

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: P560611

Luminaire Tested: FSR-12-2-LD4-2STD-35-UNV-93-85-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560611
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-35-UNV-93-85-EDD
Description: 1X2 FSR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2996.0 lumens
Efficiency: N/A
Efficacy: 90.0 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

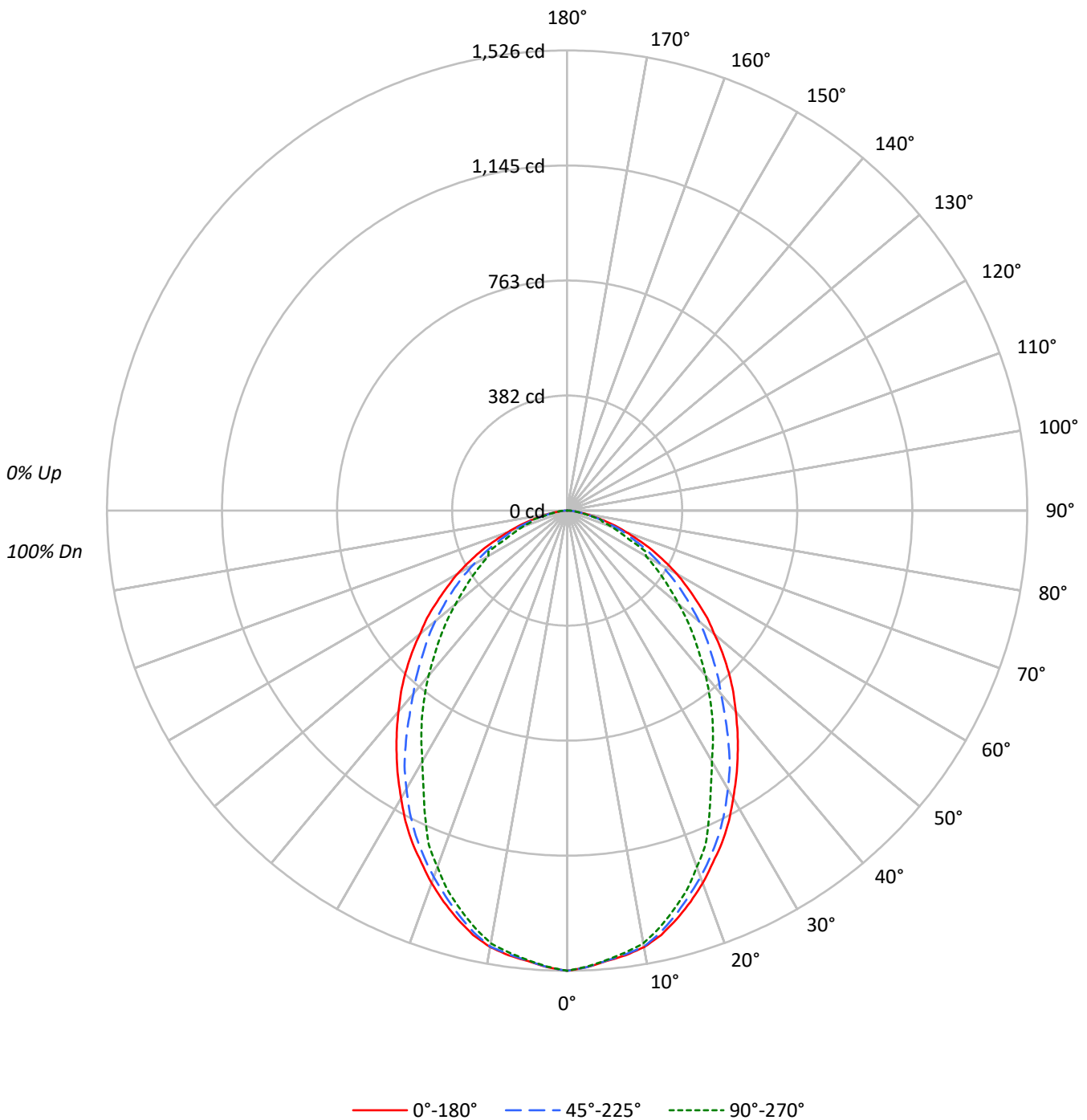
Input Watts (W): 33.3
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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									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°	8213	8213	8213
5°	8102	8092	8083
10°	8032	8022	7964
15°	7815	7736	7628
20°	7528	7407	7204
25°	7219	7061	6621
30°	6842	6622	5965
35°	6479	6121	5518
40°	6111	5578	5020
45°	5761	5157	4539
50°	5333	4786	4047
55°	4934	4337	3626
60°	4520	3874	3247
65°	3977	3393	2876
70°	3276	2971	2444
75°	2606	2275	2385
80°	1751	1640	1531
85°	1087	1309	1525

