

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: P558701

Luminaire Tested: FSR-12-1-LD4-1LO-35-UNV-93-96-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558701
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-35-UNV-93-96-EDD
Description: 1X1 FSR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR TEMPER GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 584.0 lumens
Efficiency: N/A
Efficacy: 100.7 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

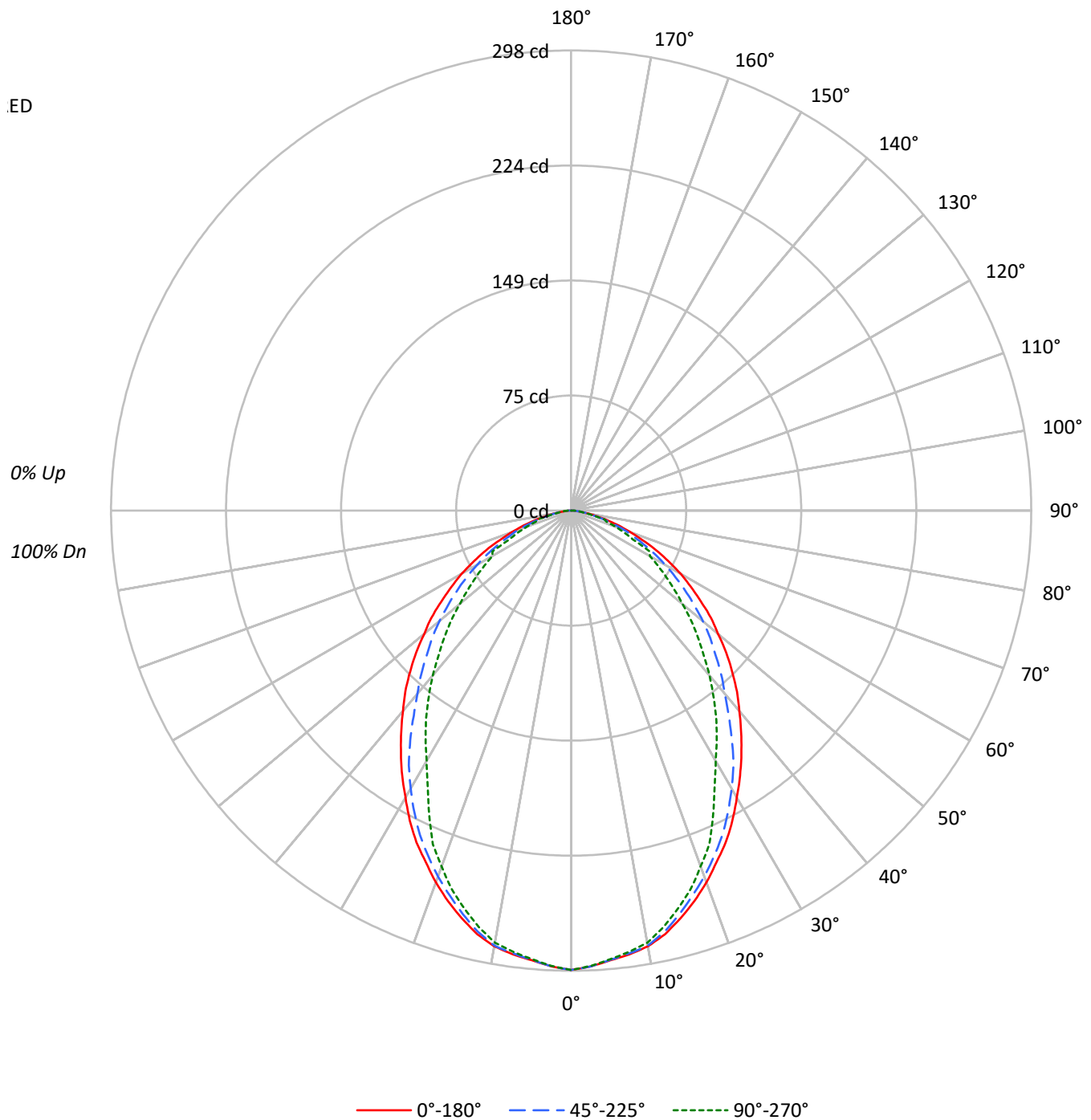
Input Watts (W): 5.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	3202	3202	3202
5°	3158	3155	3151
10°	3131	3127	3105
15°	3047	3017	2974
20°	2935	2888	2809
25°	2815	2753	2582
30°	2667	2582	2325
35°	2526	2386	2151
40°	2382	2175	1957
45°	2245	2011	1769
50°	2080	1865	1577
55°	1924	1691	1413
60°	1763	1511	1266
65°	1551	1322	1121
70°	1278	1158	954
75°	1015	886	932
80°	682	638	595
85°	420	506	593

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2245 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.7	4.7
10°-20°	76.0	13.0
20°-30°	105.2	18.0
30°-40°	112.2	19.2
40°-50°	102.3	17.5
50°-60°	80.2	13.7
60°-70°	52.2	8.9
70°-80°	23.2	4.0
80°-90°	5.0	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°	208.9	35.8
0°-40°	321.1	55.0
0°-60°	503.6	86.2
0°-90°	584.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	584.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	298	298	298	298	298	
5°	292	292	292	292	292	28
15°	273	273	271	268	267	77
25°	237	236	232	224	217	109
35°	192	191	182	168	164	120
45°	148	144	132	121	116	114
55°	102	99	90	79	75	92
65°	61	57	52	53	44	60
75°	24	23	21	20	22	26
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°	297.5	297.5	297.5	297.5	297.5
2.5°	295.4	295.4	295.4	295.1	295.1
5°	292.3	292.0	292.0	291.6	291.6
7.5°	289.9	289.6	289.2	288.9	288.2
10°	286.5	286.5	286.1	284.4	284.1
12.5°	281.0	280.6	279.3	276.8	276.2
15°	273.4	273.4	270.7	267.9	266.9
17.5°	265.2	264.8	261.4	258.6	257.2
20°	256.2	255.5	252.1	247.6	245.2
22.5°	246.2	246.2	242.1	236.3	233.9
25°	237.0	235.6	231.8	223.5	217.4
27.5°	226.3	224.2	220.1	208.4	201.2
30°	214.6	213.6	207.7	192.6	187.1
32.5°	203.6	201.9	195.7	179.9	175.4
35°	192.2	190.9	181.6	167.8	163.7
37.5°	180.9	179.2	167.5	156.5	151.3
40°	169.5	167.5	154.8	144.8	139.3
42.5°	158.9	156.1	143.8	133.1	126.9
45°	147.5	144.4	132.1	121.1	116.2
47.5°	136.2	133.4	122.1	110.7	105.2
50°	124.2	121.7	111.4	100.1	94.2
52.5°	114.2	110.4	100.4	89.1	84.3
55°	102.5	99.4	90.1	79.4	75.3
57.5°	91.8	88.7	80.1	70.2	66.7
60°	81.9	77.4	70.2	61.6	58.8
62.5°	70.8	67.4	61.2	54.0	57.4
65°	60.9	57.4	51.9	53.0	44.0
67.5°	49.9	48.1	43.3	38.5	37.1
70°	40.6	38.5	36.8	31.6	30.3
72.5°	32.3	30.3	27.9	25.1	24.1
75°	24.4	22.7	21.3	20.3	22.4
77.5°	16.9	16.2	15.1	14.1	13.8
80°	11.0	10.7	10.3	10.0	9.6
82.5°	6.5	6.5	6.5	6.5	6.5
85°	3.4	3.8	4.1	4.5	4.8
87.5°	2.1	2.1	2.4	2.8	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)