

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: P560074

Luminaire Tested: FSR-12-2-LD4-1STD-40-UNV-81-94-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560074
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-40-UNV-81-94-EDD-90
Description: 1X2 FSR TROFFER WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1233.0 lumens
Efficiency: N/A
Efficacy: 74.3 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

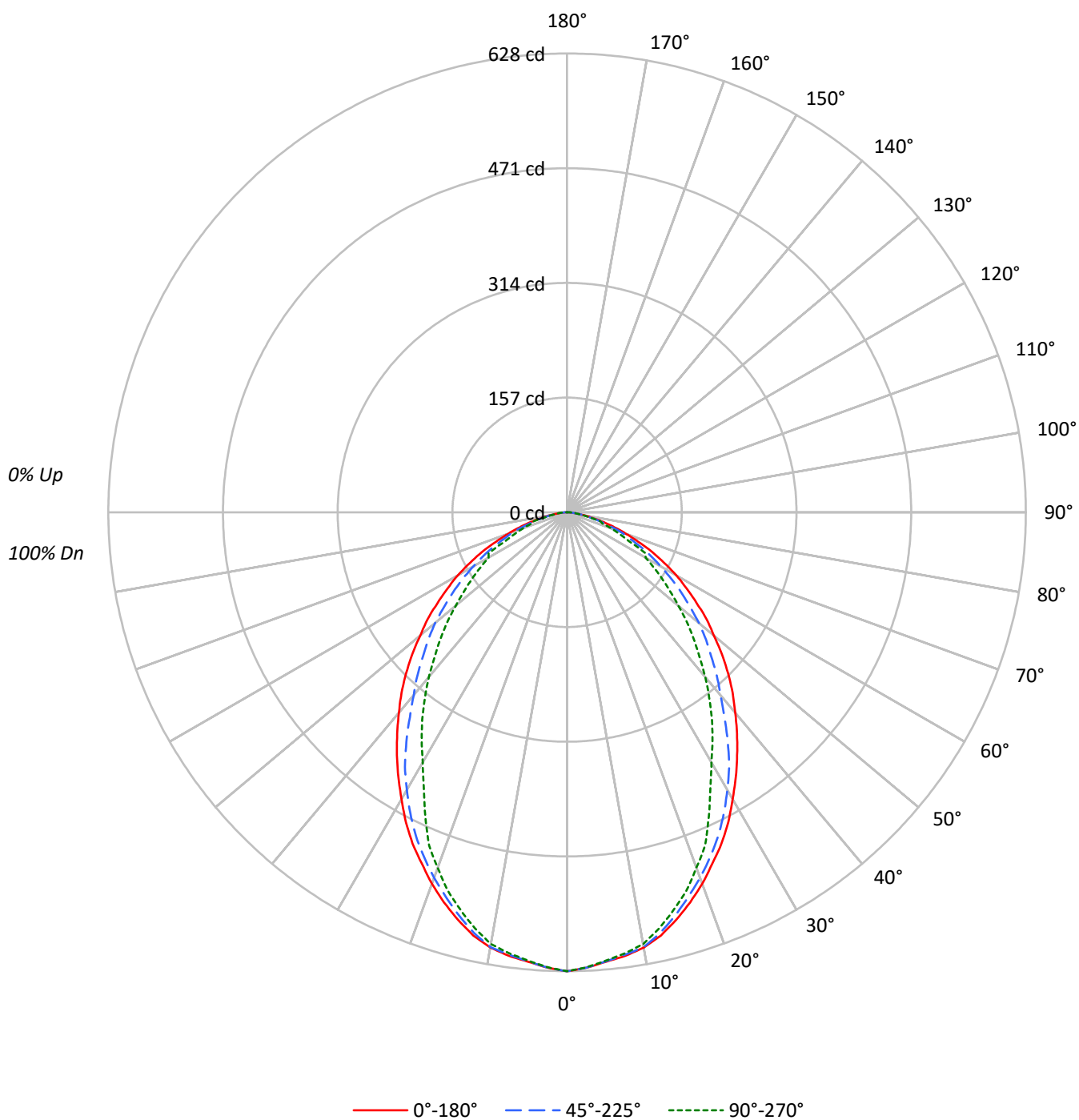
Input Watts (W): 16.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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					0
RW	70	50	30	10	70	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°	3380	3380	3380
5°	3334	3331	3326
10°	3305	3301	3278
15°	3216	3184	3140
20°	3098	3048	2965
25°	2971	2906	2725
30°	2816	2726	2455
35°	2667	2519	2271
40°	2515	2295	2066
45°	2371	2122	1868
50°	2195	1970	1666
55°	2031	1785	1492
60°	1860	1594	1337
65°	1636	1396	1183
70°	1349	1223	1006
75°	1073	936	981
80°	719	676	629
85°	451	537	630

