

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: P312323

Luminaire Tested: **14FCZ2-25-UNV-L83050-S-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: P312323  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 14FCZ2-25-UNV-L83050-S-CA125-W2A-U-4500K  
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS,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**

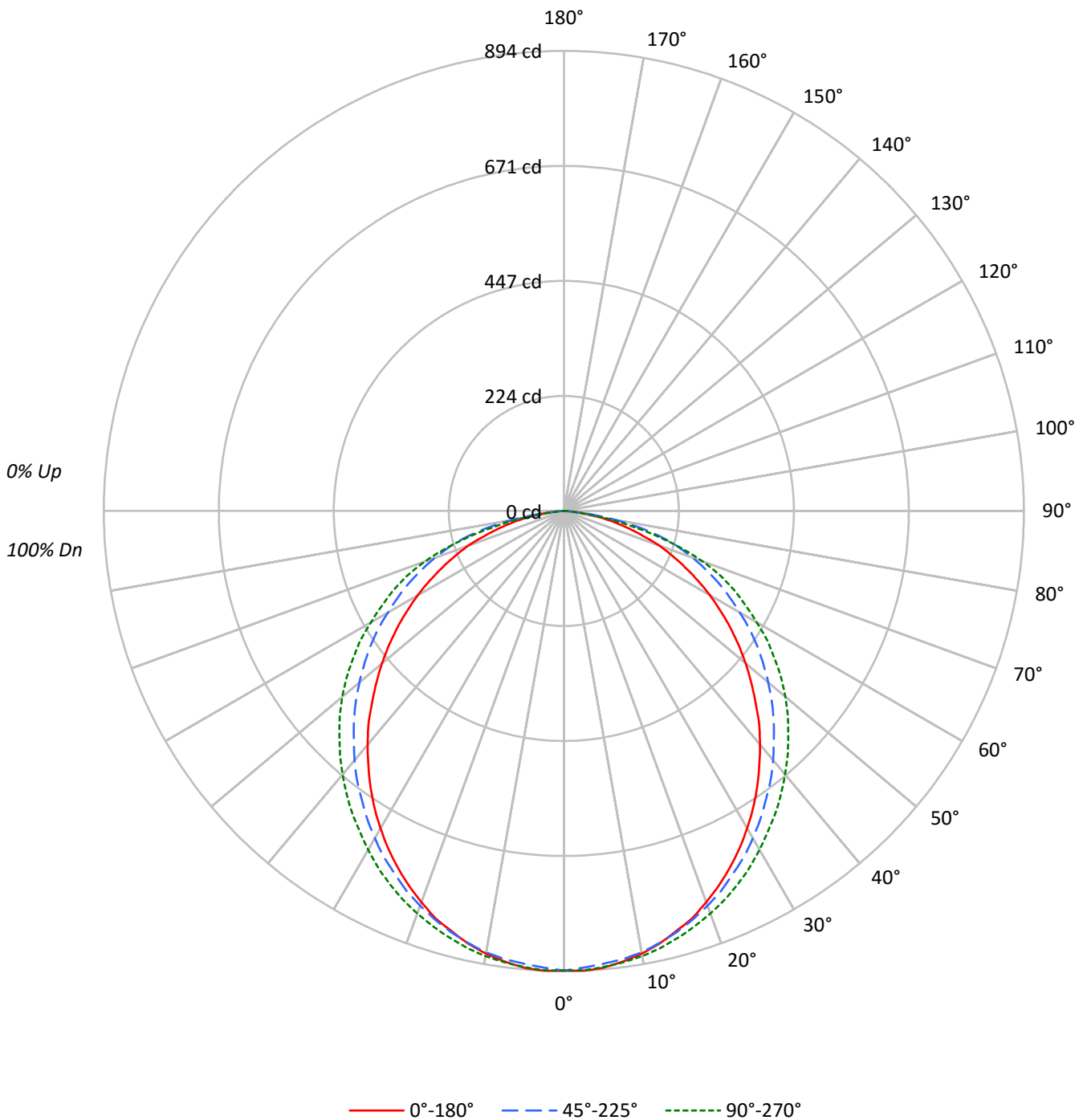
Lumens per Lamp: N/A  
Luminaire Lumens: 2502.0 lumens  
Efficiency: N/A  
Efficacy: 121.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (A<sub>in</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	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	2404	2404	2404
5°	2406	2386	2403
10°	2386	2379	2400
15°	2354	2360	2391
20°	2316	2338	2384
25°	2269	2309	2376
30°	2213	2282	2363
35°	2152	2250	2355
40°	2083	2223	2349
45°	2006	2195	2346
50°	1932	2171	2353
55°	1851	2153	2345
60°	1763	2123	2330
65°	1659	2117	2330
70°	1562	2098	2264
75°	1355	2050	1935
80°	1096	1654	1288
85°	729	574	383



