

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: P558588

Luminaire Tested: FSR-12-1-LD4-1HI-50-UNV-80-96-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558588
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-LD4-1HI-50-UNV-80-96-EDD-90
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED G ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 855.0 lumens
Efficiency: N/A
Efficacy: 79.2 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

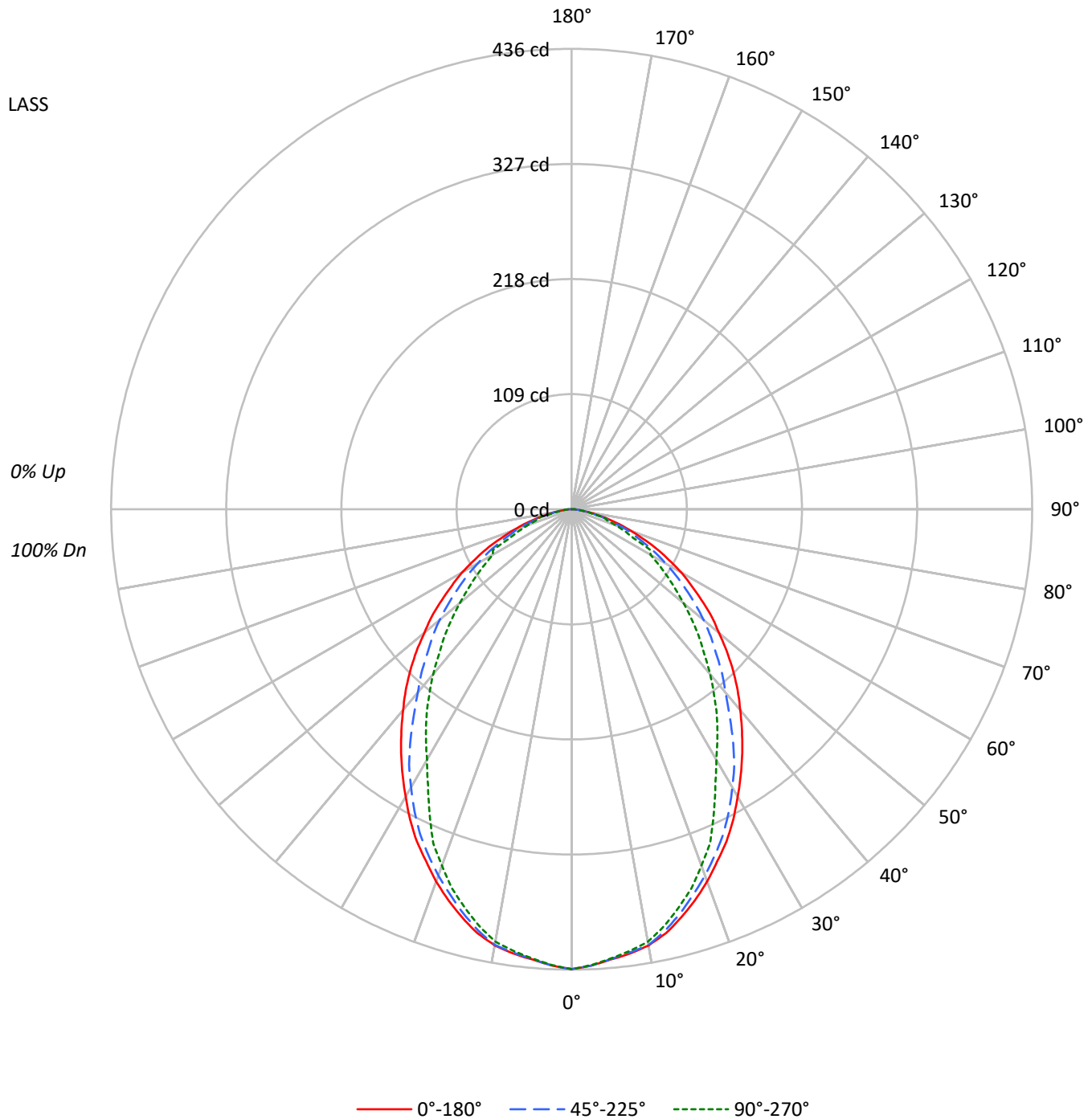
Input Watts (W): 10.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	4688	4688	4688
5°	4625	4619	4614
10°	4584	4579	4546
15°	4461	4416	4354
20°	4297	4228	4112
25°	4120	4031	3779
30°	3905	3780	3404
35°	3699	3493	3150
40°	3488	3184	2865
45°	3288	2943	2591
50°	3044	2731	2311
55°	2815	2475	2070
60°	2579	2211	1854
65°	2269	1936	1640
70°	1869	1696	1394
75°	1485	1298	1360
80°	998	936	874
85°	618	741	865

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3288 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.5	4.7
10°-20°	111.3	13.0
20°-30°	154.0	18.0
30°-40°	164.2	19.2
40°-50°	149.8	17.5
50°-60°	117.4	13.7
60°-70°	76.5	8.9
70°-80°	33.9	4.0
80°-90°	7.3	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°	305.8	35.8
0°-40°	470.1	55.0
0°-60°	737.3	86.2
0°-90°	855.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	855.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	436	436	436	436	436	
5°	428	428	428	427	427	41
15°	400	400	396	392	391	113
25°	347	345	339	327	318	159
35°	282	279	266	246	240	176
45°	216	212	193	177	170	166
55°	150	146	132	116	110	135
65°	89	84	76	78	64	88
75°	36	33	31	30	33	38
85°	5	6	6	6	7	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	435.5	435.5	435.5	435.5	435.5
2.5°	432.5	432.5	432.5	432.0	432.0
5°	428.0	427.5	427.5	427.0	427.0
7.5°	424.4	423.9	423.4	422.9	421.9
10°	419.4	419.4	418.9	416.4	415.9
12.5°	411.4	410.9	408.8	405.3	404.3
15°	400.3	400.3	396.3	392.2	390.7
17.5°	388.2	387.7	382.7	378.6	376.6
20°	375.1	374.1	369.1	362.5	359.0
22.5°	360.5	360.5	354.5	345.9	342.4
25°	346.9	344.9	339.4	327.3	318.2
27.5°	331.3	328.3	322.2	305.1	294.5
30°	314.2	312.7	304.1	282.0	273.9
32.5°	298.1	295.6	286.5	263.3	256.8
35°	281.5	279.4	265.8	245.7	239.7
37.5°	264.8	262.3	245.2	229.1	221.5
40°	248.2	245.2	226.6	212.0	203.9
42.5°	232.6	228.6	210.5	194.9	185.8
45°	216.0	211.5	193.3	177.2	170.2
47.5°	199.4	195.4	178.7	162.1	154.1
50°	181.8	178.2	163.1	146.5	138.0
52.5°	167.2	161.6	147.0	130.4	123.4
55°	150.0	145.5	131.9	116.3	110.3
57.5°	134.4	129.9	117.3	102.7	97.7
60°	119.8	113.3	102.7	90.1	86.1
62.5°	103.7	98.7	89.6	79.0	84.1
65°	89.1	84.1	76.0	77.5	64.4
67.5°	73.0	70.5	63.4	56.4	54.4
70°	59.4	56.4	53.9	46.3	44.3
72.5°	47.3	44.3	40.8	36.8	35.2
75°	35.7	33.2	31.2	29.7	32.7
77.5°	24.7	23.7	22.2	20.6	20.1
80°	16.1	15.6	15.1	14.6	14.1
82.5°	9.6	9.6	9.6	9.6	9.6
85°	5.0	5.5	6.0	6.5	7.0
87.5°	3.0	3.0	3.5	4.0	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)