

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: P559417

Luminaire Tested: FSR-12-1-LD4-2STD-35-UNV-80-88-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559417
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-LD4-2STD-35-UNV-80-88-EDD
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .500 CLEAR PC ENVIRON
SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1329.0 lumens
Efficiency: N/A
Efficacy: 80.1 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

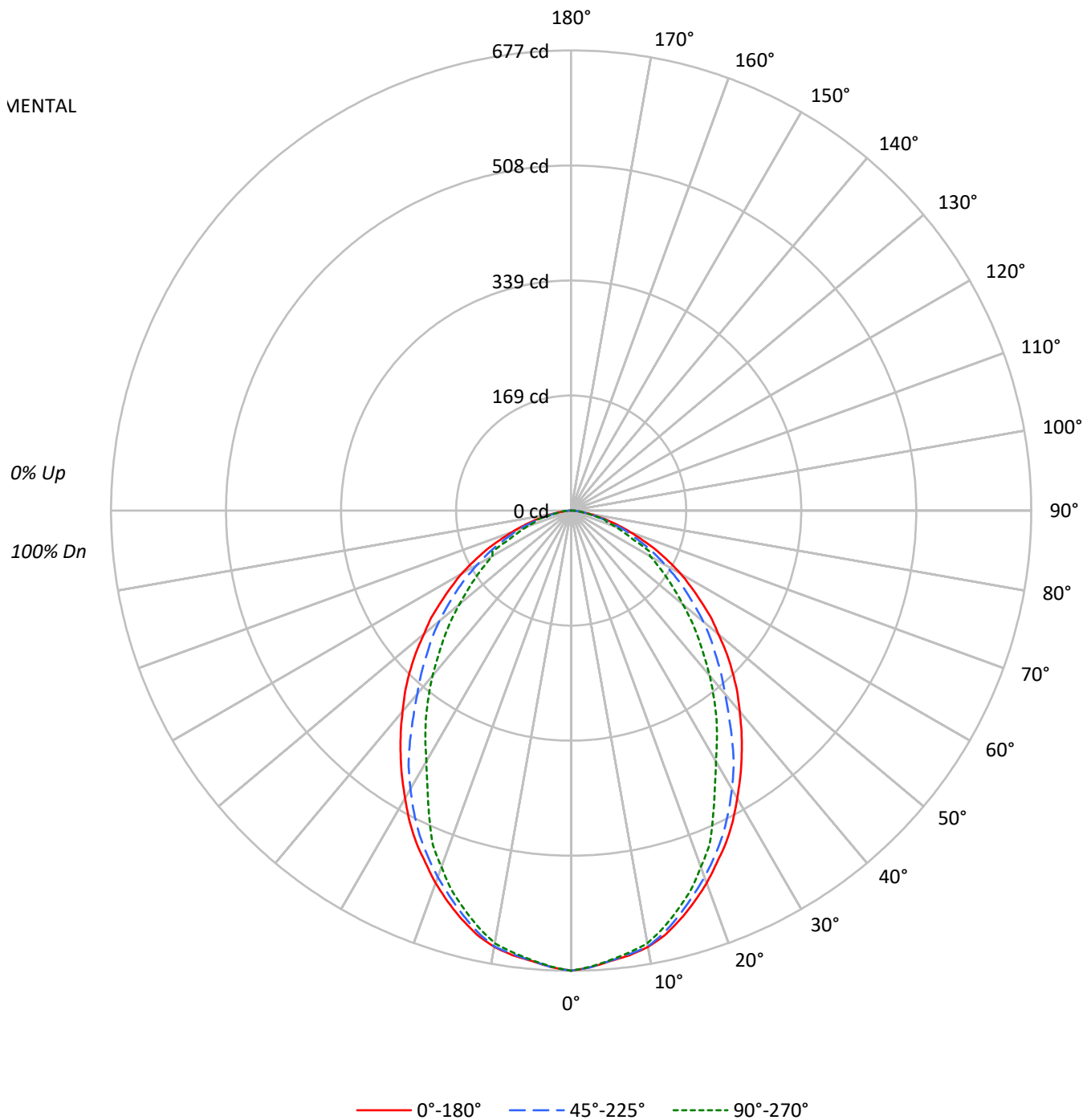
Input Watts (W): 16.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	7287	7287	7287
5°	7188	7180	7171
10°	7125	7117	7066
15°	6934	6863	6768
20°	6679	6572	6392
25°	6404	6265	5874
30°	6070	5875	5292
35°	5749	5430	4895
40°	5421	4949	4454
45°	5110	4574	4026
50°	4731	4247	3590
55°	4376	3847	3217
60°	4011	3438	2880
65°	3528	3011	2552
70°	2908	2634	2168
75°	2312	2017	2117
80°	1550	1457	1358
85°	963	1161	1359

