

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: P560703

Luminaire Tested: FSR-12-2-LD4-2STD-50-UNV-80-97-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560703
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-50-UNV-80-97-EDD
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR TEMPERED G ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2995.0 lumens
Efficiency: N/A
Efficacy: 89.9 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

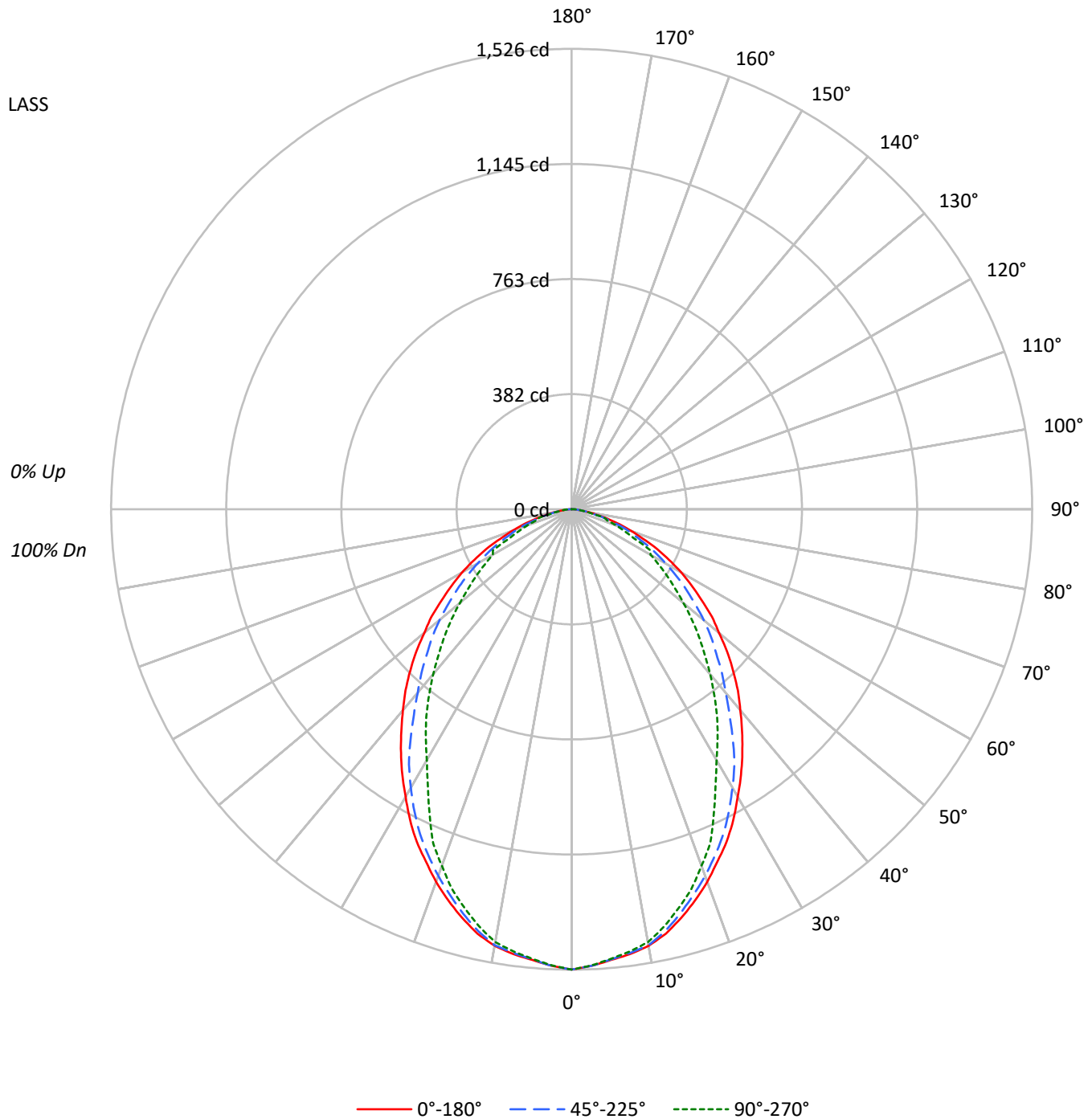
Input Watts (W): 33.3
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P560703

