

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: P688014

Luminaire Tested: FLR-HA-14-40-35-CP375

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688014
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-14-40-35-CP375
Description: Fail-Safe - FLR Fully Luminous Recessed 1X4 3500K Luminaire for High Abuse
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

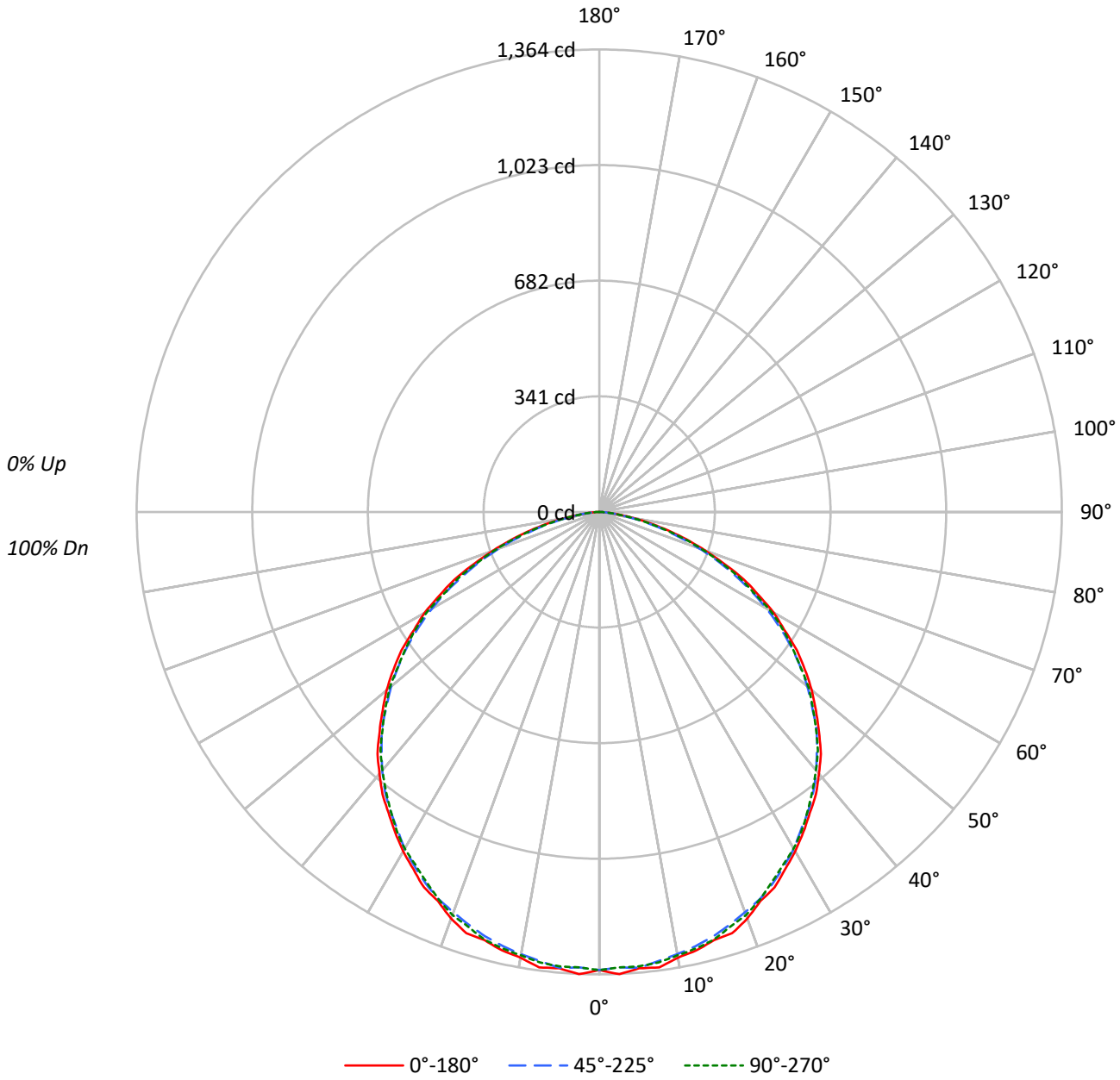
Lumens per Lamp: N/A
Luminaire Lumens: 3724.0 lumens
Efficiency: N/A
Efficacy: 94.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 39.4
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°	3636	3636	3636
5°	3650	3646	3634
10°	3648	3619	3629
15°	3643	3612	3638
20°	3655	3598	3623
25°	3629	3592	3576
30°	3591	3566	3563
35°	3558	3531	3524
40°	3540	3495	3493
45°	3485	3449	3437
50°	3425	3354	3375
55°	3338	3237	3255
60°	3196	3064	3136
65°	2993	2800	2890
70°	2622	2452	2545
75°	2171	1955	2063
80°	1537	1376	1433
85°	778	685	732

