

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: P558489

Luminaire Tested: FSR-12-1-LD4-1HI-35-UNV-82-88-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558489
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-LD4-1HI-35-UNV-82-88-EDD
Description: 1X1 FSR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 758.0 lumens
Efficiency: N/A
Efficacy: 70.2 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

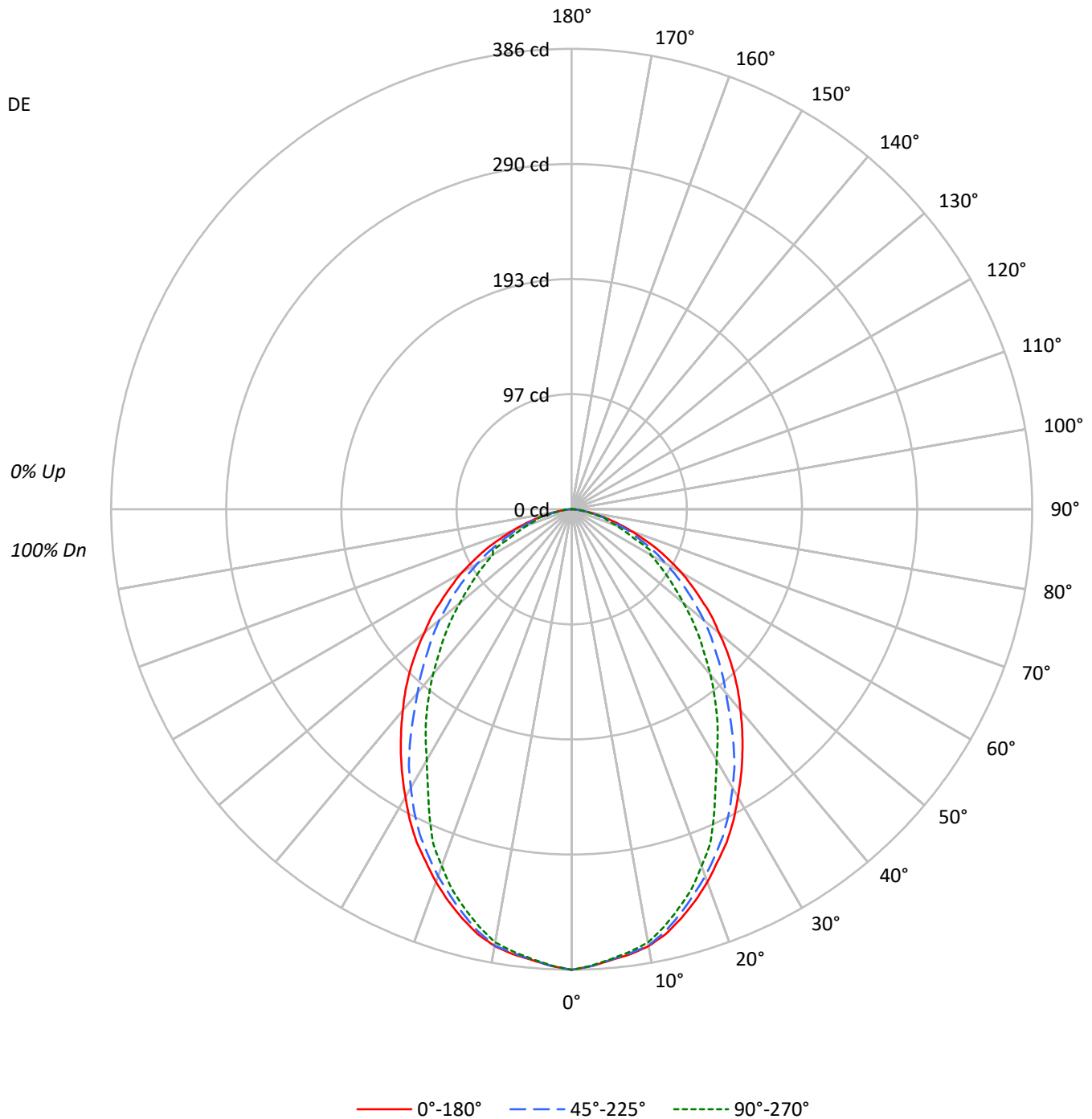
Input Watts (W): 10.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	4156	4156	4156
5°	4099	4095	4090
10°	4064	4059	4030
15°	3955	3915	3860
20°	3809	3748	3646
25°	3653	3574	3350
30°	3462	3351	3018
35°	3279	3097	2792
40°	3093	2823	2540
45°	2915	2609	2297
50°	2698	2421	2048
55°	2496	2196	1835
60°	2286	1961	1643
65°	2012	1717	1454
70°	1659	1504	1237
75°	1318	1152	1206
80°	886	831	775
85°	556	667	766

