

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: P560337

Luminaire Tested: FSR-12-2-LD4-2HI-50-UNV-82-84-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560337
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-82-84-EDD
Description: 1X2 FSR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3574.0 lumens
Efficiency: N/A
Efficacy: 82.7 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

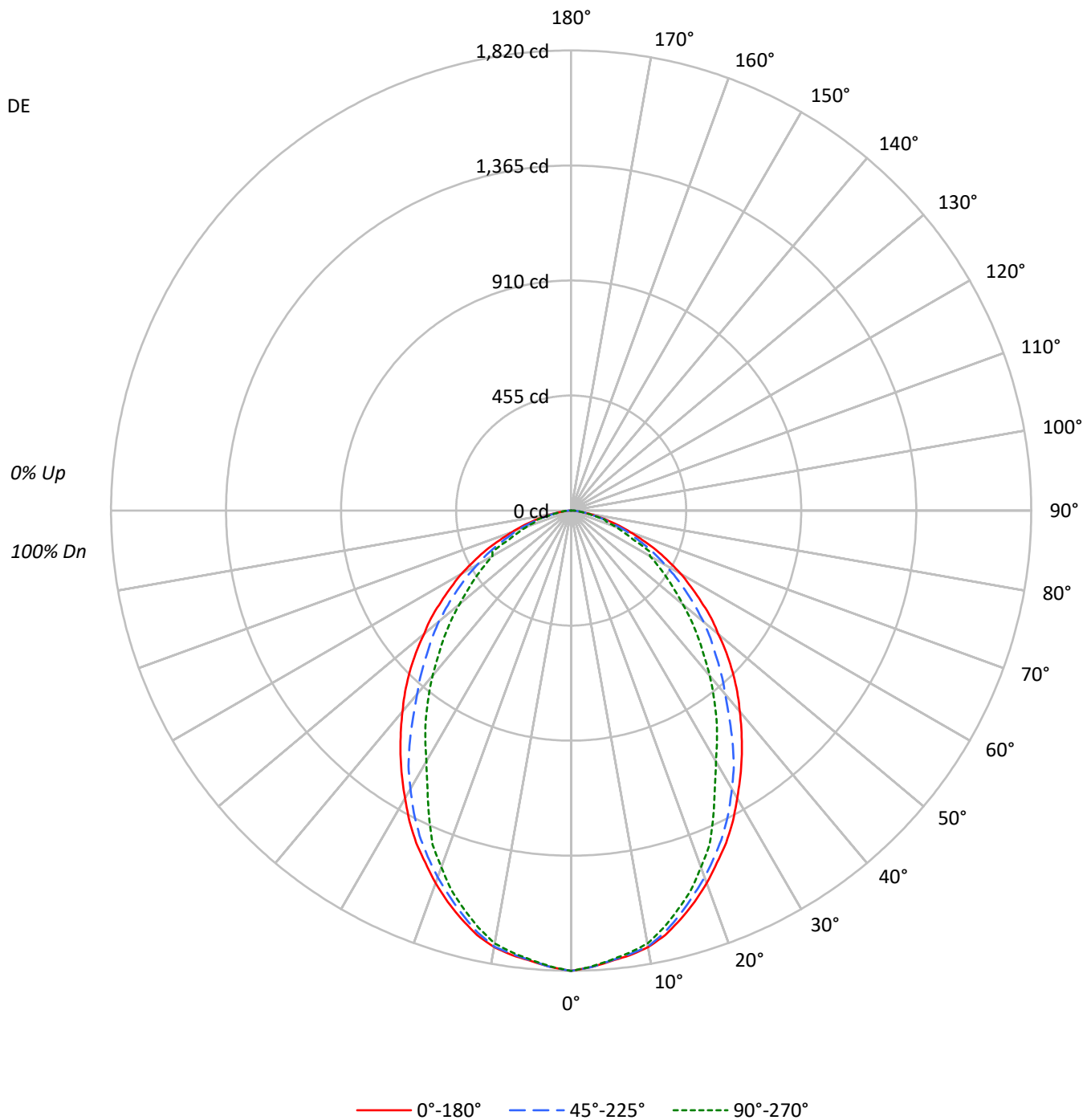
Input Watts (W): 43.2
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	9798	9798	9798
5°	9665	9654	9642
10°	9581	9570	9501
15°	9323	9229	9100
20°	8980	8836	8594
25°	8611	8424	7899
30°	8162	7900	7115
35°	7730	7301	6582
40°	7290	6654	5989
45°	6872	6151	5415
50°	6362	5709	4829
55°	5885	5174	4325
60°	5392	4622	3874
65°	4744	4047	3431
70°	3909	3544	2914
75°	3107	2714	2845
80°	2086	1956	1826
85°	1297	1562	1822