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3485 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.9	3.4
10°-20°	367.1	9.9
20°-30°	557.3	15.0
30°-40°	672.6	18.1
40°-50°	697.3	18.7
50°-60°	617.8	16.6
60°-70°	441.0	11.8
70°-80°	208.9	5.6
80°-90°	34.2	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°	1052.3	28.3
0°-40°	1724.9	46.3
0°-60°	3040.0	81.6
0°-90°	3724.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3724.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1351	1351	1351	1351	1351	
5°	1351	1344	1350	1340	1345	129
15°	1308	1300	1296	1304	1306	371
25°	1222	1202	1210	1210	1204	562
35°	1083	1072	1075	1070	1073	679
45°	916	902	906	903	903	707
55°	712	692	690	687	694	633
65°	470	440	440	443	454	459
75°	209	192	188	192	198	222
85°	25	23	22	22	24	37
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1351.1	1351.1	1351.1	1351.1	1351.1
2.5°	1364.5	1340.8	1344.5	1347.4	1344.5
5°	1351.1	1344.5	1349.7	1340.0	1345.2
7.5°	1354.8	1338.6	1336.3	1333.4	1340.0
10°	1334.9	1325.2	1324.5	1329.7	1328.2
12.5°	1324.5	1316.3	1311.9	1312.6	1318.6
15°	1307.5	1300.1	1296.4	1303.8	1306.0
17.5°	1303.0	1277.1	1277.1	1278.6	1283.0
20°	1276.4	1259.3	1256.4	1259.3	1265.3
22.5°	1242.3	1236.4	1236.4	1238.6	1237.1
25°	1222.3	1202.3	1209.7	1210.5	1204.5
27.5°	1187.5	1180.1	1178.6	1175.7	1173.5
30°	1155.7	1143.8	1147.5	1147.5	1146.8
32.5°	1120.1	1112.0	1108.3	1109.0	1112.7
35°	1083.1	1072.0	1075.0	1070.5	1072.8
37.5°	1049.8	1035.0	1038.0	1035.7	1033.5
40°	1007.6	995.8	995.0	991.3	994.3
42.5°	967.6	950.6	949.9	950.6	954.3
45°	915.8	902.5	906.2	903.2	903.2
47.5°	866.2	857.3	850.7	851.4	854.4
50°	818.1	801.1	801.1	795.1	806.2
52.5°	764.8	747.8	745.5	747.8	746.3
55°	711.5	691.5	690.0	687.0	693.7
57.5°	647.1	627.8	629.3	630.8	640.4
60°	593.8	567.8	569.3	570.8	582.7
62.5°	527.9	506.4	505.7	507.9	510.8
65°	470.1	439.8	439.8	442.7	453.8
67.5°	396.8	378.3	377.6	381.3	385.7
70°	333.2	311.7	311.7	316.1	323.5
72.5°	269.5	251.7	248.8	255.4	260.6
75°	208.8	191.8	188.0	192.5	198.4
77.5°	149.6	138.4	135.5	139.9	141.4
80°	99.2	89.6	88.8	91.1	92.5
82.5°	57.0	51.1	48.9	51.1	51.8
85°	25.2	23.0	22.2	21.5	23.7
87.5°	5.9	5.9	5.9	5.9	6.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)