

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: P560061

Luminaire Tested: FSR-12-2-LD4-1STD-40-UNV-80-96-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560061
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-40-UNV-80-96-EDD
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED G ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1527.0 lumens
Efficiency: N/A
Efficacy: 92.0 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

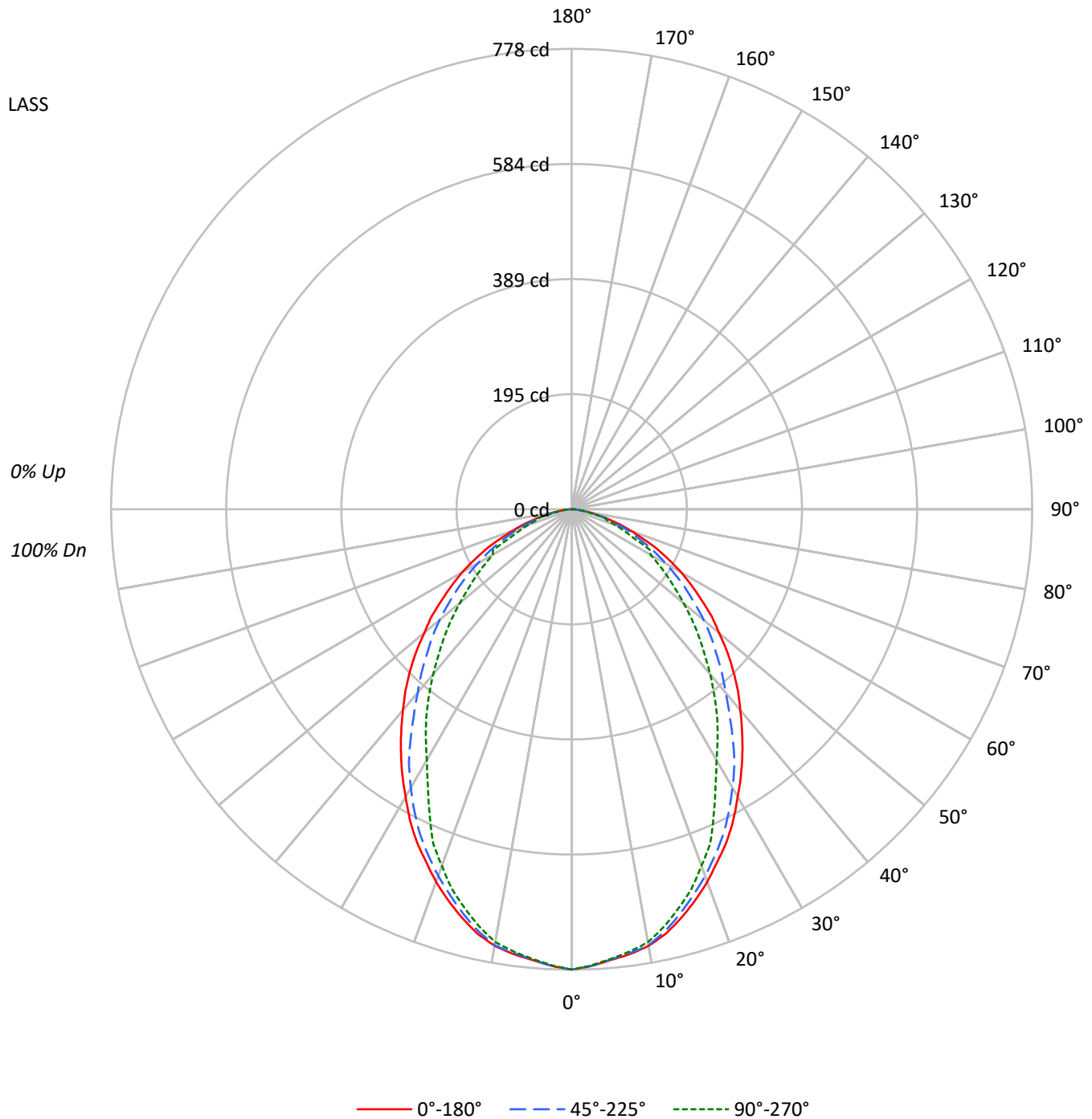
Input Watts (W): 16.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P560061

