

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: P558960

Luminaire Tested: FSR-12-1-LD4-1STD-50-UNV-80-84-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558960
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-LD4-1STD-50-UNV-80-84-EDD-90
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONM
SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 703.0 lumens
Efficiency: N/A
Efficacy: 84.7 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

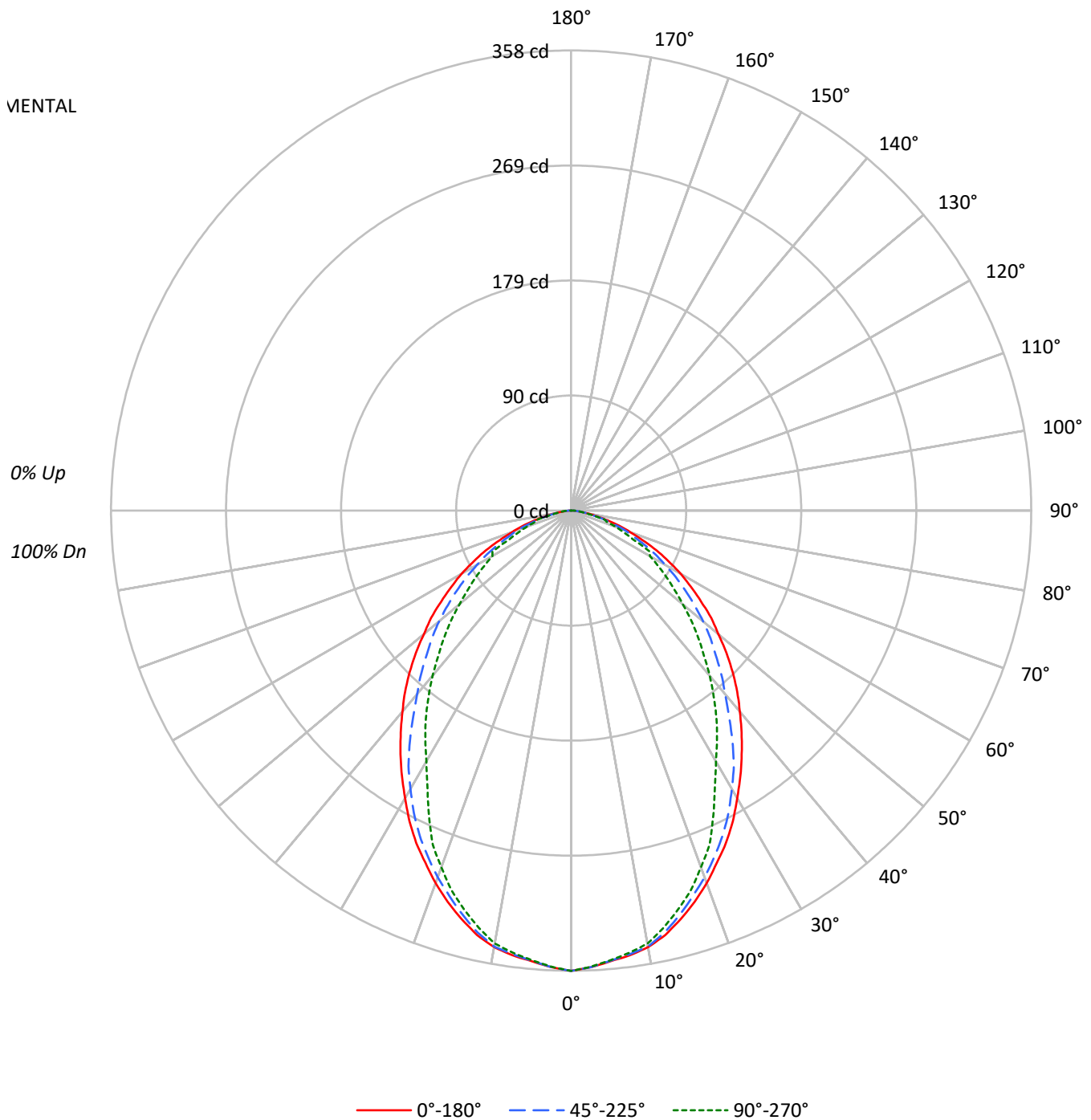
Input Watts (W): 8.3
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	3855	3855	3855
5°	3802	3798	3794
10°	3770	3764	3738
15°	3667	3631	3580
20°	3533	3477	3381
25°	3387	3314	3107
30°	3210	3107	2799
35°	3041	2872	2590
40°	2868	2618	2356
45°	2704	2420	2130
50°	2502	2246	1899
55°	2316	2036	1702
60°	2120	1819	1524
65°	1867	1592	1350
70°	1539	1394	1146
75°	1223	1069	1119
80°	818	769	719
85°	506	618	716