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2371 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.5	4.7
10°-20°	160.4	13.0
20°-30°	222.1	18.0
30°-40°	236.9	19.2
40°-50°	216.1	17.5
50°-60°	169.3	13.7
60°-70°	110.3	8.9
70°-80°	48.9	4.0
80°-90°	10.5	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°	441.1	35.8
0°-40°	677.9	55.0
0°-60°	1063.3	86.2
0°-90°	1233.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1233.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	628	628	628	628	628	
5°	617	616	616	616	616	59
15°	577	577	571	566	564	162
25°	500	497	489	472	459	230
35°	406	403	383	354	346	254
45°	312	305	279	256	245	240
55°	216	210	190	168	159	194
65°	128	121	110	112	93	127
75°	52	48	45	43	47	55
85°	7	8	9	9	10	10
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	628.1	628.1	628.1	628.1	628.1
2.5°	623.7	623.7	623.7	623.0	623.0
5°	617.2	616.5	616.5	615.7	615.7
7.5°	612.1	611.4	610.6	609.9	608.5
10°	604.8	604.8	604.1	600.5	599.8
12.5°	593.2	592.5	589.6	584.5	583.1
15°	577.2	577.2	571.4	565.6	563.5
17.5°	559.8	559.1	551.8	546.0	543.1
20°	540.9	539.5	532.2	522.8	517.7
22.5°	519.9	519.9	511.2	498.8	493.7
25°	500.3	497.4	489.4	472.0	458.9
27.5°	477.8	473.4	464.7	440.0	424.8
30°	453.1	450.9	438.6	406.6	395.0
32.5°	429.8	426.2	413.1	379.7	370.3
35°	405.9	403.0	383.4	354.3	345.6
37.5°	381.9	378.3	353.6	330.4	319.5
40°	358.0	353.6	326.7	305.7	294.1
42.5°	335.5	329.6	303.5	281.0	267.9
45°	311.5	305.0	278.8	255.6	245.4
47.5°	287.5	281.7	257.8	233.8	222.2
50°	262.1	257.0	235.3	211.3	199.0
52.5°	241.1	233.1	212.0	188.1	177.9
55°	216.4	209.8	190.2	167.7	159.0
57.5°	193.9	187.3	169.2	148.1	140.9
60°	172.8	163.4	148.1	130.0	124.2
62.5°	149.6	142.3	129.2	114.0	121.3
65°	128.5	121.3	109.6	111.8	92.9
67.5°	105.3	101.7	91.5	81.3	78.4
70°	85.7	81.3	77.7	66.8	63.9
72.5°	68.3	63.9	58.8	53.0	50.8
75°	51.6	47.9	45.0	42.8	47.2
77.5°	35.6	34.1	31.9	29.8	29.0
80°	23.2	22.5	21.8	21.1	20.3
82.5°	13.8	13.8	13.8	13.8	13.8
85°	7.3	8.0	8.7	9.4	10.2
87.5°	4.4	4.4	5.1	5.8	6.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)