

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: P560225

Luminaire Tested: FSR-12-2-LD4-2HI-35-UNV-93-84-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560225
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-35-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 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3749.0 lumens
Efficiency: N/A
Efficacy: 86.8 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

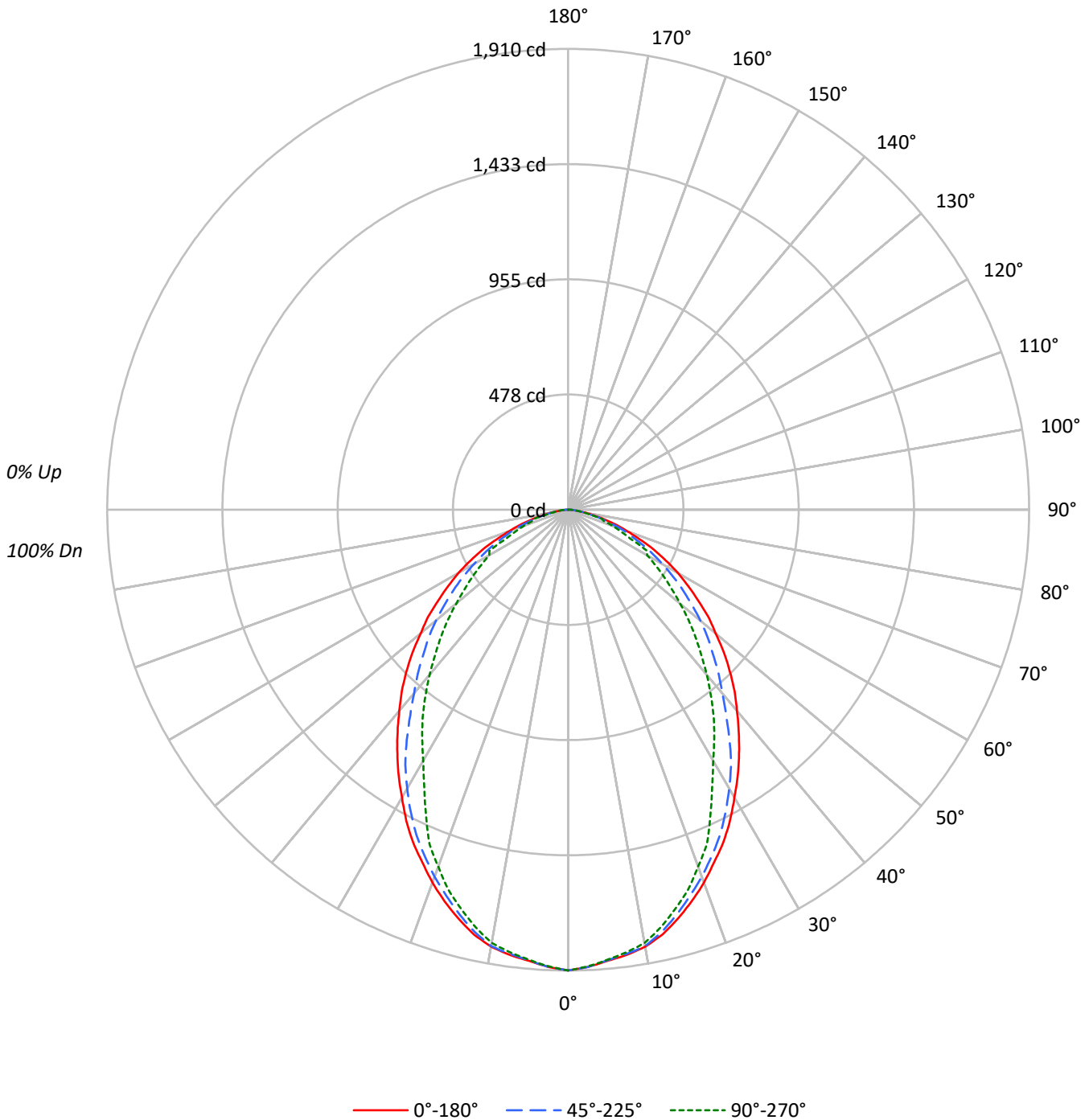
Input Watts (W): 43.2
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	10278	10278	10278
5°	10138	10126	10115
10°	10050	10038	9966
15°	9779	9681	9546
20°	9420	9269	9015
25°	9033	8836	8286
30°	8561	8287	7464
35°	8108	7659	6905
40°	7647	6980	6282
45°	7209	6453	5680
50°	6673	5989	5065
55°	6173	5427	4537
60°	5655	4848	4063
65°	4977	4246	3599
70°	4099	3717	3057
75°	3258	2847	2984
80°	2188	2052	1915
85°	1365	1636	1908

