

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: P560025

Luminaire Tested: FSR-12-2-LD4-1STD-35-UNV-82-88-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560025
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-12-2-LD4-1STD-35-UNV-82-88-EDD
Description: 1X2 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: 1198.0 lumens
Efficiency: N/A
Efficacy: 72.2 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

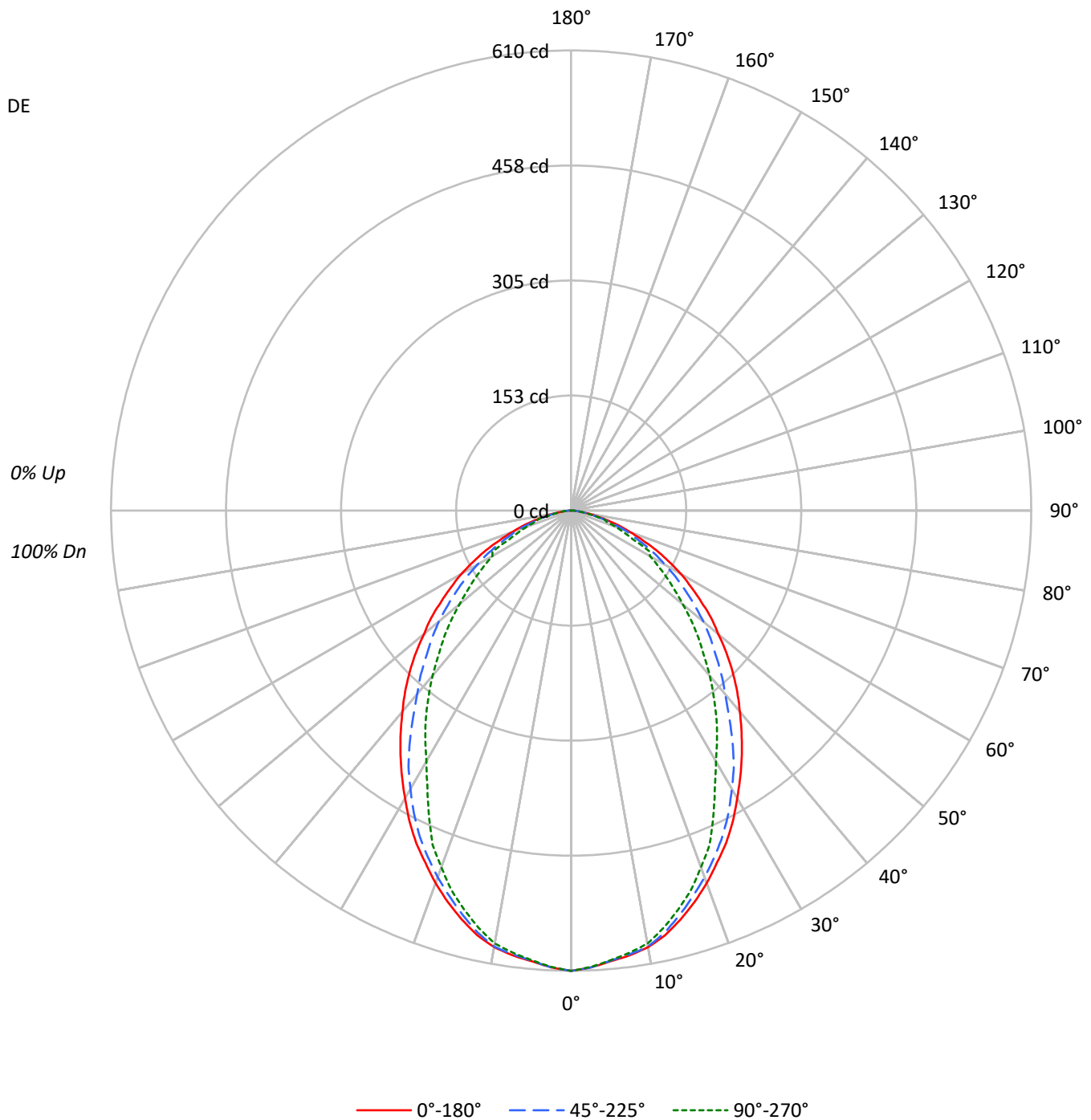
Input Watts (W): 16.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	3284	3284	3284
5°	3240	3236	3232
10°	3212	3208	3184
15°	3125	3093	3051
20°	3010	2962	2881
25°	2887	2824	2648
30°	2736	2648	2385
35°	2591	2447	2206
40°	2444	2231	2007
45°	2304	2062	1815
50°	2133	1914	1618
55°	1972	1734	1450
60°	1807	1549	1298
65°	1591	1356	1150
70°	1309	1188	977
75°	1042	909	954
80°	700	657	614
85°	438	525	611

