

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: P590007

Luminaire Tested: FSR-24-2-LD4-1LO-50-UNV-80-86-EDD

Issue Date: 12/8/2021

Test Information

Test Method: LM-79-2019
Report Number: P590007
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-135-1)
Test Lab: INNOVATION CENTER
Issue Date: 12/8/2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FSR-24-2-LD4-1LO-50-UNV-80-86-EDD
Description: 2X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONM
SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1450.0 lumens
Efficiency: N/A
Efficacy: 123.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

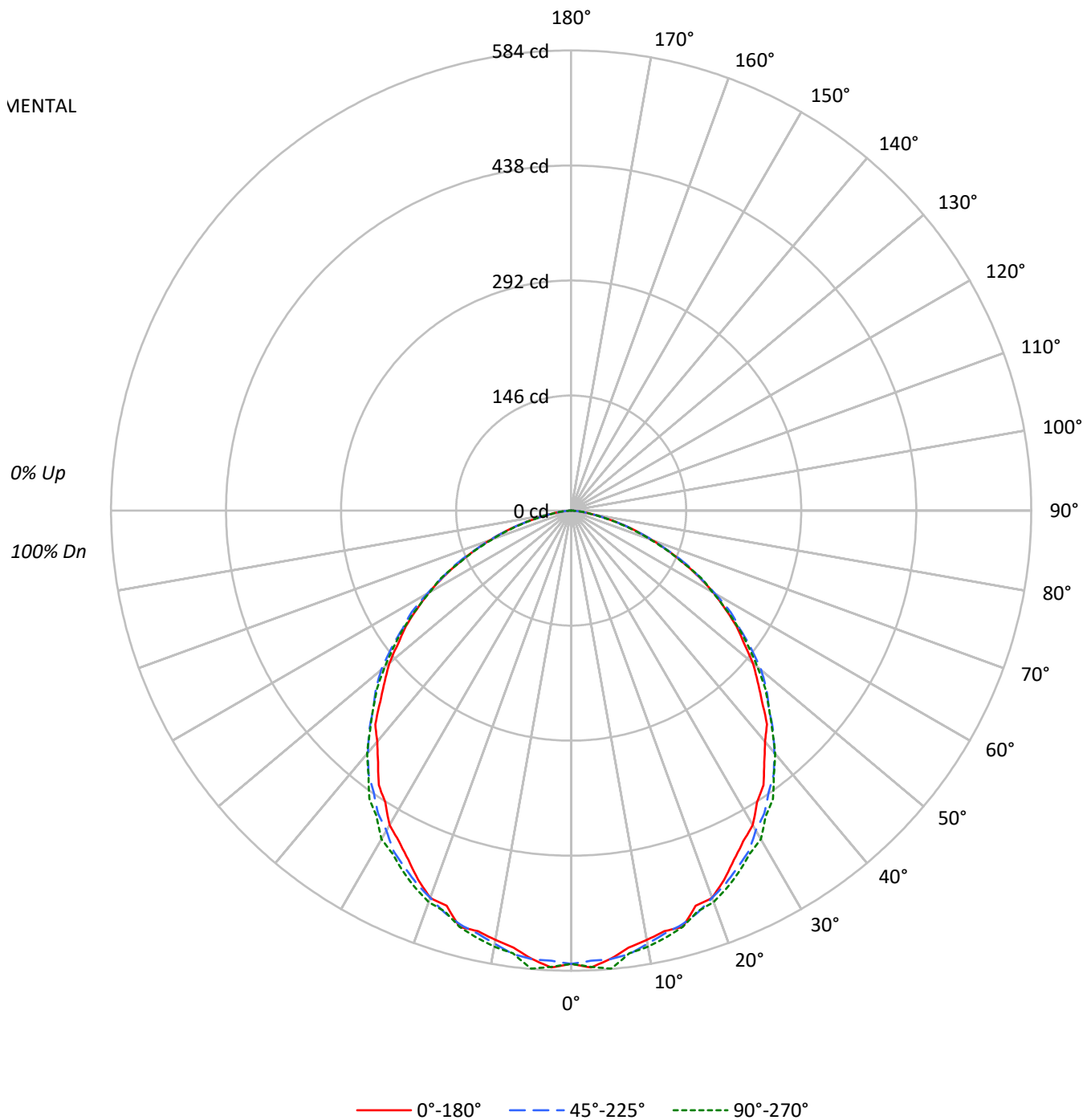
Input Watts (W): 11.7
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62
4	84	73	64	58	82	71	64	58	69	62	57	67	61	56	65	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43	41
7	67	53	45	39	65	53	45	39	51	44	39	50	43	38	48	42	38	36
8	62	49	41	35	61	48	40	35	47	40	34	46	39	34	44	39	34	32
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31	29
10	54	41	34	29	53	41	33	28	40	33	28	39	33	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1548	1548	1548
5°	1543	1544	1576
10°	1512	1525	1536
15°	1524	1516	1524
20°	1498	1498	1514
25°	1452	1484	1500
30°	1432	1457	1496
35°	1398	1435	1467
40°	1344	1409	1415
45°	1303	1349	1351
50°	1261	1317	1292
55°	1201	1225	1216
60°	1123	1134	1114
65°	1002	1027	994
70°	859	862	838
75°	680	679	653
80°	456	443	426
85°	247	244	228

