

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: P590876

Luminaire Tested: FSR-24-2-LD4-4LO-50-UNV-80-97-EDD

Issue Date: 12/8/2021

Test Information

Test Method: LM-79-2019
Report Number: P590876
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-135-1)
Test Lab: INNOVATION CENTER
Issue Date: 12/8/2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FSR-24-2-LD4-4LO-50-UNV-80-97-EDD
Description: 2X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR TEMPERED G ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5721.0 lumens
Efficiency: N/A
Efficacy: 122.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

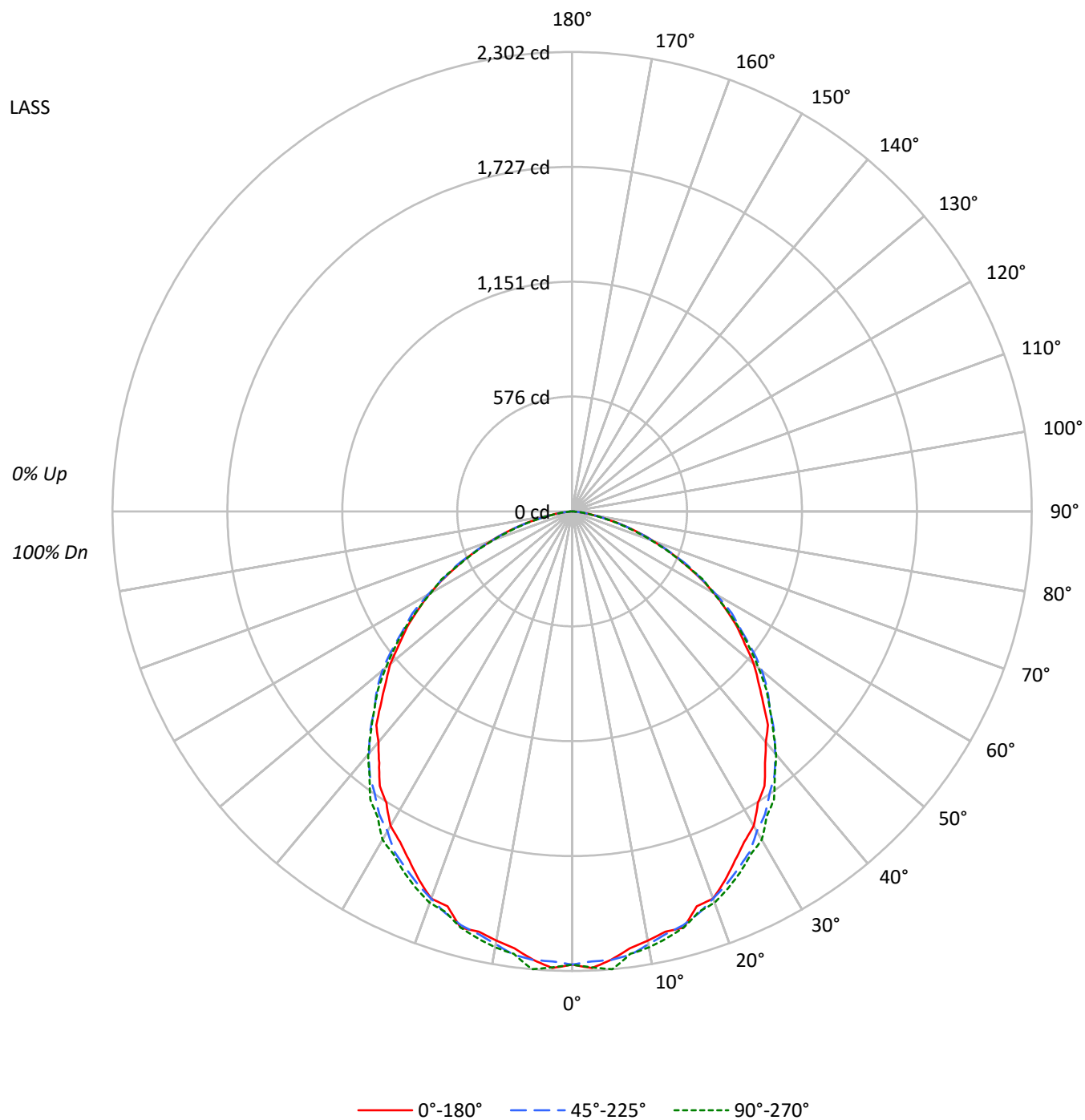
Input Watts (W): 46.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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					0
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	105	101	98	107	103	100	96		99	96	93		95	93	90		91	90	88
2	100	93	86	81	98	91	85	80		87	82	78		84	80	76		81	78	75
3	92	82	74	68	89	80	73	67		77	71	66		75	69	65		72	68	64
4	84	73	64	58	82	71	64	58		69	62	57		67	61	56		65	59	55
5	78	65	57	50	76	64	56	50		62	55	49		60	54	49		58	53	48
6	72	59	50	44	70	58	50	44		56	49	43		54	48	43		53	47	43
7	67	53	45	39	65	53	45	39		51	44	39		50	43	38		48	42	38
8	62	49	41	35	61	48	40	35		47	40	34		46	39	34		44	39	34
9	58	45	37	31	57	44	37	31		43	36	31		42	36	31		41	35	31
10	54	41	34	29	53	41	33	28		40	33	28		39	33	28		38	32	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6108	6108	6108
5°	6088	6091	6219
10°	5965	6017	6059
15°	6012	5979	6013
20°	5910	5910	5973
25°	5729	5854	5918
30°	5650	5749	5902
35°	5517	5661	5788
40°	5302	5558	5582
45°	5142	5325	5332
50°	4973	5197	5098
55°	4738	4830	4796
60°	4431	4475	4394
65°	3951	4052	3923
70°	3389	3401	3307
75°	2685	2678	2575
80°	1799	1748	1680
85°	979	969	905

