

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: P559804

Luminaire Tested: FSR-12-2-LD4-1LO-35-UNV-80-96-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559804
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-12-2-LD4-1LO-35-UNV-80-96-EDD-90
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED G ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

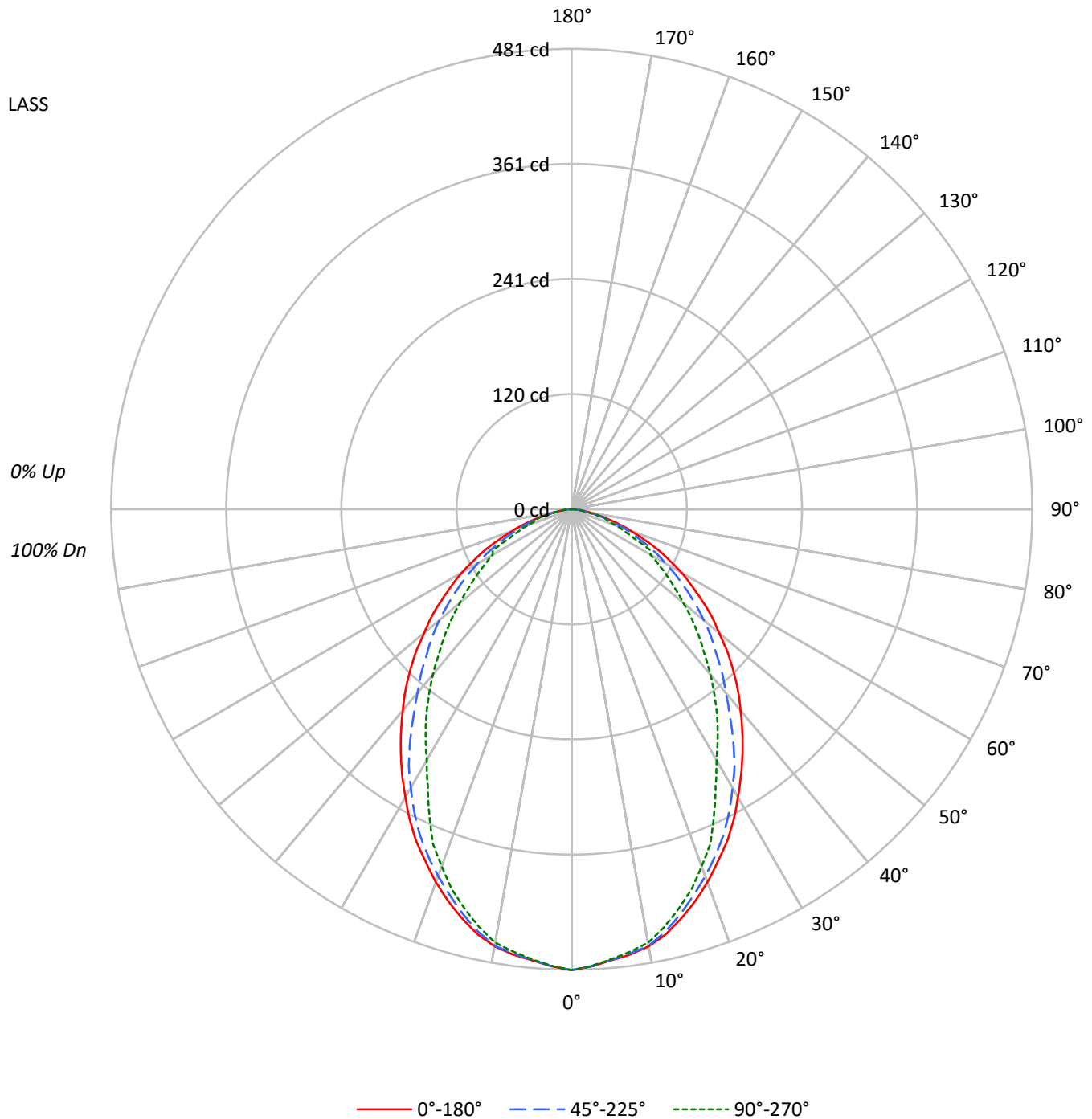
Lumens per Lamp: N/A
Luminaire Lumens: 945.0 lumens
Efficiency: N/A
Efficacy: 80.8 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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	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°	2591	2591	2591
5°	2555	2553	2549
10°	2534	2530	2512
15°	2465	2440	2406
20°	2375	2336	2273
25°	2277	2227	2089
30°	2158	2089	1881
35°	2044	1930	1740
40°	1928	1759	1584
45°	1817	1627	1432
50°	1682	1510	1277
55°	1556	1368	1144
60°	1425	1222	1025
65°	1254	1070	907
70°	1034	936	771
75°	821	717	753
80°	552	518	483
85°	346	414	482

