

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: P558711

Luminaire Tested: FSR-12-1-LD4-1LO-40-UNV-80-87-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558711
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-LD4-1LO-40-UNV-80-87-EDD
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRON
SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 556.0 lumens
Efficiency: N/A
Efficacy: 95.9 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

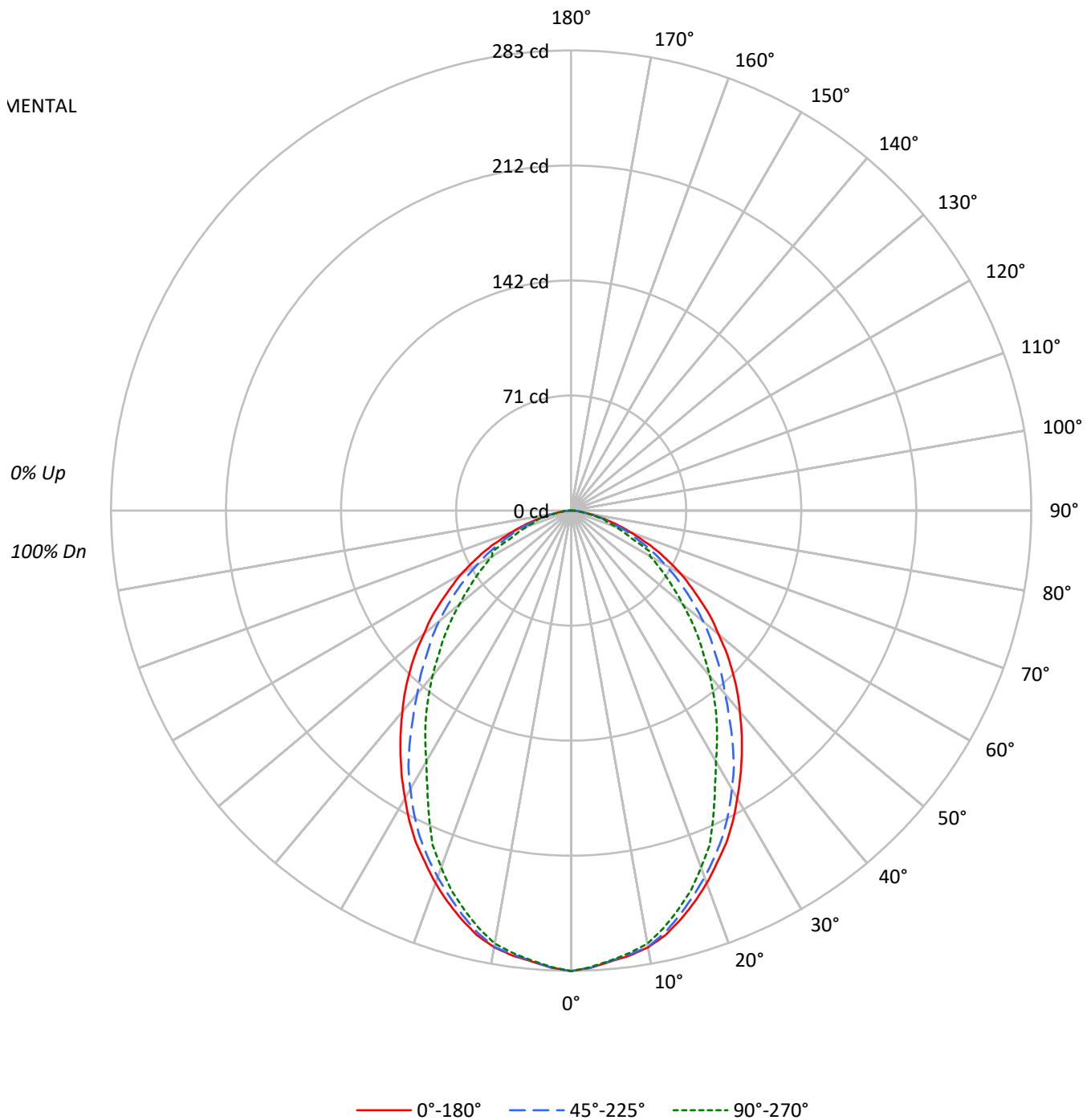
Input Watts (W): 5.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	3048	3048	3048
5°	3007	3004	3001
10°	2981	2977	2955
15°	2901	2872	2832
20°	2794	2749	2675
25°	2679	2621	2457
30°	2539	2458	2214
35°	2405	2272	2049
40°	2268	2070	1863
45°	2139	1913	1685
50°	1979	1777	1502
55°	1832	1610	1346
60°	1677	1438	1206
65°	1477	1258	1067
70°	1215	1102	906
75°	965	844	886
80°	651	607	570
85°	408	482	568

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2139 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.4	4.7
10°-20°	72.4	13.0
20°-30°	100.2	18.0
30°-40°	106.8	19.2
40°-50°	97.4	17.5
50°-60°	76.3	13.7
60°-70°	49.8	8.9
70°-80°	22.0	4.0
80°-90°	4.7	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°	198.9	35.8
0°-40°	305.7	55.0
0°-60°	479.5	86.2
0°-90°	556.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	556.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	283	283	283	283	283	
5°	278	278	278	278	278	26
15°	260	260	258	255	254	73
25°	226	224	221	213	207	104
35°	183	182	173	160	156	114
45°	140	138	126	115	111	108
55°	98	95	86	76	72	88
65°	58	55	49	50	42	57
75°	23	22	20	19	21	25
85°	3	4	4	4	5	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	283.2	283.2	283.2	283.2	283.2
2.5°	281.3	281.3	281.3	280.9	280.9
5°	278.3	278.0	278.0	277.7	277.7
7.5°	276.0	275.7	275.4	275.0	274.4
10°	272.7	272.7	272.4	270.8	270.4
12.5°	267.5	267.2	265.9	263.6	262.9
15°	260.3	260.3	257.7	255.1	254.1
17.5°	252.4	252.1	248.8	246.2	244.9
20°	243.9	243.3	240.0	235.7	233.5
22.5°	234.4	234.4	230.5	224.9	222.6
25°	225.6	224.3	220.7	212.8	206.9
27.5°	215.4	213.5	209.5	198.4	191.5
30°	204.3	203.3	197.8	183.4	178.1
32.5°	193.8	192.2	186.3	171.2	167.0
35°	183.0	181.7	172.9	159.8	155.9
37.5°	172.2	170.6	159.5	149.0	144.1
40°	161.4	159.5	147.3	137.8	132.6
42.5°	151.3	148.6	136.9	126.7	120.8
45°	140.5	137.5	125.7	115.3	110.7
47.5°	129.7	127.0	116.2	105.4	100.2
50°	118.2	115.9	106.1	95.3	89.7
52.5°	108.7	105.1	95.6	84.8	80.2
55°	97.6	94.6	85.8	75.6	71.7
57.5°	87.4	84.5	76.3	66.8	63.5
60°	77.9	73.7	66.8	58.6	56.0
62.5°	67.4	64.2	58.3	51.4	54.7
65°	58.0	54.7	49.4	50.4	41.9
67.5°	47.5	45.8	41.3	36.7	35.4
70°	38.6	36.7	35.0	30.1	28.8
72.5°	30.8	28.8	26.5	23.9	22.9
75°	23.2	21.6	20.3	19.3	21.3
77.5°	16.0	15.4	14.4	13.4	13.1
80°	10.5	10.2	9.8	9.5	9.2
82.5°	6.2	6.2	6.2	6.2	6.2
85°	3.3	3.6	3.9	4.3	4.6
87.5°	2.0	2.0	2.3	2.6	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)