

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: P562865

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

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P562865
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-LD4-2STD-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: 7805.0 lumens
Efficiency: N/A
Efficacy: 117.2 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

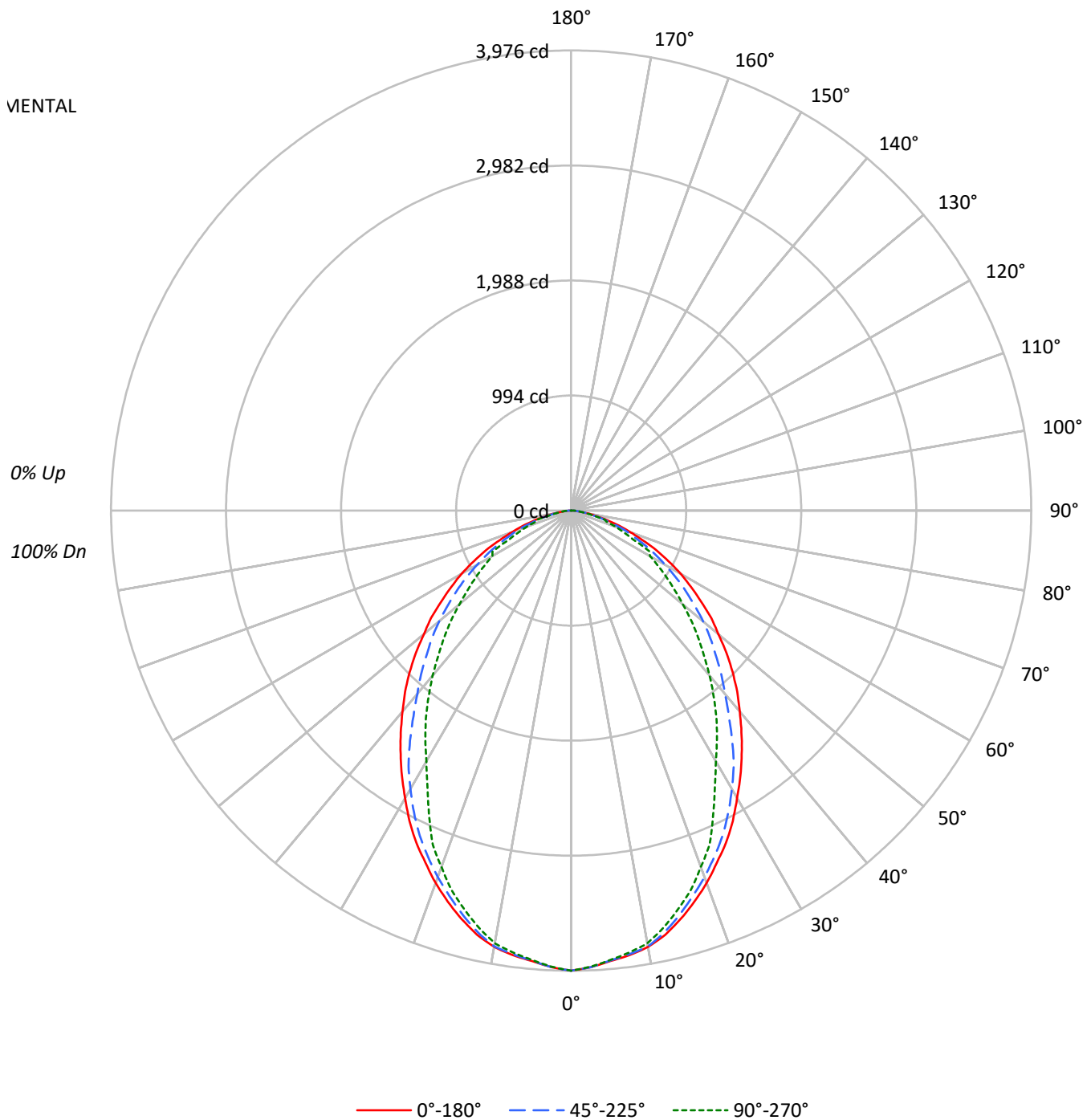
Input Watts (W): 66.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P562865

