

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: P559347

Luminaire Tested: FSR-12-1-LD4-2LO-50-UNV-80-85-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559347
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-LD4-2LO-50-UNV-80-85-EDD
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRON
SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

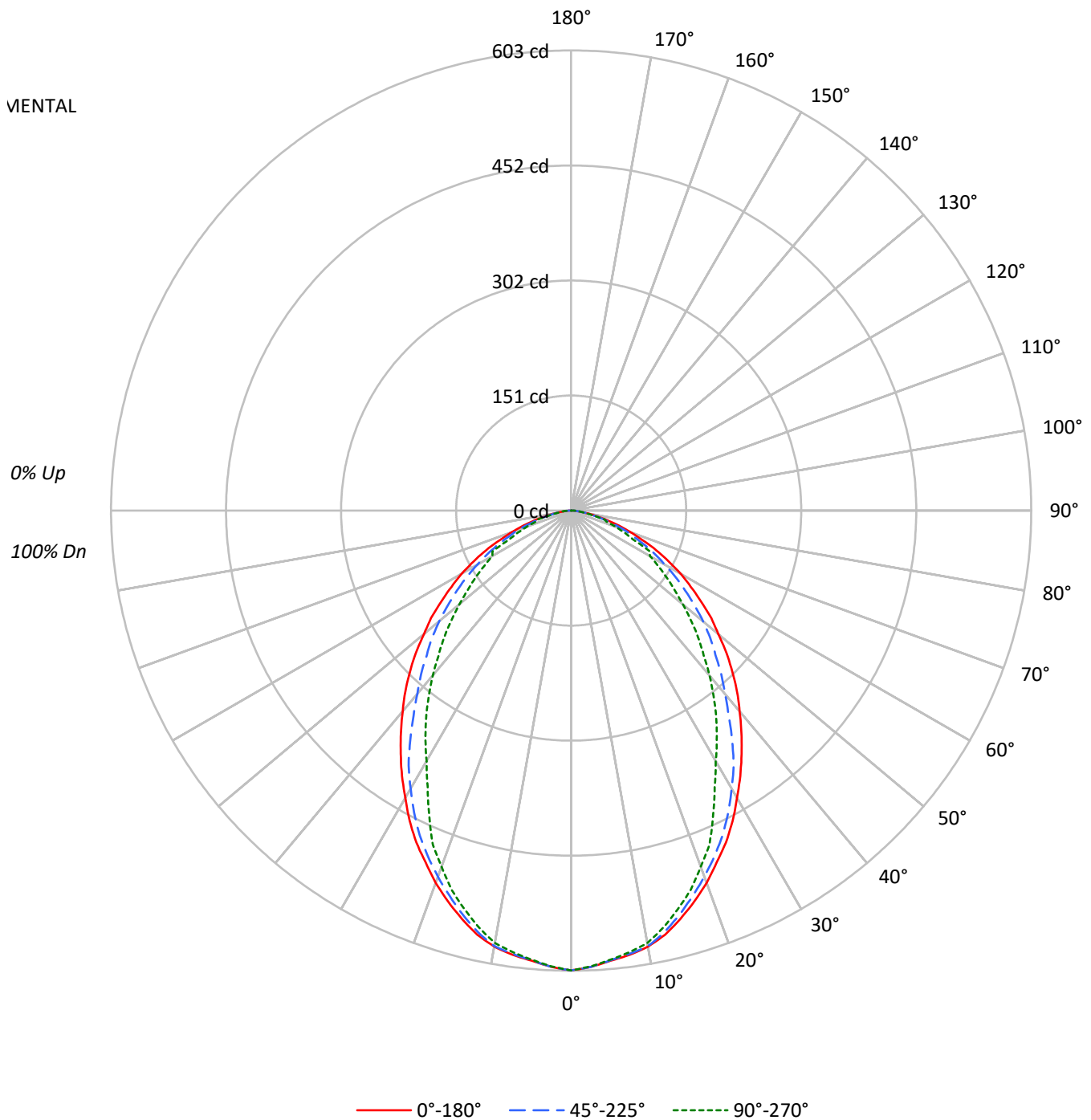
Lumens per Lamp: N/A
Luminaire Lumens: 1183.0 lumens
Efficiency: N/A
Efficacy: 101.1 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 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				
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°	6486	6486	6486
5°	6399	6391	6384
10°	6343	6335	6289
15°	6171	6110	6024
20°	5945	5849	5690
25°	5701	5576	5229
30°	5403	5230	4711
35°	5117	4833	4357
40°	4825	4405	3964
45°	4550	4072	3585
50°	4212	3779	3197
55°	3896	3425	2864
60°	3569	3059	2564
65°	3140	2679	2272
70°	2587	2345	1929
75°	2059	1797	1884
80°	1382	1296	1209
85°	865	1037	1210

