

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: P562805

Luminaire Tested: FSR-24-4-LD4-2LO-50-UNV-80-86-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P562805
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-50-UNV-80-86-EDD
Description: 2X4 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRON
SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5801.0 lumens
Efficiency: N/A
Efficacy: 124.0 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

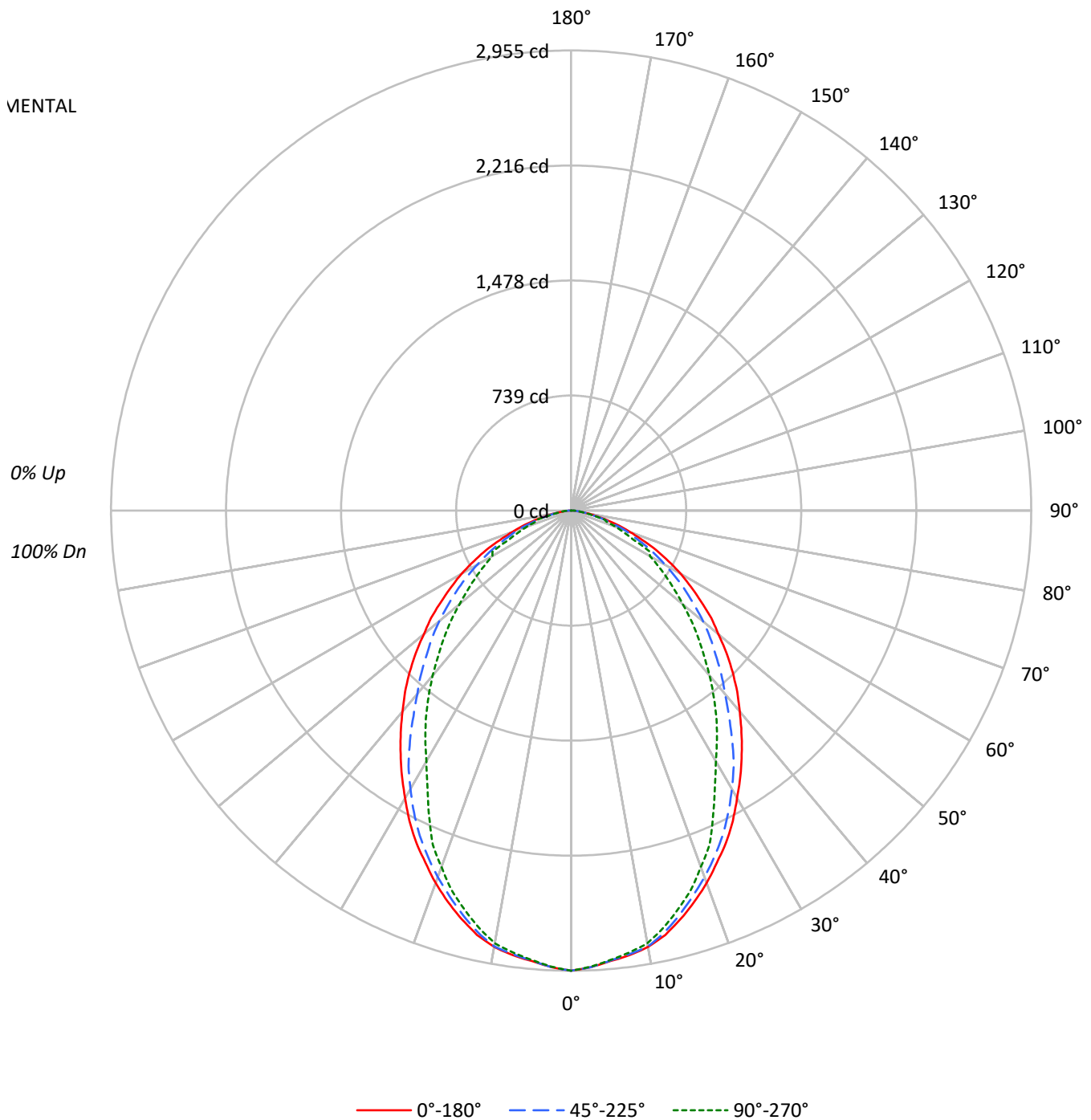
Input Watts (W): 46.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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					87			
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75					75			
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	65					65			
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56					56			
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50					50			
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47	56	50	46	44					44			
7	69	56	48	43	67	56	48	42	54	47	42	53	46	42	51	46	42	40					40			
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38	36					36			
9	61	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	33					33			
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30					30			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3976	3976	3976
5°	3922	3917	3913
10°	3888	3883	3855
15°	3783	3745	3693
20°	3644	3585	3488
25°	3494	3418	3205
30°	3312	3206	2887
35°	3137	2963	2671
40°	2958	2700	2430
45°	2789	2496	2197
50°	2581	2317	1959
55°	2388	2099	1755
60°	2188	1875	1572
65°	1925	1642	1392
70°	1586	1438	1183
75°	1261	1101	1154
80°	847	794	742
85°	528	633	738

