

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P307488

Luminaire Tested: **14FCZ2-44-UNV-L82765-RDP-CA125-W2A-U-4500K**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P307488  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 14FCZ2-44-UNV-L82765-RDP-CA125-W2A-U-4500K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" ACRYLIC SHEET  
Light Source: (168) 4500K TUNABLE CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment:

<u>Sample No.</u>	<u>Condition</u>	<u>Description</u>
AS-5443-1	Good	WHITE TWIN R-EVOLVE FLOOD
AS-5443-2	Good	REFLECTOR
AS-5443-3	Good	DRIVER
AS-5443-4	Good	UPPER MODULE
AS-5443-5	Good	LENS
AS-5443-6	Good	DRIVER 2
AS-5443-7	Good	TRIM RING

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2700.0 lumens  
Efficiency: N/A  
Efficacy: 69.2 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

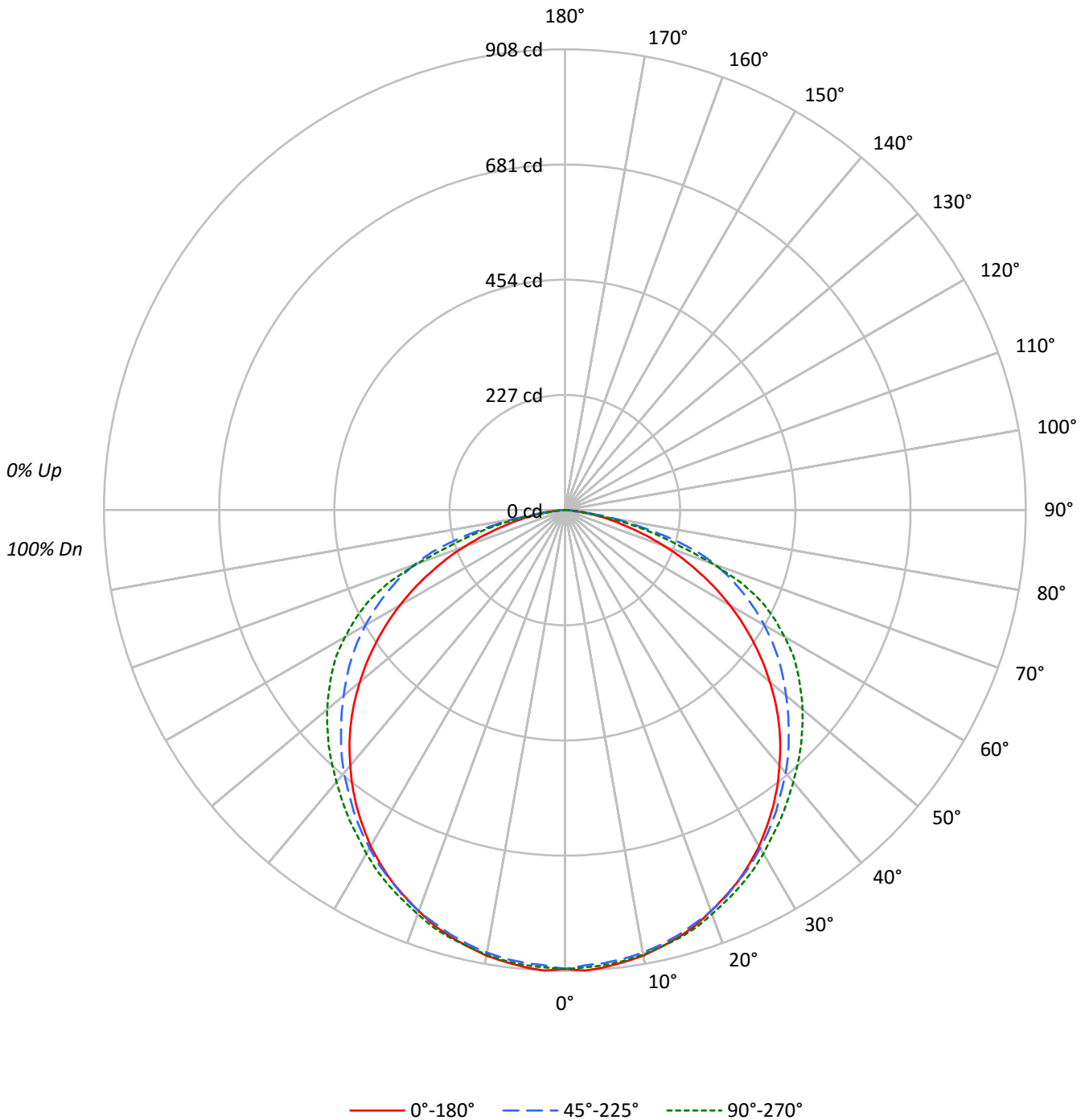
Input Watts (W): 39  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2433	2433	2433
5°	2443	2420	2431
10°	2437	2419	2431
15°	2425	2414	2431
20°	2409	2409	2427
25°	2397	2397	2428
30°	2378	2391	2430
35°	2348	2382	2438
40°	2310	2377	2458
45°	2270	2374	2503
50°	2206	2382	2559
55°	2126	2413	2631
60°	2019	2439	2689
65°	1866	2470	2725
70°	1659	2488	2438
75°	1337	2235	1951
80°	1046	1568	1274
85°	716	457	324



