

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: P559537

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

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559537
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-12-1-LD4-2STD-50-UNV-80-84-EDD
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRON
SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1616.0 lumens
Efficiency: N/A
Efficacy: 97.3 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

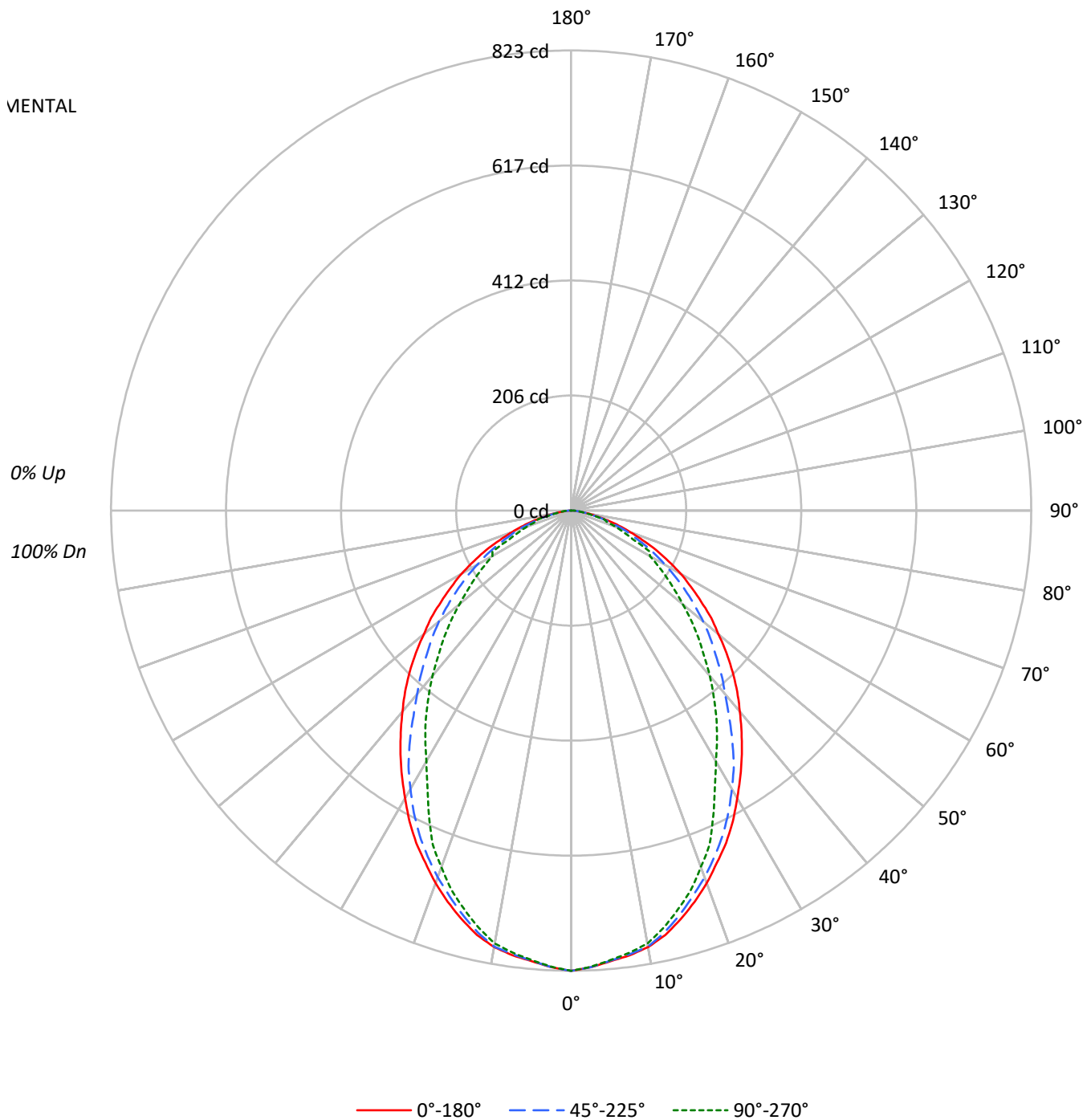
Input Watts (W): 16.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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									100																			
1	110	106	102	99	108	104	100	97	100	97	94	96	94	91	92	90	89	87									87																			
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75									75																			
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	65									65																			
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56									56																			
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50									50																			
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47	56	50	46	44									44																			
7	69	56	48	43	67	56	48	42	54	47	42	53	46	42	51	46	42	40									40																			
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38	36									36																			
9	61	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	33									33																			
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30									30																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8861	8861	8861
5°	8740	8729	8720
10°	8664	8654	8592
15°	8431	8345	8230
20°	8121	7991	7772
25°	7788	7618	7143
30°	7380	7144	6435
35°	6991	6603	5953
40°	6593	6017	5415
45°	6215	5562	4897
50°	5752	5163	4366
55°	5322	4678	3911
60°	4876	4179	3503
65°	4289	3660	3102
70°	3534	3204	2634
75°	2811	2454	2574
80°	1891	1767	1649
85°	1173	1408	1643