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2789 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	275.1	4.7
10°-20°	754.9	13.0
20°-30°	1045.1	18.0
30°-40°	1114.4	19.2
40°-50°	1016.6	17.5
50°-60°	796.5	13.7
60°-70°	519.1	8.9
70°-80°	230.0	4.0
80°-90°	49.4	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°	2075.1	35.8
0°-40°	3189.4	55.0
0°-60°	5002.6	86.2
0°-90°	5801.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5801.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2955	2955	2955	2955	2955	
5°	2904	2900	2900	2897	2897	276
15°	2716	2716	2688	2661	2651	763
25°	2354	2340	2302	2220	2159	1081
35°	1910	1896	1804	1667	1626	1194
45°	1466	1435	1312	1202	1155	1129
55°	1018	987	895	789	748	913
65°	605	570	516	526	437	596
75°	242	226	212	202	222	260
85°	34	38	41	44	48	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2955.0	2955.0	2955.0	2955.0	2955.0
2.5°	2934.5	2934.5	2934.5	2931.0	2931.0
5°	2903.7	2900.3	2900.3	2896.9	2896.9
7.5°	2879.8	2876.4	2873.0	2869.5	2862.7
10°	2845.6	2845.6	2842.2	2825.1	2821.7
12.5°	2791.0	2787.6	2773.9	2750.0	2743.2
15°	2715.8	2715.8	2688.5	2661.2	2650.9
17.5°	2633.8	2630.4	2596.3	2568.9	2555.3
20°	2545.0	2538.2	2504.0	2459.6	2435.7
22.5°	2445.9	2445.9	2405.0	2346.9	2323.0
25°	2353.7	2340.0	2302.5	2220.5	2159.0
27.5°	2247.8	2227.3	2186.3	2070.2	1998.4
30°	2131.7	2121.4	2063.3	1913.0	1858.4
32.5°	2022.3	2005.3	1943.8	1786.6	1742.2
35°	1909.6	1896.0	1803.7	1667.1	1626.1
37.5°	1796.9	1779.8	1663.7	1554.3	1503.1
40°	1684.2	1663.7	1537.3	1438.2	1383.5
42.5°	1578.3	1550.9	1427.9	1322.0	1260.6
45°	1465.5	1434.8	1311.8	1202.5	1154.7
47.5°	1352.8	1325.5	1212.7	1100.0	1045.3
50°	1233.2	1209.3	1106.8	994.1	936.0
52.5°	1134.2	1096.6	997.5	884.8	837.0
55°	1018.0	987.3	895.0	789.1	748.1
57.5°	912.1	881.4	796.0	696.9	662.7
60°	813.0	768.6	696.9	611.5	584.2
62.5°	703.7	669.6	608.1	536.3	570.5
65°	604.7	570.5	515.8	526.1	437.3
67.5°	495.3	478.3	430.4	382.6	368.9
70°	403.1	382.6	365.5	314.3	300.6
72.5°	321.1	300.6	276.7	249.4	239.1
75°	242.5	225.5	211.8	201.6	222.0
77.5°	167.4	160.6	150.3	140.1	136.6
80°	109.3	105.9	102.5	99.1	95.7
82.5°	64.9	64.9	64.9	64.9	64.9
85°	34.2	37.6	41.0	44.4	47.8
87.5°	20.5	20.5	23.9	27.3	30.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)