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

Luminous Intensity Polar Plot





TEST NUMBER: P562865

CATALOG NUMBER: FSR-24-4-LD4-2STD-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	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°	5349	5349	5349
5°	5277	5270	5264
10°	5231	5225	5187
15°	5090	5039	4968
20°	4903	4824	4692
25°	4701	4599	4312
30°	4456	4313	3885
35°	4220	3986	3594
40°	3980	3633	3270
45°	3752	3358	2956
50°	3473	3117	2636
55°	3213	2825	2361
60°	2944	2523	2115
65°	2590	2209	1873
70°	2134	1935	1591
75°	1696	1482	1553
80°	1140	1068	997
85°	710	852	993

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3752 cd/sqm



TEST NUMBER: P562865

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	370.1	4.7
10°-20°	1015.7	13.0
20°-30°	1406.1	18.0
30°-40°	1499.4	19.2
40°-50°	1367.9	17.5
50°-60°	1071.6	13.7
60°-70°	698.4	8.9
70°-80°	309.4	4.0
80°-90°	66.4	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°	2791.9	35.8
0°-40°	4291.3	55.0
0°-60°	6730.7	86.2
0°-90°	7805.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7805.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3976	3976	3976	3976	3976	
5°	3907	3902	3902	3898	3898	371
15°	3654	3654	3617	3580	3567	1027
25°	3167	3148	3098	2988	2905	1454
35°	2569	2551	2427	2243	2188	1606
45°	1972	1930	1765	1618	1554	1519
55°	1370	1328	1204	1062	1007	1229
65°	814	768	694	708	588	802
75°	326	303	285	271	299	350
85°	46	51	55	60	64	64
90°	0	0	0	0	0	



TEST NUMBER: P562865

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3975.8	3975.8	3975.8	3975.8	3975.8
2.5°	3948.2	3948.2	3948.2	3943.6	3943.6
5°	3906.8	3902.2	3902.2	3897.6	3897.6
7.5°	3874.6	3870.0	3865.5	3860.9	3851.7
10°	3828.7	3828.7	3824.1	3801.1	3796.5
12.5°	3755.1	3750.5	3732.2	3700.0	3690.8
15°	3654.0	3654.0	3617.3	3580.5	3566.7
17.5°	3543.7	3539.1	3493.2	3456.4	3438.0
20°	3424.2	3415.0	3369.1	3309.3	3277.1
22.5°	3290.9	3290.9	3235.8	3157.6	3125.5
25°	3166.8	3148.4	3097.9	2987.6	2904.8
27.5°	3024.3	2996.8	2941.6	2785.3	2688.8
30°	2868.1	2854.3	2776.1	2573.9	2500.4
32.5°	2721.0	2698.0	2615.3	2403.8	2344.1
35°	2569.3	2550.9	2426.8	2243.0	2187.8
37.5°	2417.6	2394.7	2238.4	2091.3	2022.4
40°	2266.0	2238.4	2068.3	1935.0	1861.5
42.5°	2123.5	2086.7	1921.2	1778.8	1696.0
45°	1971.8	1930.4	1765.0	1617.9	1553.5
47.5°	1820.1	1783.3	1631.7	1480.0	1406.5
50°	1659.2	1627.1	1489.2	1337.5	1259.4
52.5°	1526.0	1475.4	1342.1	1190.4	1126.1
55°	1369.7	1328.3	1204.2	1061.7	1006.6
57.5°	1227.2	1185.8	1070.9	937.6	891.7
60°	1093.9	1034.2	937.6	822.7	786.0
62.5°	946.8	900.9	818.1	721.6	767.6
65°	813.5	767.6	694.0	707.8	588.3
67.5°	666.5	643.5	579.1	514.8	496.4
70°	542.4	514.8	491.8	422.9	404.5
72.5°	432.0	404.5	372.3	335.5	321.7
75°	326.3	303.4	285.0	271.2	298.8
77.5°	225.2	216.0	202.2	188.4	183.9
80°	147.1	142.5	137.9	133.3	128.7
82.5°	87.3	87.3	87.3	87.3	87.3
85°	46.0	50.6	55.2	59.8	64.3
87.5°	27.6	27.6	32.2	36.8	41.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)