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.3	3.4
10°-20°	240.0	9.6
20°-30°	360.0	14.4
30°-40°	429.5	17.2
40°-50°	444.0	17.7
50°-60°	405.3	16.2
60°-70°	319.0	12.7
70°-80°	185.7	7.4
80°-90°	34.2	1.4
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°	684.3	27.4
0°-40°	1113.8	44.5
0°-60°	1963.1	78.5
0°-90°	2502.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2502.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	893	893	893	893	893	
5°	891	888	883	891	890	84
15°	845	846	847	858	858	238
25°	764	768	778	796	800	352
35°	655	664	685	711	717	409
45°	527	545	577	609	616	407
55°	394	416	459	492	500	353
65°	260	288	332	358	366	259
75°	130	161	197	194	186	138
85°	24	34	19	15	12	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	893.2	893.2	893.2	893.2	893.2
2.5°	894.4	891.9	888.2	894.4	893.2
5°	890.7	888.2	883.2	890.7	889.5
7.5°	883.2	880.8	878.3	885.7	884.5
10°	873.3	872.1	870.8	879.5	878.3
12.5°	860.9	860.9	859.7	869.6	869.6
15°	844.8	846.0	847.3	858.4	858.4
17.5°	829.9	828.7	832.4	844.8	846.0
20°	808.8	811.3	816.3	831.1	832.4
22.5°	787.7	790.2	798.9	813.8	817.5
25°	764.2	767.9	777.8	796.4	800.1
27.5°	739.3	744.3	758.0	777.8	781.5
30°	712.1	719.5	734.4	756.7	760.4
32.5°	684.8	692.2	710.8	733.1	738.1
35°	655.0	663.7	684.8	710.8	717.0
37.5°	624.0	635.1	660.0	686.0	693.4
40°	593.0	605.4	632.7	660.0	668.6
42.5°	562.0	574.4	604.1	635.1	643.8
45°	527.2	544.6	576.8	609.1	616.5
47.5°	493.7	512.3	548.3	580.6	590.5
50°	461.5	480.1	518.5	552.0	562.0
52.5°	428.0	447.8	488.8	523.5	532.2
55°	394.5	415.6	459.0	492.5	499.9
57.5°	361.0	383.3	428.0	460.2	468.9
60°	327.5	351.1	394.5	426.7	432.9
62.5°	294.0	318.8	363.5	392.0	398.2
65°	260.5	287.8	332.5	358.5	366.0
67.5°	228.3	255.5	299.0	323.8	330.0
70°	198.5	223.3	266.7	285.3	287.8
72.5°	161.3	192.3	234.5	244.4	238.2
75°	130.3	161.3	197.2	193.5	186.1
77.5°	99.2	130.3	153.8	141.4	131.5
80°	70.7	101.7	106.7	88.1	83.1
82.5°	45.9	70.7	59.5	45.9	37.2
85°	23.6	33.5	18.6	14.9	12.4
87.5°	7.4	5.0	2.5	2.5	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)