

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: P312137

Luminaire Tested: **14FCZ2-44-UNV-L83050-RDP-CP250-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: P312137  
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-CP250-W2A-U-4000K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" POLYCARB 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**

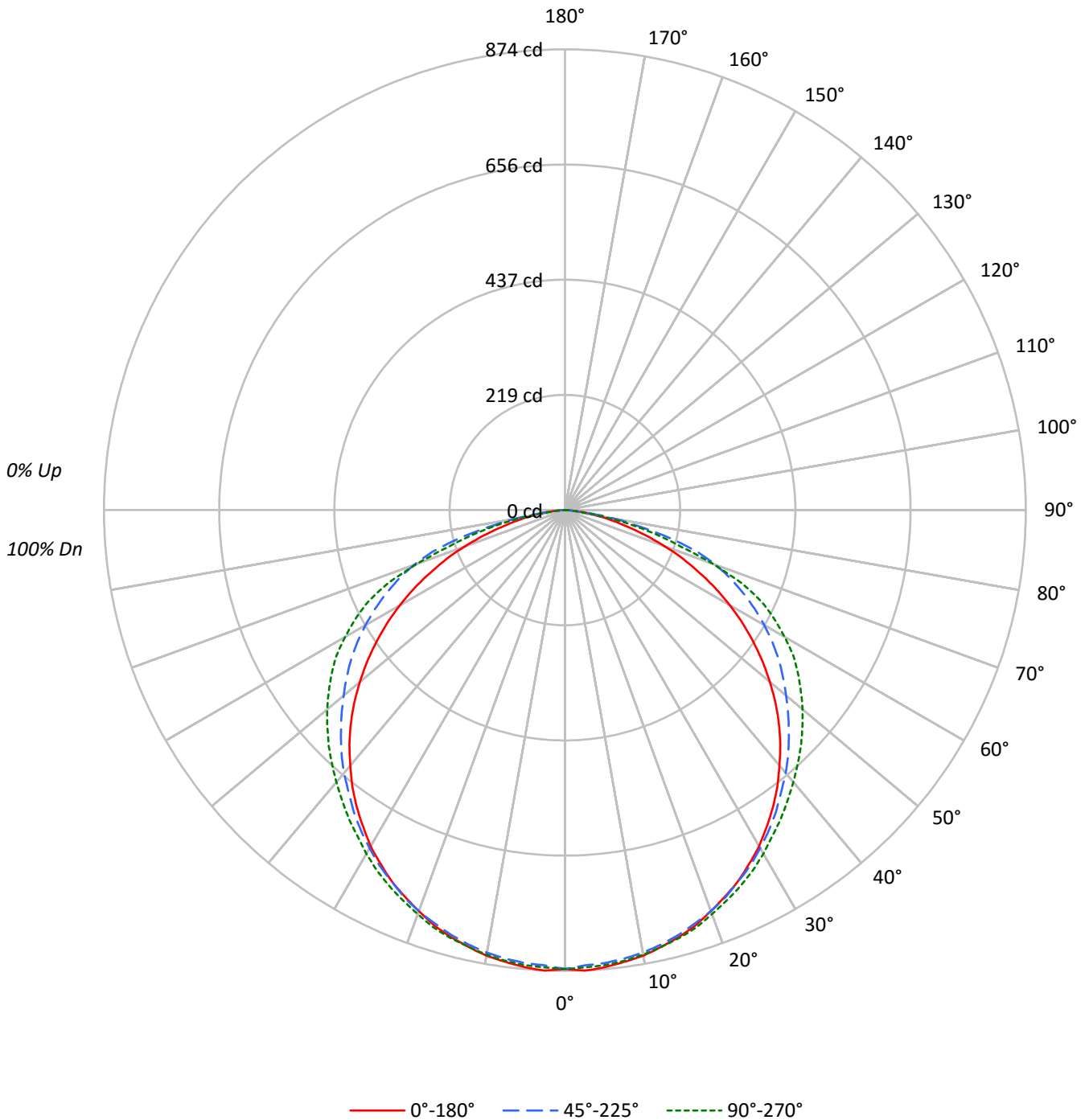
Lumens per Lamp: N/A  
Luminaire Lumens: 2599.0 lumens  
Efficiency: N/A  
Efficacy: 66.3 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 39.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	2342	2342	2342
5°	2351	2330	2340
10°	2345	2329	2340
15°	2335	2323	2340
20°	2318	2318	2336
25°	2307	2307	2338
30°	2289	2301	2339
35°	2260	2293	2346
40°	2224	2288	2367
45°	2185	2286	2409
50°	2124	2293	2463
55°	2047	2323	2532
60°	1944	2348	2588
65°	1796	2377	2623
70°	1596	2395	2347
75°	1287	2152	1878
80°	1006	1509	1226
85°	689	438	312



