

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: P558923

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

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558923
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-LD4-1STD-40-UNV-81-94-EDD
Description: 1X1 FSR TROFFER WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 757.0 lumens
Efficiency: N/A
Efficacy: 91.2 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

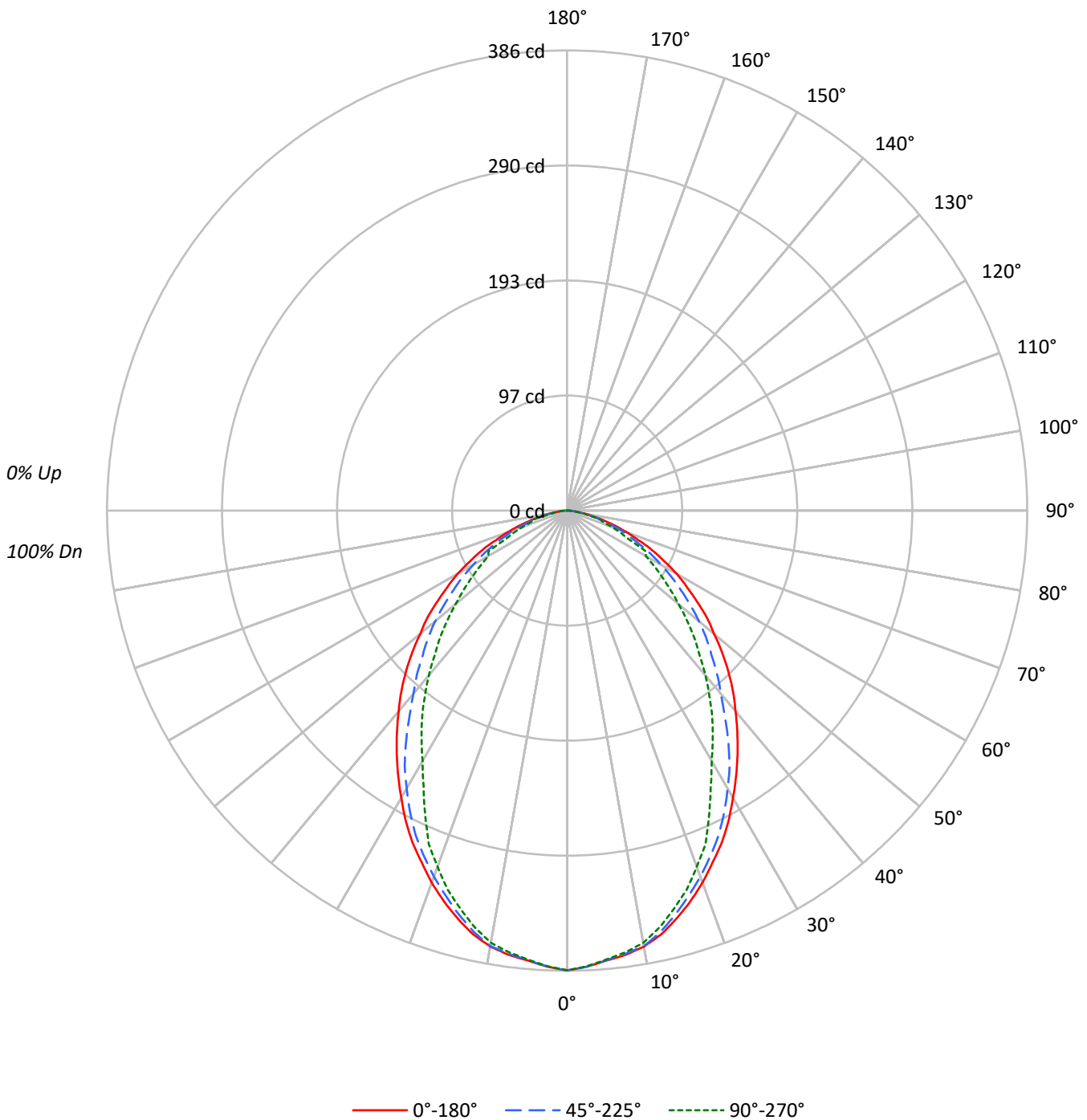
Input Watts (W): 8.3
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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				
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°	4151	4151	4151
5°	4094	4090	4084
10°	4058	4054	4024
15°	3949	3909	3855
20°	3804	3743	3640
25°	3647	3569	3346
30°	3458	3347	3014
35°	3275	3093	2788
40°	3088	2819	2536
45°	2911	2606	2294
50°	2694	2418	2045
55°	2492	2192	1832
60°	2284	1957	1640
65°	2010	1714	1454
70°	1655	1501	1234
75°	1318	1148	1206
80°	886	831	775
85°	556	655	766

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2911 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.9	4.7
10°-20°	98.5	13.0
20°-30°	136.4	18.0
30°-40°	145.4	19.2
40°-50°	132.7	17.5
50°-60°	103.9	13.7
60°-70°	67.7	8.9
70°-80°	30.0	4.0
80°-90°	6.5	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°	270.8	35.8
0°-40°	416.2	55.0
0°-60°	652.8	86.2
0°-90°	757.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	757.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	386	386	386	386	386	
5°	379	378	378	378	378	36
15°	354	354	351	347	346	100
25°	307	305	300	290	282	141
35°	249	247	235	218	212	156
45°	191	187	171	157	151	147
55°	133	129	117	103	98	119
65°	79	74	67	69	57	78
75°	32	29	28	26	29	34
85°	4	5	5	6	6	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	385.6	385.6	385.6	385.6	385.6
2.5°	382.9	382.9	382.9	382.5	382.5
5°	378.9	378.5	378.5	378.0	378.0
7.5°	375.8	375.4	374.9	374.5	373.6
10°	371.3	371.3	370.9	368.7	368.2
12.5°	364.2	363.8	362.0	358.9	358.0
15°	354.4	354.4	350.8	347.3	345.9
17.5°	343.7	343.3	338.8	335.2	333.4
20°	332.1	331.2	326.8	321.0	317.8
22.5°	319.2	319.2	313.8	306.3	303.1
25°	307.1	305.4	300.5	289.8	281.7
27.5°	293.3	290.7	285.3	270.1	260.8
30°	278.2	276.8	269.3	249.6	242.5
32.5°	263.9	261.7	253.7	233.1	227.4
35°	249.2	247.4	235.4	217.5	212.2
37.5°	234.5	232.3	217.1	202.8	196.1
40°	219.8	217.1	200.6	187.7	180.5
42.5°	206.0	202.4	186.3	172.5	164.5
45°	191.2	187.2	171.2	156.9	150.7
47.5°	176.5	173.0	158.3	143.5	136.4
50°	160.9	157.8	144.4	129.7	122.1
52.5°	148.0	143.1	130.2	115.5	109.2
55°	132.8	128.8	116.8	103.0	97.6
57.5°	119.0	115.0	103.9	90.9	86.5
60°	106.1	100.3	90.9	79.8	76.2
62.5°	91.8	87.4	79.4	70.0	74.4
65°	78.9	74.4	67.3	68.7	57.1
67.5°	64.6	62.4	56.2	49.9	48.1
70°	52.6	49.9	47.7	41.0	39.2
72.5°	41.9	39.2	36.1	32.5	31.2
75°	31.7	29.4	27.6	26.3	29.0
77.5°	21.8	21.0	19.6	18.3	17.8
80°	14.3	13.8	13.4	12.9	12.5
82.5°	8.5	8.5	8.5	8.5	8.5
85°	4.5	4.9	5.3	5.8	6.2
87.5°	2.7	2.7	3.1	3.6	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)