

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: P558527

Luminaire Tested: FSR-12-1-LD4-1HI-40-UNV-80-97-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558527
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-40-UNV-80-97-EDD
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 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: 932.0 lumens
Efficiency: N/A
Efficacy: 86.3 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

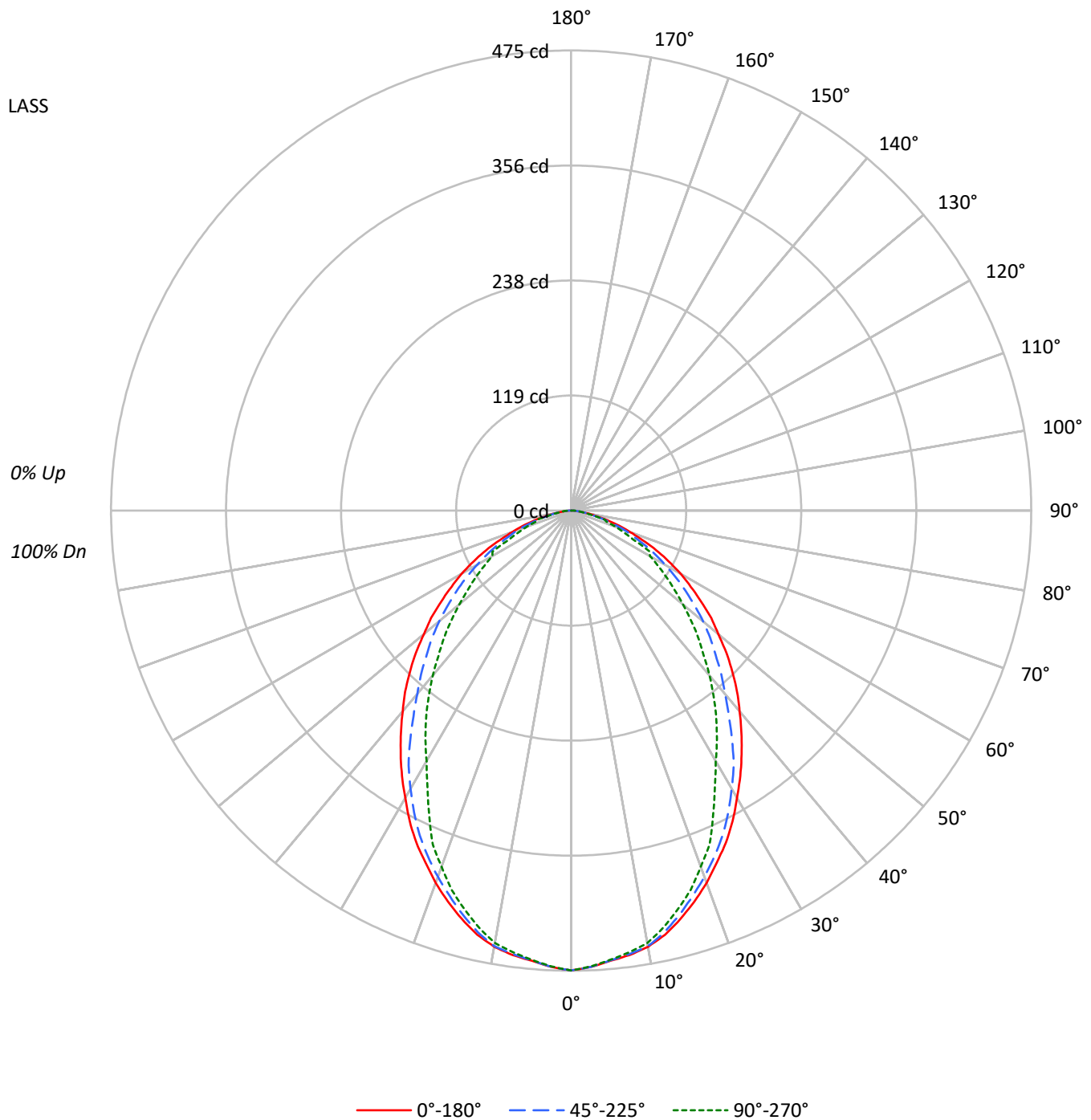
Input Watts (W): 10.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P558527

CATALOG NUMBER: FSR-12-1-LD4-1HI-40-UNV-80-97-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P558527

