

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: P558683

Luminaire Tested: FSR-12-1-LD4-1LO-35-UNV-82-94-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558683
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-82-94-EDD
Description: 1X1 FSR TROFFER WITH .187 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: 548.0 lumens
Efficiency: N/A
Efficacy: 94.5 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

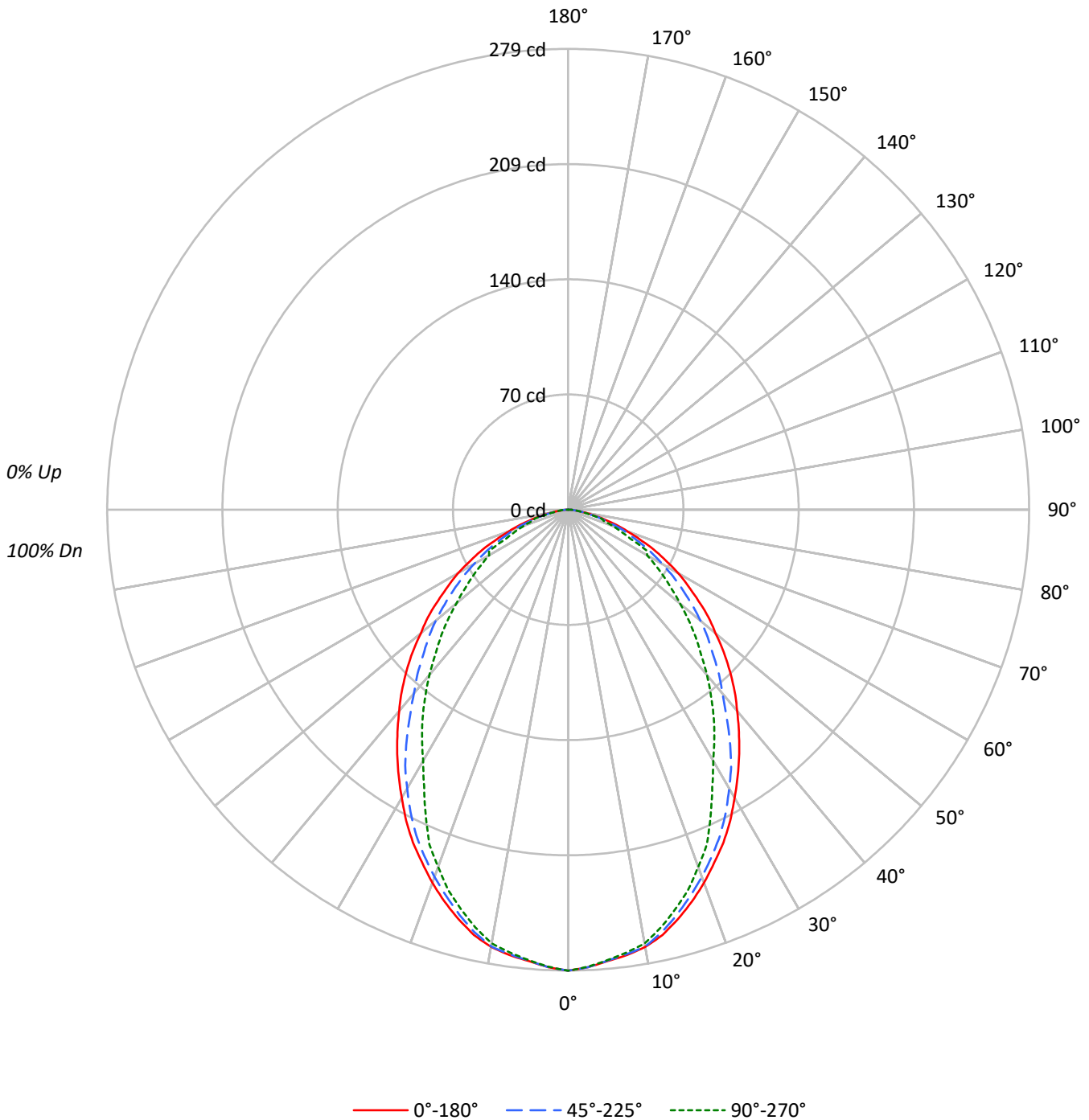
Input Watts (W): 5.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	3004	3004	3004
5°	2964	2961	2957
10°	2938	2935	2914
15°	2859	2830	2790
20°	2754	2709	2636
25°	2640	2583	2423
30°	2503	2422	2183
35°	2371	2239	2018
40°	2236	2040	1837
45°	2107	1886	1661
50°	1951	1752	1480
55°	1805	1586	1327
60°	1653	1417	1188
65°	1454	1240	1052
70°	1199	1086	894
75°	952	832	873
80°	638	601	558
85°	395	482	556

