

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: P558642

Luminaire Tested: FSR-12-1-LD4-1LO-35-UNV-80-85-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558642
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-80-85-EDD-90
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRON
SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 482.0 lumens
Efficiency: N/A
Efficacy: 83.1 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

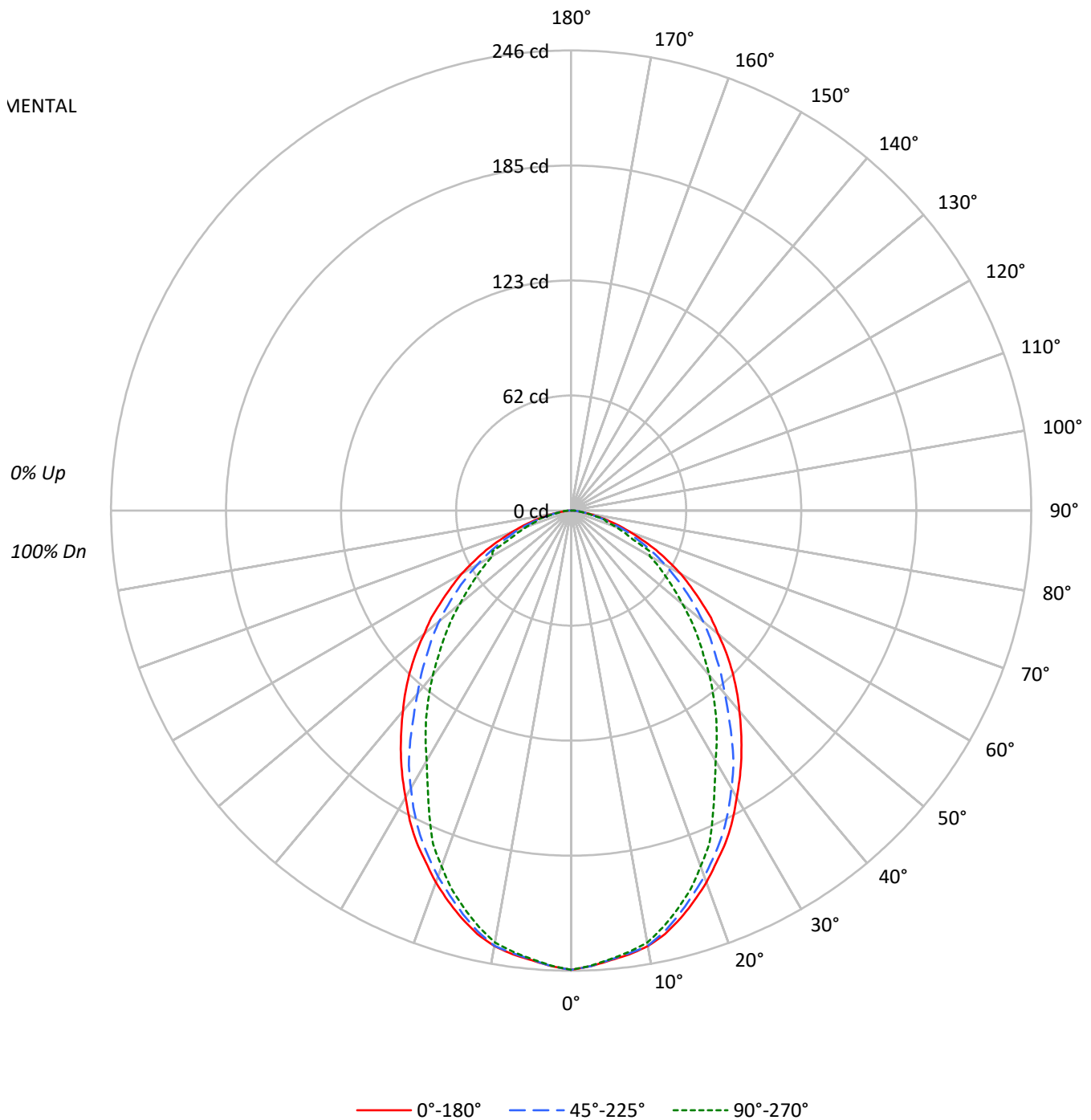
Input Watts (W): 5.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	2643	2643	2643
5°	2607	2604	2601
10°	2584	2582	2563
15°	2515	2489	2455
20°	2423	2384	2318
25°	2323	2272	2131
30°	2201	2130	1919
35°	2085	1970	1775
40°	1966	1794	1616
45°	1854	1659	1460
50°	1716	1541	1303
55°	1588	1396	1167
60°	1455	1246	1044
65°	1279	1093	925
70°	1054	957	787
75°	840	732	765
80°	564	527	490
85°	346	420	494

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1854 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.9	4.7
10°-20°	62.7	13.0
20°-30°	86.8	18.0
30°-40°	92.6	19.2
40°-50°	84.5	17.5
50°-60°	66.2	13.7
60°-70°	43.1	8.9
70°-80°	19.1	4.0
80°-90°	4.1	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°	172.4	35.8
0°-40°	265.0	55.0
0°-60°	415.7	86.2
0°-90°	482.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	482.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	246	246	246	246	246	
5°	241	241	241	241	241	23
15°	226	226	223	221	220	63
25°	196	194	191	184	179	90
35°	159	158	150	138	135	99
45°	122	119	109	100	96	94
55°	85	82	74	66	62	76
65°	50	47	43	44	36	50
75°	20	19	18	17	18	22
85°	3	3	3	4	4	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	245.5	245.5	245.5	245.5	245.5
2.5°	243.8	243.8	243.8	243.5	243.5
5°	241.3	241.0	241.0	240.7	240.7
7.5°	239.3	239.0	238.7	238.4	237.9
10°	236.4	236.4	236.2	234.7	234.5
12.5°	231.9	231.6	230.5	228.5	227.9
15°	225.7	225.7	223.4	221.1	220.3
17.5°	218.8	218.6	215.7	213.5	212.3
20°	211.5	210.9	208.1	204.4	202.4
22.5°	203.2	203.2	199.8	195.0	193.0
25°	195.6	194.4	191.3	184.5	179.4
27.5°	186.8	185.1	181.7	172.0	166.0
30°	177.1	176.3	171.4	159.0	154.4
32.5°	168.0	166.6	161.5	148.4	144.8
35°	158.7	157.5	149.9	138.5	135.1
37.5°	149.3	147.9	138.2	129.1	124.9
40°	139.9	138.2	127.7	119.5	115.0
42.5°	131.1	128.9	118.6	109.8	104.7
45°	121.8	119.2	109.0	99.9	95.9
47.5°	112.4	110.1	100.8	91.4	86.9
50°	102.5	100.5	92.0	82.6	77.8
52.5°	94.2	91.1	82.9	73.5	69.5
55°	84.6	82.0	74.4	65.6	62.2
57.5°	75.8	73.2	66.1	57.9	55.1
60°	67.6	63.9	57.9	50.8	48.5
62.5°	58.5	55.6	50.5	44.6	47.4
65°	50.2	47.4	42.9	43.7	36.3
67.5°	41.2	39.7	35.8	31.8	30.7
70°	33.5	31.8	30.4	26.1	25.0
72.5°	26.7	25.0	23.0	20.7	19.9
75°	20.2	18.7	17.6	16.7	18.4
77.5°	13.9	13.3	12.5	11.6	11.4
80°	9.1	8.8	8.5	8.2	7.9
82.5°	5.4	5.4	5.4	5.4	5.4
85°	2.8	3.1	3.4	3.7	4.0
87.5°	1.7	1.7	2.0	2.3	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)