

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: P558907

Luminaire Tested: FSR-12-1-LD4-1STD-40-UNV-80-94-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558907
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-80-94-EDD
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED G ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 797.0 lumens
Efficiency: N/A
Efficacy: 96.0 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

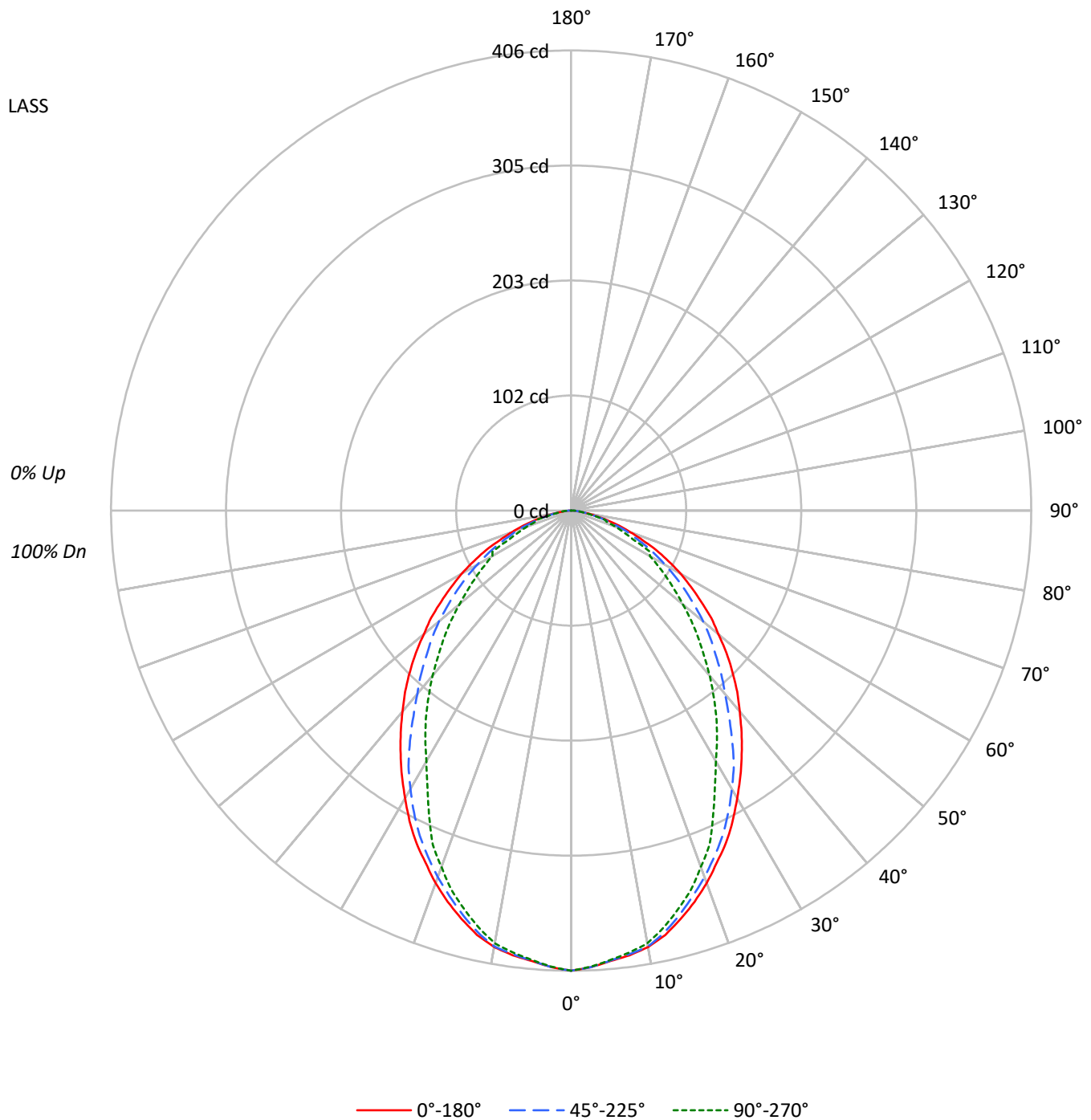
Input Watts (W): 8.3
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	4370	4370	4370
5°	4310	4306	4300
10°	4274	4268	4238
15°	4158	4116	4059
20°	4006	3940	3833
25°	3841	3757	3523
30°	3640	3524	3173
35°	3448	3256	2936
40°	3251	2968	2671
45°	3064	2743	2414
50°	2837	2547	2153
55°	2625	2308	1929
60°	2405	2060	1729
65°	2117	1806	1531
70°	1744	1580	1300
75°	1385	1210	1268
80°	930	874	812
85°	580	692	815

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3064 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.8	4.7
10°-20°	103.7	13.0
20°-30°	143.6	18.0
30°-40°	153.1	19.2
40°-50°	139.7	17.5
50°-60°	109.4	13.7
60°-70°	71.3	8.9
70°-80°	31.6	4.0
80°-90°	6.8	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°	285.1	35.8
0°-40°	438.2	55.0
0°-60°	687.3	86.2
0°-90°	797.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	797.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	406	406	406	406	406	
5°	399	398	398	398	398	38
15°	373	373	369	366	364	105
25°	323	322	316	305	297	148
35°	262	260	248	229	223	164
45°	201	197	180	165	159	155
55°	140	136	123	108	103	125
65°	83	78	71	72	60	82
75°	33	31	29	28	30	36
85°	5	5	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°	406.0	406.0	406.0	406.0	406.0
2.5°	403.2	403.2	403.2	402.7	402.7
5°	398.9	398.5	398.5	398.0	398.0
7.5°	395.7	395.2	394.7	394.2	393.3
10°	391.0	391.0	390.5	388.1	387.7
12.5°	383.5	383.0	381.1	377.8	376.9
15°	373.1	373.1	369.4	365.6	364.2
17.5°	361.9	361.4	356.7	352.9	351.1
20°	349.7	348.7	344.0	337.9	334.6
22.5°	336.0	336.0	330.4	322.4	319.2
25°	323.4	321.5	316.3	305.1	296.6
27.5°	308.8	306.0	300.4	284.4	274.6
30°	292.9	291.5	283.5	262.8	255.3
32.5°	277.9	275.5	267.1	245.5	239.4
35°	262.4	260.5	247.8	229.0	223.4
37.5°	246.9	244.5	228.6	213.6	206.5
40°	231.4	228.6	211.2	197.6	190.1
42.5°	216.8	213.1	196.2	181.6	173.2
45°	201.3	197.1	180.2	165.2	158.6
47.5°	185.9	182.1	166.6	151.1	143.6
50°	169.4	166.1	152.1	136.6	128.6
52.5°	155.8	150.7	137.0	121.6	115.0
55°	139.9	135.6	123.0	108.4	102.8
57.5°	125.3	121.1	109.4	95.7	91.1
60°	111.7	105.6	95.7	84.0	80.3
62.5°	96.7	92.0	83.5	73.7	78.4
65°	83.1	78.4	70.9	72.3	60.1
67.5°	68.1	65.7	59.1	52.6	50.7
70°	55.4	52.6	50.2	43.2	41.3
72.5°	44.1	41.3	38.0	34.3	32.9
75°	33.3	31.0	29.1	27.7	30.5
77.5°	23.0	22.1	20.7	19.2	18.8
80°	15.0	14.5	14.1	13.6	13.1
82.5°	8.9	8.9	8.9	8.9	8.9
85°	4.7	5.2	5.6	6.1	6.6
87.5°	2.8	2.8	3.3	3.8	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)