

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: P560118

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

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560118
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-LD4-1STD-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: 1278.0 lumens
Efficiency: N/A
Efficacy: 77.0 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

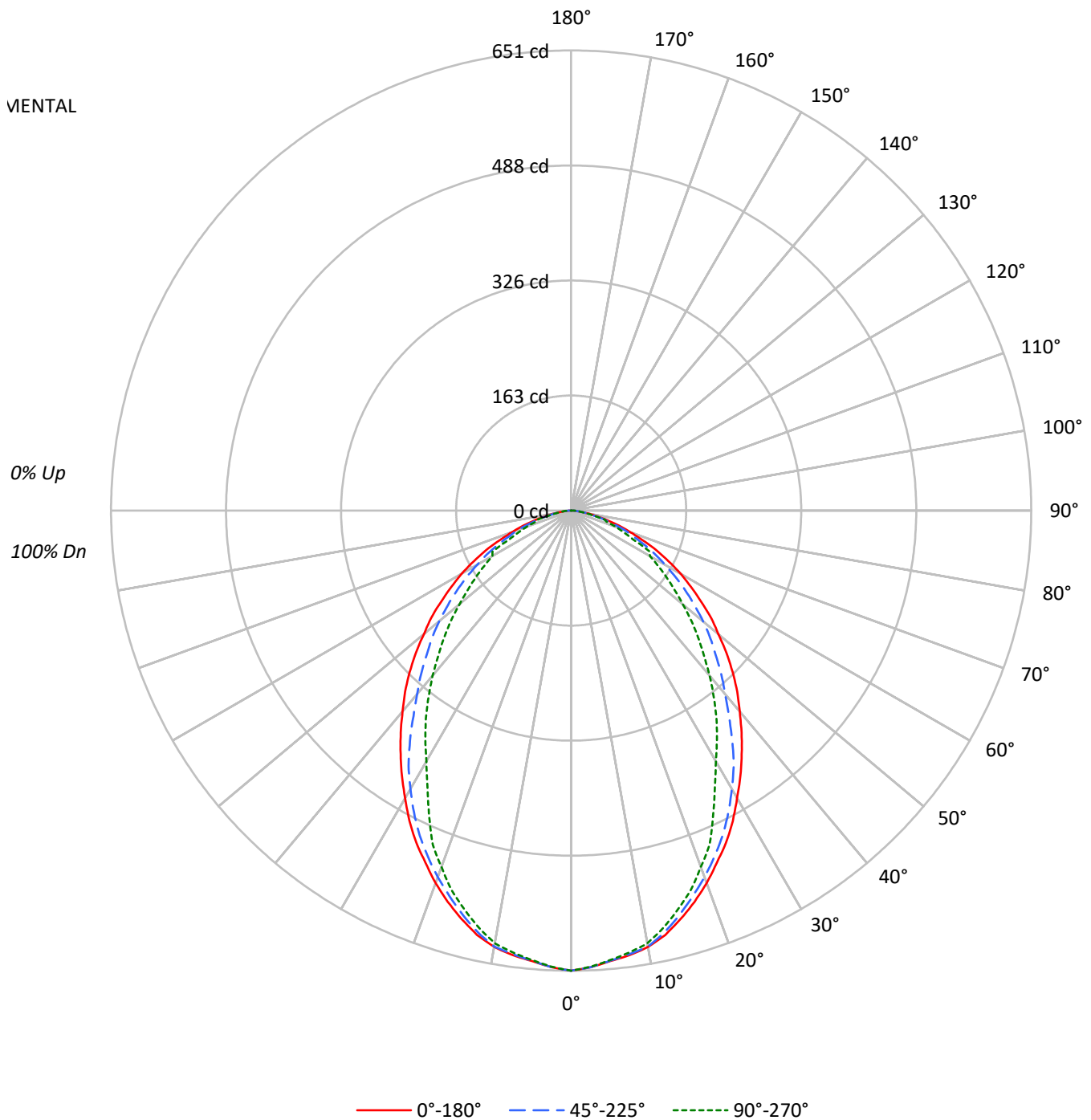
Input Watts (W): 16.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	3504	3504	3504
5°	3456	3452	3448
10°	3426	3422	3397
15°	3334	3300	3254
20°	3211	3160	3073
25°	3079	3013	2824
30°	2918	2825	2544
35°	2764	2611	2353
40°	2607	2380	2141
45°	2458	2200	1936
50°	2275	2041	1726
55°	2105	1850	1546
60°	1928	1652	1385
65°	1696	1447	1226
70°	1397	1267	1042
75°	1110	971	1017
80°	747	700	654
85°	463	556	648

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2458 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.6	4.7
10°-20°	166.3	13.0
20°-30°	230.2	18.0
30°-40°	245.5	19.2
40°-50°	224.0	17.5
50°-60°	175.5	13.7
60°-70°	114.4	8.9
70°-80°	50.7	4.0
80°-90°	10.9	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°	457.2	35.8
0°-40°	702.7	55.0
0°-60°	1102.1	86.2
0°-90°	1278.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1278.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	651	651	651	651	651	
5°	640	639	639	638	638	61
15°	598	598	592	586	584	168
25°	518	516	507	489	476	238
35°	421	418	397	367	358	263
45°	323	316	289	265	254	249
55°	224	218	197	174	165	201
65°	133	126	114	116	96	131
75°	53	50	47	44	49	57
85°	8	8	9	10	10	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	651.0	651.0	651.0	651.0	651.0
2.5°	646.5	646.5	646.5	645.7	645.7
5°	639.7	639.0	639.0	638.2	638.2
7.5°	634.4	633.7	632.9	632.2	630.7
10°	626.9	626.9	626.2	622.4	621.6
12.5°	614.9	614.1	611.1	605.8	604.3
15°	598.3	598.3	592.3	586.3	584.0
17.5°	580.3	579.5	572.0	566.0	562.9
20°	560.7	559.2	551.7	541.9	536.6
22.5°	538.9	538.9	529.8	517.0	511.8
25°	518.5	515.5	507.3	489.2	475.6
27.5°	495.2	490.7	481.7	456.1	440.3
30°	469.6	467.4	454.6	421.5	409.4
32.5°	445.5	441.8	428.2	393.6	383.8
35°	420.7	417.7	397.4	367.3	358.2
37.5°	395.9	392.1	366.5	342.4	331.1
40°	371.0	366.5	338.7	316.8	304.8
42.5°	347.7	341.7	314.6	291.3	277.7
45°	322.9	316.1	289.0	264.9	254.4
47.5°	298.0	292.0	267.2	242.3	230.3
50°	271.7	266.4	243.8	219.0	206.2
52.5°	249.9	241.6	219.8	194.9	184.4
55°	224.3	217.5	197.2	173.8	164.8
57.5°	200.9	194.2	175.4	153.5	146.0
60°	179.1	169.3	153.5	134.7	128.7
62.5°	155.0	147.5	134.0	118.2	125.7
65°	133.2	125.7	113.6	115.9	96.3
67.5°	109.1	105.4	94.8	84.3	81.3
70°	88.8	84.3	80.5	69.2	66.2
72.5°	70.7	66.2	61.0	54.9	52.7
75°	53.4	49.7	46.7	44.4	48.9
77.5°	36.9	35.4	33.1	30.9	30.1
80°	24.1	23.3	22.6	21.8	21.1
82.5°	14.3	14.3	14.3	14.3	14.3
85°	7.5	8.3	9.0	9.8	10.5
87.5°	4.5	4.5	5.3	6.0	6.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)