

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: P558841

Luminaire Tested: FSR-12-1-LD4-1STD-35-UNV-80-88-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558841
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-35-UNV-80-88-EDD
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .500 CLEAR PC ENVIRON
SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 664.0 lumens
Efficiency: N/A
Efficacy: 80.0 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

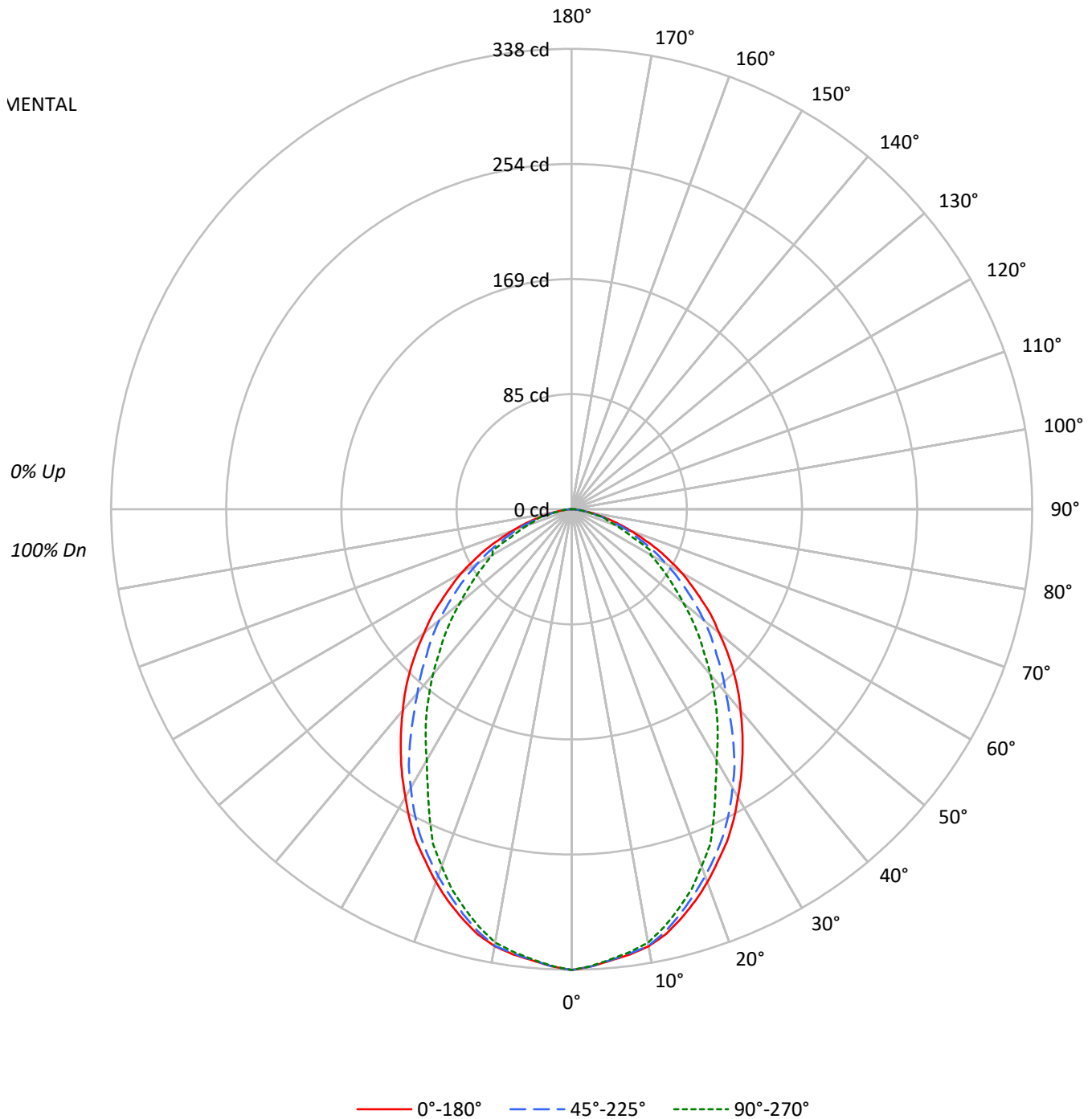
Input Watts (W): 8.3
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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	39	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°	3640	3640	3640
5°	3592	3587	3583
10°	3560	3556	3530
15°	3465	3429	3381
20°	3337	3283	3194
25°	3200	3130	2935
30°	3033	2936	2644
35°	2872	2713	2445
40°	2709	2473	2226
45°	2553	2286	2012
50°	2364	2122	1793
55°	2186	1922	1606
60°	2004	1718	1440
65°	1762	1503	1276
70°	1451	1316	1083
75°	1156	1006	1056
80°	775	725	676
85°	482	580	679