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7209 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.8	4.7
10°-20°	487.9	13.0
20°-30°	675.4	18.0
30°-40°	720.2	19.2
40°-50°	657.0	17.5
50°-60°	514.7	13.7
60°-70°	335.5	8.9
70°-80°	148.6	4.0
80°-90°	31.9	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°	1341.0	35.8
0°-40°	2061.2	55.0
0°-60°	3233.0	86.2
0°-90°	3749.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3749.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1910	1910	1910	1910	1910	
5°	1877	1874	1874	1872	1872	178
15°	1755	1755	1738	1720	1713	493
25°	1521	1512	1488	1435	1395	698
35°	1234	1225	1166	1077	1051	772
45°	947	927	848	777	746	730
55°	658	638	578	510	484	590
65°	391	369	333	340	283	385
75°	157	146	137	130	144	168
85°	22	24	26	29	31	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1909.7	1909.7	1909.7	1909.7	1909.7
2.5°	1896.4	1896.4	1896.4	1894.2	1894.2
5°	1876.6	1874.4	1874.4	1872.2	1872.2
7.5°	1861.1	1858.9	1856.7	1854.5	1850.1
10°	1839.0	1839.0	1836.8	1825.8	1823.6
12.5°	1803.7	1801.5	1792.7	1777.2	1772.8
15°	1755.1	1755.1	1737.5	1719.8	1713.2
17.5°	1702.2	1700.0	1677.9	1660.2	1651.4
20°	1644.8	1640.3	1618.3	1589.6	1574.1
22.5°	1580.7	1580.7	1554.2	1516.7	1501.3
25°	1521.1	1512.3	1488.0	1435.0	1395.3
27.5°	1452.7	1439.4	1413.0	1337.9	1291.5
30°	1377.6	1371.0	1333.5	1236.3	1201.0
32.5°	1307.0	1295.9	1256.2	1154.6	1125.9
35°	1234.1	1225.3	1165.7	1077.4	1050.9
37.5°	1161.3	1150.2	1075.2	1004.5	971.4
40°	1088.4	1075.2	993.5	929.5	894.1
42.5°	1020.0	1002.3	922.8	854.4	814.7
45°	947.1	927.2	847.8	777.1	746.2
47.5°	874.3	856.6	783.7	710.9	675.6
50°	797.0	781.5	715.3	642.5	604.9
52.5°	733.0	708.7	644.7	571.8	540.9
55°	657.9	638.0	578.4	510.0	483.5
57.5°	589.5	569.6	514.4	450.4	428.3
60°	525.4	496.7	450.4	395.2	377.5
62.5°	454.8	432.7	393.0	346.6	368.7
65°	390.8	368.7	333.4	340.0	282.6
67.5°	320.1	309.1	278.2	247.3	238.4
70°	260.5	247.3	236.2	203.1	194.3
72.5°	207.5	194.3	178.8	161.2	154.5
75°	156.7	145.7	136.9	130.3	143.5
77.5°	108.2	103.8	97.1	90.5	88.3
80°	70.6	68.4	66.2	64.0	61.8
82.5°	41.9	41.9	41.9	41.9	41.9
85°	22.1	24.3	26.5	28.7	30.9
87.5°	13.2	13.2	15.5	17.7	19.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)