

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: P560391

Luminaire Tested: FSR-12-2-LD4-2LO-35-UNV-81-87-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560391
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-81-87-EDD
Description: 1X2 FSR TROFFER WITH .156 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2029.0 lumens
Efficiency: N/A
Efficacy: 86.7 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

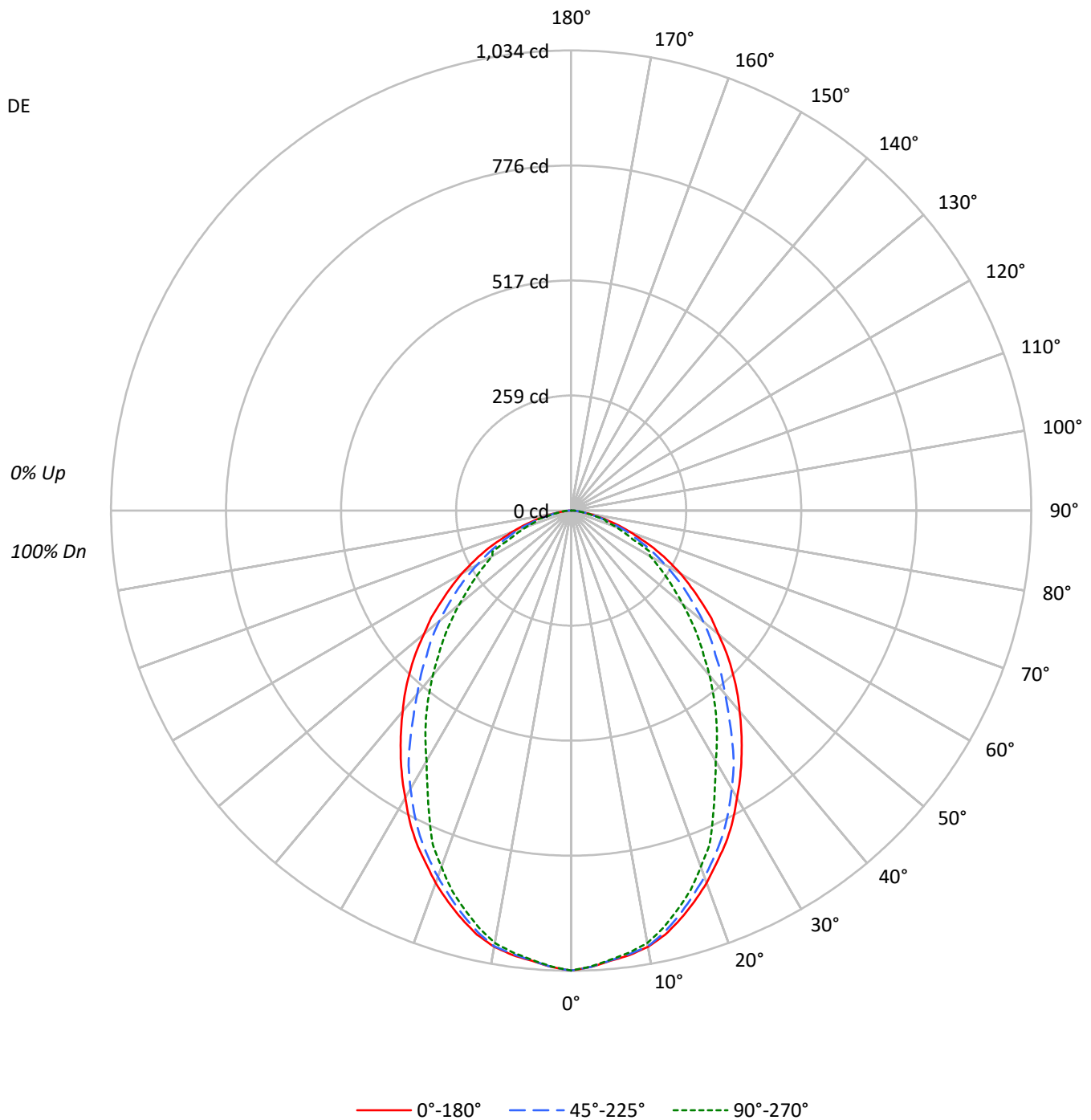
Input Watts (W): 23.4
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	108	104	100	97	100	97	94	96	94	91	92	90	89
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47	56	50	46
7	69	56	48	43	67	56	48	42	54	47	42	53	46	42	51	46	42
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38
9	61	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5562	5562	5562
5°	5487	5480	5474
10°	5439	5433	5393
15°	5293	5239	5166
20°	5098	5016	4879
25°	4889	4782	4484
30°	4634	4485	4039
35°	4388	4145	3736
40°	4139	3778	3400
45°	3902	3492	3074
50°	3611	3241	2741
55°	3341	2938	2456
60°	3061	2623	2199
65°	2693	2297	1947
70°	2219	2011	1654
75°	1763	1541	1616
80°	1184	1110	1038
85°	735	883	1031

