

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: P560113

Luminaire Tested: FSR-12-2-LD4-1STD-50-UNV-80-84-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560113
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-135-5)
Test Lab: INNOVATION CENTER
Issue Date: 7/20/2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FSR-12-2-LD4-1STD-50-UNV-80-84-EDD
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONM
SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1567.0 lumens
Efficiency: N/A
Efficacy: 94.4 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

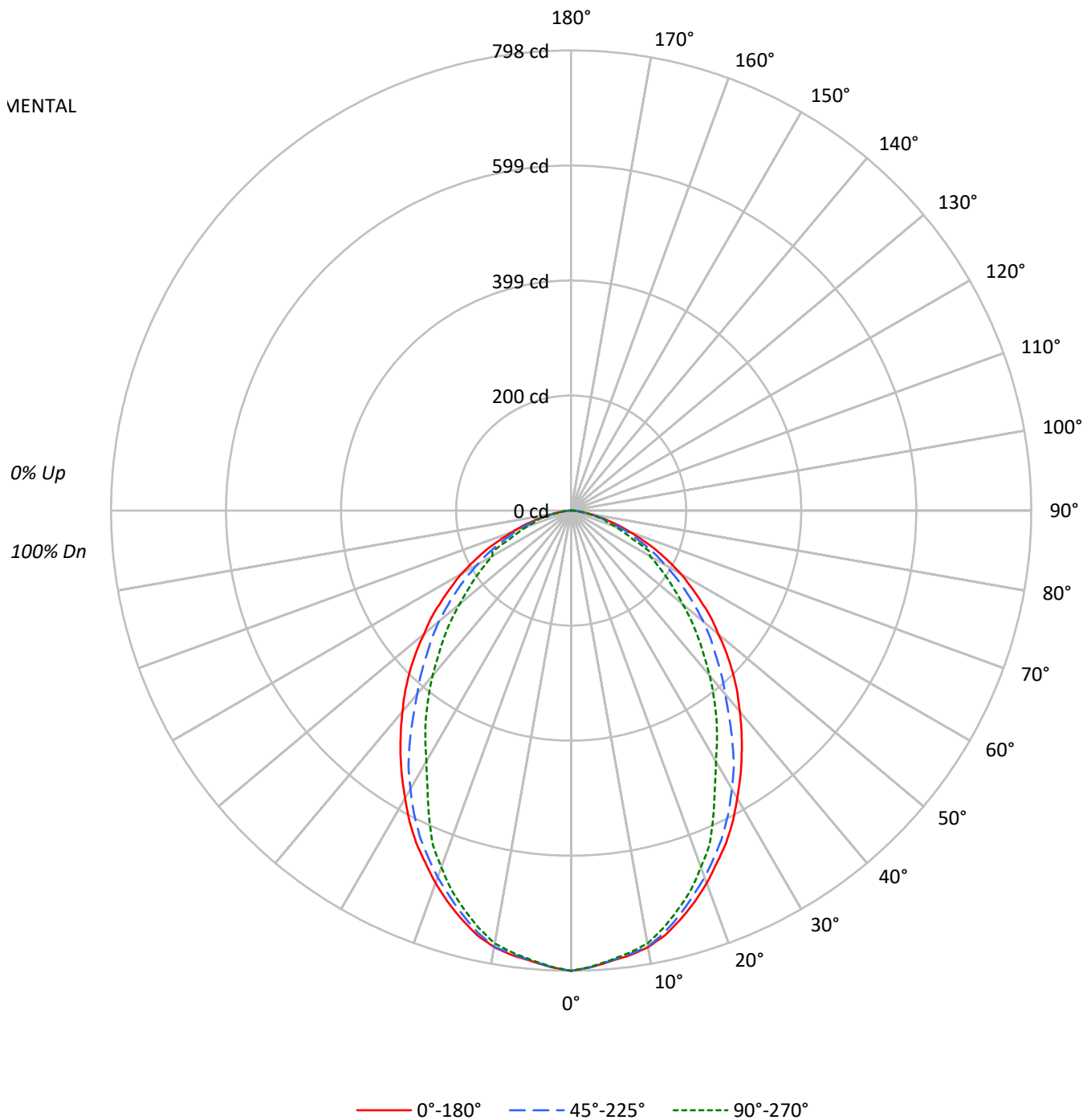
Input Watts (W): 16.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	106	102	99	108	104	100	97	100	97	94	96	94	91	92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	65
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47	56	50	46	44
7	69	56	48	43	67	56	48	42	54	47	42	53	46	42	51	46	42	40
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38	36
9	61	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	33
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4296	4296	4296
5°	4238	4232	4227
10°	4201	4196	4165
15°	4087	4046	3990
20°	3938	3874	3768
25°	3776	3694	3463
30°	3578	3464	3120
35°	3389	3201	2886
40°	3196	2918	2625
45°	3013	2697	2374
50°	2789	2503	2117
55°	2580	2269	1896
60°	2364	2026	1699
65°	2080	1774	1504
70°	1714	1553	1278
75°	1362	1189	1248
80°	914	859	800
85°	568	685	797

