

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: P559991

Luminaire Tested: FSR-12-2-LD4-1STD-35-UNV-80-87-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559991
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-80-87-EDD
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRON
SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1430.0 lumens
Efficiency: N/A
Efficacy: 86.1 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

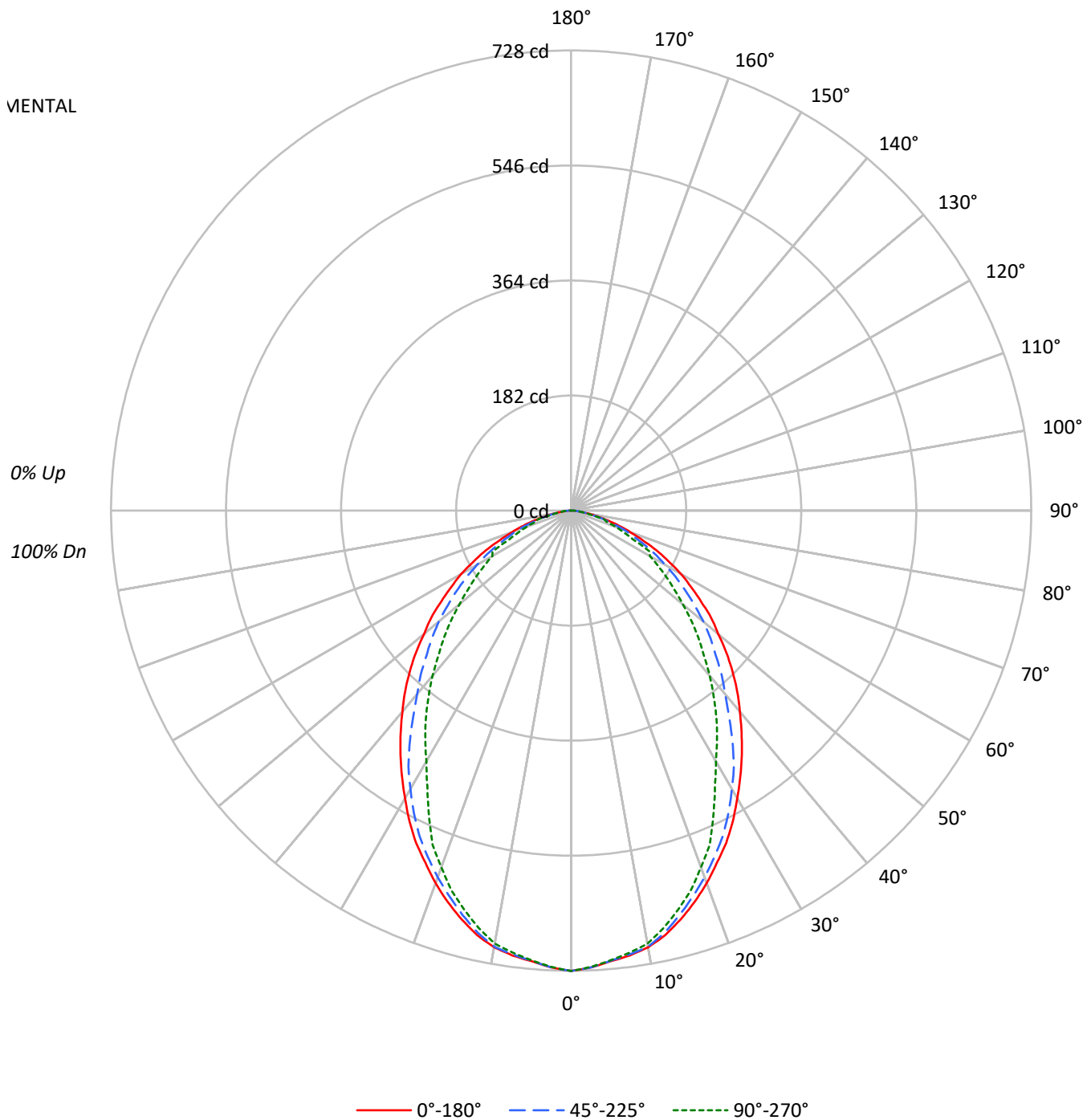
Input Watts (W): 16.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	3920	3920	3920
5°	3867	3862	3858
10°	3834	3829	3801
15°	3730	3692	3641
20°	3593	3535	3439
25°	3445	3371	3160
30°	3266	3161	2847
35°	3093	2921	2633
40°	2917	2662	2396
45°	2750	2461	2166
50°	2545	2284	1932
55°	2354	2070	1730
60°	2157	1849	1550
65°	1899	1620	1373
70°	1564	1418	1166
75°	1243	1085	1137
80°	834	784	731
85°	519	624	729

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2750 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.8	4.7
10°-20°	186.1	13.0
20°-30°	257.6	18.0
30°-40°	274.7	19.2
40°-50°	250.6	17.5
50°-60°	196.3	13.7
60°-70°	128.0	8.9
70°-80°	56.7	4.0
80°-90°	12.2	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°	511.5	35.8
0°-40°	786.2	55.0
0°-60°	1233.2	86.2
0°-90°	1430.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1430.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	728	728	728	728	728	
5°	716	715	715	714	714	68
15°	670	670	663	656	654	188
25°	580	577	568	547	532	266
35°	471	467	445	411	401	294
45°	361	354	323	296	285	278
55°	251	243	221	194	184	225
65°	149	141	127	130	108	147
75°	60	56	52	50	55	64
85°	8	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°	728.4	728.4	728.4	728.4	728.4
2.5°	723.4	723.4	723.4	722.5	722.5
5°	715.8	714.9	714.9	714.1	714.1
7.5°	709.9	709.1	708.2	707.4	705.7
10°	701.5	701.5	700.6	696.4	695.6
12.5°	688.0	687.2	683.8	677.9	676.2
15°	669.5	669.5	662.7	656.0	653.5
17.5°	649.3	648.4	640.0	633.3	629.9
20°	627.4	625.7	617.3	606.3	600.4
22.5°	602.9	602.9	592.8	578.5	572.6
25°	580.2	576.8	567.6	547.4	532.2
27.5°	554.1	549.1	538.9	510.3	492.6
30°	525.5	522.9	508.6	471.6	458.1
32.5°	498.5	494.3	479.2	440.4	429.5
35°	470.7	467.4	444.6	410.9	400.8
37.5°	442.9	438.7	410.1	383.2	370.5
40°	415.2	410.1	378.9	354.5	341.1
42.5°	389.1	382.3	352.0	325.9	310.7
45°	361.3	353.7	323.4	296.4	284.6
47.5°	333.5	326.7	298.9	271.2	257.7
50°	304.0	298.1	272.8	245.1	230.7
52.5°	279.6	270.3	245.9	218.1	206.3
55°	250.9	243.4	220.6	194.5	184.4
57.5°	224.8	217.3	196.2	171.8	163.4
60°	200.4	189.5	171.8	150.7	144.0
62.5°	173.5	165.1	149.9	132.2	140.6
65°	149.1	140.6	127.2	129.7	107.8
67.5°	122.1	117.9	106.1	94.3	90.9
70°	99.4	94.3	90.1	77.5	74.1
72.5°	79.2	74.1	68.2	61.5	58.9
75°	59.8	55.6	52.2	49.7	54.7
77.5°	41.3	39.6	37.1	34.5	33.7
80°	26.9	26.1	25.3	24.4	23.6
82.5°	16.0	16.0	16.0	16.0	16.0
85°	8.4	9.3	10.1	10.9	11.8
87.5°	5.1	5.1	5.9	6.7	7.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)