

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: P562889

Luminaire Tested: FSR-24-4-LD4-2STD-35-UNV-81-88-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P562889
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-81-88-EDD
Description: 2X4 FSR TROFFER WITH .156 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6261.0 lumens
Efficiency: N/A
Efficacy: 94.0 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

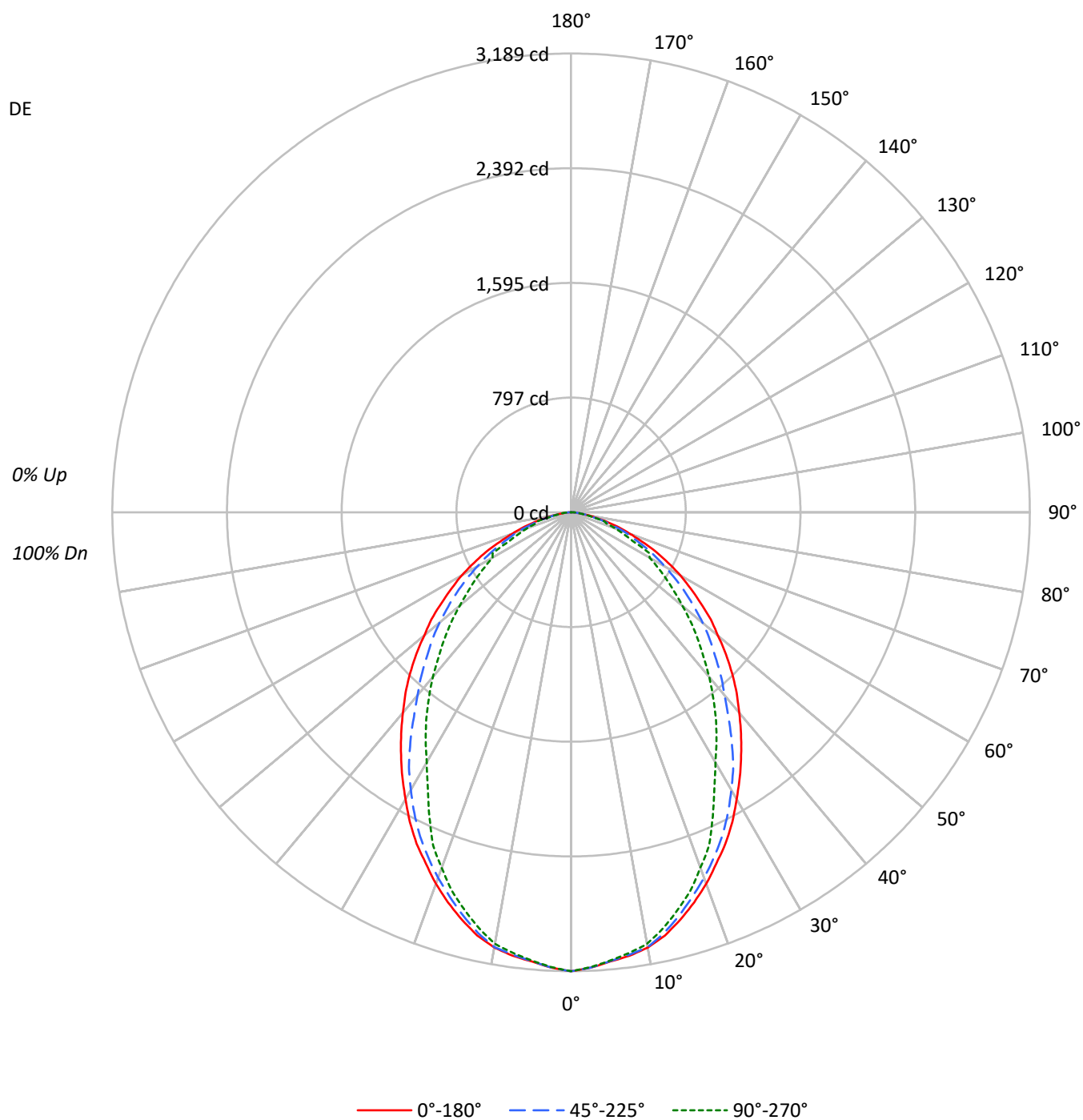
Input Watts (W): 66.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	4291	4291	4291
5°	4233	4228	4223
10°	4196	4191	4161
15°	4083	4042	3985
20°	3933	3870	3764
25°	3771	3689	3459
30°	3574	3460	3116
35°	3385	3198	2883
40°	3193	2914	2623
45°	3010	2694	2371
50°	2786	2501	2115
55°	2577	2266	1894
60°	2361	2024	1697
65°	2078	1772	1502
70°	1712	1552	1277
75°	1361	1188	1246
80°	914	857	800
85°	570	682	797