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3902 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.2	4.7
10°-20°	264.0	13.0
20°-30°	365.5	18.0
30°-40°	389.8	19.2
40°-50°	355.6	17.5
50°-60°	278.6	13.7
60°-70°	181.6	8.9
70°-80°	80.4	4.0
80°-90°	17.3	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°	725.8	35.8
0°-40°	1115.6	55.0
0°-60°	1749.7	86.2
0°-90°	2029.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2029.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1034	1034	1034	1034	1034	
5°	1016	1014	1014	1013	1013	96
15°	950	950	940	931	927	267
25°	823	818	805	777	755	378
35°	668	663	631	583	569	418
45°	513	502	459	421	404	395
55°	356	345	313	276	262	319
65°	212	200	180	184	153	208
75°	85	79	74	70	78	91
85°	12	13	14	16	17	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1033.5	1033.5	1033.5	1033.5	1033.5
2.5°	1026.4	1026.4	1026.4	1025.2	1025.2
5°	1015.6	1014.4	1014.4	1013.2	1013.2
7.5°	1007.3	1006.1	1004.9	1003.7	1001.3
10°	995.3	995.3	994.1	988.1	986.9
12.5°	976.2	975.0	970.2	961.9	959.5
15°	949.9	949.9	940.3	930.8	927.2
17.5°	921.2	920.0	908.1	898.5	893.7
20°	890.2	887.8	875.8	860.3	851.9
22.5°	855.5	855.5	841.2	820.9	812.5
25°	823.3	818.5	805.3	776.7	755.1
27.5°	786.2	779.0	764.7	724.1	699.0
30°	745.6	742.0	721.7	669.1	650.0
32.5°	707.4	701.4	679.9	624.9	609.4
35°	667.9	663.1	630.9	583.1	568.7
37.5°	628.5	622.5	581.9	543.7	525.7
40°	589.1	581.9	537.7	503.0	483.9
42.5°	552.0	542.5	499.4	462.4	440.9
45°	512.6	501.8	458.8	420.6	403.9
47.5°	473.2	463.6	424.2	384.7	365.6
50°	431.3	423.0	387.1	347.7	327.4
52.5°	396.7	383.5	348.9	309.5	292.7
55°	356.1	345.3	313.1	276.0	261.7
57.5°	319.0	308.3	278.4	243.7	231.8
60°	284.4	268.8	243.7	213.9	204.3
62.5°	246.1	234.2	212.7	187.6	199.5
65°	211.5	199.5	180.4	184.0	152.9
67.5°	173.3	167.3	150.6	133.8	129.0
70°	141.0	133.8	127.8	109.9	105.1
72.5°	112.3	105.1	96.8	87.2	83.6
75°	84.8	78.9	74.1	70.5	77.7
77.5°	58.5	56.2	52.6	49.0	47.8
80°	38.2	37.0	35.8	34.7	33.5
82.5°	22.7	22.7	22.7	22.7	22.7
85°	11.9	13.1	14.3	15.5	16.7
87.5°	7.2	7.2	8.4	9.6	10.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)