

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: P558677

Luminaire Tested: FSR-12-1-LD4-1LO-35-UNV-82-86-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558677
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-35-UNV-82-86-EDD
Description: 1X1 FSR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 530.0 lumens
Efficiency: N/A
Efficacy: 91.4 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

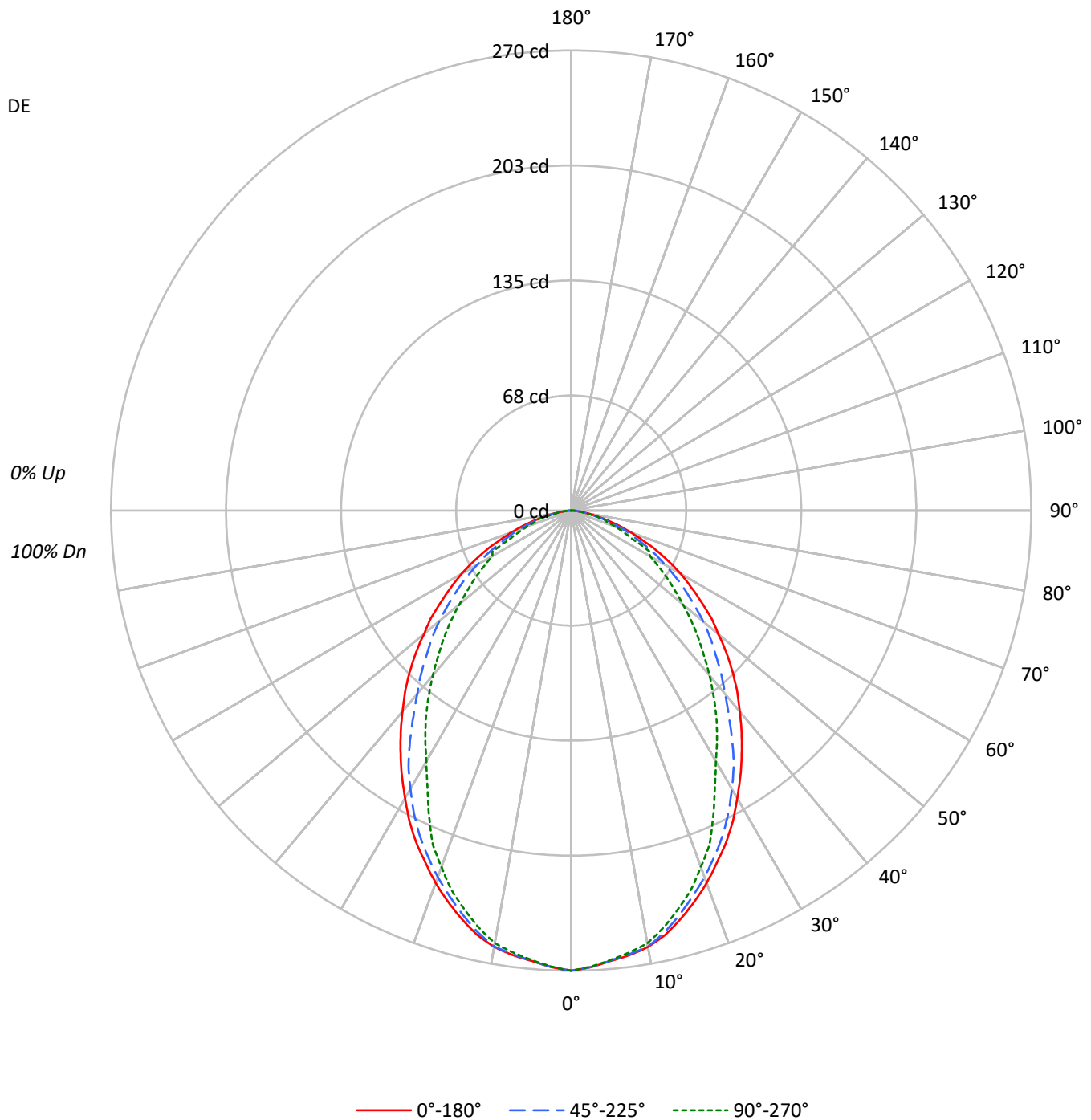
Input Watts (W): 5.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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				
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	47	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°	2906	2906	2906
5°	2867	2863	2860
10°	2842	2839	2818
15°	2765	2737	2699
20°	2663	2621	2549
25°	2553	2499	2343
30°	2421	2343	2110
35°	2293	2166	1953
40°	2162	1973	1776
45°	2038	1825	1606
50°	1887	1693	1432
55°	1745	1535	1284
60°	1600	1371	1150
65°	1406	1200	1019
70°	1158	1051	865
75°	923	807	844
80°	620	583	539
85°	383	457	543

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2038 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.1	4.7
10°-20°	69.0	13.0
20°-30°	95.5	18.0
30°-40°	101.8	19.2
40°-50°	92.9	17.5
50°-60°	72.8	13.7
60°-70°	47.4	8.9
70°-80°	21.0	4.0
80°-90°	4.5	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°	189.6	35.8
0°-40°	291.4	55.0
0°-60°	457.1	86.2
0°-90°	530.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	530.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	270	270	270	270	270	
5°	265	265	265	265	265	25
15°	248	248	246	243	242	70
25°	215	214	210	203	197	99
35°	174	173	165	152	149	109
45°	134	131	120	110	106	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°	270.0	270.0	270.0	270.0	270.0
2.5°	268.1	268.1	268.1	267.8	267.8
5°	265.3	265.0	265.0	264.7	264.7
7.5°	263.1	262.8	262.5	262.2	261.5
10°	260.0	260.0	259.7	258.1	257.8
12.5°	255.0	254.7	253.4	251.2	250.6
15°	248.1	248.1	245.6	243.1	242.2
17.5°	240.6	240.3	237.2	234.7	233.5
20°	232.5	231.9	228.8	224.7	222.5
22.5°	223.5	223.5	219.7	214.4	212.2
25°	215.0	213.8	210.4	202.9	197.3
27.5°	205.4	203.5	199.8	189.1	182.6
30°	194.8	193.8	188.5	174.8	169.8
32.5°	184.8	183.2	177.6	163.2	159.2
35°	174.5	173.2	164.8	152.3	148.6
37.5°	164.2	162.6	152.0	142.0	137.3
40°	153.9	152.0	140.4	131.4	126.4
42.5°	144.2	141.7	130.5	120.8	115.2
45°	133.9	131.1	119.9	109.9	105.5
47.5°	123.6	121.1	110.8	100.5	95.5
50°	112.7	110.5	101.1	90.8	85.5
52.5°	103.6	100.2	91.1	80.8	76.5
55°	93.0	90.2	81.8	72.1	68.4
57.5°	83.3	80.5	72.7	63.7	60.5
60°	74.3	70.2	63.7	55.9	53.4
62.5°	64.3	61.2	55.6	49.0	52.1
65°	55.2	52.1	47.1	48.1	40.0
67.5°	45.3	43.7	39.3	35.0	33.7
70°	36.8	35.0	33.4	28.7	27.5
72.5°	29.3	27.5	25.3	22.8	21.8
75°	22.2	20.6	19.4	18.4	20.3
77.5°	15.3	14.7	13.7	12.8	12.5
80°	10.0	9.7	9.4	9.1	8.7
82.5°	5.9	5.9	5.9	5.9	5.9
85°	3.1	3.4	3.7	4.1	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)