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6872 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.5	4.7
10°-20°	465.1	13.0
20°-30°	643.9	18.0
30°-40°	686.6	19.2
40°-50°	626.4	17.5
50°-60°	490.7	13.7
60°-70°	319.8	8.9
70°-80°	141.7	4.0
80°-90°	30.4	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°	1278.4	35.8
0°-40°	1965.0	55.0
0°-60°	3082.1	86.2
0°-90°	3574.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3574.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1820	1820	1820	1820	1820	
5°	1789	1787	1787	1785	1785	170
15°	1673	1673	1656	1640	1633	470
25°	1450	1442	1419	1368	1330	666
35°	1176	1168	1111	1027	1002	736
45°	903	884	808	741	711	696
55°	627	608	551	486	461	563
65°	372	352	318	324	269	367
75°	149	139	130	124	137	160
85°	21	23	25	27	30	29
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1820.5	1820.5	1820.5	1820.5	1820.5
2.5°	1807.9	1807.9	1807.9	1805.8	1805.8
5°	1789.0	1786.9	1786.9	1784.8	1784.8
7.5°	1774.2	1772.1	1770.0	1767.9	1763.7
10°	1753.2	1753.2	1751.1	1740.6	1738.5
12.5°	1719.5	1717.4	1709.0	1694.3	1690.1
15°	1673.2	1673.2	1656.4	1639.5	1633.2
17.5°	1622.7	1620.6	1599.6	1582.7	1574.3
20°	1568.0	1563.8	1542.7	1515.4	1500.6
22.5°	1507.0	1507.0	1481.7	1445.9	1431.2
25°	1450.1	1441.7	1418.6	1368.0	1330.2
27.5°	1384.9	1372.3	1347.0	1275.4	1231.2
30°	1313.3	1307.0	1271.2	1178.6	1144.9
32.5°	1246.0	1235.4	1197.6	1100.7	1073.4
35°	1176.5	1168.1	1111.3	1027.1	1001.8
37.5°	1107.1	1096.5	1025.0	957.6	926.1
40°	1037.6	1025.0	947.1	886.1	852.4
42.5°	972.4	955.5	879.8	814.5	776.6
45°	902.9	884.0	808.2	740.8	711.4
47.5°	833.5	816.6	747.2	677.7	644.0
50°	759.8	745.1	681.9	612.5	576.7
52.5°	698.8	675.6	614.6	545.1	515.6
55°	627.2	608.3	551.4	486.2	460.9
57.5°	561.9	543.0	490.4	429.4	408.3
60°	500.9	473.6	429.4	376.7	359.9
62.5°	433.6	412.5	374.6	330.4	351.5
65°	372.5	351.5	317.8	324.1	269.4
67.5°	305.2	294.7	265.2	235.7	227.3
70°	248.4	235.7	225.2	193.6	185.2
72.5°	197.8	185.2	170.5	153.6	147.3
75°	149.4	138.9	130.5	124.2	136.8
77.5°	103.1	98.9	92.6	86.3	84.2
80°	67.3	65.2	63.1	61.0	58.9
82.5°	40.0	40.0	40.0	40.0	40.0
85°	21.0	23.2	25.3	27.4	29.5
87.5°	12.6	12.6	14.7	16.8	18.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)