

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: P558977

Luminaire Tested: FSR-12-1-LD4-1STD-50-UNV-81-84-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558977
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-12-1-LD4-1STD-50-UNV-81-84-EDD
Description: 1X1 FSR TROFFER WITH .156 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: 768.0 lumens
Efficiency: N/A
Efficacy: 92.5 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

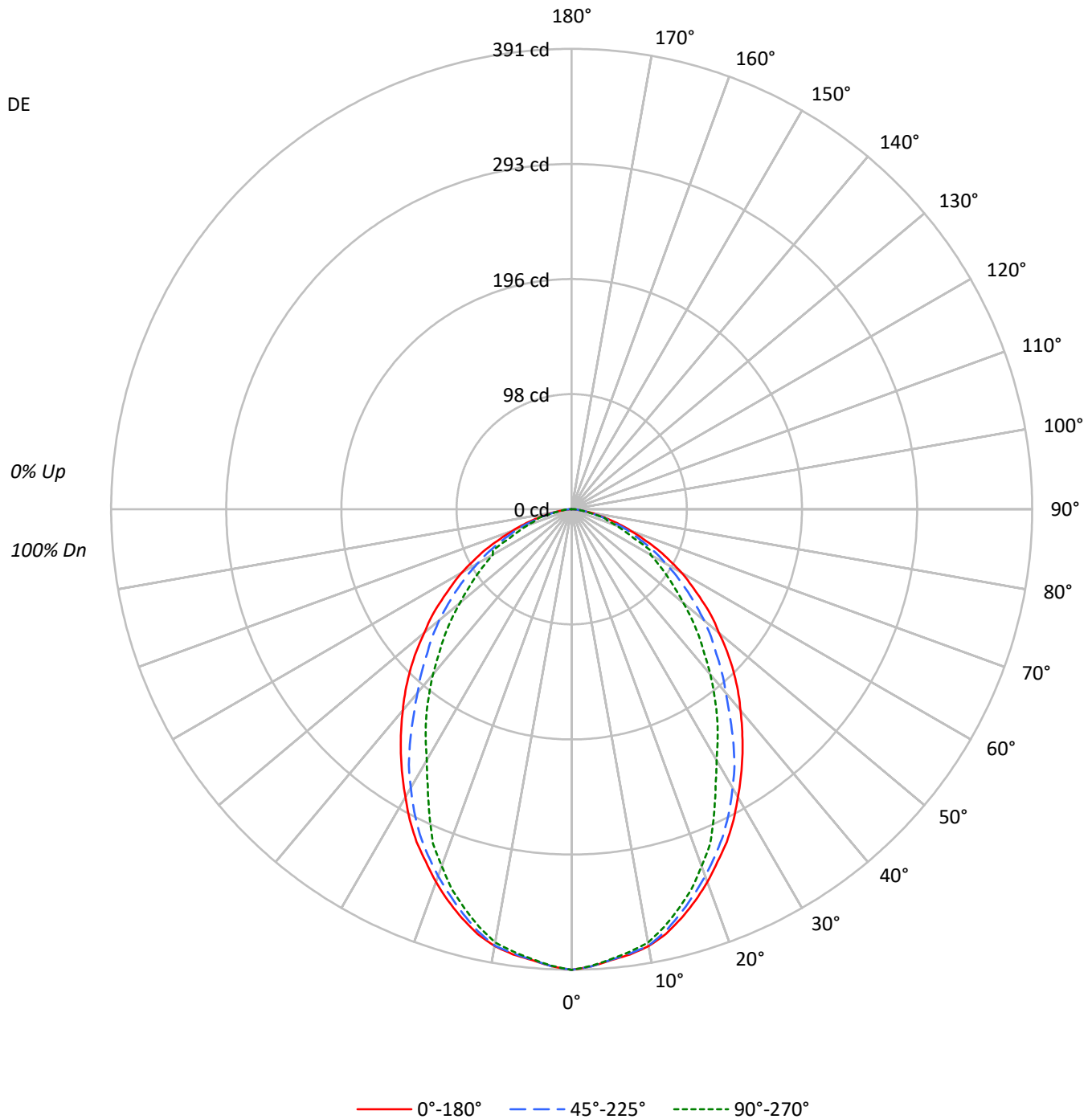
Input Watts (W): 8.3
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	4211	4211	4211
5°	4153	4149	4144
10°	4117	4113	4083
15°	4007	3966	3911
20°	3859	3797	3694
25°	3701	3620	3394
30°	3507	3396	3058
35°	3322	3138	2829
40°	3133	2859	2574
45°	2953	2644	2328
50°	2735	2453	2075
55°	2530	2224	1858
60°	2316	1987	1664
65°	2040	1740	1475
70°	1681	1523	1253
75°	1335	1164	1223
80°	899	843	787
85°	556	667	778