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3010 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	296.9	4.7
10°-20°	814.8	13.0
20°-30°	1128.0	18.0
30°-40°	1202.7	19.2
40°-50°	1097.3	17.5
50°-60°	859.6	13.7
60°-70°	560.3	8.9
70°-80°	248.2	4.0
80°-90°	53.3	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°	2239.6	35.8
0°-40°	3442.4	55.0
0°-60°	5399.2	86.2
0°-90°	6261.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6261.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3189	3189	3189	3189	3189	
5°	3134	3130	3130	3127	3127	297
15°	2931	2931	2902	2872	2861	824
25°	2540	2526	2485	2397	2330	1166
35°	2061	2046	1947	1799	1755	1289
45°	1582	1548	1416	1298	1246	1218
55°	1099	1066	966	852	808	985
65°	653	616	557	568	472	643
75°	262	243	229	218	240	281
85°	37	41	44	48	52	51
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3189.3	3189.3	3189.3	3189.3	3189.3
2.5°	3167.1	3167.1	3167.1	3163.5	3163.5
5°	3134.0	3130.3	3130.3	3126.6	3126.6
7.5°	3108.2	3104.5	3100.8	3097.1	3089.7
10°	3071.3	3071.3	3067.6	3049.2	3045.5
12.5°	3012.3	3008.6	2993.9	2968.0	2960.7
15°	2931.2	2931.2	2901.7	2872.2	2861.1
17.5°	2842.7	2839.0	2802.1	2772.6	2757.9
20°	2746.8	2739.5	2702.6	2654.7	2628.8
22.5°	2639.9	2639.9	2595.7	2533.0	2507.2
25°	2540.4	2525.6	2485.0	2396.6	2330.2
27.5°	2426.1	2403.9	2359.7	2234.3	2156.9
30°	2300.7	2289.6	2227.0	2064.7	2005.7
32.5°	2182.7	2164.3	2097.9	1928.3	1880.4
35°	2061.0	2046.3	1946.7	1799.3	1755.0
37.5°	1939.4	1920.9	1795.6	1677.6	1622.3
40°	1817.7	1795.6	1659.2	1552.2	1493.2
42.5°	1703.4	1673.9	1541.2	1426.9	1360.5
45°	1581.7	1548.5	1415.8	1297.8	1246.2
47.5°	1460.1	1430.6	1308.9	1187.2	1128.2
50°	1331.0	1305.2	1194.6	1072.9	1010.2
52.5°	1224.1	1183.5	1076.6	954.9	903.3
55°	1098.7	1065.5	966.0	851.7	807.5
57.5°	984.4	951.3	859.1	752.2	715.3
60°	877.5	829.6	752.2	660.0	630.5
62.5°	759.5	722.7	656.3	578.9	615.7
65°	652.6	615.7	556.7	567.8	471.9
67.5°	534.6	516.2	464.6	412.9	398.2
70°	435.1	412.9	394.5	339.2	324.5
72.5°	346.6	324.5	298.6	269.2	258.1
75°	261.8	243.3	228.6	217.5	239.7
77.5°	180.7	173.3	162.2	151.2	147.5
80°	118.0	114.3	110.6	106.9	103.2
82.5°	70.1	70.1	70.1	70.1	70.1
85°	36.9	40.6	44.2	47.9	51.6
87.5°	22.1	22.1	25.8	29.5	33.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)