

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: P559549

Luminaire Tested: FSR-12-1-LD4-2STD-50-UNV-80-96-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559549
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-80-96-EDD
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED G ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1602.0 lumens
Efficiency: N/A
Efficacy: 96.5 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

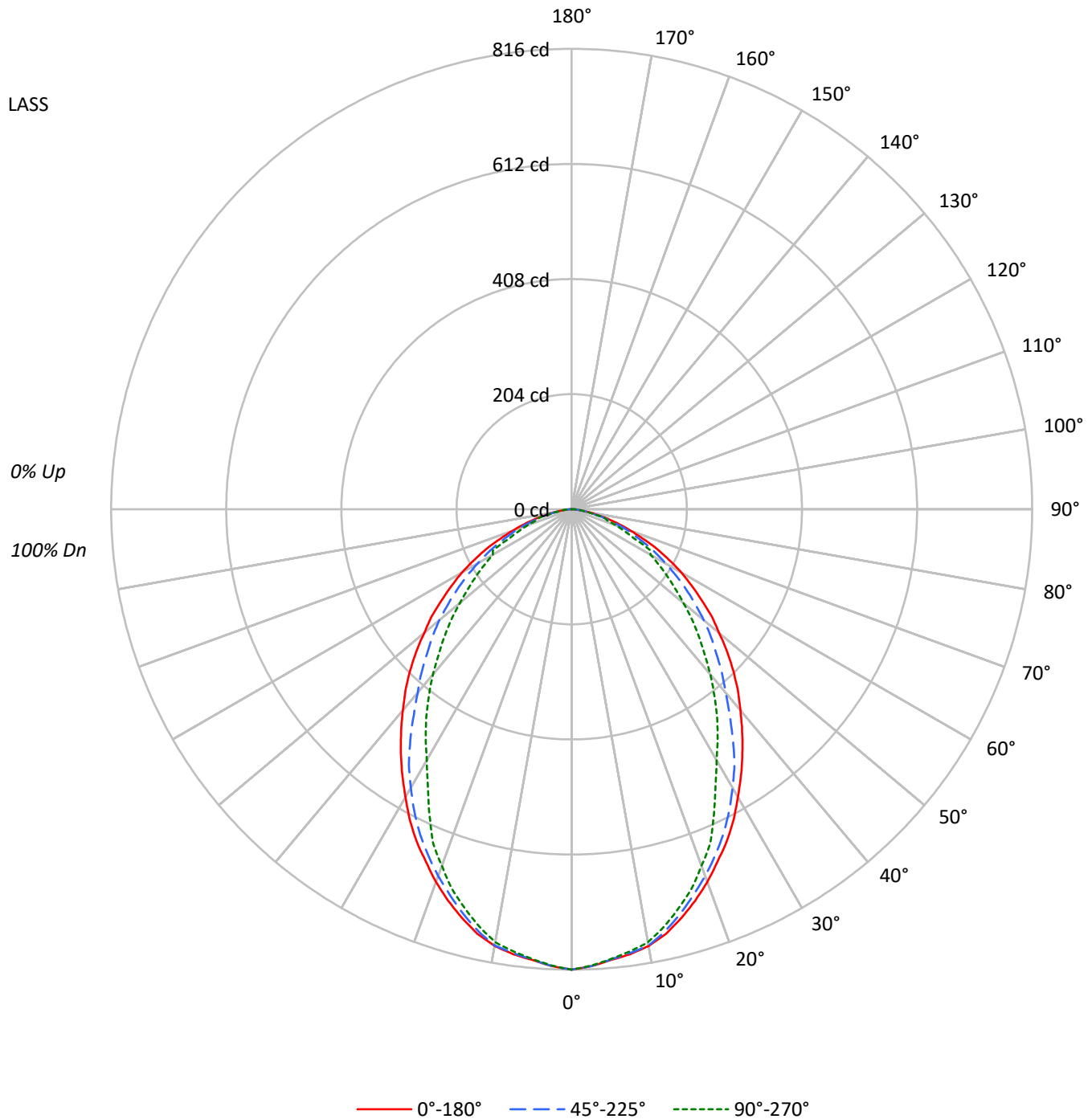
Input Watts (W): 16.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P559549

