

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: P558667

Luminaire Tested: FSR-12-1-LD4-1LO-35-UNV-81-94-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558667
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-81-94-EDD
Description: 1X1 FSR TROFFER WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 559.0 lumens
Efficiency: N/A
Efficacy: 96.4 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

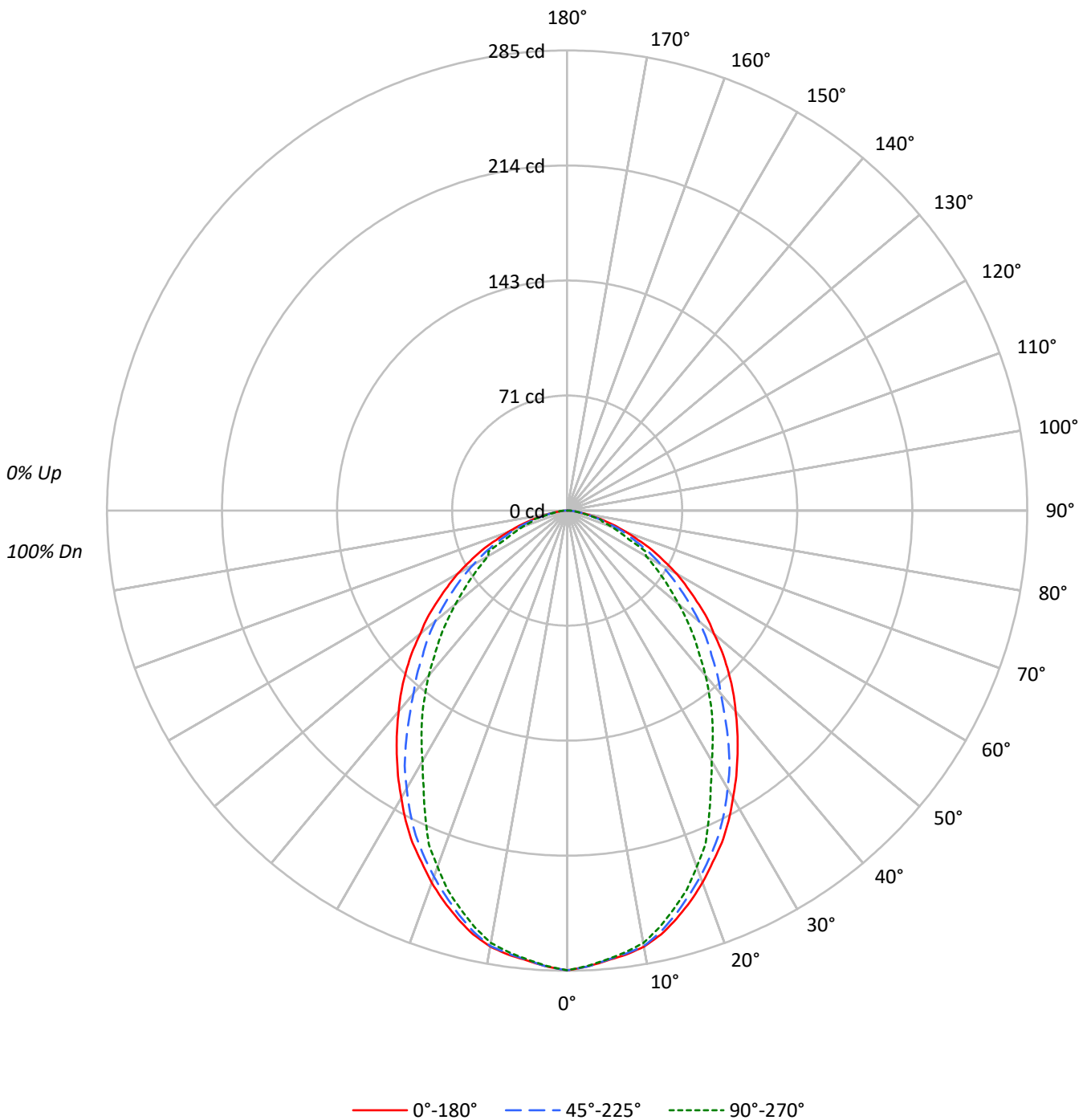
Input Watts (W): 5.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	47	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°	3064	3064	3064
5°	3023	3020	3017
10°	2997	2994	2972
15°	2916	2887	2846
20°	2809	2764	2688
25°	2694	2635	2470
30°	2553	2471	2226
35°	2418	2284	2059
40°	2281	2081	1873
45°	2149	1924	1694
50°	1989	1787	1510
55°	1841	1618	1353
60°	1686	1447	1212
65°	1485	1266	1072
70°	1221	1108	913
75°	973	848	890
80°	651	614	570
85°	408	494	568

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2149 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.5	4.7
10°-20°	72.7	13.0
20°-30°	100.7	18.0
30°-40°	107.4	19.2
40°-50°	98.0	17.5
50°-60°	76.7	13.7
60°-70°	50.0	8.9
70°-80°	22.2	4.0
80°-90°	4.8	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°	200.0	35.8
0°-40°	307.3	55.0
0°-60°	482.1	86.2
0°-90°	559.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	559.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	285	285	285	285	285	
5°	280	280	280	279	279	27
15°	262	262	259	256	255	74
25°	227	226	222	214	208	104
35°	184	183	174	161	157	115
45°	141	138	126	116	111	109
55°	98	95	86	76	72	88
65°	58	55	50	51	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°	284.7	284.7	284.7	284.7	284.7
2.5°	282.8	282.8	282.8	282.4	282.4
5°	279.8	279.5	279.5	279.2	279.2
7.5°	277.5	277.2	276.8	276.5	275.9
10°	274.2	274.2	273.9	272.2	271.9
12.5°	268.9	268.6	267.3	265.0	264.3
15°	261.7	261.7	259.1	256.4	255.4
17.5°	253.8	253.5	250.2	247.5	246.2
20°	245.2	244.6	241.3	237.0	234.7
22.5°	235.7	235.7	231.7	226.2	223.8
25°	226.8	225.5	221.9	214.0	208.0
27.5°	216.6	214.6	210.7	199.5	192.6
30°	205.4	204.4	198.8	184.3	179.1
32.5°	194.9	193.2	187.3	172.2	167.9
35°	184.0	182.7	173.8	160.6	156.7
37.5°	173.2	171.5	160.3	149.8	144.8
40°	162.3	160.3	148.1	138.6	133.3
42.5°	152.1	149.5	137.6	127.4	121.5
45°	141.2	138.3	126.4	115.9	111.3
47.5°	130.4	127.7	116.9	106.0	100.7
50°	118.8	116.5	106.7	95.8	90.2
52.5°	109.3	105.7	96.1	85.3	80.7
55°	98.1	95.1	86.2	76.0	72.1
57.5°	87.9	84.9	76.7	67.2	63.9
60°	78.3	74.1	67.2	58.9	56.3
62.5°	67.8	64.5	58.6	51.7	55.0
65°	58.3	55.0	49.7	50.7	42.1
67.5°	47.7	46.1	41.5	36.9	35.6
70°	38.8	36.9	35.2	30.3	29.0
72.5°	30.9	29.0	26.7	24.0	23.0
75°	23.4	21.7	20.4	19.4	21.4
77.5°	16.1	15.5	14.5	13.5	13.2
80°	10.5	10.2	9.9	9.5	9.2
82.5°	6.3	6.3	6.3	6.3	6.3
85°	3.3	3.6	4.0	4.3	4.6
87.5°	2.0	2.0	2.3	2.6	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)