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.6	3.2
10°-20°	245.6	9.1
20°-30°	373.9	13.8
30°-40°	455.4	16.9
40°-50°	483.2	17.9
50°-60°	456.0	16.9
60°-70°	368.2	13.6
70°-80°	199.7	7.4
80°-90°	32.3	1.2
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°	705.1	26.1
0°-40°	1160.5	43.0
0°-60°	2099.7	77.8
0°-90°	2700.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2700.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	904	904	904	904	904	
5°	904	902	896	902	900	86
15°	871	868	866	873	873	246
25°	807	805	807	816	818	372
35°	715	719	725	740	742	447
45°	596	605	624	647	658	459
55°	453	472	514	548	561	405
65°	293	329	388	420	428	290
75°	129	188	215	194	188	141
85°	23	25	15	13	10	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	904.3	904.3	904.3	904.3	904.3
2.5°	908.5	904.3	898.0	904.3	902.2
5°	904.3	902.2	895.9	902.2	900.1
7.5°	898.0	898.0	891.7	895.9	895.9
10°	891.7	889.5	885.3	891.7	889.5
12.5°	881.1	879.0	876.9	883.2	881.1
15°	870.6	868.5	866.4	872.7	872.7
17.5°	857.9	855.8	853.7	862.1	862.1
20°	841.1	841.1	841.1	849.5	847.4
22.5°	824.2	824.2	826.3	834.7	832.6
25°	807.3	805.2	807.3	815.8	817.9
27.5°	786.3	788.4	790.5	798.9	801.0
30°	765.2	767.3	769.4	779.9	782.0
32.5°	739.9	744.1	748.3	761.0	761.0
35°	714.6	718.8	725.1	739.9	742.0
37.5°	687.2	691.4	699.8	716.7	720.9
40°	657.7	664.0	676.6	693.5	699.8
42.5°	628.2	636.6	651.3	670.3	678.8
45°	596.5	605.0	623.9	647.1	657.7
47.5°	562.8	573.4	596.5	626.1	634.5
50°	527.0	541.7	569.1	600.8	611.3
52.5°	491.1	508.0	541.7	575.5	586.0
55°	453.2	472.2	514.3	548.1	560.7
57.5°	415.3	436.3	484.8	520.7	533.3
60°	375.2	400.5	453.2	489.0	499.6
62.5°	335.2	364.7	421.6	457.4	465.9
65°	293.0	328.8	387.9	419.5	427.9
67.5°	253.0	295.1	354.1	377.3	377.3
70°	210.8	257.2	316.2	322.5	309.9
72.5°	168.6	221.3	274.0	250.8	240.3
75°	128.6	187.6	215.0	193.9	187.6
77.5°	97.0	151.8	151.8	139.1	134.9
80°	67.5	115.9	101.2	88.5	82.2
82.5°	44.3	65.3	52.7	42.2	35.8
85°	23.2	25.3	14.8	12.6	10.5
87.5°	8.4	4.2	2.1	4.2	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)