

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: P560642

Luminaire Tested: FSR-12-2-LD4-2STD-40-UNV-81-85-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560642
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-LD4-2STD-40-UNV-81-85-EDD-90
Description: 1X2 FSR TROFFER WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2411.0 lumens
Efficiency: N/A
Efficacy: 72.4 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

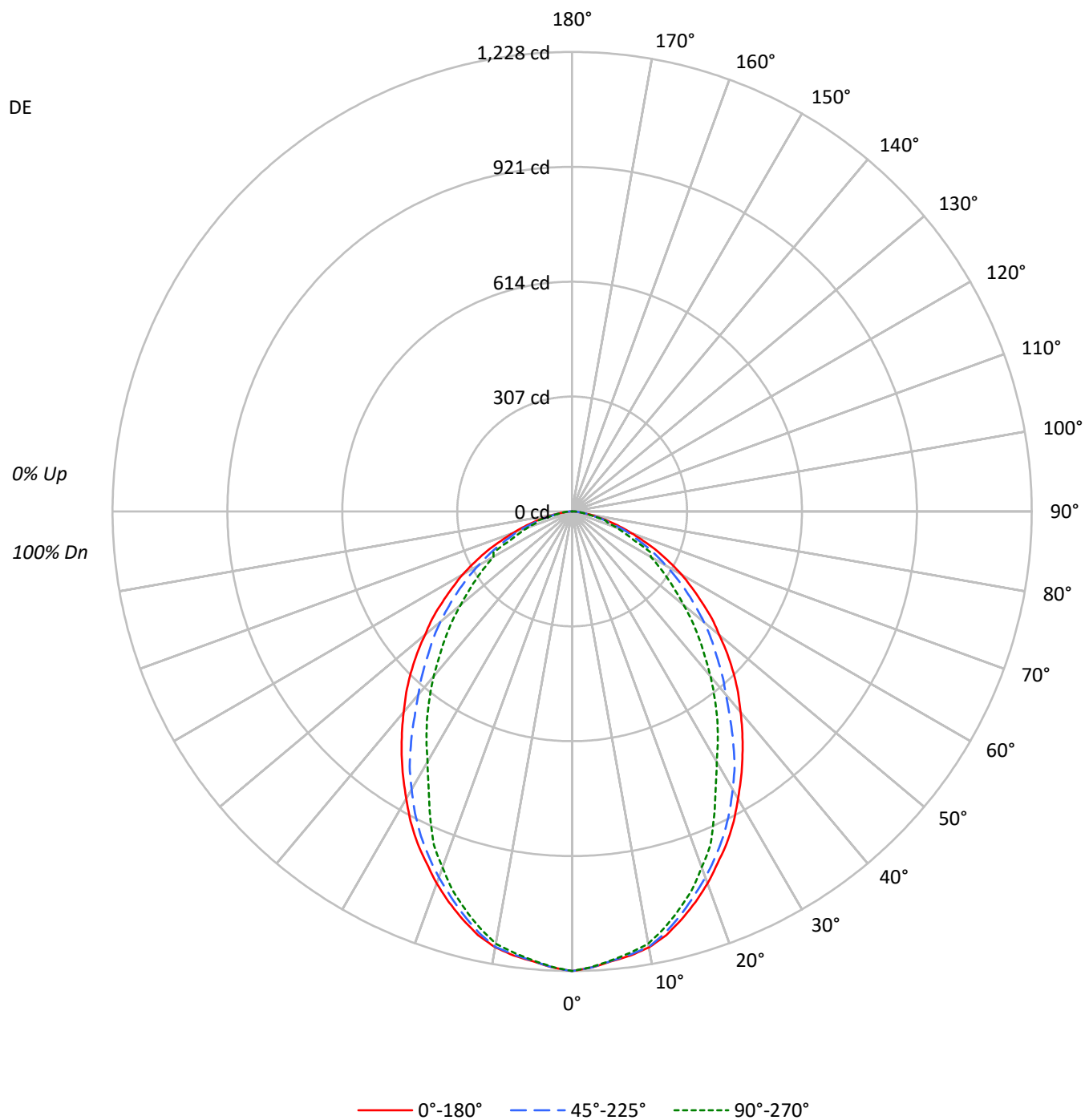
Input Watts (W): 33.3
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P560642

