

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: P560120

Luminaire Tested: FSR-12-2-LD4-1STD-50-UNV-80-88-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560120
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-80-88-EDD-90
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .500 CLEAR PC ENVIRON
SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1151.0 lumens
Efficiency: N/A
Efficacy: 69.3 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

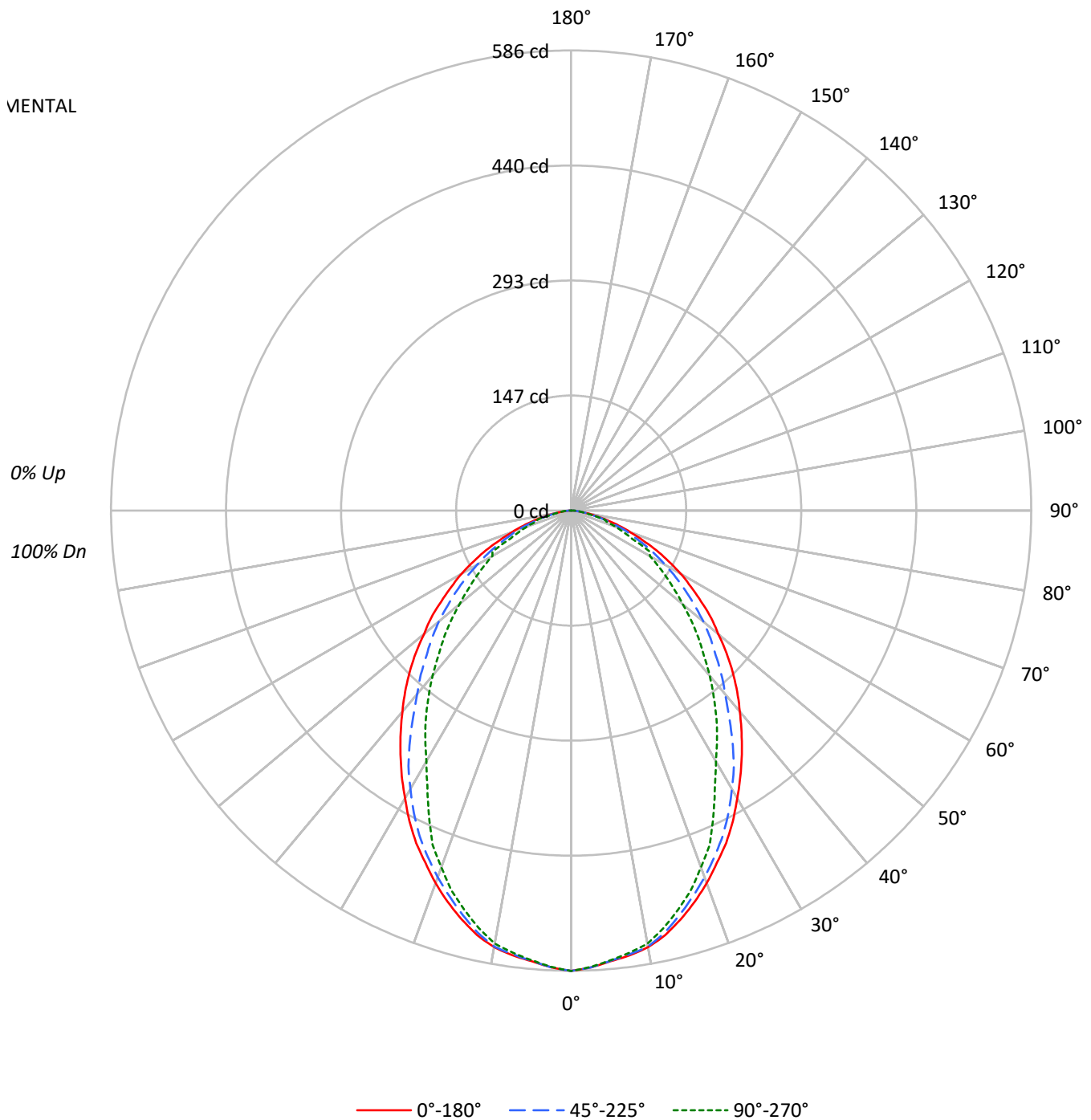
Input Watts (W): 16.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	3155	3155	3155
5°	3112	3109	3105
10°	3086	3082	3060
15°	3003	2972	2931
20°	2892	2845	2768
25°	2773	2713	2544
30°	2629	2544	2291
35°	2489	2351	2120
40°	2348	2143	1929
45°	2213	1981	1744
50°	2049	1839	1555
55°	1895	1666	1392
60°	1736	1489	1248
65°	1528	1303	1105
70°	1259	1141	938
75°	1000	873	917
80°	673	629	589
85°	420	500	587

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2213 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.6	4.7
10°-20°	149.8	13.0
20°-30°	207.4	18.0
30°-40°	221.1	19.2
40°-50°	201.7	17.5
50°-60°	158.0	13.7
60°-70°	103.0	8.9
70°-80°	45.6	4.0
80°-90°	9.8	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°	411.7	35.8
0°-40°	632.8	55.0
0°-60°	992.6	86.2
0°-90°	1151.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1151.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	586	586	586	586	586	
5°	576	576	576	575	575	55
15°	539	539	533	528	526	151
25°	467	464	457	441	428	214
35°	379	376	358	331	323	237
45°	291	285	260	239	229	224
55°	202	196	178	157	148	181
65°	120	113	102	104	87	118
75°	48	45	42	40	44	52
85°	7	8	8	9	10	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	586.3	586.3	586.3	586.3	586.3
2.5°	582.2	582.2	582.2	581.6	581.6
5°	576.1	575.5	575.5	574.8	574.8
7.5°	571.4	570.7	570.0	569.4	568.0
10°	564.6	564.6	563.9	560.5	559.9
12.5°	553.8	553.1	550.4	545.6	544.3
15°	538.9	538.9	533.4	528.0	526.0
17.5°	522.6	521.9	515.1	509.7	507.0
20°	505.0	503.6	496.8	488.0	483.3
22.5°	485.3	485.3	477.2	465.7	460.9
25°	467.0	464.3	456.8	440.6	428.4
27.5°	446.0	441.9	433.8	410.8	396.5
30°	423.0	420.9	409.4	379.6	368.7
32.5°	401.3	397.9	385.7	354.5	345.7
35°	378.9	376.2	357.9	330.8	322.6
37.5°	356.5	353.1	330.1	308.4	298.2
40°	334.2	330.1	305.0	285.4	274.5
42.5°	313.1	307.7	283.3	262.3	250.1
45°	290.8	284.7	260.3	238.6	229.1
47.5°	268.4	263.0	240.6	218.3	207.4
50°	244.7	239.9	219.6	197.2	185.7
52.5°	225.0	217.6	197.9	175.6	166.1
55°	202.0	195.9	177.6	156.6	148.4
57.5°	181.0	174.9	157.9	138.3	131.5
60°	161.3	152.5	138.3	121.3	115.9
62.5°	139.6	132.9	120.6	106.4	113.2
65°	120.0	113.2	102.3	104.4	86.8
67.5°	98.3	94.9	85.4	75.9	73.2
70°	80.0	75.9	72.5	62.4	59.6
72.5°	63.7	59.6	54.9	49.5	47.4
75°	48.1	44.7	42.0	40.0	44.1
77.5°	33.2	31.9	29.8	27.8	27.1
80°	21.7	21.0	20.3	19.7	19.0
82.5°	12.9	12.9	12.9	12.9	12.9
85°	6.8	7.5	8.1	8.8	9.5
87.5°	4.1	4.1	4.7	5.4	6.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)