

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: P558767

Luminaire Tested: FSR-12-1-LD4-1LO-40-UNV-93-97-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558767
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-LD4-1LO-40-UNV-93-97-EDD
Description: 1X1 FSR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR TEMPER
GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 568.0 lumens
Efficiency: N/A
Efficacy: 97.9 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

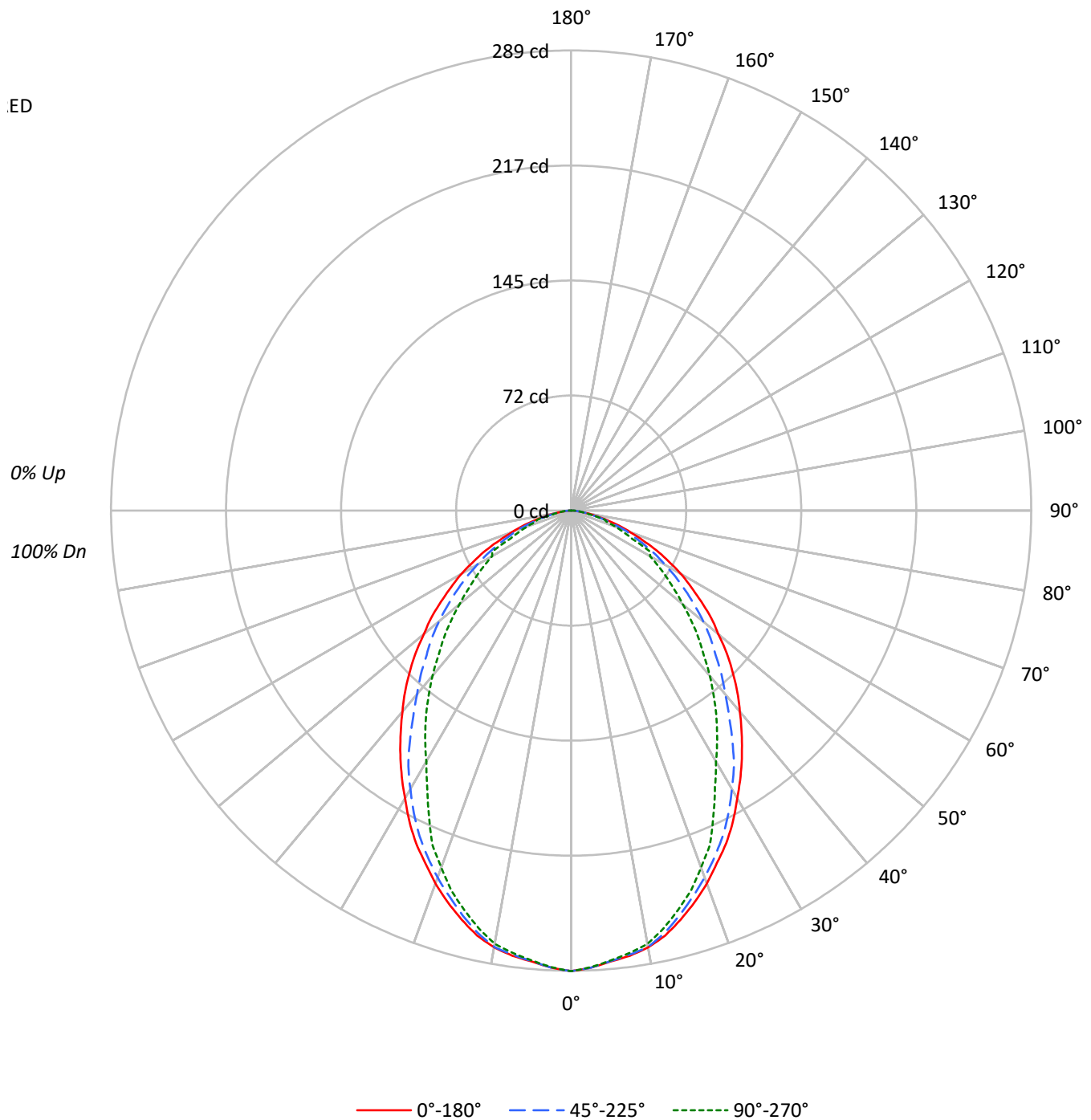
Input Watts (W): 5.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	3114	3114	3114
5°	3072	3069	3064
10°	3045	3042	3020
15°	2963	2933	2893
20°	2855	2809	2732
25°	2738	2677	2511
30°	2594	2511	2262
35°	2457	2321	2092
40°	2317	2115	1904
45°	2184	1955	1722
50°	2021	1815	1534
55°	1871	1644	1376
60°	1714	1468	1231
65°	1508	1286	1090
70°	1243	1127	925
75°	986	861	902
80°	663	620	583
85°	408	494	580