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2107 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.0	4.7
10°-20°	71.3	13.0
20°-30°	98.7	18.0
30°-40°	105.3	19.2
40°-50°	96.0	17.5
50°-60°	75.2	13.7
60°-70°	49.0	8.9
70°-80°	21.7	4.0
80°-90°	4.7	0.8
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°	196.0	35.8
0°-40°	301.3	55.0
0°-60°	472.6	86.2
0°-90°	548.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	548.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	279	279	279	279	279	
5°	274	274	274	274	274	26
15°	257	257	254	251	250	72
25°	222	221	218	210	204	102
35°	180	179	170	158	154	113
45°	138	136	124	114	109	107
55°	96	93	84	74	71	86
65°	57	54	49	50	41	56
75°	23	21	20	19	21	25
85°	3	4	4	4	4	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	279.1	279.1	279.1	279.1	279.1
2.5°	277.2	277.2	277.2	276.9	276.9
5°	274.3	274.0	274.0	273.7	273.7
7.5°	272.0	271.7	271.4	271.1	270.4
10°	268.8	268.8	268.5	266.9	266.6
12.5°	263.7	263.3	262.0	259.8	259.1
15°	256.6	256.6	254.0	251.4	250.4
17.5°	248.8	248.5	245.3	242.7	241.4
20°	240.4	239.8	236.5	232.4	230.1
22.5°	231.1	231.1	227.2	221.7	219.4
25°	222.3	221.1	217.5	209.8	204.0
27.5°	212.3	210.4	206.5	195.6	188.8
30°	201.4	200.4	194.9	180.7	175.6
32.5°	191.0	189.4	183.6	168.8	164.6
35°	180.4	179.1	170.4	157.5	153.6
37.5°	169.7	168.1	157.2	146.8	142.0
40°	159.1	157.2	145.2	135.9	130.7
42.5°	149.1	146.5	134.9	124.9	119.1
45°	138.4	135.5	123.9	113.6	109.1
47.5°	127.8	125.2	114.6	103.9	98.7
50°	116.5	114.2	104.6	93.9	88.4
52.5°	107.1	103.6	94.2	83.6	79.1
55°	96.2	93.3	84.5	74.5	70.7
57.5°	86.2	83.3	75.2	65.8	62.6
60°	76.8	72.6	65.8	57.8	55.2
62.5°	66.5	63.3	57.4	50.7	53.9
65°	57.1	53.9	48.7	49.7	41.3
67.5°	46.8	45.2	40.7	36.1	34.9
70°	38.1	36.1	34.5	29.7	28.4
72.5°	30.3	28.4	26.1	23.6	22.6
75°	22.9	21.3	20.0	19.0	21.0
77.5°	15.8	15.2	14.2	13.2	12.9
80°	10.3	10.0	9.7	9.4	9.0
82.5°	6.1	6.1	6.1	6.1	6.1
85°	3.2	3.5	3.9	4.2	4.5
87.5°	1.9	1.9	2.3	2.6	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)