

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: P560353

Luminaire Tested: FSR-12-2-LD4-2HI-50-UNV-93-84-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560353
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-12-2-LD4-2HI-50-UNV-93-84-EDD
Description: 1X2 FSR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3851.0 lumens
Efficiency: N/A
Efficacy: 89.1 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

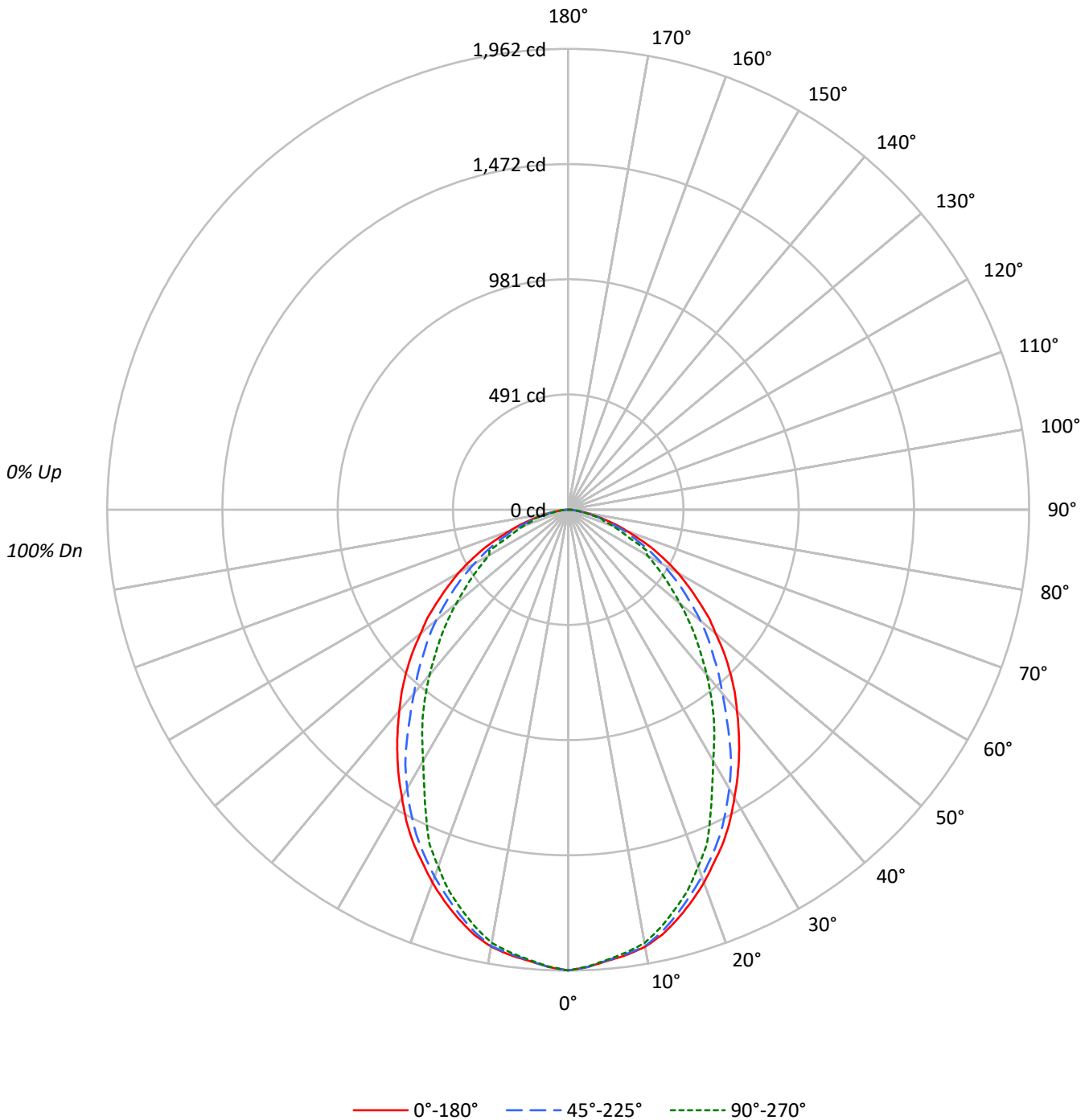
Input Watts (W): 43.2
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P560353

