

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: P562129

Luminaire Tested: FSR-24-4-LD4-1HI-50-UNV-82-84-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P562129
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-LD4-1HI-50-UNV-82-84-EDD
Description: 2X4 FSR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4572.0 lumens
Efficiency: N/A
Efficacy: 105.8 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

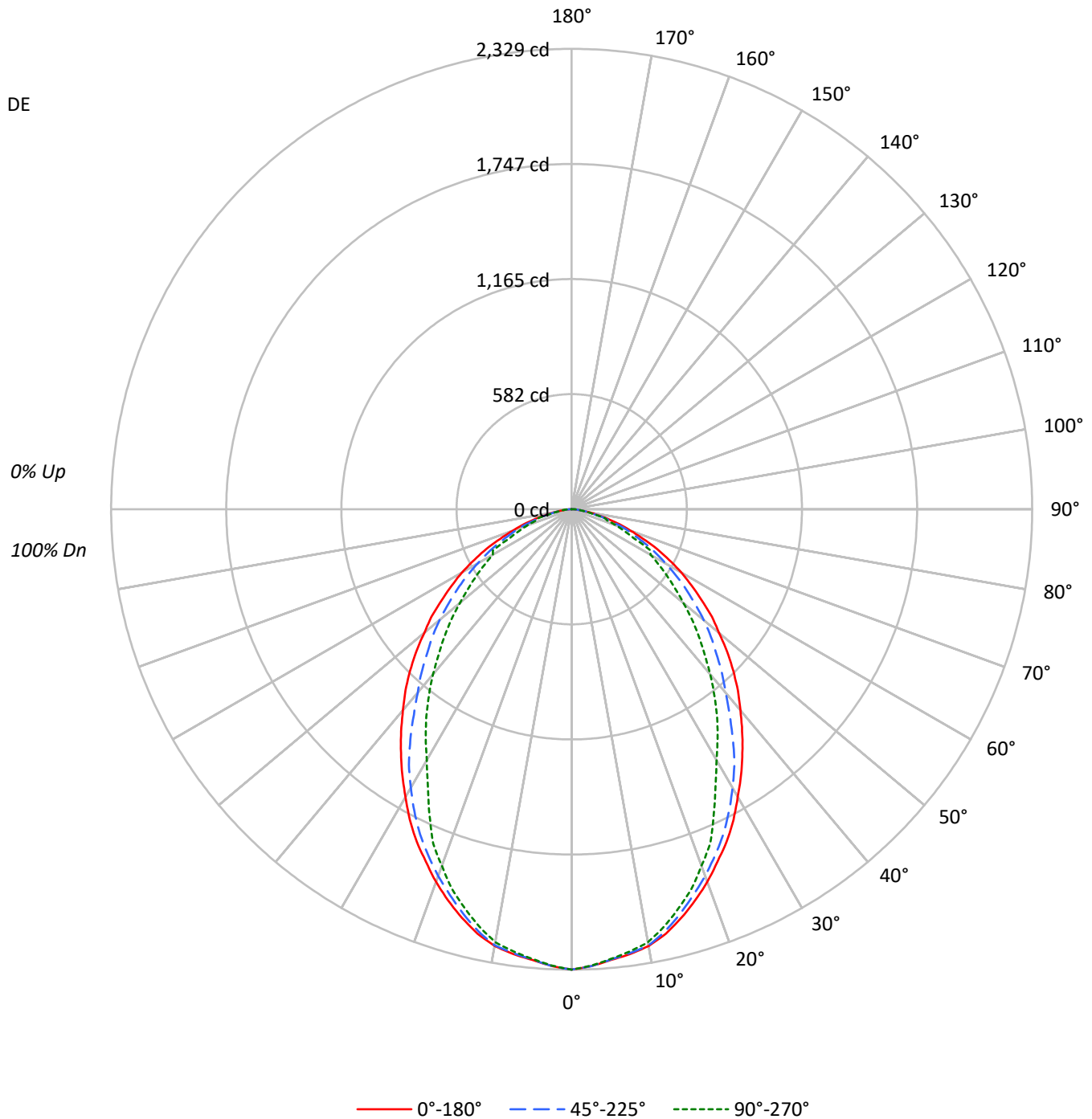
Input Watts (W): 43.2
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P562129

