

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: P308299

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-HRP-CA125-W2A-U-5000K**

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: P308299  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-22)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 22FCZ2-44HE-UNV-L82765-HRP-CA125-W2A-U-5000K  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" ACRYLIC SHEET  
Light Source: (168) 3000K 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**

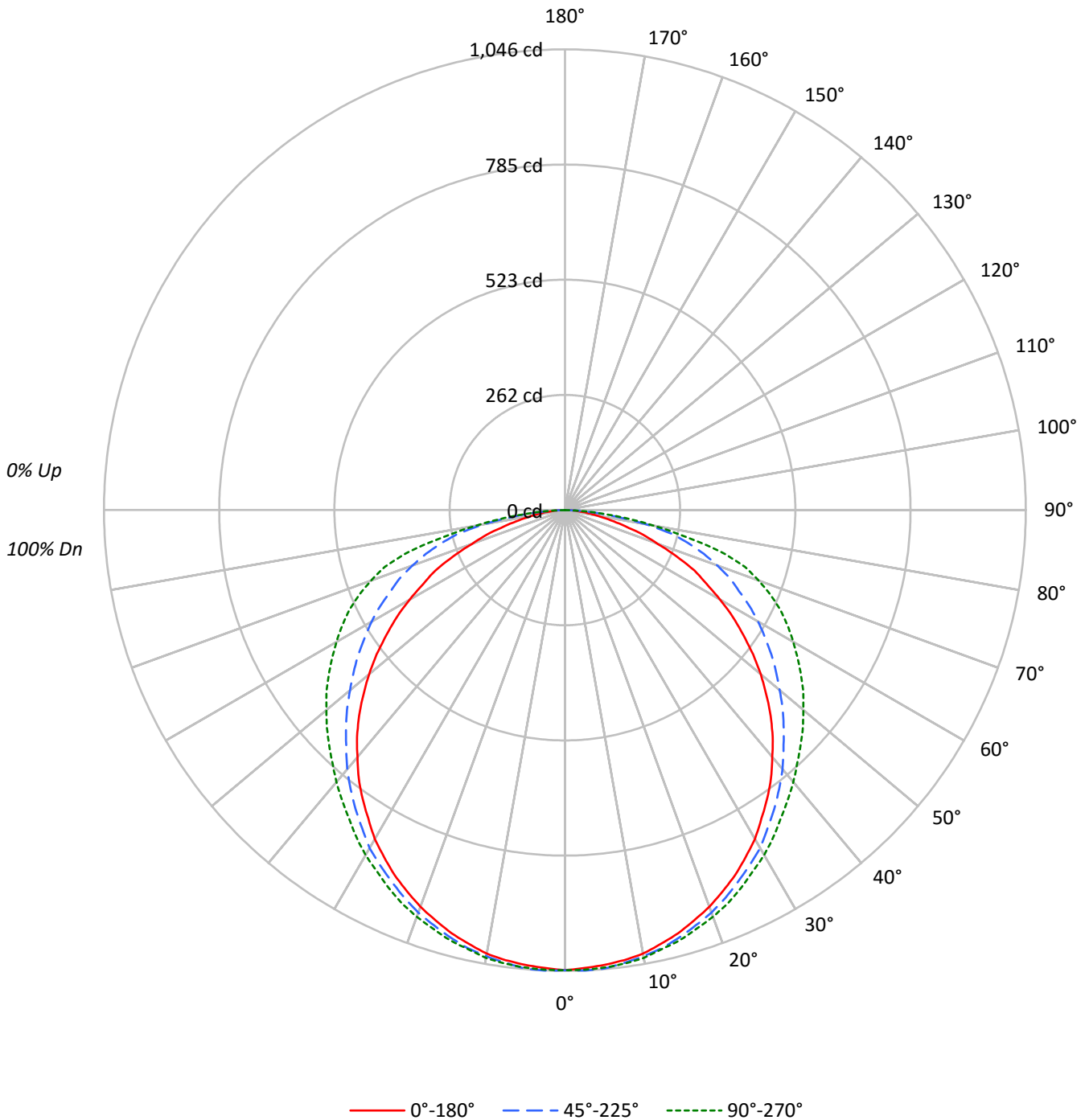
Lumens per Lamp: N/A  
Luminaire Lumens: 3172.0 lumens  
Efficiency: N/A  
Efficacy: 83.3 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 38.1  
Input Voltage (V): NR  
Input Current (A<sub>in</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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	84	78	73	80	75	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