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2915 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.9	4.7
10°-20°	98.6	13.0
20°-30°	136.6	18.0
30°-40°	145.6	19.2
40°-50°	132.8	17.5
50°-60°	104.1	13.7
60°-70°	67.8	8.9
70°-80°	30.1	4.0
80°-90°	6.5	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°	271.1	35.8
0°-40°	416.8	55.0
0°-60°	653.7	86.2
0°-90°	758.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	758.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	386	386	386	386	386	
5°	379	379	379	378	378	36
15°	355	355	351	348	346	100
25°	308	306	301	290	282	141
35°	250	248	236	218	212	156
45°	192	188	171	157	151	148
55°	133	129	117	103	98	119
65°	79	74	67	69	57	78
75°	32	30	28	26	29	34
85°	4	5	5	6	6	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	386.1	386.1	386.1	386.1	386.1
2.5°	383.4	383.4	383.4	383.0	383.0
5°	379.4	379.0	379.0	378.5	378.5
7.5°	376.3	375.8	375.4	375.0	374.1
10°	371.8	371.8	371.4	369.2	368.7
12.5°	364.7	364.2	362.5	359.3	358.4
15°	354.9	354.9	351.3	347.7	346.4
17.5°	344.2	343.7	339.2	335.7	333.9
20°	332.5	331.7	327.2	321.4	318.3
22.5°	319.6	319.6	314.2	306.7	303.5
25°	307.6	305.8	300.9	290.1	282.1
27.5°	293.7	291.0	285.7	270.5	261.1
30°	278.5	277.2	269.6	250.0	242.8
32.5°	264.3	262.0	254.0	233.5	227.7
35°	249.5	247.7	235.7	217.8	212.5
37.5°	234.8	232.6	217.4	203.1	196.4
40°	220.1	217.4	200.9	187.9	180.8
42.5°	206.2	202.7	186.6	172.7	164.7
45°	191.5	187.5	171.4	157.1	150.9
47.5°	176.8	173.2	158.5	143.7	136.6
50°	161.1	158.0	144.6	129.9	122.3
52.5°	148.2	143.3	130.3	115.6	109.4
55°	133.0	129.0	117.0	103.1	97.8
57.5°	119.2	115.2	104.0	91.1	86.6
60°	106.2	100.4	91.1	79.9	76.3
62.5°	92.0	87.5	79.5	70.1	74.5
65°	79.0	74.5	67.4	68.7	57.1
67.5°	64.7	62.5	56.2	50.0	48.2
70°	52.7	50.0	47.8	41.1	39.3
72.5°	42.0	39.3	36.2	32.6	31.2
75°	31.7	29.5	27.7	26.3	29.0
77.5°	21.9	21.0	19.6	18.3	17.9
80°	14.3	13.8	13.4	12.9	12.5
82.5°	8.5	8.5	8.5	8.5	8.5
85°	4.5	4.9	5.4	5.8	6.2
87.5°	2.7	2.7	3.1	3.6	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)