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1817 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.8	4.7
10°-20°	123.0	13.0
20°-30°	170.3	18.0
30°-40°	181.5	19.2
40°-50°	165.6	17.5
50°-60°	129.7	13.7
60°-70°	84.6	8.9
70°-80°	37.5	4.0
80°-90°	8.1	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°	338.0	35.8
0°-40°	519.6	55.0
0°-60°	814.9	86.2
0°-90°	945.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	945.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	481	481	481	481	481	
5°	473	472	472	472	472	45
15°	442	442	438	434	432	124
25°	383	381	375	362	352	176
35°	311	309	294	272	265	194
45°	239	234	214	196	188	184
55°	166	161	146	129	122	149
65°	98	93	84	86	71	97
75°	40	37	34	33	36	42
85°	6	6	7	7	8	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	481.4	481.4	481.4	481.4	481.4
2.5°	478.0	478.0	478.0	477.5	477.5
5°	473.0	472.5	472.5	471.9	471.9
7.5°	469.1	468.6	468.0	467.5	466.3
10°	463.6	463.6	463.0	460.2	459.7
12.5°	454.7	454.1	451.9	448.0	446.9
15°	442.4	442.4	438.0	433.5	431.8
17.5°	429.1	428.5	422.9	418.5	416.3
20°	414.6	413.5	407.9	400.7	396.8
22.5°	398.5	398.5	391.8	382.3	378.4
25°	383.4	381.2	375.1	361.7	351.7
27.5°	366.2	362.8	356.2	337.2	325.6
30°	347.3	345.6	336.1	311.6	302.7
32.5°	329.4	326.7	316.6	291.0	283.8
35°	311.1	308.9	293.8	271.6	264.9
37.5°	292.7	289.9	271.0	253.2	244.9
40°	274.4	271.0	250.4	234.3	225.4
42.5°	257.1	252.6	232.6	215.4	205.3
45°	238.7	233.7	213.7	195.9	188.1
47.5°	220.4	215.9	197.6	179.2	170.3
50°	200.9	197.0	180.3	161.9	152.5
52.5°	184.8	178.6	162.5	144.1	136.3
55°	165.8	160.8	145.8	128.6	121.9
57.5°	148.6	143.6	129.7	113.5	108.0
60°	132.4	125.2	113.5	99.6	95.2
62.5°	114.6	109.1	99.1	87.4	92.9
65°	98.5	92.9	84.0	85.7	71.2
67.5°	80.7	77.9	70.1	62.3	60.1
70°	65.7	62.3	59.5	51.2	49.0
72.5°	52.3	49.0	45.1	40.6	39.0
75°	39.5	36.7	34.5	32.8	36.2
77.5°	27.3	26.2	24.5	22.8	22.3
80°	17.8	17.3	16.7	16.1	15.6
82.5°	10.6	10.6	10.6	10.6	10.6
85°	5.6	6.1	6.7	7.2	7.8
87.5°	3.3	3.3	3.9	4.5	5.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)