CATALOG NUMBER: FSR-24-4-LD4-1HI-50-UNV-82-84-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P562129

CATALOG NUMBER: FSR-24-4-LD4-1HI-50-UNV-82-84-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	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°	3134	3134	3134
5°	3091	3087	3084
10°	3064	3061	3038
15°	2981	2952	2910
20°	2872	2826	2749
25°	2754	2694	2526
30°	2610	2527	2276
35°	2472	2335	2105
40°	2331	2128	1915
45°	2198	1967	1732
50°	2035	1826	1544
55°	1882	1655	1383
60°	1724	1478	1239
65°	1517	1294	1097
70°	1250	1133	932
75°	994	868	910
80°	668	626	584
85°	415	499	582

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2198 cd/sqm



TEST NUMBER: P562129

CATALOG NUMBER: FSR-24-4-LD4-1HI-50-UNV-82-84-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.8	4.7
10°-20°	595.0	13.0
20°-30°	823.7	18.0
30°-40°	878.3	19.2
40°-50°	801.3	17.5
50°-60°	627.7	13.7
60°-70°	409.1	8.9
70°-80°	181.3	4.0
80°-90°	38.9	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°	1635.4	35.8
0°-40°	2513.7	55.0
0°-60°	3942.7	86.2
0°-90°	4572.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4572.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2329	2329	2329	2329	2329	
5°	2288	2286	2286	2283	2283	217
15°	2140	2140	2119	2097	2089	602
25°	1855	1844	1815	1750	1702	852
35°	1505	1494	1422	1314	1282	941
45°	1155	1131	1034	948	910	890
55°	802	778	705	622	590	720
65°	477	450	407	415	345	470
75°	191	178	167	159	175	205
85°	27	30	32	35	38	37
90°	0	0	0	0	0	



TEST NUMBER: P562129

CATALOG NUMBER: FSR-24-4-LD4-1HI-50-UNV-82-84-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2328.9	2328.9	2328.9	2328.9	2328.9
2.5°	2312.8	2312.8	2312.8	2310.1	2310.1
5°	2288.5	2285.8	2285.8	2283.1	2283.1
7.5°	2269.7	2267.0	2264.3	2261.6	2256.2
10°	2242.8	2242.8	2240.1	2226.6	2223.9
12.5°	2199.7	2197.0	2186.2	2167.4	2162.0
15°	2140.4	2140.4	2118.9	2097.4	2089.3
17.5°	2075.8	2073.1	2046.2	2024.7	2013.9
20°	2005.8	2000.4	1973.5	1938.5	1919.7
22.5°	1927.7	1927.7	1895.4	1849.7	1830.8
25°	1855.1	1844.3	1814.7	1750.1	1701.6
27.5°	1771.6	1755.4	1723.1	1631.6	1575.0
30°	1680.1	1672.0	1626.2	1507.7	1464.7
32.5°	1593.9	1580.4	1532.0	1408.1	1373.1
35°	1505.0	1494.3	1421.6	1313.9	1281.6
37.5°	1416.2	1402.7	1311.2	1225.0	1184.7
40°	1327.3	1311.2	1211.6	1133.5	1090.4
42.5°	1243.9	1222.3	1125.4	1042.0	993.5
45°	1155.0	1130.8	1033.9	947.7	910.0
47.5°	1066.2	1044.6	955.8	866.9	823.9
50°	972.0	953.1	872.3	783.5	737.7
52.5°	893.9	864.3	786.2	697.3	659.6
55°	802.3	778.1	705.4	621.9	589.6
57.5°	718.9	694.6	627.3	549.2	522.3
60°	640.8	605.8	549.2	481.9	460.4
62.5°	554.6	527.7	479.2	422.7	449.6
65°	476.6	449.6	406.6	414.6	344.6
67.5°	390.4	376.9	339.2	301.5	290.8
70°	317.7	301.5	288.1	247.7	236.9
72.5°	253.1	236.9	218.1	196.5	188.5
75°	191.2	177.7	166.9	158.9	175.0
77.5°	131.9	126.5	118.5	110.4	107.7
80°	86.2	83.5	80.8	78.1	75.4
82.5°	51.2	51.2	51.2	51.2	51.2
85°	26.9	29.6	32.3	35.0	37.7
87.5°	16.2	16.2	18.8	21.5	24.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)