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

	0°	45°	90°
0°	2811	2811	2811
5°	2800	2821	2816
10°	2794	2810	2821
15°	2771	2798	2815
20°	2745	2785	2814
25°	2715	2763	2810
30°	2680	2754	2810
35°	2629	2721	2807
40°	2573	2699	2833
45°	2513	2673	2879
50°	2429	2664	2957
55°	2319	2685	3070
60°	2186	2724	3220
65°	2064	2777	3440
70°	1763	2897	3684
75°	1477	3016	3828
80°	1209	2915	3194
85°	1050	2161	2347



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.0	3.1
10°-20°	283.2	8.9
20°-30°	429.1	13.5
30°-40°	518.2	16.3
40°-50°	544.5	17.2
50°-60°	512.3	16.2
60°-70°	427.2	13.5
70°-80°	283.0	8.9
80°-90°	75.4	2.4
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°	811.3	25.6
0°-40°	1329.5	41.9
0°-60°	2386.3	75.2
0°-90°	3172.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3172.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1044	1044	1044	1044	1044	
5°	1036	1038	1044	1044	1042	99
15°	994	998	1004	1008	1010	280
25°	914	920	930	942	946	421
35°	800	808	828	846	854	500
45°	660	670	702	738	756	509
55°	494	516	572	630	654	442
65°	324	352	436	508	540	315
75°	142	198	290	350	368	154
85°	34	52	70	76	76	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1044.5	1044.5	1044.5	1044.5	1044.5
2.5°	1040.5	1042.5	1046.5	1046.5	1044.5
5°	1036.5	1038.5	1044.5	1044.5	1042.5
7.5°	1030.5	1032.5	1036.5	1040.5	1038.5
10°	1022.5	1024.5	1028.5	1032.5	1032.5
12.5°	1008.5	1010.5	1018.5	1020.5	1020.5
15°	994.5	998.5	1004.5	1008.5	1010.5
17.5°	976.5	980.5	988.5	996.5	996.5
20°	958.5	962.5	972.5	980.5	982.5
22.5°	936.5	942.5	952.5	962.5	966.5
25°	914.4	920.4	930.4	942.5	946.5
27.5°	888.4	894.4	908.4	922.4	924.4
30°	862.4	868.4	886.4	898.4	904.4
32.5°	830.4	838.4	856.4	874.4	880.4
35°	800.4	808.4	828.4	846.4	854.4
37.5°	768.4	776.4	798.4	820.4	830.4
40°	732.4	742.4	768.4	792.4	806.4
42.5°	698.3	708.3	734.4	766.4	780.4
45°	660.3	670.3	702.3	738.4	756.4
47.5°	620.3	632.3	670.3	714.3	732.4
50°	580.3	594.3	636.3	686.3	706.3
52.5°	538.3	556.3	604.3	658.3	682.3
55°	494.2	516.2	572.3	630.3	654.3
57.5°	452.2	472.2	538.3	600.3	626.3
60°	406.2	432.2	506.2	570.3	598.3
62.5°	362.2	390.2	472.2	540.3	570.3
65°	324.2	352.2	436.2	508.2	540.3
67.5°	274.1	312.2	406.2	474.2	506.2
70°	224.1	276.1	368.2	438.2	468.2
72.5°	186.1	236.1	330.2	400.2	428.2
75°	142.1	198.1	290.1	350.2	368.2
77.5°	106.1	164.1	248.1	278.1	280.1
80°	78.0	126.1	188.1	198.1	206.1
82.5°	54.0	88.0	122.1	134.1	138.1
85°	34.0	52.0	70.0	76.0	76.0
87.5°	18.0	20.0	24.0	24.0	24.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)