

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: P558612

Luminaire Tested: FSR-12-1-LD4-1HI-50-UNV-82-86-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558612
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-50-UNV-82-86-EDD-90
Description: 1X1 FSR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 777.0 lumens
Efficiency: N/A
Efficacy: 71.9 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

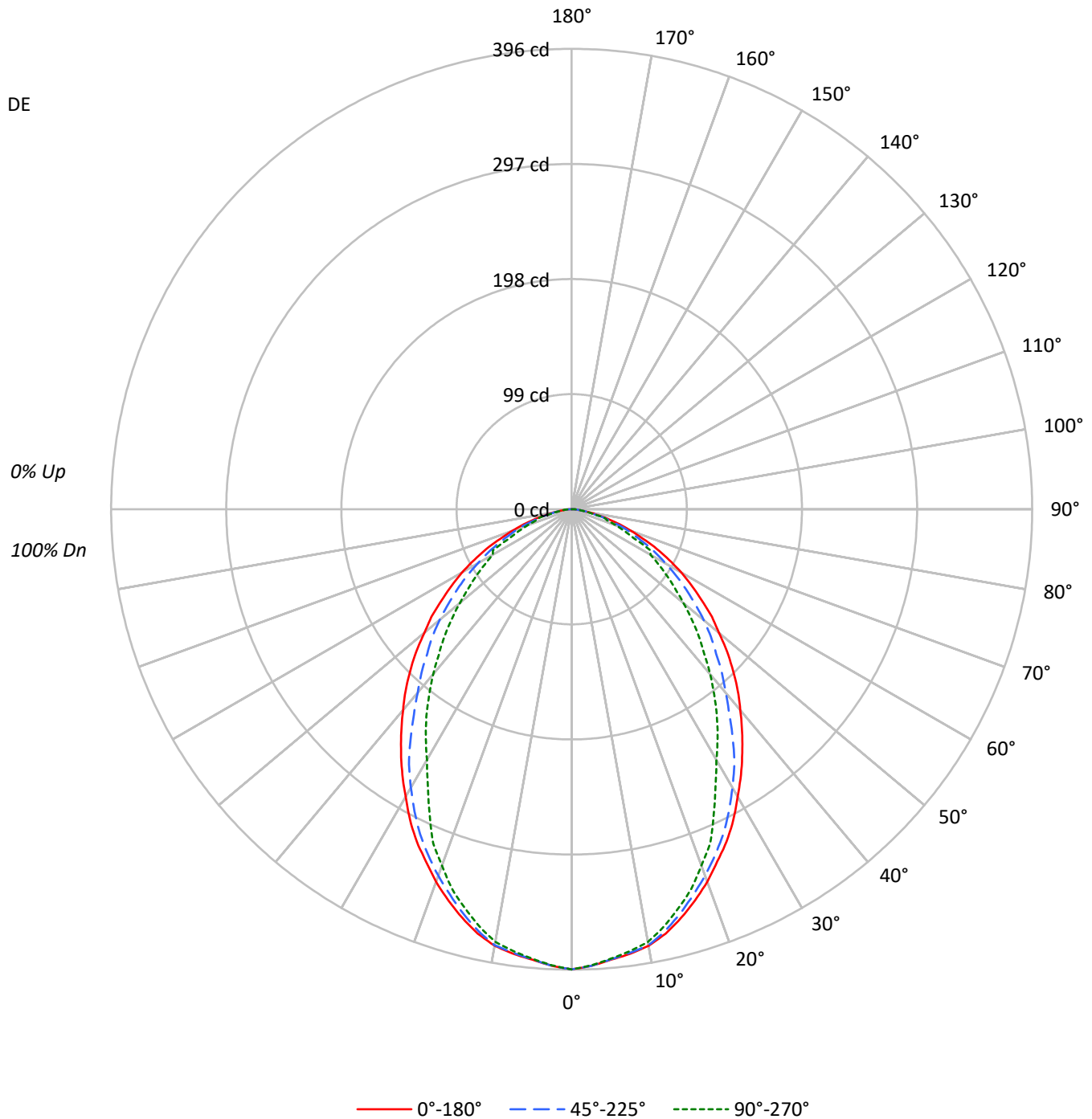
Input Watts (W): 10.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P558612

