

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: P560011

Luminaire Tested: FSR-12-2-LD4-1STD-35-UNV-81-94-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560011
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-35-UNV-81-94-EDD
Description: 1X2 FSR TROFFER WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1452.0 lumens
Efficiency: N/A
Efficacy: 87.5 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

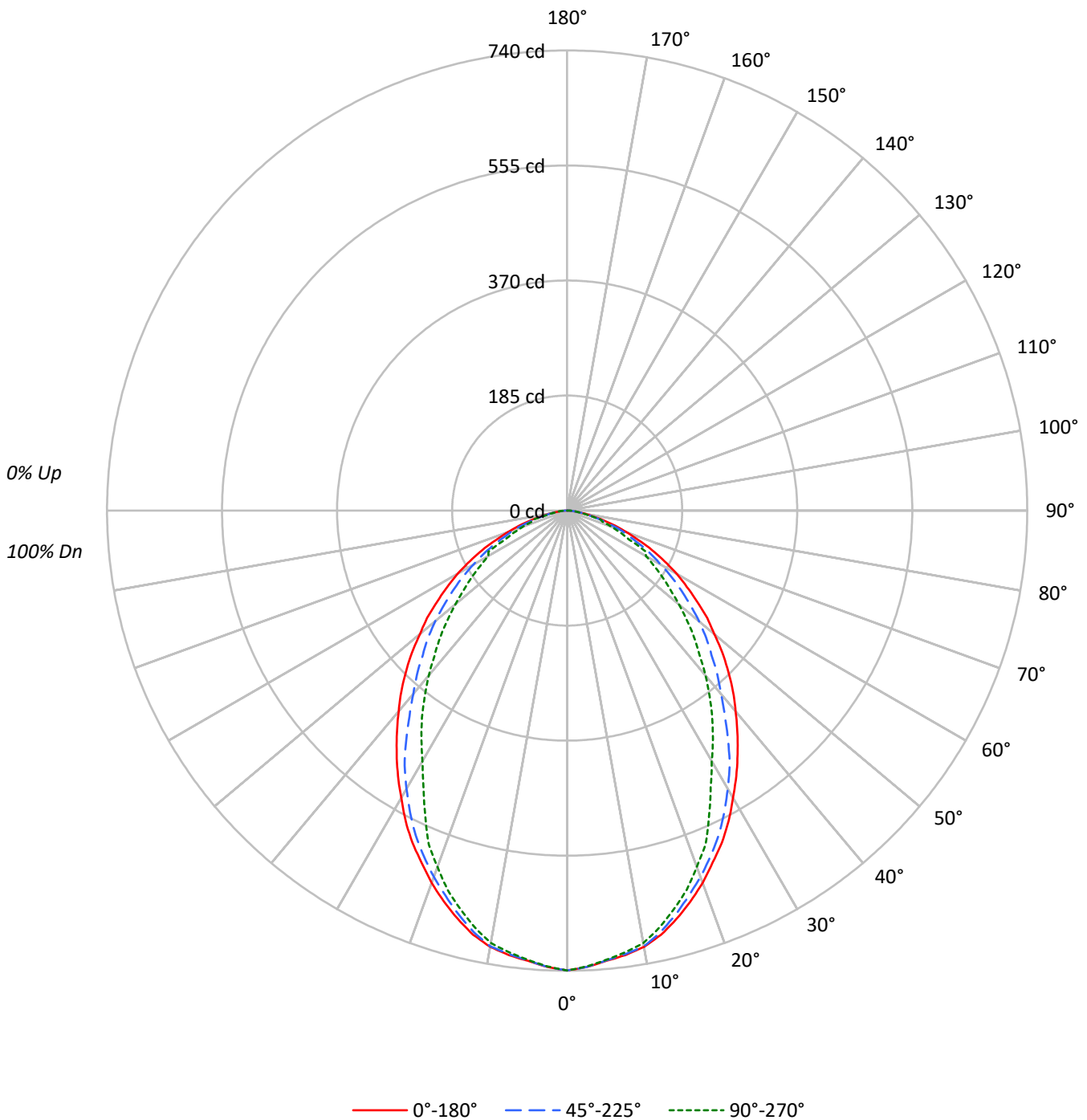
Input Watts (W): 16.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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
RW	70	50	30	10	70	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
1	110	106	102	99	108	104	100	97	100	97	94	96	94	91	92	90	89
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47	56	50	46
7	69	56	48	43	67	56	48	42	54	47	42	53	46	42	51	46	42
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38
9	61	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3980	3980	3980
5°	3927	3922	3917
10°	3893	3888	3860
15°	3788	3749	3697
20°	3648	3590	3492
25°	3498	3422	3209
30°	3316	3210	2891
35°	3141	2966	2674
40°	2961	2703	2433
45°	2792	2499	2200
50°	2585	2319	1962
55°	2391	2102	1757
60°	2190	1877	1574
65°	1927	1644	1393
70°	1588	1440	1183
75°	1262	1102	1156
80°	849	797	741
85°	531	636	741

