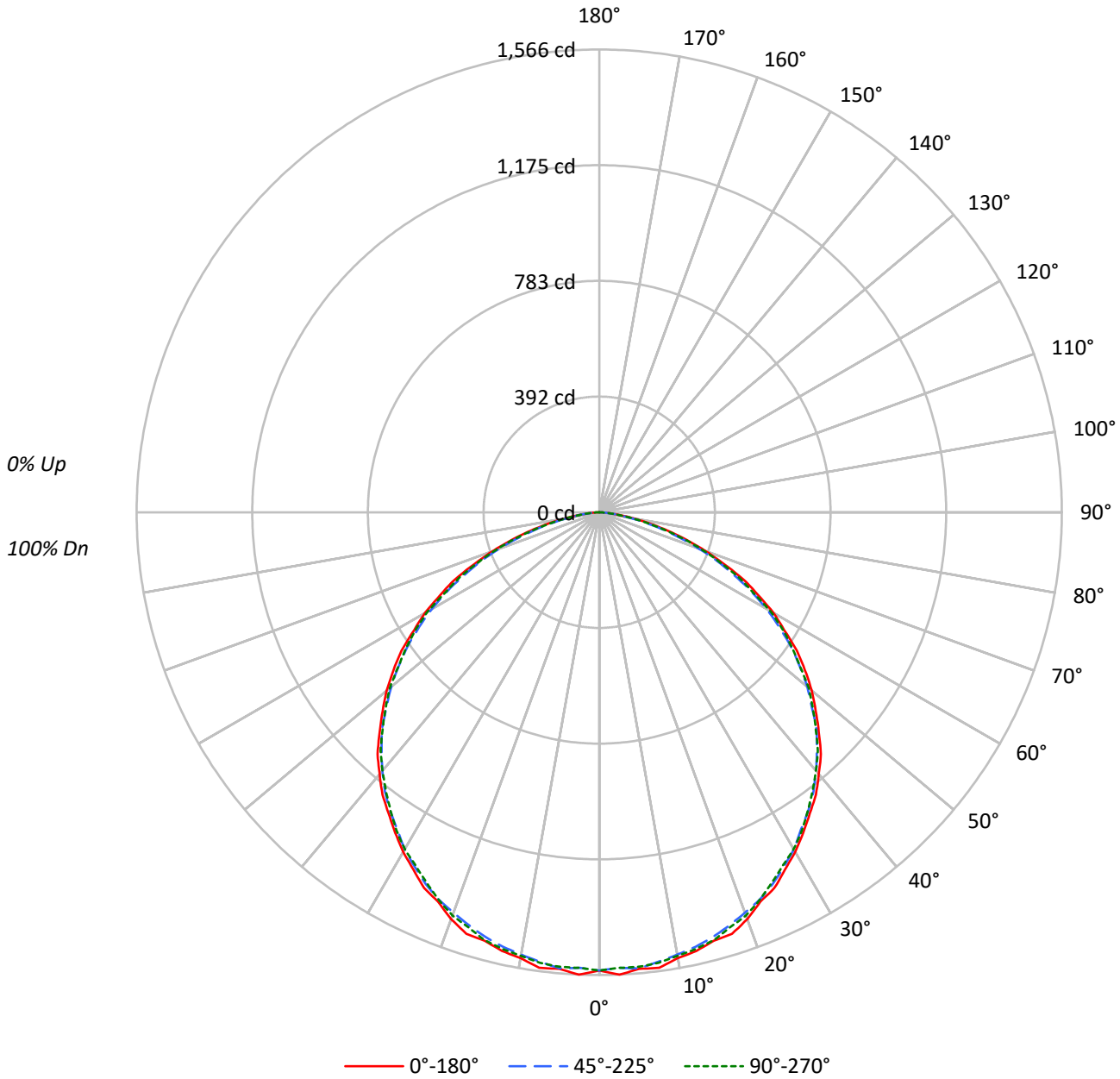
Lumens per Lamp: N/A
Luminaire Lumens: 4274.3 lumens
Efficiency: N/A
Efficacy: 105.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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	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	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°	4173	4173	4173
5°	4189	4185	4171
10°	4186	4154	4166
15°	4181	4145	4176
20°	4195	4129	4159
25°	4165	4123	4105
30°	4122	4093	4090
35°	4084	4053	4045
40°	4063	4012	4009
45°	4000	3958	3945
50°	3931	3849	3874
55°	3831	3716	3735
60°	3668	3517	3599
65°	3436	3214	3317
70°	3009	2814	2921
75°	2491	2244	2367
80°	1765	1581	1646
85°	892	787	840

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4000 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.8	3.4
10°-20°	421.3	9.9
20°-30°	639.7	15.0
30°-40°	772.0	18.1
40°-50°	800.4	18.7
50°-60°	709.0	16.6
60°-70°	506.1	11.8
70°-80°	239.8	5.6
80°-90°	39.2	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°	1207.8	28.3
0°-40°	1979.8	46.3
0°-60°	3489.2	81.6
0°-90°	4274.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4274.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1551	1551	1551	1551	1551	
5°	1551	1543	1549	1538	1544	148
15°	1501	1492	1488	1496	1499	425
25°	1403	1380	1388	1389	1382	645
35°	1243	1230	1234	1229	1231	779
45°	1051	1036	1040	1037	1037	812
55°	817	794	792	789	796	726
65°	540	505	505	508	521	527
75°	240	220	216	221	228	255