CATALOG NUMBER: FSR-12-1-LD4-1HI-50-UNV-82-86-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P558612

CATALOG NUMBER: FSR-12-1-LD4-1HI-50-UNV-82-86-EDD-90

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	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	
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°	4260	4260	4260
5°	4202	4198	4192
10°	4167	4161	4130
15°	4054	4013	3957
20°	3905	3842	3737
25°	3745	3663	3435
30°	3549	3435	3094
35°	3361	3175	2862
40°	3170	2893	2604
45°	2988	2675	2355
50°	2766	2483	2100
55°	2560	2250	1880
60°	2344	2009	1683
65°	2063	1760	1493
70°	1699	1542	1268
75°	1352	1181	1235
80°	905	849	793
85°	568	679	790

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2988 cd/sqm



TEST NUMBER: P558612

CATALOG NUMBER: FSR-12-1-LD4-1HI-50-UNV-82-86-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.8	4.7
10°-20°	101.1	13.0
20°-30°	140.0	18.0
30°-40°	149.3	19.2
40°-50°	136.2	17.5
50°-60°	106.7	13.7
60°-70°	69.5	8.9
70°-80°	30.8	4.0
80°-90°	6.6	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°	277.9	35.8
0°-40°	427.2	55.0
0°-60°	670.1	86.2
0°-90°	777.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	777.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	396	396	396	396	396	
5°	389	388	388	388	388	37
15°	364	364	360	356	355	102
25°	315	313	308	297	289	145
35°	256	254	242	223	218	160
45°	196	192	176	161	155	151
55°	136	132	120	106	100	122
65°	81	76	69	70	59	80
75°	32	30	28	27	30	35
85°	5	5	6	6	6	6
90°	0	0	0	0	0	



TEST NUMBER: P558612

CATALOG NUMBER: FSR-12-1-LD4-1HI-50-UNV-82-86-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	395.8	395.8	395.8	395.8	395.8
2.5°	393.0	393.0	393.0	392.6	392.6
5°	388.9	388.5	388.5	388.0	388.0
7.5°	385.7	385.3	384.8	384.4	383.4
10°	381.2	381.2	380.7	378.4	377.9
12.5°	373.8	373.4	371.5	368.3	367.4
15°	363.8	363.8	360.1	356.4	355.1
17.5°	352.8	352.3	347.7	344.1	342.3
20°	340.9	340.0	335.4	329.4	326.2
22.5°	327.6	327.6	322.1	314.3	311.1
25°	315.3	313.4	308.4	297.4	289.2
27.5°	301.1	298.3	292.8	277.3	267.7
30°	285.5	284.1	276.4	256.2	248.9
32.5°	270.9	268.6	260.4	239.3	233.4
35°	255.8	253.9	241.6	223.3	217.8
37.5°	240.7	238.4	222.8	208.2	201.3
40°	225.6	222.8	205.9	192.6	185.3
42.5°	211.4	207.7	191.3	177.1	168.8
45°	196.3	192.2	175.7	161.1	154.7
47.5°	181.2	177.5	162.4	147.3	140.0
50°	165.2	162.0	148.3	133.2	125.4
52.5°	151.9	146.9	133.6	118.5	112.1
55°	136.4	132.2	119.9	105.7	100.2
57.5°	122.2	118.1	106.6	93.3	88.8
60°	108.9	103.0	93.3	81.9	78.2
62.5°	94.3	89.7	81.4	71.8	76.4
65°	81.0	76.4	69.1	70.5	58.6
67.5°	66.3	64.1	57.7	51.2	49.4
70°	54.0	51.2	49.0	42.1	40.3
72.5°	43.0	40.3	37.1	33.4	32.0
75°	32.5	30.2	28.4	27.0	29.7
77.5°	22.4	21.5	20.1	18.8	18.3
80°	14.6	14.2	13.7	13.3	12.8
82.5°	8.7	8.7	8.7	8.7	8.7
85°	4.6	5.0	5.5	5.9	6.4
87.5°	2.7	2.7	3.2	3.7	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)