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2184 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.9	4.7
10°-20°	73.9	13.0
20°-30°	102.3	18.0
30°-40°	109.1	19.2
40°-50°	99.5	17.5
50°-60°	78.0	13.7
60°-70°	50.8	8.9
70°-80°	22.5	4.0
80°-90°	4.8	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°	203.2	35.8
0°-40°	312.3	55.0
0°-60°	489.8	86.2
0°-90°	568.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	568.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	289	289	289	289	289	
5°	284	284	284	284	284	27
15°	266	266	263	261	260	75
25°	230	229	225	217	211	106
35°	187	186	177	163	159	117
45°	144	140	128	118	113	111
55°	100	97	88	77	73	89
65°	59	56	50	52	43	58
75°	24	22	21	20	22	25
85°	3	4	4	4	5	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	289.3	289.3	289.3	289.3	289.3
2.5°	287.3	287.3	287.3	287.0	287.0
5°	284.3	284.0	284.0	283.6	283.6
7.5°	282.0	281.6	281.3	281.0	280.3
10°	278.6	278.6	278.3	276.6	276.3
12.5°	273.3	272.9	271.6	269.3	268.6
15°	265.9	265.9	263.2	260.6	259.6
17.5°	257.9	257.6	254.2	251.5	250.2
20°	249.2	248.5	245.2	240.8	238.5
22.5°	239.5	239.5	235.5	229.8	227.5
25°	230.5	229.1	225.4	217.4	211.4
27.5°	220.1	218.1	214.1	202.7	195.7
30°	208.7	207.7	202.0	187.3	182.0
32.5°	198.0	196.3	190.3	174.9	170.6
35°	187.0	185.6	176.6	163.2	159.2
37.5°	175.9	174.3	162.9	152.2	147.2
40°	164.9	162.9	150.5	140.8	135.5
42.5°	154.5	151.9	139.8	129.4	123.4
45°	143.5	140.5	128.4	117.7	113.1
47.5°	132.5	129.8	118.7	107.7	102.4
50°	120.7	118.4	108.4	97.3	91.6
52.5°	111.0	107.4	97.7	86.6	81.9
55°	99.7	96.7	87.6	77.3	73.3
57.5°	89.3	86.3	77.9	68.2	64.9
60°	79.6	75.3	68.2	59.9	57.2
62.5°	68.9	65.6	59.5	52.5	55.9
65°	59.2	55.9	50.5	51.5	42.8
67.5°	48.5	46.8	42.1	37.5	36.1
70°	39.5	37.5	35.8	30.8	29.4
72.5°	31.4	29.4	27.1	24.4	23.4
75°	23.7	22.1	20.7	19.7	21.7
77.5°	16.4	15.7	14.7	13.7	13.4
80°	10.7	10.4	10.0	9.7	9.4
82.5°	6.4	6.4	6.4	6.4	6.4
85°	3.3	3.7	4.0	4.3	4.7
87.5°	2.0	2.0	2.3	2.7	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)