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4550 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.1	4.7
10°-20°	153.9	13.0
20°-30°	213.1	18.0
30°-40°	227.3	19.2
40°-50°	207.3	17.5
50°-60°	162.4	13.7
60°-70°	105.8	8.9
70°-80°	46.9	4.0
80°-90°	10.1	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°	423.2	35.8
0°-40°	650.4	55.0
0°-60°	1020.2	86.2
0°-90°	1183.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1183.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	603	603	603	603	603	
5°	592	592	592	591	591	56
15°	554	554	548	543	541	156
25°	480	477	470	453	440	220
35°	389	387	368	340	332	243
45°	299	293	268	245	236	230
55°	208	201	182	161	153	186
65°	123	116	105	107	89	122
75°	50	46	43	41	45	53
85°	7	8	8	9	10	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	602.6	602.6	602.6	602.6	602.6
2.5°	598.4	598.4	598.4	597.7	597.7
5°	592.2	591.5	591.5	590.8	590.8
7.5°	587.3	586.6	585.9	585.2	583.8
10°	580.3	580.3	579.6	576.1	575.4
12.5°	569.2	568.5	565.7	560.8	559.4
15°	553.8	553.8	548.3	542.7	540.6
17.5°	537.1	536.4	529.5	523.9	521.1
20°	519.0	517.6	510.6	501.6	496.7
22.5°	498.8	498.8	490.4	478.6	473.7
25°	480.0	477.2	469.5	452.8	440.3
27.5°	458.4	454.2	445.9	422.2	407.5
30°	434.7	432.6	420.8	390.1	379.0
32.5°	412.4	408.9	396.4	364.3	355.3
35°	389.4	386.6	367.8	340.0	331.6
37.5°	366.4	363.0	339.3	317.0	306.5
40°	343.4	339.3	313.5	293.3	282.1
42.5°	321.9	316.3	291.2	269.6	257.1
45°	298.9	292.6	267.5	245.2	235.5
47.5°	275.9	270.3	247.3	224.3	213.2
50°	251.5	246.6	225.7	202.7	190.9
52.5°	231.3	223.6	203.4	180.4	170.7
55°	207.6	201.3	182.5	160.9	152.6
57.5°	186.0	179.7	162.3	142.1	135.2
60°	165.8	156.7	142.1	124.7	119.1
62.5°	143.5	136.5	124.0	109.4	116.3
65°	123.3	116.3	105.2	107.3	89.2
67.5°	101.0	97.5	87.8	78.0	75.2
70°	82.2	78.0	74.5	64.1	61.3
72.5°	65.5	61.3	56.4	50.9	48.8
75°	49.5	46.0	43.2	41.1	45.3
77.5°	34.1	32.7	30.7	28.6	27.9
80°	22.3	21.6	20.9	20.2	19.5
82.5°	13.2	13.2	13.2	13.2	13.2
85°	7.0	7.7	8.4	9.1	9.8
87.5°	4.2	4.2	4.9	5.6	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)