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2553 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.5	4.7
10°-20°	86.4	13.0
20°-30°	119.6	18.0
30°-40°	127.6	19.2
40°-50°	116.4	17.5
50°-60°	91.2	13.7
60°-70°	59.4	8.9
70°-80°	26.3	4.0
80°-90°	5.6	0.8
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°	237.5	35.8
0°-40°	365.1	55.0
0°-60°	572.6	86.2
0°-90°	664.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	664.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	338	338	338	338	338	
5°	332	332	332	332	332	32
15°	311	311	308	305	303	87
25°	269	268	264	254	247	124
35°	219	217	206	191	186	137
45°	168	164	150	138	132	129
55°	116	113	102	90	86	105
65°	69	65	59	60	50	68
75°	28	26	24	23	25	30
85°	4	4	5	5	6	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	338.2	338.2	338.2	338.2	338.2
2.5°	335.9	335.9	335.9	335.5	335.5
5°	332.4	332.0	332.0	331.6	331.6
7.5°	329.6	329.2	328.8	328.5	327.7
10°	325.7	325.7	325.3	323.4	323.0
12.5°	319.5	319.1	317.5	314.8	314.0
15°	310.9	310.9	307.7	304.6	303.4
17.5°	301.5	301.1	297.2	294.0	292.5
20°	291.3	290.5	286.6	281.5	278.8
22.5°	280.0	280.0	275.3	268.6	265.9
25°	269.4	267.8	263.5	254.2	247.1
27.5°	257.3	254.9	250.3	237.0	228.7
30°	244.0	242.8	236.2	219.0	212.7
32.5°	231.5	229.5	222.5	204.5	199.4
35°	218.6	217.0	206.5	190.8	186.1
37.5°	205.7	203.7	190.4	177.9	172.0
40°	192.8	190.4	176.0	164.6	158.4
42.5°	180.7	177.5	163.4	151.3	144.3
45°	167.7	164.2	150.2	137.6	132.2
47.5°	154.8	151.7	138.8	125.9	119.7
50°	141.2	138.4	126.7	113.8	107.1
52.5°	129.8	125.5	114.2	101.3	95.8
55°	116.5	113.0	102.4	90.3	85.6
57.5°	104.4	100.9	91.1	79.8	75.9
60°	93.1	88.0	79.8	70.0	66.9
62.5°	80.6	76.6	69.6	61.4	65.3
65°	69.2	65.3	59.0	60.2	50.1
67.5°	56.7	54.7	49.3	43.8	42.2
70°	46.1	43.8	41.8	36.0	34.4
72.5°	36.8	34.4	31.7	28.5	27.4
75°	27.8	25.8	24.2	23.1	25.4
77.5°	19.2	18.4	17.2	16.0	15.6
80°	12.5	12.1	11.7	11.3	10.9
82.5°	7.4	7.4	7.4	7.4	7.4
85°	3.9	4.3	4.7	5.1	5.5
87.5°	2.3	2.3	2.7	3.1	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)