

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: P559927

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

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559927
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
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRONM
SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1097.0 lumens
Efficiency: N/A
Efficacy: 93.8 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

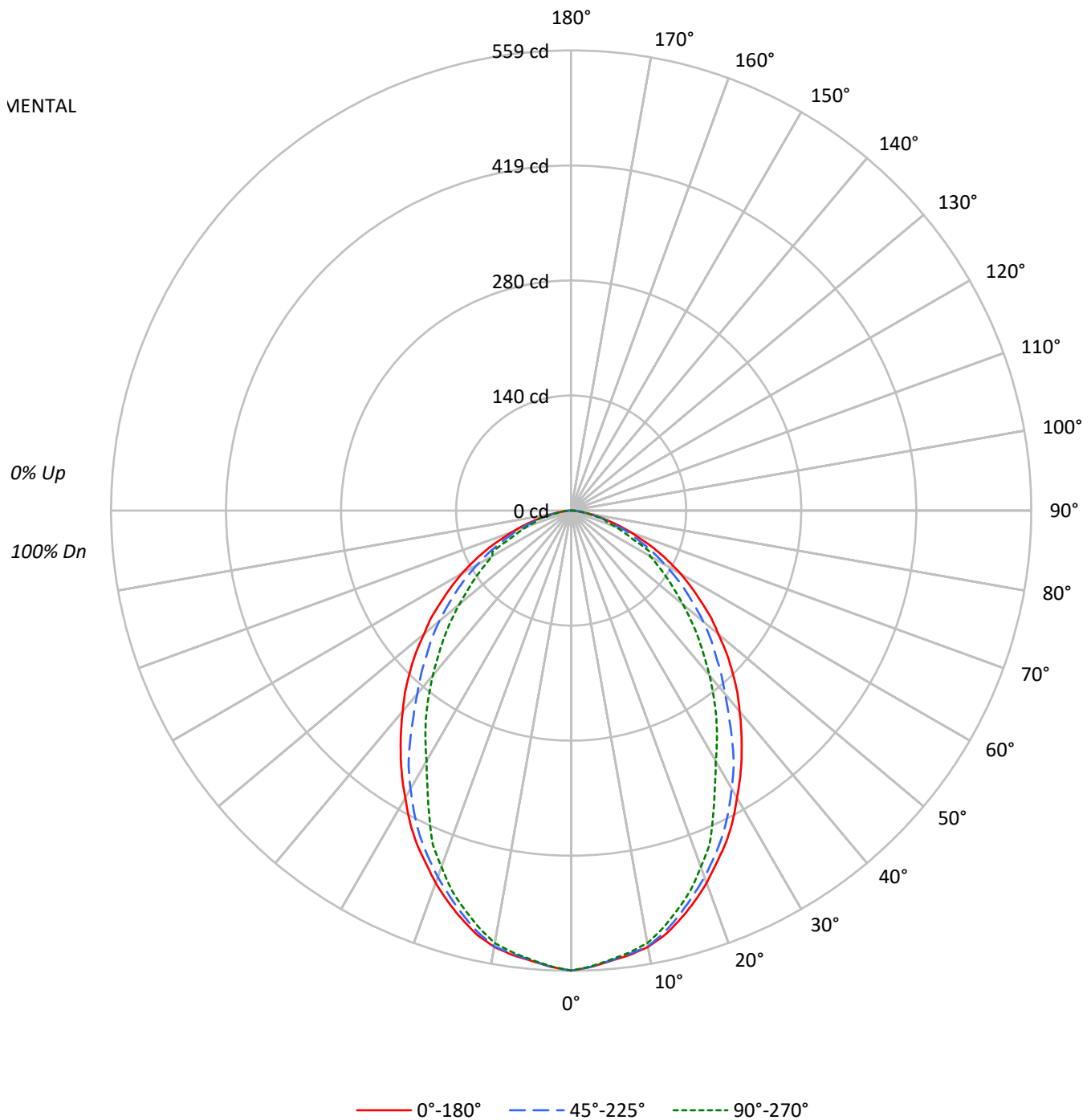
Input Watts (W): 11.7
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P559927

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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°	3007	3007	3007
5°	2967	2963	2959
10°	2941	2937	2916
15°	2862	2833	2793
20°	2757	2712	2638
25°	2643	2586	2425
30°	2505	2425	2184
35°	2372	2241	2020
40°	2238	2042	1838
45°	2109	1888	1662
50°	1953	1752	1482
55°	1806	1589	1328
60°	1654	1419	1189
65°	1456	1242	1053
70°	1199	1087	894
75°	954	834	873
80°	642	601	561
85°	401	482	556

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2109 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.0	4.7
10°-20°	142.8	13.0
20°-30°	197.6	18.0
30°-40°	210.7	19.2
40°-50°	192.3	17.5
50°-60°	150.6	13.7
60°-70°	98.2	8.9
70°-80°	43.5	4.0
80°-90°	9.3	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°	392.4	35.8
0°-40°	603.1	55.0
0°-60°	946.0	86.2
0°-90°	1097.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1097.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	559	559	559	559	559	
5°	549	548	548	548	548	52
15°	514	514	508	503	501	144
25°	445	442	435	420	408	204
35°	361	358	341	315	308	226
45°	277	271	248	227	218	213
55°	192	187	169	149	142	173
65°	114	108	98	100	83	113
75°	46	43	40	38	42	49
85°	6	7	8	8	9	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	558.8	558.8	558.8	558.8	558.8
2.5°	554.9	554.9	554.9	554.3	554.3
5°	549.1	548.5	548.5	547.8	547.8
7.5°	544.6	543.9	543.3	542.6	541.4
10°	538.1	538.1	537.5	534.2	533.6
12.5°	527.8	527.1	524.6	520.0	518.7
15°	513.6	513.6	508.4	503.2	501.3
17.5°	498.1	497.4	491.0	485.8	483.2
20°	481.3	480.0	473.5	465.1	460.6
22.5°	462.5	462.5	454.8	443.8	439.3
25°	445.1	442.5	435.4	419.9	408.3
27.5°	425.1	421.2	413.4	391.5	377.9
30°	403.1	401.2	390.2	361.8	351.4
32.5°	382.4	379.2	367.6	337.9	329.5
35°	361.1	358.5	341.1	315.3	307.5
37.5°	339.8	336.6	314.6	293.9	284.2
40°	318.5	314.6	290.7	272.0	261.6
42.5°	298.5	293.3	270.0	250.0	238.4
45°	277.1	271.3	248.1	227.4	218.4
47.5°	255.8	250.7	229.3	208.0	197.7
50°	233.2	228.7	209.3	188.0	177.0
52.5°	214.5	207.4	188.6	167.3	158.3
55°	192.5	186.7	169.3	149.2	141.5
57.5°	172.5	166.7	150.5	131.8	125.3
60°	153.7	145.4	131.8	115.6	110.5
62.5°	133.1	126.6	115.0	101.4	107.9
65°	114.3	107.9	97.5	99.5	82.7
67.5°	93.7	90.4	81.4	72.4	69.8
70°	76.2	72.4	69.1	59.4	56.8
72.5°	60.7	56.8	52.3	47.2	45.2
75°	45.9	42.6	40.1	38.1	42.0
77.5°	31.7	30.4	28.4	26.5	25.8
80°	20.7	20.0	19.4	18.7	18.1
82.5°	12.3	12.3	12.3	12.3	12.3
85°	6.5	7.1	7.8	8.4	9.0
87.5°	3.9	3.9	4.5	5.2	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)