85°	29	26	26	25	27	43
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1550.8	1550.8	1550.8	1550.8	1550.8
2.5°	1566.1	1538.9	1543.1	1546.5	1543.1
5°	1550.8	1543.1	1549.1	1538.0	1544.0
7.5°	1555.0	1536.3	1533.8	1530.4	1538.0
10°	1532.1	1521.1	1520.2	1526.2	1524.5
12.5°	1520.2	1510.9	1505.8	1506.6	1513.4
15°	1500.7	1492.2	1487.9	1496.4	1499.0
17.5°	1495.6	1465.8	1465.8	1467.5	1472.6
20°	1465.0	1445.4	1442.0	1445.4	1452.2
22.5°	1425.9	1419.1	1419.1	1421.6	1419.9
25°	1402.9	1380.0	1388.5	1389.3	1382.5
27.5°	1363.0	1354.5	1352.8	1349.4	1346.9
30°	1326.5	1312.9	1317.1	1317.1	1316.3
32.5°	1285.7	1276.3	1272.1	1272.9	1277.2
35°	1243.2	1230.4	1233.8	1228.7	1231.3
37.5°	1204.9	1188.0	1191.3	1188.8	1186.3
40°	1156.5	1142.9	1142.1	1137.8	1141.2
42.5°	1110.6	1091.1	1090.2	1091.1	1095.3
45°	1051.1	1035.8	1040.1	1036.7	1036.7
47.5°	994.2	984.0	976.4	977.2	980.6
50°	939.0	919.4	919.4	912.6	925.4
52.5°	877.8	858.2	855.7	858.2	856.5
55°	816.6	793.7	792.0	788.6	796.2
57.5°	742.7	720.6	722.3	724.0	735.0
60°	681.5	651.8	653.5	655.2	668.8
62.5°	605.9	581.2	580.4	582.9	586.3
65°	539.6	504.8	504.8	508.2	520.9
67.5°	455.5	434.2	433.4	437.6	442.7
70°	382.4	357.7	357.7	362.8	371.3
72.5°	309.3	288.9	285.5	293.2	299.1
75°	239.6	220.1	215.8	220.9	227.7
77.5°	171.6	158.9	155.5	160.6	162.3
80°	113.9	102.8	102.0	104.5	106.2
82.5°	65.4	58.6	56.1	58.6	59.5
85°	28.9	26.3	25.5	24.6	27.2
87.5°	6.8	6.8	6.8	6.8	7.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)