

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: P559996

Luminaire Tested: FSR-12-2-LD4-1STD-35-UNV-80-96-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559996
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-80-96-EDD-90
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED G ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1265.0 lumens
Efficiency: N/A
Efficacy: 76.2 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

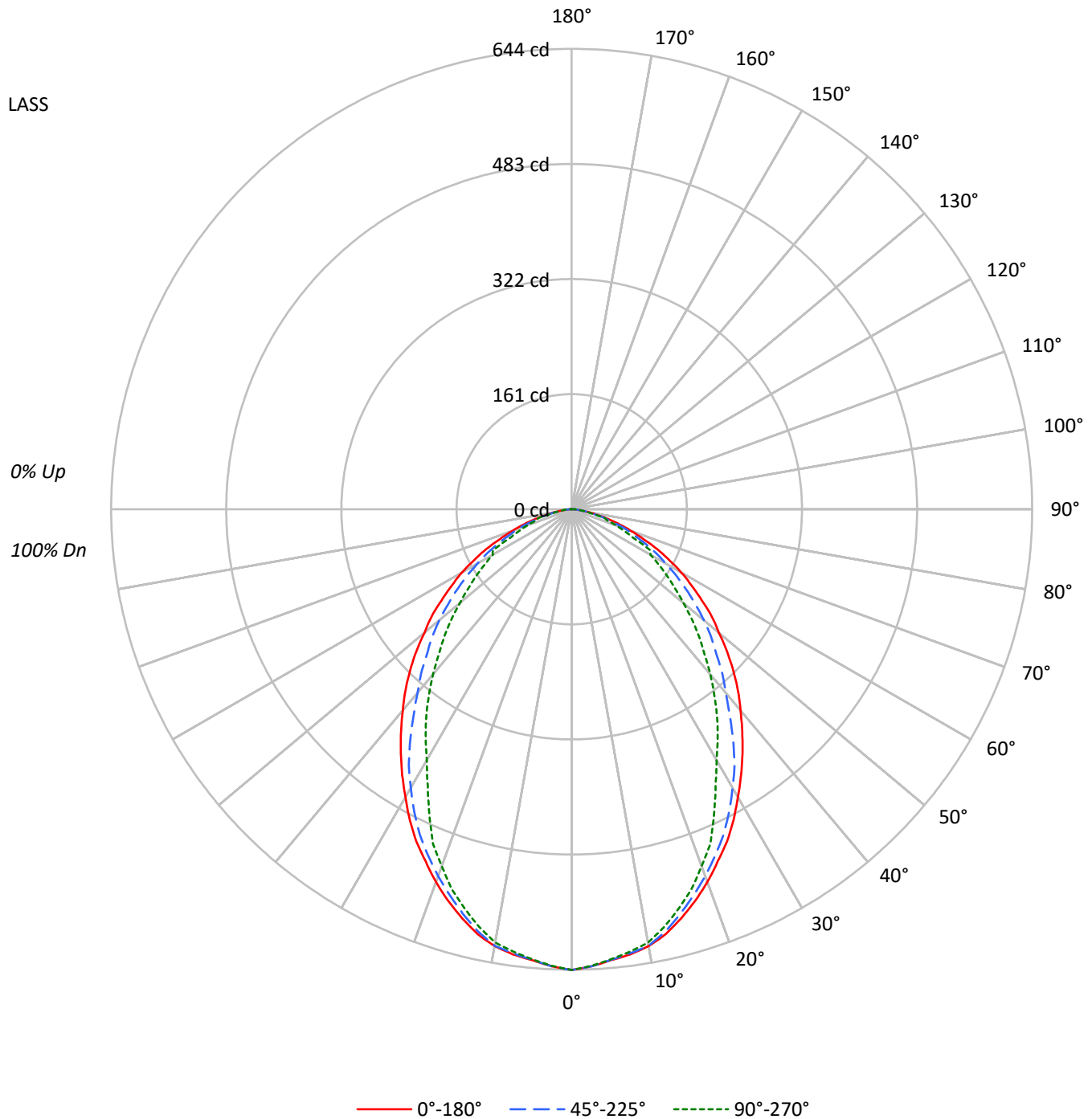
Input Watts (W): 16.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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																												
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°	3468	3468	3468
5°	3421	3417	3413
10°	3391	3387	3363
15°	3300	3267	3221
20°	3179	3127	3042
25°	3048	2982	2796
30°	2889	2796	2518
35°	2736	2584	2330
40°	2581	2355	2120
45°	2433	2178	1917
50°	2251	2021	1709
55°	2083	1832	1530
60°	1908	1636	1371
65°	1680	1433	1215
70°	1383	1254	1032
75°	1100	961	1006
80°	738	691	648
85°	457	550	642

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2433 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.0	4.7
10°-20°	164.6	13.0
20°-30°	227.9	18.0
30°-40°	243.0	19.2
40°-50°	221.7	17.5
50°-60°	173.7	13.7
60°-70°	113.2	8.9
70°-80°	50.2	4.0
80°-90°	10.8	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°	452.5	35.8
0°-40°	695.5	55.0
0°-60°	1090.9	86.2
0°-90°	1265.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1265.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	644	644	644	644	644	
5°	633	632	632	632	632	60
15°	592	592	586	580	578	166
25°	513	510	502	484	471	236
35°	416	413	393	364	355	260
45°	320	313	286	262	252	246
55°	222	215	195	172	163	199
65°	132	124	112	115	95	130
75°	53	49	46	44	48	57
85°	7	8	9	10	10	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	644.4	644.4	644.4	644.4	644.4
2.5°	639.9	639.9	639.9	639.2	639.2
5°	633.2	632.5	632.5	631.7	631.7
7.5°	628.0	627.2	626.5	625.8	624.3
10°	620.5	620.5	619.8	616.1	615.3
12.5°	608.6	607.9	604.9	599.7	598.2
15°	592.2	592.2	586.3	580.3	578.1
17.5°	574.3	573.6	566.2	560.2	557.2
20°	555.0	553.5	546.0	536.4	531.1
22.5°	533.4	533.4	524.4	511.8	506.6
25°	513.3	510.3	502.1	484.2	470.8
27.5°	490.2	485.7	476.8	451.4	435.8
30°	464.8	462.6	449.9	417.2	405.2
32.5°	441.0	437.3	423.9	389.6	379.9
35°	416.4	413.4	393.3	363.5	354.6
37.5°	391.8	388.1	362.8	338.9	327.8
40°	367.3	362.8	335.2	313.6	301.7
42.5°	344.2	338.2	311.4	288.3	274.9
45°	319.6	312.9	286.1	262.2	251.8
47.5°	295.0	289.0	264.5	239.9	228.0
50°	268.9	263.7	241.4	216.8	204.1
52.5°	247.3	239.1	217.5	192.9	182.5
55°	222.0	215.3	195.2	172.1	163.1
57.5°	198.9	192.2	173.6	152.0	144.5
60°	177.3	167.6	152.0	133.3	127.4
62.5°	153.5	146.0	132.6	117.0	124.4
65°	131.9	124.4	112.5	114.7	95.4
67.5°	108.0	104.3	93.9	83.4	80.5
70°	87.9	83.4	79.7	68.5	65.6
72.5°	70.0	65.6	60.3	54.4	52.1
75°	52.9	49.2	46.2	44.0	48.4
77.5°	36.5	35.0	32.8	30.5	29.8
80°	23.8	23.1	22.3	21.6	20.9
82.5°	14.2	14.2	14.2	14.2	14.2
85°	7.4	8.2	8.9	9.7	10.4
87.5°	4.5	4.5	5.2	6.0	6.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)