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2704 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.3	4.7
10°-20°	91.5	13.0
20°-30°	126.7	18.0
30°-40°	135.1	19.2
40°-50°	123.2	17.5
50°-60°	96.5	13.7
60°-70°	62.9	8.9
70°-80°	27.9	4.0
80°-90°	6.0	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°	251.5	35.8
0°-40°	386.5	55.0
0°-60°	606.2	86.2
0°-90°	703.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	703.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	358	358	358	358	358	
5°	352	352	352	351	351	33
15°	329	329	326	322	321	93
25°	285	284	279	269	262	131
35°	231	230	219	202	197	145
45°	178	174	159	146	140	137
55°	123	120	108	96	91	111
65°	73	69	62	64	53	72
75°	29	27	26	24	27	32
85°	4	5	5	5	6	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	358.1	358.1	358.1	358.1	358.1
2.5°	355.6	355.6	355.6	355.2	355.2
5°	351.9	351.5	351.5	351.1	351.1
7.5°	349.0	348.6	348.2	347.7	346.9
10°	344.9	344.9	344.4	342.4	342.0
12.5°	338.2	337.8	336.2	333.3	332.4
15°	329.1	329.1	325.8	322.5	321.3
17.5°	319.2	318.8	314.6	311.3	309.7
20°	308.4	307.6	303.5	298.1	295.2
22.5°	296.4	296.4	291.4	284.4	281.5
25°	285.2	283.6	279.0	269.1	261.6
27.5°	272.4	269.9	265.0	250.9	242.2
30°	258.3	257.1	250.0	231.8	225.2
32.5°	245.1	243.0	235.6	216.5	211.1
35°	231.4	229.8	218.6	202.0	197.1
37.5°	217.8	215.7	201.6	188.4	182.2
40°	204.1	201.6	186.3	174.3	167.7
42.5°	191.3	188.0	173.0	160.2	152.8
45°	177.6	173.9	159.0	145.7	139.9
47.5°	163.9	160.6	147.0	133.3	126.7
50°	149.4	146.6	134.1	120.5	113.4
52.5°	137.4	132.9	120.9	107.2	101.4
55°	123.4	119.6	108.5	95.6	90.7
57.5°	110.5	106.8	96.5	84.5	80.3
60°	98.5	93.1	84.5	74.1	70.8
62.5°	85.3	81.1	73.7	65.0	69.1
65°	73.3	69.1	62.5	63.8	53.0
67.5°	60.0	58.0	52.2	46.4	44.7
70°	48.9	46.4	44.3	38.1	36.4
72.5°	38.9	36.4	33.5	30.2	29.0
75°	29.4	27.3	25.7	24.4	26.9
77.5°	20.3	19.5	18.2	17.0	16.6
80°	13.2	12.8	12.4	12.0	11.6
82.5°	7.9	7.9	7.9	7.9	7.9
85°	4.1	4.6	5.0	5.4	5.8
87.5°	2.5	2.5	2.9	3.3	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)