CATALOG NUMBER: FSR-12-2-LD4-2HI-50-UNV-93-84-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P560353

CATALOG NUMBER: FSR-12-2-LD4-2HI-50-UNV-93-84-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	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°	10557	10557	10557
5°	10414	10402	10390
10°	10324	10311	10237
15°	10045	9945	9805
20°	9676	9521	9261
25°	9279	9077	8511
30°	8794	8513	7667
35°	8329	7867	7092
40°	7855	7170	6453
45°	7405	6628	5834
50°	6855	6152	5203
55°	6341	5575	4660
60°	5809	4979	4174
65°	5112	4360	3697
70°	4211	3819	3141
75°	3348	2924	3065
80°	2250	2108	1968
85°	1402	1680	1958

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7405 cd/sqm

TEST NUMBER: P560353

CATALOG NUMBER: FSR-12-2-LD4-2HI-50-UNV-93-84-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.6	4.7
10°-20°	501.1	13.0
20°-30°	693.8	18.0
30°-40°	739.8	19.2
40°-50°	674.9	17.5
50°-60°	528.7	13.7
60°-70°	344.6	8.9
70°-80°	152.7	4.0
80°-90°	32.8	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°	1377.5	35.8
0°-40°	2117.3	55.0
0°-60°	3320.9	86.2
0°-90°	3851.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3851.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1962	1962	1962	1962	1962	
5°	1928	1925	1925	1923	1923	183
15°	1803	1803	1785	1767	1760	507
25°	1562	1553	1528	1474	1433	717
35°	1268	1259	1197	1107	1080	793
45°	973	952	871	798	766	749
55°	676	655	594	524	497	606
65°	401	379	342	349	290	396
75°	161	150	141	134	147	173
85°	23	25	27	30	32	31
90°	0	0	0	0	0	



TEST NUMBER: P560353

CATALOG NUMBER: FSR-12-2-LD4-2HI-50-UNV-93-84-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1961.6	1961.6	1961.6	1961.6	1961.6
2.5°	1948.0	1948.0	1948.0	1945.8	1945.8
5°	1927.6	1925.4	1925.4	1923.1	1923.1
7.5°	1911.8	1909.5	1907.2	1905.0	1900.4
10°	1889.1	1889.1	1886.8	1875.5	1873.2
12.5°	1852.8	1850.5	1841.5	1825.6	1821.0
15°	1802.9	1802.9	1784.8	1766.6	1759.8
17.5°	1748.5	1746.2	1723.5	1705.4	1696.3
20°	1689.5	1685.0	1662.3	1632.8	1616.9
22.5°	1623.7	1623.7	1596.5	1558.0	1542.1
25°	1562.5	1553.4	1528.5	1474.1	1433.3
27.5°	1492.2	1478.6	1451.4	1374.3	1326.7
30°	1415.1	1408.3	1369.8	1270.0	1233.7
32.5°	1342.5	1331.2	1290.4	1186.1	1156.6
35°	1267.7	1258.6	1197.4	1106.7	1079.5
37.5°	1192.9	1181.5	1104.4	1031.8	997.8
40°	1118.0	1104.4	1020.5	954.7	918.5
42.5°	1047.7	1029.6	947.9	877.6	836.8
45°	972.9	952.5	870.8	798.3	766.5
47.5°	898.0	879.9	805.1	730.2	693.9
50°	818.7	802.8	734.8	659.9	621.4
52.5°	752.9	728.0	662.2	587.4	555.6
55°	675.8	655.4	594.2	523.9	496.6
57.5°	605.5	585.1	528.4	462.6	440.0
60°	539.7	510.3	462.6	405.9	387.8
62.5°	467.2	444.5	403.7	356.0	378.7
65°	401.4	378.7	342.4	349.2	290.3
67.5°	328.8	317.5	285.7	254.0	244.9
70°	267.6	254.0	242.7	208.6	199.6
72.5°	213.2	199.6	183.7	165.5	158.7
75°	161.0	149.7	140.6	133.8	147.4
77.5°	111.1	106.6	99.8	93.0	90.7
80°	72.6	70.3	68.0	65.8	63.5
82.5°	43.1	43.1	43.1	43.1	43.1
85°	22.7	24.9	27.2	29.5	31.7
87.5°	13.6	13.6	15.9	18.1	20.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)