

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: P312122

Luminaire Tested: **14FCZ2-44-UNV-L83050-RDP-CA125-W2A-U-4000K**

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: P312122  
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-L83050-RDP-CA125-W2A-U-4000K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" ACRYLIC SHEET  
Light Source: (168) 4000K 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**

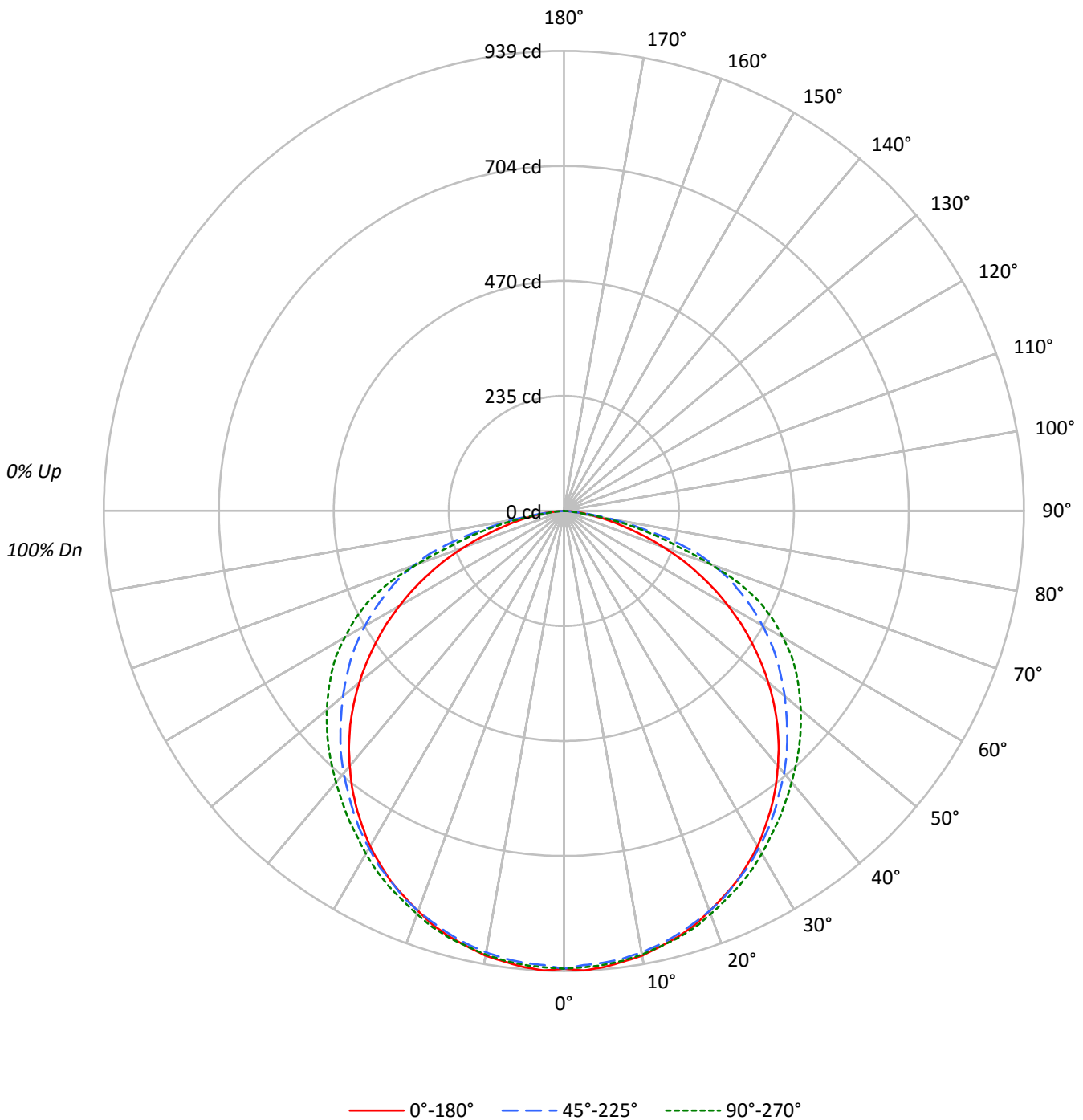
Lumens per Lamp: N/A  
Luminaire Lumens: 2790.0 lumens  
Efficiency: N/A  
Efficacy: 71.2 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 39.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
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: 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°	2514	2514	2514
5°	2524	2501	2512
10°	2518	2500	2512
15°	2506	2494	2512
20°	2489	2489	2507
25°	2477	2477	2509
30°	2457	2470	2511
35°	2426	2462	2519
40°	2387	2456	2540
45°	2346	2453	2586
50°	2280	2462	2645
55°	2197	2494	2718
60°	2087	2520	2778
65°	1928	2552	2816
70°	1714	2570	2519
75°	1382	2310	2016
80°	1080	1621	1316
85°	741	469	337



