

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: P560325

Luminaire Tested: FSR-12-2-LD4-2HI-50-UNV-81-86-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560325
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-81-86-EDD
Description: 1X2 FSR TROFFER WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3538.0 lumens
Efficiency: N/A
Efficacy: 81.9 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

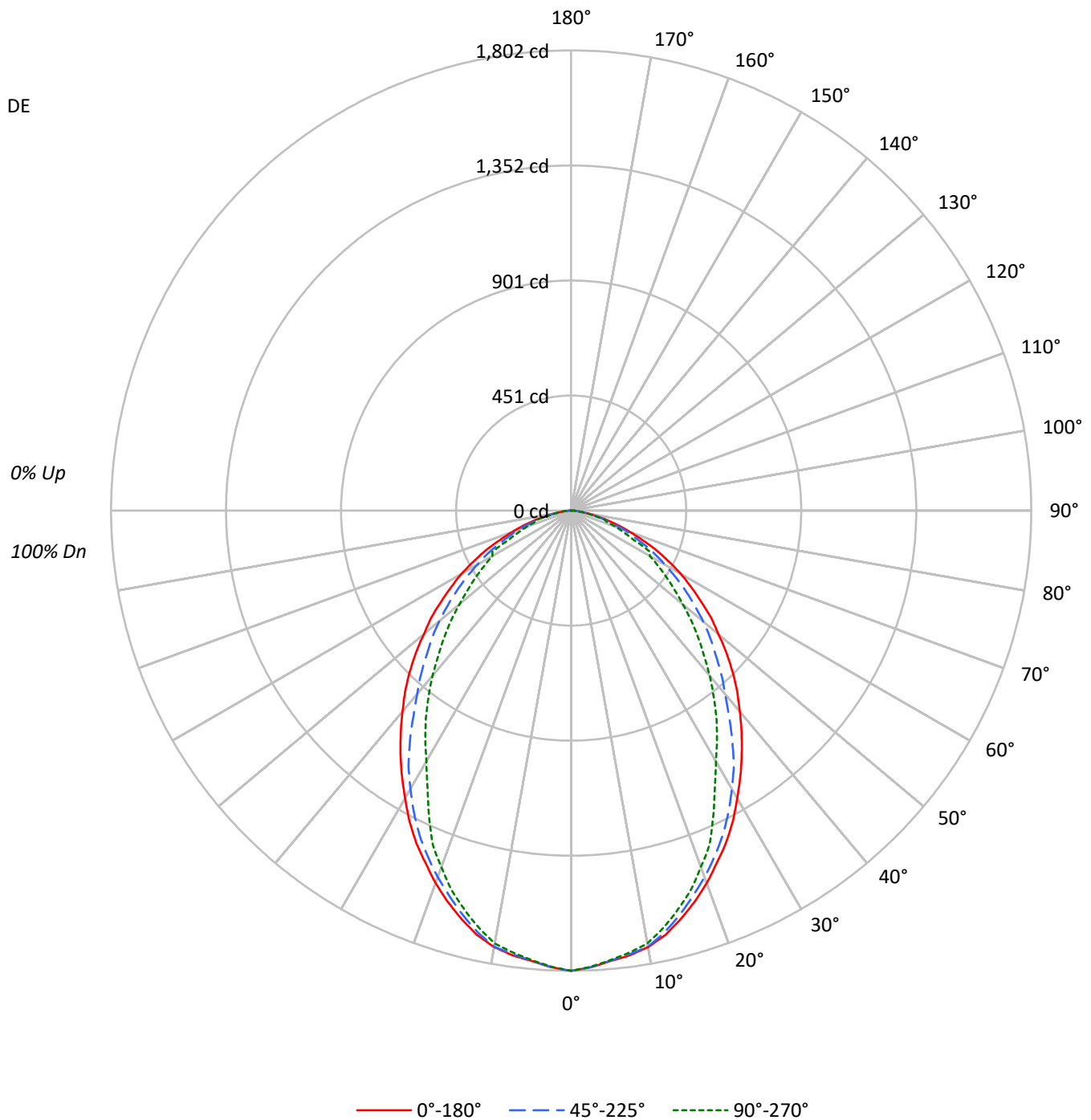
Input Watts (W): 43.2
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	9699	9699	9699
5°	9568	9557	9545
10°	9484	9474	9405
15°	9229	9136	9009
20°	8890	8747	8508
25°	8524	8339	7820
30°	8080	7820	7044
35°	7652	7228	6516
40°	7217	6587	5928
45°	6803	6090	5360
50°	6297	5652	4780
55°	5826	5122	4282
60°	5338	4575	3835
65°	4697	4006	3396
70°	3869	3508	2884
75°	3075	2687	2816
80°	2067	1937	1807
85°	1284	1544	1803