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°

Vertical Angle: 45°

Luminance: 5462 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	213.5	3.7
10°-20°	605.2	10.6
20°-30°	906.6	15.8
30°-40°	1074.5	18.8
40°-50°	1076.5	18.8
50°-60°	913.8	16.0
60°-70°	616.1	10.8
70°-80°	270.7	4.7
80°-90°	44.0	0.8
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°	1725.3	30.2
0°-40°	2799.9	48.9
0°-60°	4790.2	83.7
0°-90°	5721.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5721.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2270	2270	2270	2270	2270	
5°	2254	2249	2255	2248	2302	212
15°	2158	2133	2146	2157	2158	601
25°	1929	1940	1972	1997	1993	892
35°	1679	1684	1723	1763	1762	1043
45°	1351	1376	1399	1435	1401	1045
55°	1010	1003	1030	1023	1022	898
65°	620	612	636	612	616	617
75°	258	253	258	240	248	277
85°	32	31	31	30	29	46
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2269.9	2269.9	2269.9	2269.9	2269.9
2.5°	2289.6	2272.3	2256.2	2274.9	2286.4
5°	2253.8	2248.6	2254.7	2248.0	2302.2
7.5°	2207.5	2227.7	2239.5	2232.1	2235.4
10°	2182.9	2175.9	2202.0	2220.1	2217.5
12.5°	2156.5	2167.1	2168.5	2188.2	2189.9
15°	2158.0	2133.1	2146.3	2157.4	2158.3
17.5°	2074.2	2101.1	2110.2	2135.7	2104.1
20°	2063.9	2044.3	2063.9	2090.0	2085.9
22.5°	2000.9	1978.9	2021.1	2044.3	2042.8
25°	1929.4	1939.9	1971.6	1997.4	1993.3
27.5°	1866.7	1879.0	1924.1	1959.6	1936.7
30°	1818.3	1812.1	1850.2	1881.9	1899.5
32.5°	1731.8	1754.1	1798.7	1830.0	1813.3
35°	1679.4	1684.4	1723.3	1763.2	1762.0
37.5°	1587.6	1610.8	1665.6	1676.7	1666.5
40°	1509.4	1532.5	1582.1	1594.1	1589.1
42.5°	1451.7	1455.8	1498.3	1512.0	1490.0
45°	1351.1	1376.3	1399.2	1435.2	1401.2
47.5°	1265.5	1277.3	1326.5	1336.2	1318.3
50°	1187.9	1192.0	1241.5	1229.5	1217.8
52.5°	1090.3	1107.6	1135.4	1133.1	1119.3
55°	1010.0	1003.2	1029.6	1022.6	1022.3
57.5°	913.5	925.3	947.0	935.8	917.9
60°	823.3	823.6	831.5	818.9	816.5
62.5°	722.7	726.3	728.0	712.5	737.7
65°	620.5	612.3	636.3	612.0	616.1
67.5°	526.4	530.5	528.1	512.9	518.8
70°	430.8	436.1	432.3	415.0	420.3
72.5°	343.5	337.0	341.2	319.5	329.4
75°	258.2	252.9	257.6	239.5	247.7
77.5°	175.9	180.0	177.0	167.4	172.9
80°	116.1	112.8	112.8	107.3	108.4
82.5°	67.7	64.5	63.6	61.8	64.5
85°	31.7	30.8	31.4	30.5	29.3
87.5°	11.4	11.7	11.7	11.1	10.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)