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.4	3.2
10°-20°	236.4	9.1
20°-30°	359.9	13.8
30°-40°	438.4	16.9
40°-50°	465.1	17.9
50°-60°	439.0	16.9
60°-70°	354.4	13.6
70°-80°	192.3	7.4
80°-90°	31.1	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°	678.7	26.1
0°-40°	1117.1	43.0
0°-60°	2021.2	77.8
0°-90°	2599.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2599.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	870	870	870	870	870	
5°	870	868	862	868	866	83
15°	838	836	834	840	840	236
25°	777	775	777	785	787	358
35°	688	692	698	712	714	430
45°	574	582	601	623	633	442
55°	436	454	495	528	540	390
65°	282	316	373	404	412	279
75°	124	181	207	187	181	135
85°	22	24	14	12	10	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	870.5	870.5	870.5	870.5	870.5
2.5°	874.5	870.5	864.4	870.5	868.4
5°	870.5	868.4	862.4	868.4	866.4
7.5°	864.4	864.4	858.3	862.4	862.4
10°	858.3	856.3	852.2	858.3	856.3
12.5°	848.2	846.1	844.1	850.2	848.2
15°	838.0	836.0	833.9	840.0	840.0
17.5°	825.8	823.8	821.8	829.9	829.9
20°	809.6	809.6	809.6	817.7	815.7
22.5°	793.4	793.4	795.4	803.5	801.5
25°	777.1	775.1	777.1	785.3	787.3
27.5°	756.8	758.9	760.9	769.0	771.0
30°	736.6	738.6	740.6	750.8	752.8
32.5°	712.2	716.3	720.3	732.5	732.5
35°	687.9	691.9	698.0	712.2	714.2
37.5°	661.5	665.5	673.7	689.9	693.9
40°	633.1	639.2	651.3	667.6	673.7
42.5°	604.7	612.8	627.0	645.2	653.4
45°	574.2	582.3	600.6	622.9	633.1
47.5°	541.8	551.9	574.2	602.6	610.8
50°	507.3	521.5	547.8	578.3	588.4
52.5°	472.8	489.0	521.5	553.9	564.1
55°	436.3	454.5	495.1	527.6	539.7
57.5°	399.7	420.0	466.7	501.2	513.4
60°	361.2	385.5	436.3	470.7	480.9
62.5°	322.6	351.0	405.8	440.3	448.4
65°	282.0	316.5	373.3	403.8	411.9
67.5°	243.5	284.1	340.9	363.2	363.2
70°	202.9	247.5	304.4	310.4	298.3
72.5°	162.3	213.1	263.8	241.5	231.3
75°	123.8	180.6	207.0	186.7	180.6
77.5°	93.3	146.1	146.1	133.9	129.9
80°	64.9	111.6	97.4	85.2	79.1
82.5°	42.6	62.9	50.7	40.6	34.5
85°	22.3	24.3	14.2	12.2	10.1
87.5°	8.1	4.1	2.0	4.1	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)