

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: P590805

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

Issue Date: 12/8/2021

Test Information

Test Method: LM-79-2019
Report Number: P590805
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-35-UNV-80-84-EDD
Description: 2X2 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): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

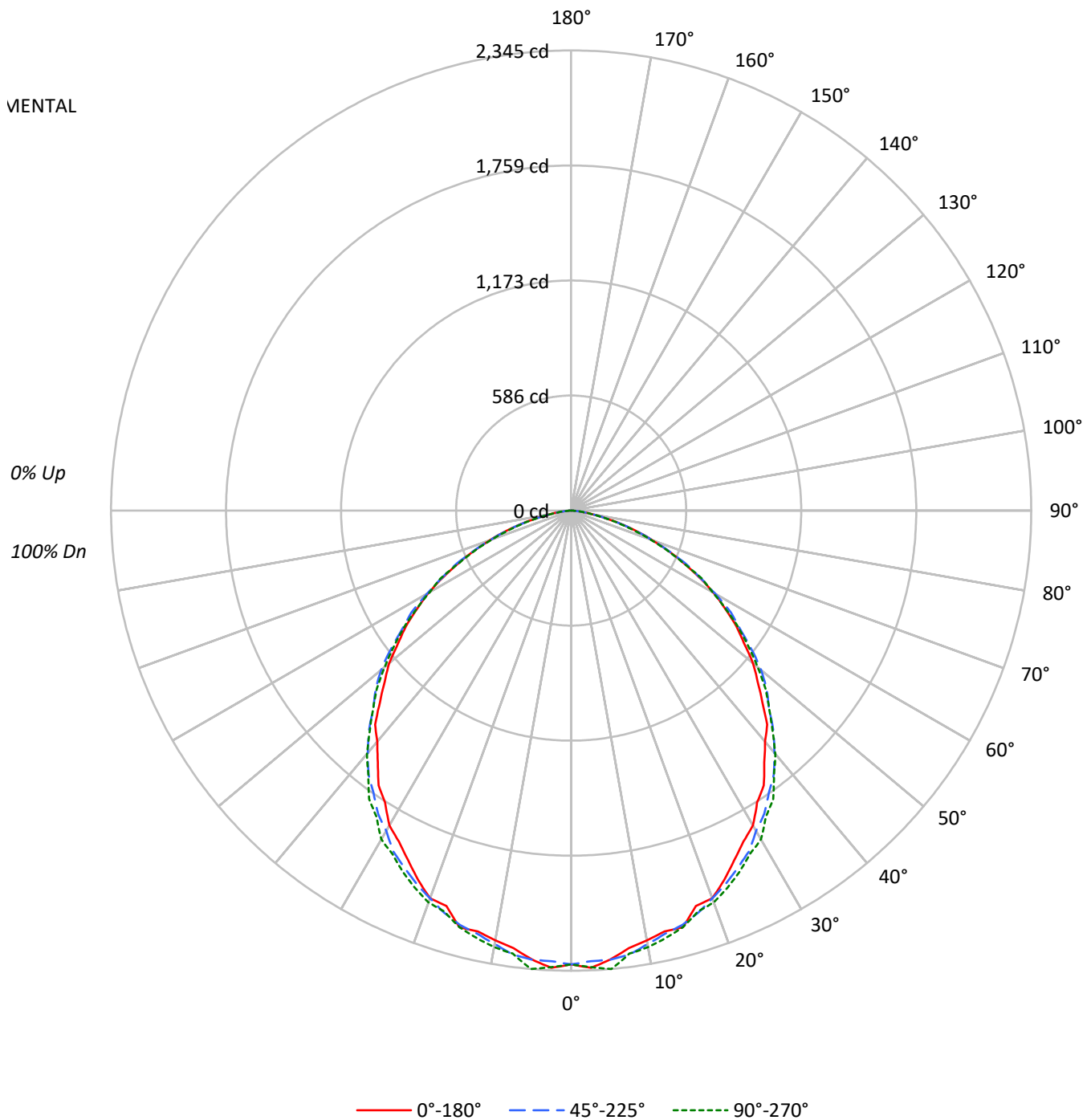
Input Watts (W): 46.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P590805

CATALOG NUMBER: FSR-24-2-LD4-4LO-35-UNV-80-84-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P590805