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2792 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.8	4.7
10°-20°	189.0	13.0
20°-30°	261.6	18.0
30°-40°	278.9	19.2
40°-50°	254.5	17.5
50°-60°	199.4	13.7
60°-70°	129.9	8.9
70°-80°	57.6	4.0
80°-90°	12.3	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°	519.4	35.8
0°-40°	798.3	55.0
0°-60°	1252.1	86.2
0°-90°	1452.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1452.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	740	740	740	740	740	
5°	727	726	726	725	725	69
15°	680	680	673	666	664	191
25°	589	586	576	556	540	270
35°	478	475	452	417	407	299
45°	367	359	328	301	289	283
55°	255	247	224	198	187	229
65°	151	143	129	132	109	149
75°	61	56	53	50	56	65
85°	9	9	10	11	12	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	739.6	739.6	739.6	739.6	739.6
2.5°	734.5	734.5	734.5	733.6	733.6
5°	726.8	725.9	725.9	725.1	725.1
7.5°	720.8	720.0	719.1	718.3	716.5
10°	712.3	712.3	711.4	707.1	706.3
12.5°	698.6	697.7	694.3	688.3	686.6
15°	679.8	679.8	672.9	666.1	663.5
17.5°	659.3	658.4	649.8	643.0	639.6
20°	637.0	635.3	626.8	615.6	609.7
22.5°	612.2	612.2	602.0	587.4	581.4
25°	589.1	585.7	576.3	555.8	540.4
27.5°	562.6	557.5	547.2	518.2	500.2
30°	533.6	531.0	516.5	478.8	465.2
32.5°	506.2	501.9	486.5	447.2	436.1
35°	478.0	474.6	451.5	417.3	407.0
37.5°	449.8	445.5	416.4	389.1	376.2
40°	421.5	416.4	384.8	360.0	346.3
42.5°	395.0	388.2	357.4	330.9	315.5
45°	366.8	359.1	328.3	301.0	289.0
47.5°	338.6	331.8	303.5	275.3	261.6
50°	308.7	302.7	277.0	248.8	234.3
52.5°	283.9	274.5	249.7	221.5	209.5
55°	254.8	247.1	224.0	197.5	187.3
57.5°	228.3	220.6	199.2	174.4	165.9
60°	203.5	192.4	174.4	153.1	146.2
62.5°	176.1	167.6	152.2	134.2	142.8
65°	151.3	142.8	129.1	131.7	109.4
67.5°	124.0	119.7	107.7	95.8	92.3
70°	100.9	95.8	91.5	78.7	75.2
72.5°	80.4	75.2	69.3	62.4	59.9
75°	60.7	56.4	53.0	50.4	55.6
77.5°	41.9	40.2	37.6	35.1	34.2
80°	27.4	26.5	25.7	24.8	23.9
82.5°	16.2	16.2	16.2	16.2	16.2
85°	8.6	9.4	10.3	11.1	12.0
87.5°	5.1	5.1	6.0	6.8	7.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)