

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: P562673

Luminaire Tested: FSR-24-4-LD4-2LO-35-UNV-80-84-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P562673
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-24-4-LD4-2LO-35-UNV-80-84-EDD
Description: 2X4 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRON
SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5828.0 lumens
Efficiency: N/A
Efficacy: 124.5 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

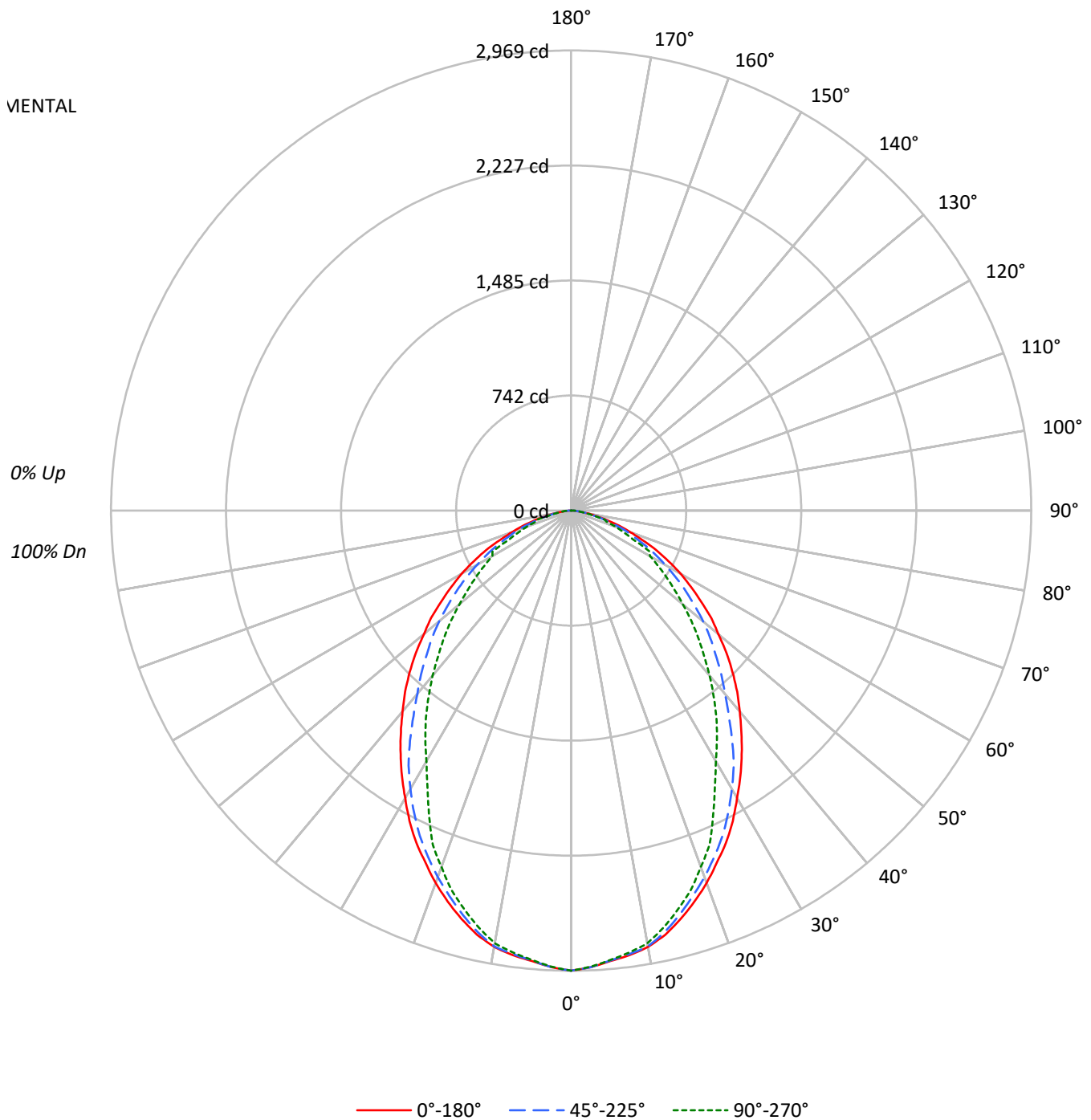
Input Watts (W): 46.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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				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°	3994	3994	3994
5°	3940	3935	3931
10°	3906	3901	3873
15°	3801	3762	3710
20°	3661	3602	3504
25°	3511	3434	3220
30°	3327	3221	2901
35°	3151	2976	2683
40°	2972	2713	2441
45°	2802	2508	2207
50°	2593	2328	1968
55°	2399	2109	1763
60°	2198	1884	1579
65°	1934	1650	1399
70°	1593	1445	1188
75°	1267	1106	1160
80°	851	798	745
85°	530	636	741

