

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: P559926

Luminaire Tested: FSR-12-2-LD4-1LO-50-UNV-80-87-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559926
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-50-UNV-80-87-EDD-90
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRONM
SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 954.0 lumens
Efficiency: N/A
Efficacy: 81.5 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

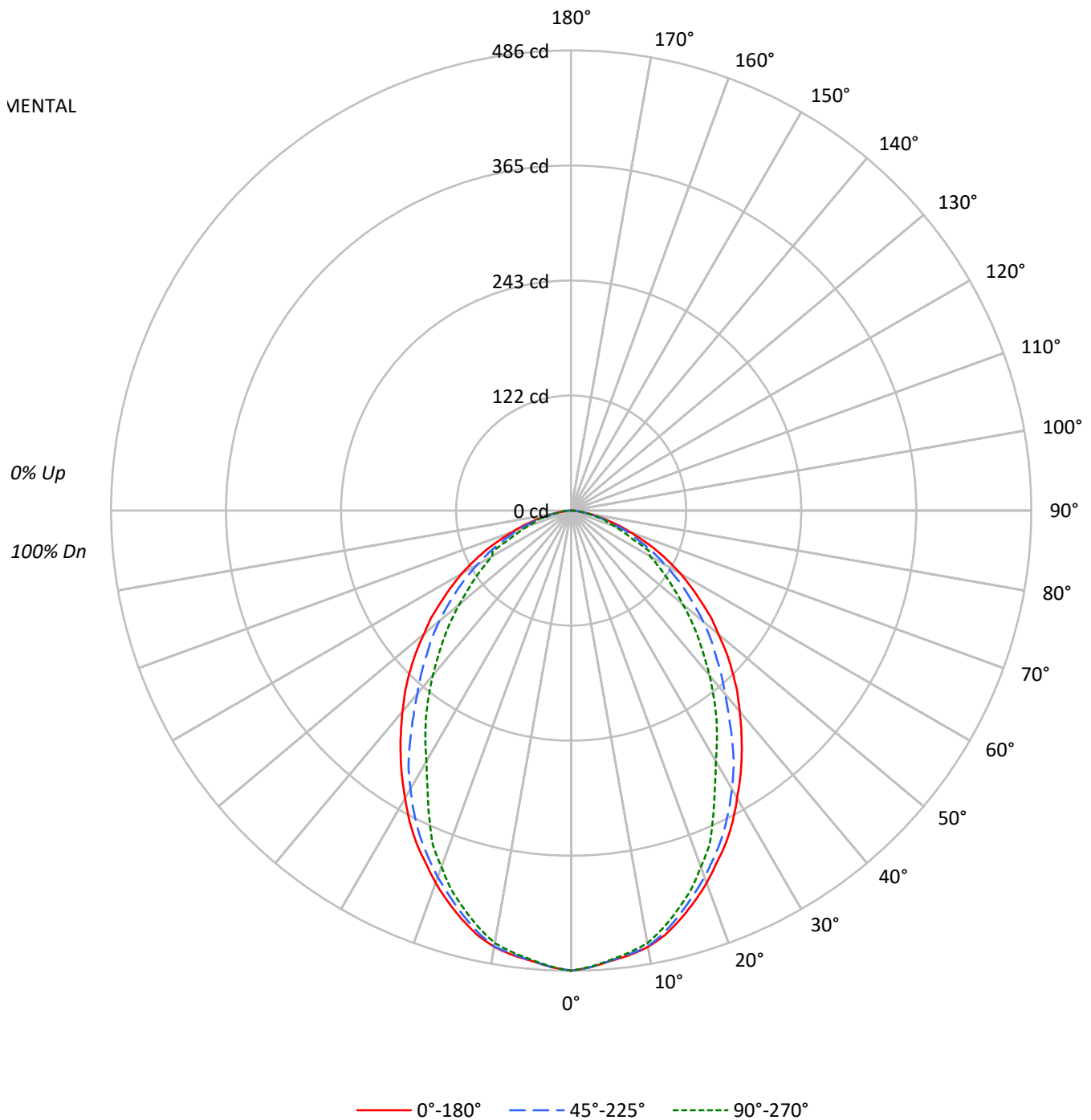
Input Watts (W): 11.7
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	2616	2616	2616
5°	2580	2577	2574
10°	2558	2554	2536
15°	2488	2463	2429
20°	2397	2359	2294
25°	2299	2249	2109
30°	2179	2109	1899
35°	2063	1949	1757
40°	1946	1776	1598
45°	1834	1642	1445
50°	1698	1524	1289
55°	1571	1381	1154
60°	1439	1234	1034
65°	1266	1080	916
70°	1043	946	777
75°	830	724	759
80°	558	524	487
85°	346	414	488

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1834 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.2	4.7
10°-20°	124.1	13.0
20°-30°	171.9	18.0
30°-40°	183.3	19.2
40°-50°	167.2	17.5
50°-60°	131.0	13.7
60°-70°	85.4	8.9
70°-80°	37.8	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°	341.3	35.8
0°-40°	524.5	55.0
0°-60°	822.7	86.2
0°-90°	954.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	954.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	486	486	486	486	486	
5°	478	477	477	476	476	45
15°	447	447	442	438	436	126
25°	387	385	379	365	355	178
35°	314	312	297	274	267	196
45°	241	236	216	198	190	186
55°	167	162	147	130	123	150
65°	99	94	85	86	72	98
75°	40	37	35	33	36	43
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°	486.0	486.0	486.0	486.0	486.0
2.5°	482.6	482.6	482.6	482.0	482.0
5°	477.5	477.0	477.0	476.4	476.4
7.5°	473.6	473.0	472.5	471.9	470.8
10°	468.0	468.0	467.4	464.6	464.0
12.5°	459.0	458.4	456.2	452.2	451.1
15°	446.6	446.6	442.1	437.6	436.0
17.5°	433.1	432.6	427.0	422.5	420.2
20°	418.5	417.4	411.8	404.5	400.6
22.5°	402.2	402.2	395.5	386.0	382.0
25°	387.1	384.8	378.7	365.2	355.1
27.5°	369.7	366.3	359.6	340.4	328.7
30°	350.6	348.9	339.3	314.6	305.6
32.5°	332.6	329.8	319.7	293.8	286.5
35°	314.0	311.8	296.6	274.2	267.4
37.5°	295.5	292.7	273.6	255.6	247.2
40°	277.0	273.6	252.8	236.5	227.5
42.5°	259.6	255.1	234.8	217.4	207.3
45°	241.0	236.0	215.7	197.8	189.9
47.5°	222.5	218.0	199.4	180.9	171.9
50°	202.8	198.9	182.0	163.5	153.9
52.5°	186.5	180.3	164.0	145.5	137.6
55°	167.4	162.4	147.2	129.8	123.0
57.5°	150.0	144.9	130.9	114.6	109.0
60°	133.7	126.4	114.6	100.6	96.1
62.5°	115.7	110.1	100.0	88.2	93.8
65°	99.4	93.8	84.8	86.5	71.9
67.5°	81.5	78.7	70.8	62.9	60.7
70°	66.3	62.9	60.1	51.7	49.4
72.5°	52.8	49.4	45.5	41.0	39.3
75°	39.9	37.1	34.8	33.1	36.5
77.5°	27.5	26.4	24.7	23.0	22.5
80°	18.0	17.4	16.9	16.3	15.7
82.5°	10.7	10.7	10.7	10.7	10.7
85°	5.6	6.2	6.7	7.3	7.9
87.5°	3.4	3.4	3.9	4.5	5.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)