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5761 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.1	4.7
10°-20°	389.9	13.0
20°-30°	539.8	18.0
30°-40°	575.5	19.2
40°-50°	525.1	17.5
50°-60°	411.3	13.7
60°-70°	268.1	8.9
70°-80°	118.8	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°	1071.7	35.8
0°-40°	1647.2	55.0
0°-60°	2583.6	86.2
0°-90°	2996.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2996.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1526	1526	1526	1526	1526	
5°	1500	1498	1498	1496	1496	142
15°	1403	1403	1388	1374	1369	394
25°	1216	1208	1189	1147	1115	558
35°	986	979	932	861	840	617
45°	757	741	678	621	596	583
55°	526	510	462	408	386	472
65°	312	295	266	272	226	308
75°	125	116	109	104	115	134
85°	18	19	21	23	25	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1526.1	1526.1	1526.1	1526.1	1526.1
2.5°	1515.5	1515.5	1515.5	1513.8	1513.8
5°	1499.7	1497.9	1497.9	1496.1	1496.1
7.5°	1487.3	1485.5	1483.8	1482.0	1478.5
10°	1469.7	1469.7	1467.9	1459.1	1457.3
12.5°	1441.4	1439.7	1432.6	1420.3	1416.7
15°	1402.6	1402.6	1388.5	1374.4	1369.1
17.5°	1360.3	1358.5	1340.9	1326.8	1319.7
20°	1314.4	1310.9	1293.2	1270.3	1257.9
22.5°	1263.2	1263.2	1242.1	1212.1	1199.7
25°	1215.6	1208.5	1189.1	1146.8	1115.0
27.5°	1160.9	1150.3	1129.2	1069.2	1032.1
30°	1100.9	1095.6	1065.6	988.0	959.8
32.5°	1044.5	1035.6	1003.9	922.7	899.8
35°	986.2	979.2	931.6	861.0	839.8
37.5°	928.0	919.2	859.2	802.8	776.3
40°	869.8	859.2	793.9	742.8	714.5
42.5°	815.1	801.0	737.5	682.8	651.0
45°	756.9	741.0	677.5	621.0	596.3
47.5°	698.7	684.5	626.3	568.1	539.9
50°	636.9	624.6	571.6	513.4	483.4
52.5°	585.7	566.3	515.2	457.0	432.3
55°	525.8	509.9	462.2	407.6	386.4
57.5°	471.1	455.2	411.1	359.9	342.3
60°	419.9	397.0	359.9	315.8	301.7
62.5°	363.4	345.8	314.0	277.0	294.6
65°	312.3	294.6	266.4	271.7	225.8
67.5°	255.8	247.0	222.3	197.6	190.5
70°	208.2	197.6	188.8	162.3	155.3
72.5°	165.8	155.3	142.9	128.8	123.5
75°	125.3	116.4	109.4	104.1	114.7
77.5°	86.5	82.9	77.6	72.3	70.6
80°	56.5	54.7	52.9	51.2	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	12.4	14.1	15.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)