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2304 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.8	4.7
10°-20°	155.9	13.0
20°-30°	215.8	18.0
30°-40°	230.1	19.2
40°-50°	210.0	17.5
50°-60°	164.5	13.7
60°-70°	107.2	8.9
70°-80°	47.5	4.0
80°-90°	10.2	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°	428.5	35.8
0°-40°	658.7	55.0
0°-60°	1033.1	86.2
0°-90°	1198.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1198.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	610	610	610	610	610	
5°	600	599	599	598	598	57
15°	561	561	555	550	548	158
25°	486	483	476	459	446	223
35°	394	392	372	344	336	247
45°	303	296	271	248	238	233
55°	210	204	185	163	154	189
65°	125	118	106	109	90	123
75°	50	47	44	42	46	54
85°	7	8	8	9	10	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	610.2	610.2	610.2	610.2	610.2
2.5°	606.0	606.0	606.0	605.3	605.3
5°	599.7	599.0	599.0	598.3	598.3
7.5°	594.7	594.0	593.3	592.6	591.2
10°	587.7	587.7	587.0	583.4	582.7
12.5°	576.4	575.7	572.9	567.9	566.5
15°	560.9	560.9	555.2	549.6	547.5
17.5°	543.9	543.2	536.2	530.5	527.7
20°	525.6	524.2	517.1	507.9	503.0
22.5°	505.1	505.1	496.7	484.7	479.7
25°	486.1	483.3	475.5	458.6	445.9
27.5°	464.2	460.0	451.5	427.5	412.7
30°	440.2	438.1	426.1	395.1	383.8
32.5°	417.6	414.1	401.4	369.0	359.8
35°	394.4	391.5	372.5	344.3	335.8
37.5°	371.1	367.6	343.6	321.0	310.4
40°	347.8	343.6	317.5	297.0	285.7
42.5°	325.9	320.3	294.9	273.0	260.3
45°	302.7	296.3	270.9	248.3	238.5
47.5°	279.4	273.7	250.4	227.2	215.9
50°	254.7	249.7	228.6	205.3	193.3
52.5°	234.2	226.5	206.0	182.7	172.8
55°	210.2	203.9	184.8	163.0	154.5
57.5°	188.4	182.0	164.4	143.9	136.9
60°	167.9	158.7	143.9	126.3	120.6
62.5°	145.3	138.3	125.6	110.8	117.8
65°	124.9	117.8	106.5	108.6	90.3
67.5°	102.3	98.8	88.9	79.0	76.2
70°	83.2	79.0	75.5	64.9	62.1
72.5°	66.3	62.1	57.1	51.5	49.4
75°	50.1	46.6	43.7	41.6	45.9
77.5°	34.6	33.2	31.0	28.9	28.2
80°	22.6	21.9	21.2	20.5	19.8
82.5°	13.4	13.4	13.4	13.4	13.4
85°	7.1	7.8	8.5	9.2	9.9
87.5°	4.2	4.2	4.9	5.6	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)