CATALOG NUMBER: FSR-12-1-LD4-2STD-50-UNV-80-96-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P559549

CATALOG NUMBER: FSR-12-1-LD4-2STD-50-UNV-80-96-EDD

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°	8783	8783	8783
5°	8665	8654	8644
10°	8589	8579	8517
15°	8358	8274	8158
20°	8050	7921	7704
25°	7720	7551	7081
30°	7317	7082	6379
35°	6930	6545	5901
40°	6535	5965	5369
45°	6161	5515	4854
50°	5704	5119	4329
55°	5275	4639	3877
60°	4833	4144	3472
65°	4253	3629	3077
70°	3503	3175	2612
75°	2786	2433	2549
80°	1872	1754	1636
85°	1161	1396	1630

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6161 cd/sqm

TEST NUMBER: P559549

CATALOG NUMBER: FSR-12-1-LD4-2STD-50-UNV-80-96-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.0	4.7
10°-20°	208.5	13.0
20°-30°	288.6	18.0
30°-40°	307.7	19.2
40°-50°	280.8	17.5
50°-60°	219.9	13.7
60°-70°	143.4	8.9
70°-80°	63.5	4.0
80°-90°	13.6	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°	573.0	35.8
0°-40°	880.8	55.0
0°-60°	1381.5	86.2
0°-90°	1602.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1602.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	816	816	816	816	816	
5°	802	801	801	800	800	76
15°	750	750	742	735	732	211
25°	650	646	636	613	596	298
35°	527	524	498	460	449	330
45°	405	396	362	332	319	312
55°	281	273	247	218	207	252
65°	167	158	142	145	121	165
75°	67	62	58	56	61	72
85°	9	10	11	12	13	13
90°	0	0	0	0	0	



TEST NUMBER: P559549

CATALOG NUMBER: FSR-12-1-LD4-2STD-50-UNV-80-96-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	816.0	816.0	816.0	816.0	816.0
2.5°	810.4	810.4	810.4	809.4	809.4
5°	801.9	800.9	800.9	800.0	800.0
7.5°	795.3	794.3	793.4	792.5	790.6
10°	785.8	785.8	784.9	780.2	779.2
12.5°	770.8	769.8	766.0	759.4	757.5
15°	750.0	750.0	742.5	734.9	732.1
17.5°	727.4	726.4	717.0	709.4	705.7
20°	702.8	700.9	691.5	679.2	672.6
22.5°	675.5	675.5	664.2	648.1	641.5
25°	650.0	646.2	635.8	613.2	596.2
27.5°	620.8	615.1	603.8	571.7	551.9
30°	588.7	585.8	569.8	528.3	513.2
32.5°	558.5	553.8	536.8	493.4	481.1
35°	527.4	523.6	498.1	460.4	449.1
37.5°	496.2	491.5	459.4	429.2	415.1
40°	465.1	459.4	424.5	397.2	382.1
42.5°	435.8	428.3	394.3	365.1	348.1
45°	404.7	396.2	362.3	332.1	318.9
47.5°	373.6	366.0	334.9	303.8	288.7
50°	340.6	334.0	305.7	274.5	258.5
52.5°	313.2	302.8	275.5	244.3	231.1
55°	281.1	272.6	247.2	217.9	206.6
57.5°	251.9	243.4	219.8	192.5	183.0
60°	224.5	212.3	192.5	168.9	161.3
62.5°	194.3	184.9	167.9	148.1	157.5
65°	167.0	157.5	142.5	145.3	120.8
67.5°	136.8	132.1	118.9	105.7	101.9
70°	111.3	105.7	100.9	86.8	83.0
72.5°	88.7	83.0	76.4	68.9	66.0
75°	67.0	62.3	58.5	55.7	61.3
77.5°	46.2	44.3	41.5	38.7	37.7
80°	30.2	29.2	28.3	27.4	26.4
82.5°	17.9	17.9	17.9	17.9	17.9
85°	9.4	10.4	11.3	12.3	13.2
87.5°	5.7	5.7	6.6	7.5	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)