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2953 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.4	4.7
10°-20°	99.9	13.0
20°-30°	138.4	18.0
30°-40°	147.5	19.2
40°-50°	134.6	17.5
50°-60°	105.5	13.7
60°-70°	68.7	8.9
70°-80°	30.4	4.0
80°-90°	6.5	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°	274.7	35.8
0°-40°	422.3	55.0
0°-60°	662.3	86.2
0°-90°	768.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	768.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	391	391	391	391	391	
5°	384	384	384	384	384	36
15°	360	360	356	352	351	101
25°	312	310	305	294	286	143
35°	253	251	239	221	215	158
45°	194	190	174	159	153	149
55°	135	131	118	104	99	121
65°	80	76	68	70	58	79
75°	32	30	28	27	29	34
85°	4	5	5	6	6	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	391.2	391.2	391.2	391.2	391.2
2.5°	388.5	388.5	388.5	388.0	388.0
5°	384.4	384.0	384.0	383.5	383.5
7.5°	381.3	380.8	380.4	379.9	379.0
10°	376.7	376.7	376.3	374.0	373.6
12.5°	369.5	369.0	367.2	364.1	363.2
15°	359.6	359.6	355.9	352.3	351.0
17.5°	348.7	348.2	343.7	340.1	338.3
20°	336.9	336.0	331.5	325.6	322.5
22.5°	323.8	323.8	318.4	310.7	307.5
25°	311.6	309.8	304.8	294.0	285.8
27.5°	297.6	294.9	289.4	274.1	264.6
30°	282.2	280.9	273.2	253.3	246.0
32.5°	267.7	265.5	257.3	236.5	230.7
35°	252.8	251.0	238.8	220.7	215.3
37.5°	237.9	235.6	220.3	205.8	199.0
40°	223.0	220.3	203.5	190.4	183.2
42.5°	208.9	205.3	189.0	175.0	166.9
45°	194.0	190.0	173.7	159.2	152.9
47.5°	179.1	175.5	160.6	145.6	138.4
50°	163.3	160.1	146.5	131.6	123.9
52.5°	150.2	145.2	132.1	117.1	110.8
55°	134.8	130.7	118.5	104.5	99.0
57.5°	120.8	116.7	105.4	92.3	87.7
60°	107.6	101.8	92.3	81.0	77.3
62.5°	93.2	88.6	80.5	71.0	75.5
65°	80.1	75.5	68.3	69.6	57.9
67.5°	65.6	63.3	57.0	50.7	48.8
70°	53.4	50.7	48.4	41.6	39.8
72.5°	42.5	39.8	36.6	33.0	31.7
75°	32.1	29.8	28.0	26.7	29.4
77.5°	22.2	21.3	19.9	18.5	18.1
80°	14.5	14.0	13.6	13.1	12.7
82.5°	8.6	8.6	8.6	8.6	8.6
85°	4.5	5.0	5.4	5.9	6.3
87.5°	2.7	2.7	3.2	3.6	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)