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.4	3.2
10°-20°	253.8	9.1
20°-30°	386.4	13.8
30°-40°	470.6	16.9
40°-50°	499.3	17.9
50°-60°	471.2	16.9
60°-70°	380.5	13.6
70°-80°	206.4	7.4
80°-90°	33.4	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°	728.6	26.1
0°-40°	1199.2	43.0
0°-60°	2169.7	77.8
0°-90°	2790.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2790.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	934	934	934	934	934	
5°	934	932	926	932	930	89
15°	900	897	895	902	902	254
25°	834	832	834	843	845	384
35°	738	743	749	764	767	462
45°	616	625	645	669	680	475
55°	468	488	532	566	579	418
65°	303	340	401	434	442	300
75°	133	194	222	200	194	145
85°	24	26	15	13	11	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	934.4	934.4	934.4	934.4	934.4
2.5°	938.8	934.4	927.9	934.4	932.3
5°	934.4	932.3	925.7	932.3	930.1
7.5°	927.9	927.9	921.4	925.7	925.7
10°	921.4	919.2	914.8	921.4	919.2
12.5°	910.5	908.3	906.1	912.7	910.5
15°	899.6	897.4	895.2	901.8	901.8
17.5°	886.5	884.3	882.2	890.9	890.9
20°	869.1	869.1	869.1	877.8	875.6
22.5°	851.7	851.7	853.8	862.6	860.4
25°	834.2	832.1	834.2	843.0	845.1
27.5°	812.5	814.6	816.8	825.5	827.7
30°	790.7	792.9	795.0	805.9	808.1
32.5°	764.5	768.9	773.3	786.3	786.3
35°	738.4	742.8	749.3	764.5	766.7
37.5°	710.1	714.4	723.2	740.6	744.9
40°	679.6	686.1	699.2	716.6	723.2
42.5°	649.1	657.8	673.1	692.7	701.4
45°	616.4	625.1	644.7	668.7	679.6
47.5°	581.6	592.5	616.4	646.9	655.6
50°	544.5	559.8	588.1	620.8	631.7
52.5°	507.5	524.9	559.8	594.6	605.5
55°	468.3	487.9	531.5	566.3	579.4
57.5°	429.1	450.9	501.0	538.0	551.1
60°	387.7	413.9	468.3	505.3	516.2
62.5°	346.3	376.8	435.6	472.7	481.4
65°	302.8	339.8	400.8	433.5	442.2
67.5°	261.4	304.9	365.9	389.9	389.9
70°	217.8	265.7	326.7	333.3	320.2
72.5°	174.3	228.7	283.2	259.2	248.3
75°	132.9	193.9	222.2	200.4	193.9
77.5°	100.2	156.8	156.8	143.8	139.4
80°	69.7	119.8	104.6	91.5	84.9
82.5°	45.7	67.5	54.5	43.6	37.0
85°	24.0	26.1	15.2	13.1	10.9
87.5°	8.7	4.4	2.2	4.4	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)