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2802 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	276.3	4.7
10°-20°	758.4	13.0
20°-30°	1050.0	18.0
30°-40°	1119.6	19.2
40°-50°	1021.4	17.5
50°-60°	800.2	13.7
60°-70°	521.5	8.9
70°-80°	231.0	4.0
80°-90°	49.6	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°	2084.7	35.8
0°-40°	3204.3	55.0
0°-60°	5025.8	86.2
0°-90°	5828.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5828.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2969	2969	2969	2969	2969	
5°	2917	2914	2914	2910	2910	277
15°	2728	2728	2701	2674	2663	767
25°	2365	2351	2313	2231	2169	1086
35°	1918	1905	1812	1675	1634	1199
45°	1472	1442	1318	1208	1160	1134
55°	1023	992	899	793	752	917
65°	608	573	518	528	439	599
75°	244	226	213	202	223	261
85°	34	38	41	45	48	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2968.7	2968.7	2968.7	2968.7	2968.7
2.5°	2948.1	2948.1	2948.1	2944.7	2944.7
5°	2917.2	2913.8	2913.8	2910.4	2910.4
7.5°	2893.2	2889.8	2886.3	2882.9	2876.0
10°	2858.9	2858.9	2855.4	2838.3	2834.9
12.5°	2804.0	2800.5	2786.8	2762.8	2755.9
15°	2728.5	2728.5	2701.0	2673.6	2663.3
17.5°	2646.1	2642.7	2608.3	2580.9	2567.2
20°	2556.9	2550.0	2515.7	2471.1	2447.0
22.5°	2457.3	2457.3	2416.1	2357.8	2333.8
25°	2364.7	2350.9	2313.2	2230.8	2169.0
27.5°	2258.3	2237.7	2196.5	2079.8	2007.7
30°	2141.6	2131.3	2072.9	1921.9	1867.0
32.5°	2031.8	2014.6	1952.8	1795.0	1750.3
35°	1918.5	1904.8	1812.1	1674.8	1633.6
37.5°	1805.2	1788.1	1671.4	1561.6	1510.1
40°	1692.0	1671.4	1544.4	1444.9	1390.0
42.5°	1585.6	1558.1	1434.6	1328.2	1266.4
45°	1472.3	1441.5	1317.9	1208.1	1160.0
47.5°	1359.1	1331.6	1218.4	1105.1	1050.2
50°	1239.0	1214.9	1112.0	998.7	940.4
52.5°	1139.4	1101.7	1002.2	888.9	840.8
55°	1022.7	991.9	899.2	792.8	751.6
57.5°	916.4	885.5	799.7	700.1	665.8
60°	816.8	772.2	700.1	614.3	586.9
62.5°	707.0	672.7	610.9	538.8	573.1
65°	607.5	573.1	518.2	528.5	439.3
67.5°	497.6	480.5	432.4	384.4	370.7
70°	405.0	384.4	367.2	315.7	302.0
72.5°	322.6	302.0	278.0	250.5	240.2
75°	243.7	226.5	212.8	202.5	223.1
77.5°	168.2	161.3	151.0	140.7	137.3
80°	109.8	106.4	103.0	99.5	96.1
82.5°	65.2	65.2	65.2	65.2	65.2
85°	34.3	37.8	41.2	44.6	48.0
87.5°	20.6	20.6	24.0	27.5	30.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)