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5110 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.0	4.7
10°-20°	172.9	13.0
20°-30°	239.4	18.0
30°-40°	255.3	19.2
40°-50°	232.9	17.5
50°-60°	182.5	13.7
60°-70°	118.9	8.9
70°-80°	52.7	4.0
80°-90°	11.3	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°	475.4	35.8
0°-40°	730.7	55.0
0°-60°	1146.1	86.2
0°-90°	1329.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1329.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	677	677	677	677	677	
5°	665	664	664	664	664	63
15°	622	622	616	610	607	175
25°	539	536	528	509	495	248
35°	438	434	413	382	372	274
45°	336	329	300	276	264	259
55°	233	226	205	181	171	209
65°	138	131	118	120	100	137
75°	56	52	48	46	51	60
85°	8	9	9	10	11	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	677.0	677.0	677.0	677.0	677.0
2.5°	672.3	672.3	672.3	671.5	671.5
5°	665.2	664.5	664.5	663.7	663.7
7.5°	659.8	659.0	658.2	657.4	655.8
10°	651.9	651.9	651.1	647.2	646.5
12.5°	639.4	638.6	635.5	630.0	628.5
15°	622.2	622.2	615.9	609.7	607.3
17.5°	603.4	602.6	594.8	588.5	585.4
20°	583.1	581.5	573.7	563.5	558.0
22.5°	560.4	560.4	551.0	537.7	532.2
25°	539.2	536.1	527.5	508.7	494.6
27.5°	515.0	510.3	500.9	474.3	457.8
30°	488.4	486.0	472.7	438.3	425.8
32.5°	463.3	459.4	445.3	409.3	399.1
35°	437.5	434.4	413.2	381.9	372.5
37.5°	411.7	407.8	381.1	356.1	344.4
40°	385.8	381.1	352.2	329.5	317.0
42.5°	361.6	355.3	327.1	302.9	288.8
45°	335.7	328.7	300.5	275.5	264.5
47.5°	309.9	303.7	277.8	252.0	239.5
50°	282.5	277.1	253.6	227.7	214.4
52.5°	259.8	251.2	228.5	202.7	191.7
55°	233.2	226.2	205.0	180.8	171.4
57.5°	209.0	201.9	182.4	159.7	151.8
60°	186.3	176.1	159.7	140.1	133.8
62.5°	161.2	153.4	139.3	122.9	130.7
65°	138.5	130.7	118.2	120.5	100.2
67.5°	113.5	109.6	98.6	87.7	84.5
70°	92.4	87.7	83.7	72.0	68.9
72.5°	73.6	68.9	63.4	57.1	54.8
75°	55.6	51.7	48.5	46.2	50.9
77.5°	38.3	36.8	34.4	32.1	31.3
80°	25.0	24.3	23.5	22.7	21.9
82.5°	14.9	14.9	14.9	14.9	14.9
85°	7.8	8.6	9.4	10.2	11.0
87.5°	4.7	4.7	5.5	6.3	7.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)