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 1384 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.1	3.7
10°-20°	153.4	10.6
20°-30°	229.8	15.8
30°-40°	272.4	18.8
40°-50°	272.8	18.8
50°-60°	231.6	16.0
60°-70°	156.2	10.8
70°-80°	68.6	4.7
80°-90°	11.1	0.8
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°	437.3	30.2
0°-40°	709.6	48.9
0°-60°	1214.1	83.7
0°-90°	1450.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1450.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	575	575	575	575	575	
5°	571	570	572	570	584	54
15°	547	541	544	547	547	152
25°	489	492	500	506	505	226
35°	426	427	437	447	447	264
45°	342	349	355	364	355	265
55°	256	254	261	259	259	228
65°	157	155	161	155	156	156
75°	65	64	65	61	63	70
85°	8	8	8	8	7	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	575.3	575.3	575.3	575.3	575.3
2.5°	580.3	575.9	571.8	576.6	579.5
5°	571.2	569.9	571.5	569.8	583.5
7.5°	559.5	564.6	567.6	565.7	566.6
10°	553.3	551.5	558.1	562.7	562.0
12.5°	546.6	549.2	549.6	554.6	555.0
15°	546.9	540.6	544.0	546.8	547.0
17.5°	525.7	532.5	534.8	541.3	533.3
20°	523.1	518.1	523.1	529.7	528.7
22.5°	507.1	501.6	512.3	518.1	517.8
25°	489.0	491.7	499.7	506.2	505.2
27.5°	473.1	476.2	487.7	496.7	490.9
30°	460.9	459.3	468.9	477.0	481.4
32.5°	438.9	444.6	455.9	463.8	459.6
35°	425.6	426.9	436.8	446.9	446.6
37.5°	402.4	408.3	422.2	425.0	422.4
40°	382.6	388.4	401.0	404.0	402.8
42.5°	367.9	369.0	379.7	383.2	377.7
45°	342.4	348.8	354.6	363.8	355.1
47.5°	320.8	323.7	336.2	338.7	334.1
50°	301.1	302.1	314.7	311.6	308.6
52.5°	276.3	280.7	287.8	287.2	283.7
55°	256.0	254.3	261.0	259.2	259.1
57.5°	231.5	234.5	240.0	237.2	232.7
60°	208.7	208.7	210.7	207.5	207.0
62.5°	183.2	184.1	184.5	180.6	187.0
65°	157.3	155.2	161.3	155.1	156.1
67.5°	133.4	134.5	133.9	130.0	131.5
70°	109.2	110.5	109.6	105.2	106.5
72.5°	87.1	85.4	86.5	81.0	83.5
75°	65.4	64.1	65.3	60.7	62.8
77.5°	44.6	45.6	44.9	42.4	43.8
80°	29.4	28.6	28.6	27.2	27.5
82.5°	17.2	16.3	16.1	15.7	16.3
85°	8.0	7.8	7.9	7.7	7.4
87.5°	2.9	3.0	3.0	2.8	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)