CATALOG NUMBER: FSR-12-2-LD4-2STD-50-UNV-80-97-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P560703

CATALOG NUMBER: FSR-12-2-LD4-2STD-50-UNV-80-97-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	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°	8211	8211	8211
5°	8099	8090	8080
10°	8029	8019	7961
15°	7813	7734	7626
20°	7526	7404	7202
25°	7216	7059	6619
30°	6840	6620	5963
35°	6478	6118	5516
40°	6109	5576	5018
45°	5759	5155	4537
50°	5331	4784	4047
55°	4932	4336	3625
60°	4519	3873	3246
65°	3976	3391	2876
70°	3275	2969	2442
75°	2603	2275	2383
80°	1748	1640	1531
85°	1087	1309	1525

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5759 cd/sqm



TEST NUMBER: P560703

CATALOG NUMBER: FSR-12-2-LD4-2STD-50-UNV-80-97-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.0	4.7
10°-20°	389.7	13.0
20°-30°	539.6	18.0
30°-40°	575.3	19.2
40°-50°	524.9	17.5
50°-60°	411.2	13.7
60°-70°	268.0	8.9
70°-80°	118.7	4.0
80°-90°	25.5	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°	1071.3	35.8
0°-40°	1646.7	55.0
0°-60°	2582.8	86.2
0°-90°	2995.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2995.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1526	1526	1526	1526	1526	
5°	1499	1497	1497	1496	1496	142
15°	1402	1402	1388	1374	1369	394
25°	1215	1208	1189	1146	1115	558
35°	986	979	931	861	840	616
45°	757	741	677	621	596	583
55°	526	510	462	407	386	471
65°	312	294	266	272	226	308
75°	125	116	109	104	115	134
85°	18	19	21	23	25	24
90°	0	0	0	0	0	



TEST NUMBER: P560703

CATALOG NUMBER: FSR-12-2-LD4-2STD-50-UNV-80-97-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1525.6	1525.6	1525.6	1525.6	1525.6
2.5°	1515.0	1515.0	1515.0	1513.3	1513.3
5°	1499.2	1497.4	1497.4	1495.6	1495.6
7.5°	1486.8	1485.0	1483.3	1481.5	1478.0
10°	1469.2	1469.2	1467.4	1458.6	1456.8
12.5°	1441.0	1439.2	1432.1	1419.8	1416.3
15°	1402.2	1402.2	1388.0	1373.9	1368.6
17.5°	1359.8	1358.1	1340.4	1326.3	1319.3
20°	1314.0	1310.4	1292.8	1269.9	1257.5
22.5°	1262.8	1262.8	1241.7	1211.7	1199.3
25°	1215.2	1208.1	1188.7	1146.4	1114.7
27.5°	1160.5	1149.9	1128.8	1068.8	1031.8
30°	1100.6	1095.3	1065.3	987.7	959.5
32.5°	1044.1	1035.3	1003.6	922.4	899.5
35°	985.9	978.9	931.2	860.7	839.5
37.5°	927.7	918.9	858.9	802.5	776.0
40°	869.5	858.9	793.7	742.5	714.3
42.5°	814.8	800.7	737.2	682.6	650.8
45°	756.6	740.8	677.3	620.8	596.1
47.5°	698.4	684.3	626.1	567.9	539.7
50°	636.7	624.4	571.4	513.2	483.3
52.5°	585.6	566.2	515.0	456.8	432.1
55°	525.6	509.7	462.1	407.4	386.3
57.5°	470.9	455.0	410.9	359.8	342.2
60°	419.8	396.8	359.8	315.7	301.6
62.5°	363.3	345.7	313.9	276.9	294.5
65°	312.2	294.5	266.3	271.6	225.8
67.5°	255.7	246.9	222.2	197.5	190.5
70°	208.1	197.5	188.7	162.3	155.2
72.5°	165.8	155.2	142.9	128.8	123.5
75°	125.2	116.4	109.4	104.1	114.6
77.5°	86.4	82.9	77.6	72.3	70.5
80°	56.4	54.7	52.9	51.1	49.4
82.5°	33.5	33.5	33.5	33.5	33.5
85°	17.6	19.4	21.2	22.9	24.7
87.5°	10.6	10.6	12.3	14.1	15.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)