CATALOG NUMBER: FSR-12-1-LD4-1HI-40-UNV-80-97-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	100	100	100	100	100		
1	110	106	102	99	108	104	100	97	100	97	94	96	94	91	92	90	89	87	87	87	87	87	87	87		
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75	75	75	75	75	75	75		
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	65	65	65	65	65	65	65		
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56	56	56	56	56	56	56		
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50	50	50	50	50	50	50		
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47	56	50	46	44	44	44	44	44	44	44		
7	69	56	48	43	67	56	48	42	54	47	42	53	46	42	51	46	42	40	40	40	40	40	40	40		
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38	36	36	36	36	36	36	36		
9	61	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	33	33	33	33	33	33	33		
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30	30	30	30	30	30	30		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5110	5110	5110
5°	5041	5035	5029
10°	4997	4991	4955
15°	4862	4813	4746
20°	4684	4608	4482
25°	4492	4393	4120
30°	4257	4120	3711
35°	4031	3808	3432
40°	3802	3471	3124
45°	3585	3209	2824
50°	3317	2977	2519
55°	3070	2699	2256
60°	2812	2411	2021
65°	2473	2111	1791
70°	2039	1847	1520
75°	1622	1414	1485
80°	1091	1023	955
85°	679	815	951

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3585 cd/sqm



TEST NUMBER: P558527

CATALOG NUMBER: FSR-12-1-LD4-1HI-40-UNV-80-97-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.2	4.7
10°-20°	121.3	13.0
20°-30°	167.9	18.0
30°-40°	179.0	19.2
40°-50°	163.3	17.5
50°-60°	128.0	13.7
60°-70°	83.4	8.9
70°-80°	37.0	4.0
80°-90°	7.9	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°	333.4	35.8
0°-40°	512.4	55.0
0°-60°	803.7	86.2
0°-90°	932.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	932.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	475	475	475	475	475	
5°	466	466	466	465	465	44
15°	436	436	432	428	426	123
25°	378	376	370	357	347	174
35°	307	305	290	268	261	192
45°	236	230	211	193	186	181
55°	164	159	144	127	120	147
65°	97	92	83	84	70	96
75°	39	36	34	32	36	42
85°	6	6	7	7	8	8
90°	0	0	0	0	0	



TEST NUMBER: P558527

CATALOG NUMBER: FSR-12-1-LD4-1HI-40-UNV-80-97-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	474.7	474.7	474.7	474.7	474.7
2.5°	471.5	471.5	471.5	470.9	470.9
5°	466.5	466.0	466.0	465.4	465.4
7.5°	462.7	462.1	461.6	461.0	459.9
10°	457.2	457.2	456.6	453.9	453.3
12.5°	448.4	447.9	445.7	441.8	440.7
15°	436.3	436.3	431.9	427.5	425.9
17.5°	423.2	422.6	417.1	412.7	410.5
20°	408.9	407.8	402.3	395.2	391.3
22.5°	393.0	393.0	386.4	377.1	373.2
25°	378.2	376.0	369.9	356.7	346.9
27.5°	361.1	357.8	351.3	332.6	321.1
30°	342.5	340.8	331.5	307.4	298.6
32.5°	324.9	322.2	312.3	287.0	279.9
35°	306.8	304.6	289.8	267.8	261.2
37.5°	288.7	285.9	267.3	249.7	241.5
40°	270.6	267.3	247.0	231.1	222.3
42.5°	253.6	249.2	229.4	212.4	202.5
45°	235.5	230.5	210.8	193.2	185.5
47.5°	217.3	213.0	194.8	176.7	167.9
50°	198.1	194.3	177.8	159.7	150.4
52.5°	182.2	176.2	160.3	142.2	134.5
55°	163.6	158.6	143.8	126.8	120.2
57.5°	146.5	141.6	127.9	112.0	106.5
60°	130.6	123.5	112.0	98.2	93.9
62.5°	113.1	107.6	97.7	86.2	91.7
65°	97.1	91.7	82.9	84.5	70.3
67.5°	79.6	76.8	69.2	61.5	59.3
70°	64.8	61.5	58.7	50.5	48.3
72.5°	51.6	48.3	44.5	40.1	38.4
75°	39.0	36.2	34.0	32.4	35.7
77.5°	26.9	25.8	24.1	22.5	22.0
80°	17.6	17.0	16.5	15.9	15.4
82.5°	10.4	10.4	10.4	10.4	10.4
85°	5.5	6.0	6.6	7.1	7.7
87.5°	3.3	3.3	3.8	4.4	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)