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6803 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.8	4.7
10°-20°	460.4	13.0
20°-30°	637.4	18.0
30°-40°	679.7	19.2
40°-50°	620.1	17.5
50°-60°	485.8	13.7
60°-70°	316.6	8.9
70°-80°	140.3	4.0
80°-90°	30.1	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°	1265.6	35.8
0°-40°	1945.2	55.0
0°-60°	3051.0	86.2
0°-90°	3538.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3538.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1802	1802	1802	1802	1802	
5°	1771	1769	1769	1767	1767	168
15°	1656	1656	1640	1623	1617	466
25°	1436	1427	1404	1354	1317	659
35°	1165	1156	1100	1017	992	728
45°	894	875	800	733	704	689
55°	621	602	546	481	456	557
65°	369	348	315	321	267	363
75°	148	138	129	123	135	159
85°	21	23	25	27	29	29
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1802.2	1802.2	1802.2	1802.2	1802.2
2.5°	1789.7	1789.7	1789.7	1787.6	1787.6
5°	1771.0	1768.9	1768.9	1766.8	1766.8
7.5°	1756.4	1754.3	1752.2	1750.1	1746.0
10°	1735.5	1735.5	1733.5	1723.0	1721.0
12.5°	1702.2	1700.1	1691.8	1677.2	1673.0
15°	1656.4	1656.4	1639.7	1623.0	1616.8
17.5°	1606.4	1604.3	1583.4	1566.8	1558.4
20°	1552.2	1548.0	1527.2	1500.1	1485.5
22.5°	1491.8	1491.8	1466.8	1431.4	1416.8
25°	1435.5	1427.2	1404.3	1354.3	1316.8
27.5°	1370.9	1358.4	1333.4	1262.6	1218.8
30°	1300.1	1293.8	1258.4	1166.7	1133.4
32.5°	1233.4	1223.0	1185.5	1089.7	1062.6
35°	1164.7	1156.3	1100.1	1016.7	991.7
37.5°	1095.9	1085.5	1014.7	948.0	916.7
40°	1027.2	1014.7	937.6	877.1	843.8
42.5°	962.6	945.9	870.9	806.3	768.8
45°	893.8	875.1	800.1	733.4	704.2
47.5°	825.1	808.4	739.6	670.9	637.5
50°	752.1	737.6	675.0	606.3	570.9
52.5°	691.7	668.8	608.4	539.6	510.5
55°	620.9	602.1	545.9	481.3	456.3
57.5°	556.3	537.5	485.5	425.0	404.2
60°	495.9	468.8	425.0	372.9	356.3
62.5°	429.2	408.4	370.9	327.1	347.9
65°	368.8	347.9	314.6	320.9	266.7
67.5°	302.1	291.7	262.5	233.3	225.0
70°	245.9	233.3	222.9	191.7	183.3
72.5°	195.8	183.3	168.8	152.1	145.8
75°	147.9	137.5	129.2	122.9	135.4
77.5°	102.1	97.9	91.7	85.4	83.3
80°	66.7	64.6	62.5	60.4	58.3
82.5°	39.6	39.6	39.6	39.6	39.6
85°	20.8	22.9	25.0	27.1	29.2
87.5°	12.5	12.5	14.6	16.7	18.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)