

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: P558727

Luminaire Tested: FSR-12-1-LD4-1LO-40-UNV-81-87-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558727
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-81-87-EDD
Description: 1X1 FSR TROFFER WITH .156 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 529.0 lumens
Efficiency: N/A
Efficacy: 91.2 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

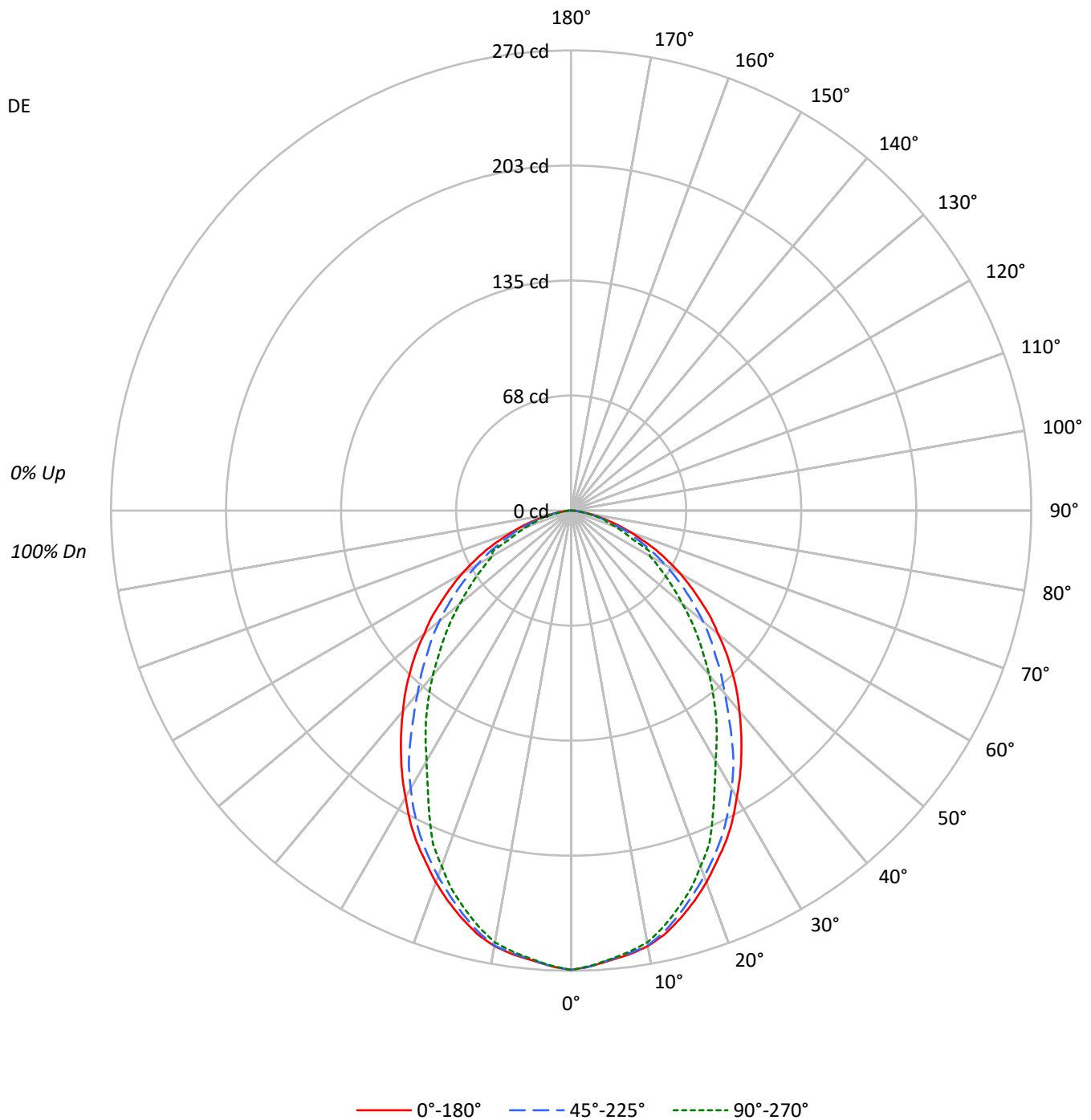
Input Watts (W): 5.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	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°	2901	2901	2901
5°	2861	2858	2855
10°	2836	2833	2812
15°	2760	2732	2693
20°	2659	2615	2544
25°	2549	2494	2339
30°	2416	2339	2107
35°	2288	2162	1949
40°	2158	1970	1773
45°	2034	1821	1603
50°	1884	1690	1430
55°	1742	1531	1280
60°	1595	1369	1147
65°	1403	1197	1016
70°	1158	1048	862
75°	919	803	840
80°	620	576	539
85°	383	457	543

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2034 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.1	4.7
10°-20°	68.8	13.0
20°-30°	95.3	18.0
30°-40°	101.6	19.2
40°-50°	92.7	17.5
50°-60°	72.6	13.7
60°-70°	47.3	8.9
70°-80°	21.0	4.0
80°-90°	4.5	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°	189.2	35.8
0°-40°	290.9	55.0
0°-60°	456.2	86.2
0°-90°	529.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	529.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	270	270	270	270	270	
5°	265	264	264	264	264	25
15°	248	248	245	243	242	70
25°	215	213	210	202	197	99
35°	174	173	164	152	148	109
45°	134	131	120	110	105	103
55°	93	90	82	72	68	83
65°	55	52	47	48	40	54
75°	22	21	19	18	20	24
85°	3	3	4	4	4	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	269.5	269.5	269.5	269.5	269.5
2.5°	267.6	267.6	267.6	267.3	267.3
5°	264.8	264.5	264.5	264.2	264.2
7.5°	262.6	262.3	262.0	261.7	261.1
10°	259.5	259.5	259.2	257.6	257.3
12.5°	254.5	254.2	253.0	250.8	250.2
15°	247.7	247.7	245.2	242.7	241.7
17.5°	240.2	239.9	236.8	234.3	233.0
20°	232.1	231.5	228.3	224.3	222.1
22.5°	223.0	223.0	219.3	214.0	211.8
25°	214.6	213.4	210.0	202.5	196.9
27.5°	205.0	203.1	199.4	188.8	182.2
30°	194.4	193.5	188.2	174.5	169.5
32.5°	184.4	182.9	177.3	162.9	158.9
35°	174.1	172.9	164.5	152.0	148.3
37.5°	163.9	162.3	151.7	141.7	137.1
40°	153.6	151.7	140.2	131.2	126.2
42.5°	143.9	141.4	130.2	120.6	115.0
45°	133.6	130.8	119.6	109.7	105.3
47.5°	123.4	120.9	110.6	100.3	95.3
50°	112.5	110.3	100.9	90.7	85.4
52.5°	103.4	100.0	91.0	80.7	76.3
55°	92.8	90.0	81.6	72.0	68.2
57.5°	83.2	80.4	72.6	63.6	60.4
60°	74.1	70.1	63.6	55.8	53.3
62.5°	64.2	61.1	55.5	48.9	52.0
65°	55.1	52.0	47.0	48.0	39.9
67.5°	45.2	43.6	39.3	34.9	33.6
70°	36.8	34.9	33.3	28.7	27.4
72.5°	29.3	27.4	25.2	22.7	21.8
75°	22.1	20.6	19.3	18.4	20.2
77.5°	15.3	14.6	13.7	12.8	12.5
80°	10.0	9.7	9.3	9.0	8.7
82.5°	5.9	5.9	5.9	5.9	5.9
85°	3.1	3.4	3.7	4.0	4.4
87.5°	1.9	1.9	2.2	2.5	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)