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3013 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.3	4.7
10°-20°	203.9	13.0
20°-30°	282.3	18.0
30°-40°	301.0	19.2
40°-50°	274.6	17.5
50°-60°	215.1	13.7
60°-70°	140.2	8.9
70°-80°	62.1	4.0
80°-90°	13.3	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°	560.5	35.8
0°-40°	861.5	55.0
0°-60°	1351.3	86.2
0°-90°	1567.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1567.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	798	798	798	798	798	
5°	784	783	783	782	782	74
15°	734	734	726	719	716	206
25°	636	632	622	600	583	292
35°	516	512	487	450	439	322
45°	396	388	354	325	312	305
55°	275	267	242	213	202	247
65°	163	154	139	142	118	161
75°	66	61	57	54	60	70
85°	9	10	11	12	13	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	798.2	798.2	798.2	798.2	798.2
2.5°	792.7	792.7	792.7	791.7	791.7
5°	784.4	783.4	783.4	782.5	782.5
7.5°	777.9	777.0	776.1	775.1	773.3
10°	768.7	768.7	767.8	763.1	762.2
12.5°	753.9	753.0	749.3	742.8	741.0
15°	733.6	733.6	726.2	718.8	716.1
17.5°	711.5	710.5	701.3	693.9	690.2
20°	687.5	685.6	676.4	664.4	657.9
22.5°	660.7	660.7	649.6	634.0	627.5
25°	635.8	632.1	622.0	599.8	583.2
27.5°	607.2	601.7	590.6	559.2	539.8
30°	575.8	573.0	557.4	516.8	502.0
32.5°	546.3	541.7	525.1	482.6	470.6
35°	515.8	512.1	487.2	450.3	439.2
37.5°	485.4	480.8	449.4	419.9	406.0
40°	454.9	449.4	415.3	388.5	373.7
42.5°	426.3	418.9	385.7	357.1	340.5
45°	395.9	387.6	354.3	324.8	311.9
47.5°	365.4	358.0	327.6	297.1	282.4
50°	333.1	326.7	299.0	268.5	252.8
52.5°	306.4	296.2	269.5	239.0	226.1
55°	275.0	266.7	241.8	213.2	202.1
57.5°	246.4	238.1	215.0	188.2	179.0
60°	219.6	207.6	188.2	165.2	157.8
62.5°	190.1	180.9	164.3	144.9	154.1
65°	163.3	154.1	139.3	142.1	118.1
67.5°	133.8	129.2	116.3	103.4	99.7
70°	108.9	103.4	98.7	84.9	81.2
72.5°	86.7	81.2	74.7	67.4	64.6
75°	65.5	60.9	57.2	54.4	60.0
77.5°	45.2	43.4	40.6	37.8	36.9
80°	29.5	28.6	27.7	26.8	25.8
82.5°	17.5	17.5	17.5	17.5	17.5
85°	9.2	10.2	11.1	12.0	12.9
87.5°	5.5	5.5	6.5	7.4	8.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)