CATALOG NUMBER: FSR-24-2-LD4-4LO-35-UNV-80-84-EDD

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	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88					86				
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75					73				
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64					62				
4	84	73	64	58	82	71	64	58	69	62	57	67	61	56	65	59	55					53				
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48					46				
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43					41				
7	67	53	45	39	65	53	45	39	51	44	39	50	43	38	48	42	38					36				
8	62	49	41	35	61	48	40	35	47	40	34	46	39	34	44	39	34					32				
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31					29				
10	54	41	34	29	53	41	33	28	40	33	28	39	33	28	38	32	28					26				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6223	6223	6223
5°	6202	6205	6335
10°	6076	6129	6173
15°	6125	6091	6125
20°	6021	6021	6085
25°	5836	5964	6029
30°	5756	5857	6013
35°	5620	5767	5897
40°	5401	5662	5687
45°	5238	5425	5432
50°	5066	5295	5193
55°	4827	4921	4886
60°	4514	4559	4477
65°	4025	4127	3996
70°	3453	3465	3368
75°	2734	2728	2623
80°	1832	1781	1712
85°	994	985	923

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 5564 cd/sqm



TEST NUMBER: P590805

CATALOG NUMBER: FSR-24-2-LD4-4LO-35-UNV-80-84-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.5	3.7
10°-20°	616.5	10.6
20°-30°	923.6	15.8
30°-40°	1094.7	18.8
40°-50°	1096.7	18.8
50°-60°	930.9	16.0
60°-70°	627.6	10.8
70°-80°	275.8	4.7
80°-90°	44.8	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°	1757.6	30.2
0°-40°	2852.2	48.9
0°-60°	4879.8	83.7
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°	2312	2312	2312	2312	2312	
5°	2296	2291	2297	2290	2345	216
15°	2198	2173	2186	2198	2199	612
25°	1966	1976	2008	2035	2031	909
35°	1711	1716	1756	1796	1795	1062
45°	1376	1402	1425	1462	1427	1065
55°	1029	1022	1049	1042	1041	915
65°	632	624	648	623	628	629
75°	263	258	262	244	252	282
85°	32	31	32	31	30	47
90°	0	0	0	0	0	



TEST NUMBER: P590805

CATALOG NUMBER: FSR-24-2-LD4-4LO-35-UNV-80-84-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2312.4	2312.4	2312.4	2312.4	2312.4
2.5°	2332.4	2314.8	2298.4	2317.5	2329.1
5°	2296.0	2290.6	2296.9	2290.0	2345.2
7.5°	2248.8	2269.4	2281.4	2273.9	2277.2
10°	2223.7	2216.6	2243.1	2261.6	2259.0
12.5°	2196.9	2207.6	2209.1	2229.1	2230.9
15°	2198.4	2173.0	2186.4	2197.8	2198.6
17.5°	2113.0	2140.4	2149.7	2175.7	2143.4
20°	2102.5	2082.5	2102.5	2129.1	2124.9
22.5°	2038.3	2015.9	2058.9	2082.5	2081.0
25°	1965.5	1976.2	2008.5	2034.7	2030.6
27.5°	1901.6	1914.1	1960.1	1996.2	1972.9
30°	1852.3	1846.0	1884.9	1917.1	1935.0
32.5°	1764.2	1786.9	1832.3	1864.3	1847.2
35°	1710.8	1715.9	1755.6	1796.2	1795.0
37.5°	1617.3	1640.9	1696.8	1708.1	1697.7
40°	1537.6	1561.2	1611.7	1623.9	1618.8
42.5°	1478.8	1483.0	1526.3	1540.3	1517.9
45°	1376.4	1402.1	1425.4	1462.1	1427.4
47.5°	1289.2	1301.2	1351.3	1361.2	1343.0
50°	1210.1	1214.3	1264.7	1252.5	1240.5
52.5°	1110.7	1128.3	1156.6	1154.3	1140.2
55°	1028.9	1022.0	1048.9	1041.7	1041.4
57.5°	930.6	942.6	964.7	953.3	935.1
60°	838.7	839.0	847.0	834.2	831.8
62.5°	736.3	739.8	741.6	725.8	751.5
65°	632.1	623.7	648.2	623.4	627.6
67.5°	536.2	540.4	538.0	522.5	528.5
70°	438.9	444.3	440.4	422.8	428.1
72.5°	349.9	343.4	347.5	325.4	335.6
75°	263.0	257.7	262.4	243.9	252.3
77.5°	179.1	183.3	180.3	170.5	176.2
80°	118.2	114.9	114.9	109.3	110.5
82.5°	69.0	65.7	64.8	63.0	65.7
85°	32.2	31.3	31.9	31.1	29.9
87.5°	11.6	11.9	11.9	11.3	10.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)