

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: P590006

Luminaire Tested: FSR-24-2-LD4-1LO-50-UNV-80-85-EDD

Issue Date: 12/8/2021

Test Information

Test Method: LM-79-2019
Report Number: P590006
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-80-85-EDD
Description: 2X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONM
SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1467.0 lumens
Efficiency: N/A
Efficacy: 125.4 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

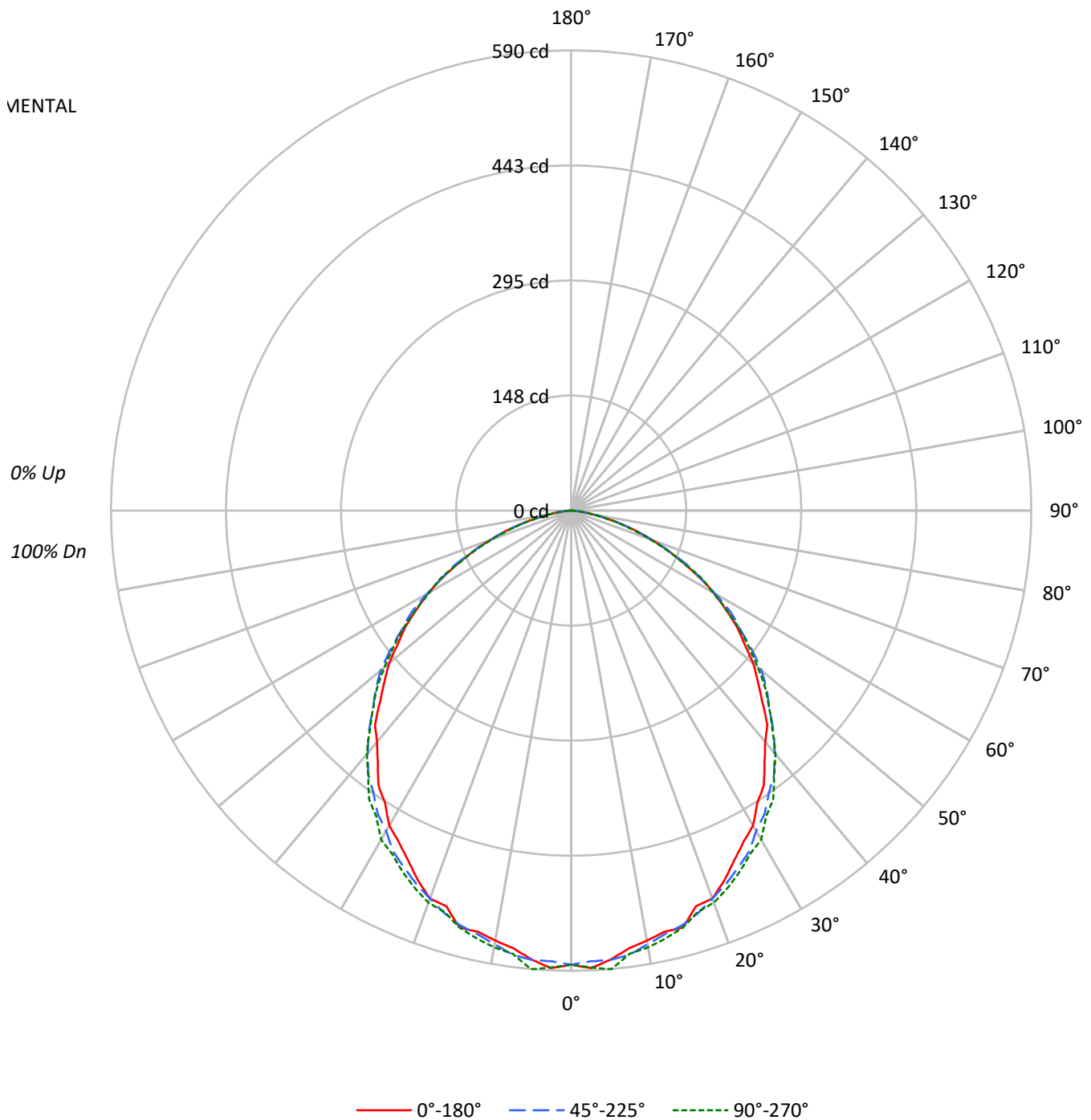
Input Watts (W): 11.7
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	1566	1566	1566
5°	1561	1562	1595
10°	1529	1543	1554
15°	1542	1533	1542
20°	1515	1515	1532
25°	1469	1501	1518
30°	1449	1474	1514
35°	1415	1452	1484
40°	1359	1425	1431
45°	1319	1365	1367
50°	1275	1333	1307
55°	1215	1239	1230
60°	1136	1147	1127
65°	1013	1039	1006
70°	869	873	848
75°	688	687	660
80°	462	448	431
85°	250	247	232