CATALOG NUMBER: FSR-12-2-LD4-2STD-40-UNV-81-85-EDD-90

Luminous Intensity Polar Plot



TEST NUMBER: P560642

CATALOG NUMBER: FSR-12-2-LD4-2STD-40-UNV-81-85-EDD-90

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	106	102	99	108	104	100	97	100	97	94		96	94	91		92
2	101	94	88	83	99	92	87	82	89	84	80		86	82	78		83
3	93	84	77	71	91	82	76	70	79	74	69		77	72	68		74
4	86	75	67	61	84	74	66	61	72	65	60		69	64	59		67
5	80	68	60	54	78	67	59	53	65	58	53		63	57	52		61
6	74	62	53	48	72	61	53	47	59	52	47		57	51	47		56
7	69	56	48	43	67	56	48	42	54	47	42		53	46	42		51
8	65	52	44	38	63	51	44	38	50	43	38		49	42	38		48
9	61	48	40	35	59	47	40	35	46	39	35		45	39	34		44
10	57	44	37	32	56	44	37	32	43	36	32		42	36	32		41

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6610	6610	6610
5°	6520	6512	6505
10°	6463	6456	6409
15°	6289	6226	6139
20°	6058	5960	5798
25°	5809	5682	5328
30°	5506	5330	4800
35°	5215	4926	4440
40°	4918	4489	4040
45°	4636	4150	3653
50°	4291	3852	3257
55°	3970	3491	2917
60°	3637	3117	2613
65°	3200	2730	2314
70°	2636	2390	1965
75°	2096	1830	1919
80°	1407	1320	1234
85°	877	1050	1229

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4636 cd/sqm

TEST NUMBER: P560642

CATALOG NUMBER: FSR-12-2-LD4-2STD-40-UNV-81-85-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.3	4.7
10°-20°	313.7	13.0
20°-30°	434.4	18.0
30°-40°	463.2	19.2
40°-50°	422.5	17.5
50°-60°	331.0	13.7
60°-70°	215.7	8.9
70°-80°	95.6	4.0
80°-90°	20.5	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°	862.4	35.8
0°-40°	1325.6	55.0
0°-60°	2079.1	86.2
0°-90°	2411.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2411.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1228	1228	1228	1228	1228	
5°	1207	1205	1205	1204	1204	115
15°	1129	1129	1117	1106	1102	317
25°	978	973	957	923	897	449
35°	794	788	750	693	676	496
45°	609	596	545	500	480	469
55°	423	410	372	328	311	379
65°	251	237	214	219	182	248
75°	101	94	88	84	92	108
85°	14	16	17	18	20	20
90°	0	0	0	0	0	

TEST NUMBER: P560642

CATALOG NUMBER: FSR-12-2-LD4-2STD-40-UNV-81-85-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1228.1	1228.1	1228.1	1228.1	1228.1
2.5°	1219.6	1219.6	1219.6	1218.2	1218.2
5°	1206.8	1205.4	1205.4	1204.0	1204.0
7.5°	1196.9	1195.5	1194.1	1192.6	1189.8
10°	1182.7	1182.7	1181.3	1174.2	1172.8
12.5°	1160.0	1158.6	1152.9	1142.9	1140.1
15°	1128.7	1128.7	1117.4	1106.0	1101.8
17.5°	1094.7	1093.2	1079.1	1067.7	1062.0
20°	1057.8	1054.9	1040.7	1022.3	1012.3
22.5°	1016.6	1016.6	999.5	975.4	965.5
25°	978.2	972.6	956.9	922.9	897.3
27.5°	934.2	925.7	908.7	860.4	830.6
30°	886.0	881.7	857.6	795.1	772.4
32.5°	840.5	833.4	807.9	742.6	724.1
35°	793.7	788.0	749.7	692.9	675.8
37.5°	746.8	739.7	691.4	646.0	624.7
40°	700.0	691.4	638.9	597.7	575.0
42.5°	655.9	644.6	593.5	549.5	523.9
45°	609.1	596.3	545.2	499.8	479.9
47.5°	562.2	550.9	504.0	457.2	434.5
50°	512.5	502.6	460.0	413.2	389.0
52.5°	471.4	455.8	414.6	367.7	347.9
55°	423.1	410.3	372.0	328.0	310.9
57.5°	379.1	366.3	330.8	289.6	275.4
60°	337.9	319.5	289.6	254.1	242.8
62.5°	292.5	278.3	252.7	222.9	237.1
65°	251.3	237.1	214.4	218.6	181.7
67.5°	205.9	198.8	178.9	159.0	153.3
70°	167.5	159.0	151.9	130.6	124.9
72.5°	133.5	124.9	115.0	103.6	99.4
75°	100.8	93.7	88.0	83.8	92.3
77.5°	69.6	66.7	62.5	58.2	56.8
80°	45.4	44.0	42.6	41.2	39.8
82.5°	27.0	27.0	27.0	27.0	27.0
85°	14.2	15.6	17.0	18.5	19.9
87.5°	8.5	8.5	9.9	11.4	12.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)