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6215 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.6	4.7
10°-20°	210.3	13.0
20°-30°	291.1	18.0
30°-40°	310.4	19.2
40°-50°	283.2	17.5
50°-60°	221.9	13.7
60°-70°	144.6	8.9
70°-80°	64.1	4.0
80°-90°	13.8	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°	578.1	35.8
0°-40°	888.5	55.0
0°-60°	1393.6	86.2
0°-90°	1616.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1616.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	823	823	823	823	823	
5°	809	808	808	807	807	77
15°	757	757	749	741	738	213
25°	656	652	641	619	601	301
35°	532	528	502	464	453	333
45°	408	400	365	335	322	314
55°	284	275	249	220	208	254
65°	168	159	144	147	122	166
75°	68	63	59	56	62	72
85°	10	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°	823.2	823.2	823.2	823.2	823.2
2.5°	817.5	817.5	817.5	816.5	816.5
5°	808.9	807.9	807.9	807.0	807.0
7.5°	802.2	801.3	800.3	799.4	797.5
10°	792.7	792.7	791.8	787.0	786.1
12.5°	777.5	776.5	772.7	766.1	764.2
15°	756.6	756.6	748.9	741.3	738.5
17.5°	733.7	732.8	723.2	715.6	711.8
20°	709.0	707.1	697.6	685.2	678.5
22.5°	681.4	681.4	670.0	653.8	647.1
25°	655.7	651.9	641.4	618.6	601.4
27.5°	626.2	620.5	609.0	576.7	556.7
30°	593.8	591.0	574.8	532.9	517.7
32.5°	563.4	558.6	541.5	497.7	485.3
35°	532.0	528.2	502.5	464.4	453.0
37.5°	500.6	495.8	463.4	433.0	418.7
40°	469.2	463.4	428.2	400.6	385.4
42.5°	439.7	432.0	397.8	368.3	351.2
45°	408.3	399.7	365.4	335.0	321.7
47.5°	376.8	369.2	337.8	306.4	291.2
50°	343.5	336.9	308.3	276.9	260.7
52.5°	315.9	305.5	277.9	246.5	233.2
55°	283.6	275.0	249.3	219.8	208.4
57.5°	254.1	245.5	221.7	194.1	184.6
60°	226.5	214.1	194.1	170.3	162.7
62.5°	196.0	186.5	169.4	149.4	158.9
65°	168.4	158.9	143.7	146.6	121.8
67.5°	138.0	133.2	119.9	106.6	102.8
70°	112.3	106.6	101.8	87.6	83.7
72.5°	89.5	83.7	77.1	69.5	66.6
75°	67.6	62.8	59.0	56.1	61.9
77.5°	46.6	44.7	41.9	39.0	38.1
80°	30.5	29.5	28.5	27.6	26.6
82.5°	18.1	18.1	18.1	18.1	18.1
85°	9.5	10.5	11.4	12.4	13.3
87.5°	5.7	5.7	6.7	7.6	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)