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 1400 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.8	3.7
10°-20°	155.2	10.6
20°-30°	232.5	15.8
30°-40°	275.5	18.8
40°-50°	276.0	18.8
50°-60°	234.3	16.0
60°-70°	158.0	10.8
70°-80°	69.4	4.7
80°-90°	11.3	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°	442.4	30.2
0°-40°	718.0	48.9
0°-60°	1228.3	83.7
0°-90°	1467.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1467.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	582	582	582	582	582	
5°	578	577	578	576	590	54
15°	553	547	550	553	553	154
25°	495	497	506	512	511	229
35°	431	432	442	452	452	267
45°	346	353	359	368	359	268
55°	259	257	264	262	262	230
65°	159	157	163	157	158	158
75°	66	65	66	61	64	71
85°	8	8	8	8	8	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	582.1	582.1	582.1	582.1	582.1
2.5°	587.1	582.7	578.5	583.3	586.3
5°	577.9	576.6	578.2	576.4	590.3
7.5°	566.1	571.2	574.3	572.4	573.2
10°	559.7	557.9	564.6	569.3	568.6
12.5°	553.0	555.7	556.1	561.1	561.6
15°	553.4	547.0	550.4	553.2	553.4
17.5°	531.9	538.8	541.1	547.6	539.5
20°	529.2	524.2	529.2	535.9	534.9
22.5°	513.1	507.4	518.3	524.2	523.8
25°	494.7	497.4	505.6	512.2	511.1
27.5°	478.7	481.8	493.4	502.5	496.6
30°	466.3	464.7	474.4	482.6	487.1
32.5°	444.1	449.8	461.2	469.3	465.0
35°	430.6	431.9	441.9	452.1	451.8
37.5°	407.1	413.0	427.1	430.0	427.3
40°	387.0	393.0	405.7	408.8	407.5
42.5°	372.2	373.3	384.2	387.7	382.1
45°	346.5	352.9	358.8	368.0	359.3
47.5°	324.5	327.5	340.1	342.6	338.0
50°	304.6	305.7	318.4	315.3	312.3
52.5°	279.6	284.0	291.1	290.5	287.0
55°	259.0	257.3	264.0	262.2	262.1
57.5°	234.3	237.3	242.8	240.0	235.4
60°	211.1	211.2	213.2	210.0	209.4
62.5°	185.3	186.2	186.7	182.7	189.2
65°	159.1	157.0	163.2	156.9	158.0
67.5°	135.0	136.0	135.4	131.5	133.0
70°	110.5	111.8	110.9	106.4	107.8
72.5°	88.1	86.4	87.5	81.9	84.5
75°	66.2	64.9	66.1	61.4	63.5
77.5°	45.1	46.1	45.4	42.9	44.3
80°	29.8	28.9	28.9	27.5	27.8
82.5°	17.4	16.5	16.3	15.9	16.5
85°	8.1	7.9	8.0	7.8	7.5
87.5°	2.9	3.0	3.0	2.9	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)