

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: P560370

Luminaire Tested: FSR-12-2-LD4-2LO-35-UNV-80-85-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560370
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-LD4-2LO-35-UNV-80-85-EDD-90
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRON
SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1867.9 lumens
Efficiency: N/A
Efficacy: 79.8 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

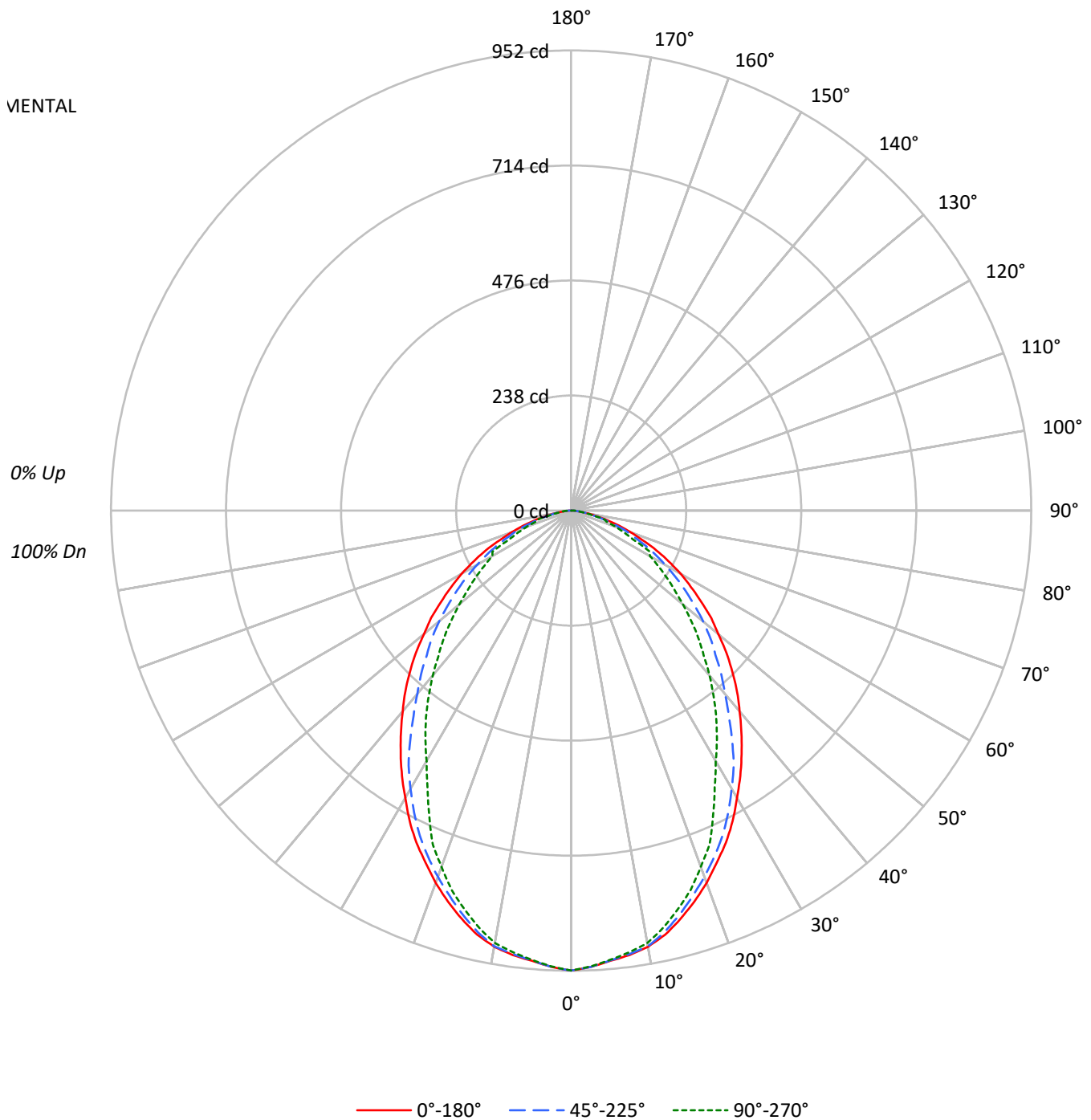
Input Watts (W): 23.4
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	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°	5121	5121	5121
5°	5051	5045	5039
10°	5008	5002	4965
15°	4873	4824	4756
20°	4694	4618	4492
25°	4501	4403	4128
30°	4266	4129	3719
35°	4040	3816	3440
40°	3810	3478	3130
45°	3592	3215	2830
50°	3325	2984	2524
55°	3076	2704	2260
60°	2818	2415	2025
65°	2479	2115	1793
70°	2043	1852	1523
75°	1624	1418	1487
80°	1091	1023	955
85°	679	815	951