CATALOG NUMBER: FSR-12-2-LD4-1STD-40-UNV-80-96-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P560061

CATALOG NUMBER: FSR-12-2-LD4-1STD-40-UNV-80-96-EDD

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	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°	4186	4186	4186
5°	4129	4124	4119
10°	4094	4089	4059
15°	3983	3943	3888
20°	3837	3775	3672
25°	3679	3599	3375
30°	3487	3375	3040
35°	3303	3120	2812
40°	3114	2843	2559
45°	2936	2628	2313
50°	2718	2440	2063
55°	2515	2211	1848
60°	2303	1974	1655
65°	2027	1729	1466
70°	1670	1514	1245
75°	1327	1160	1214
80°	893	837	781
85°	556	667	778

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2936 cd/sqm

TEST NUMBER: P560061

CATALOG NUMBER: FSR-12-2-LD4-1STD-40-UNV-80-96-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.4	4.7
10°-20°	198.7	13.0
20°-30°	275.1	18.0
30°-40°	293.3	19.2
40°-50°	267.6	17.5
50°-60°	209.7	13.7
60°-70°	136.6	8.9
70°-80°	60.5	4.0
80°-90°	13.0	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°	546.2	35.8
0°-40°	839.6	55.0
0°-60°	1316.8	86.2
0°-90°	1527.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1527.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	778	778	778	778	778	
5°	764	763	763	762	762	73
15°	715	715	708	700	698	201
25°	620	616	606	584	568	284
35°	503	499	475	439	428	314
45°	386	378	345	316	304	297
55°	268	260	236	208	197	240
65°	159	150	136	138	115	157
75°	64	59	56	53	58	68
85°	9	10	11	12	13	12
90°	0	0	0	0	0	



TEST NUMBER: P560061

CATALOG NUMBER: FSR-12-2-LD4-1STD-40-UNV-80-96-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	777.8	777.8	777.8	777.8	777.8
2.5°	772.4	772.4	772.4	771.5	771.5
5°	764.3	763.4	763.4	762.5	762.5
7.5°	758.1	757.2	756.3	755.4	753.6
10°	749.1	749.1	748.2	743.7	742.8
12.5°	734.7	733.8	730.2	723.9	722.1
15°	714.9	714.9	707.7	700.5	697.8
17.5°	693.3	692.4	683.4	676.2	672.6
20°	669.9	668.1	659.1	647.4	641.2
22.5°	643.8	643.8	633.1	617.8	611.5
25°	619.6	616.0	606.1	584.5	568.3
27.5°	591.7	586.3	575.5	544.9	526.0
30°	561.1	558.4	543.1	503.6	489.2
32.5°	532.3	527.8	511.7	470.3	458.6
35°	502.7	499.1	474.8	438.8	428.0
37.5°	473.0	468.5	437.9	409.1	395.7
40°	443.3	437.9	404.7	378.6	364.2
42.5°	415.4	408.3	375.9	348.0	331.8
45°	385.8	377.7	345.3	316.5	303.9
47.5°	356.1	348.9	319.2	289.6	275.2
50°	324.6	318.3	291.4	261.7	246.4
52.5°	298.5	288.7	262.6	232.9	220.3
55°	268.0	259.9	235.6	207.7	196.9
57.5°	240.1	232.0	209.5	183.4	174.5
60°	214.0	202.3	183.4	161.0	153.8
62.5°	185.2	176.2	160.1	141.2	150.2
65°	159.2	150.2	135.8	138.5	115.1
67.5°	130.4	125.9	113.3	100.7	97.1
70°	106.1	100.7	96.2	82.7	79.1
72.5°	84.5	79.1	72.8	65.6	62.9
75°	63.8	59.3	55.8	53.1	58.4
77.5°	44.1	42.3	39.6	36.9	36.0
80°	28.8	27.9	27.0	26.1	25.2
82.5°	17.1	17.1	17.1	17.1	17.1
85°	9.0	9.9	10.8	11.7	12.6
87.5°	5.4	5.4	6.3	7.2	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)