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3592 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.6	4.7
10°-20°	243.1	13.0
20°-30°	336.5	18.0
30°-40°	358.8	19.2
40°-50°	327.4	17.5
50°-60°	256.5	13.7
60°-70°	167.1	8.9
70°-80°	74.1	4.0
80°-90°	15.9	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°	668.2	35.8
0°-40°	1027.0	55.0
0°-60°	1610.8	86.2
0°-90°	1867.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1867.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	952	952	952	952	952	
5°	935	934	934	933	933	89
15°	874	874	866	857	854	246
25°	758	754	741	715	695	348
35°	615	610	581	537	524	384
45°	472	462	422	387	372	364
55°	328	318	288	254	241	294
65°	195	184	166	169	141	192
75°	78	73	68	65	72	84
85°	11	12	13	14	15	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	951.5	951.5	951.5	951.5	951.5
2.5°	944.9	944.9	944.9	943.8	943.8
5°	935.0	933.9	933.9	932.8	932.8
7.5°	927.3	926.2	925.1	924.0	921.8
10°	916.3	916.3	915.2	909.7	908.6
12.5°	898.7	897.6	893.2	885.5	883.3
15°	874.5	874.5	865.7	856.9	853.6
17.5°	848.1	847.0	836.0	827.2	822.8
20°	819.5	817.3	806.3	792.0	784.3
22.5°	787.6	787.6	774.4	755.7	748.0
25°	757.9	753.5	741.4	715.0	695.2
27.5°	723.8	717.2	704.0	666.6	643.5
30°	686.4	683.1	664.4	616.0	598.4
32.5°	651.2	645.7	625.9	575.3	561.0
35°	614.9	610.5	580.8	536.8	523.6
37.5°	578.6	573.1	535.7	500.5	484.0
40°	542.3	535.7	495.0	463.1	445.5
42.5°	508.2	499.4	459.8	425.7	405.9
45°	471.9	462.0	422.4	387.2	371.8
47.5°	435.6	426.8	390.5	354.2	336.6
50°	397.1	389.4	356.4	320.1	301.4
52.5°	365.2	353.1	321.2	284.9	269.5
55°	327.8	317.9	288.2	254.1	240.9
57.5°	293.7	283.8	256.3	224.4	213.4
60°	261.8	247.5	224.4	196.9	188.1
62.5°	226.6	215.6	195.8	172.7	183.7
65°	194.7	183.7	166.1	169.4	140.8
67.5°	159.5	154.0	138.6	123.2	118.8
70°	129.8	123.2	117.7	101.2	96.8
72.5°	103.4	96.8	89.1	80.3	77.0
75°	78.1	72.6	68.2	64.9	71.5
77.5°	53.9	51.7	48.4	45.1	44.0
80°	35.2	34.1	33.0	31.9	30.8
82.5°	20.9	20.9	20.9	20.9	20.9
85°	11.0	12.1	13.2	14.3	15.4
87.5°	6.6	6.6	7.7	8.8	9.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)