

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: P308297

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-HRP-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: P308297  
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-4000K  
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**

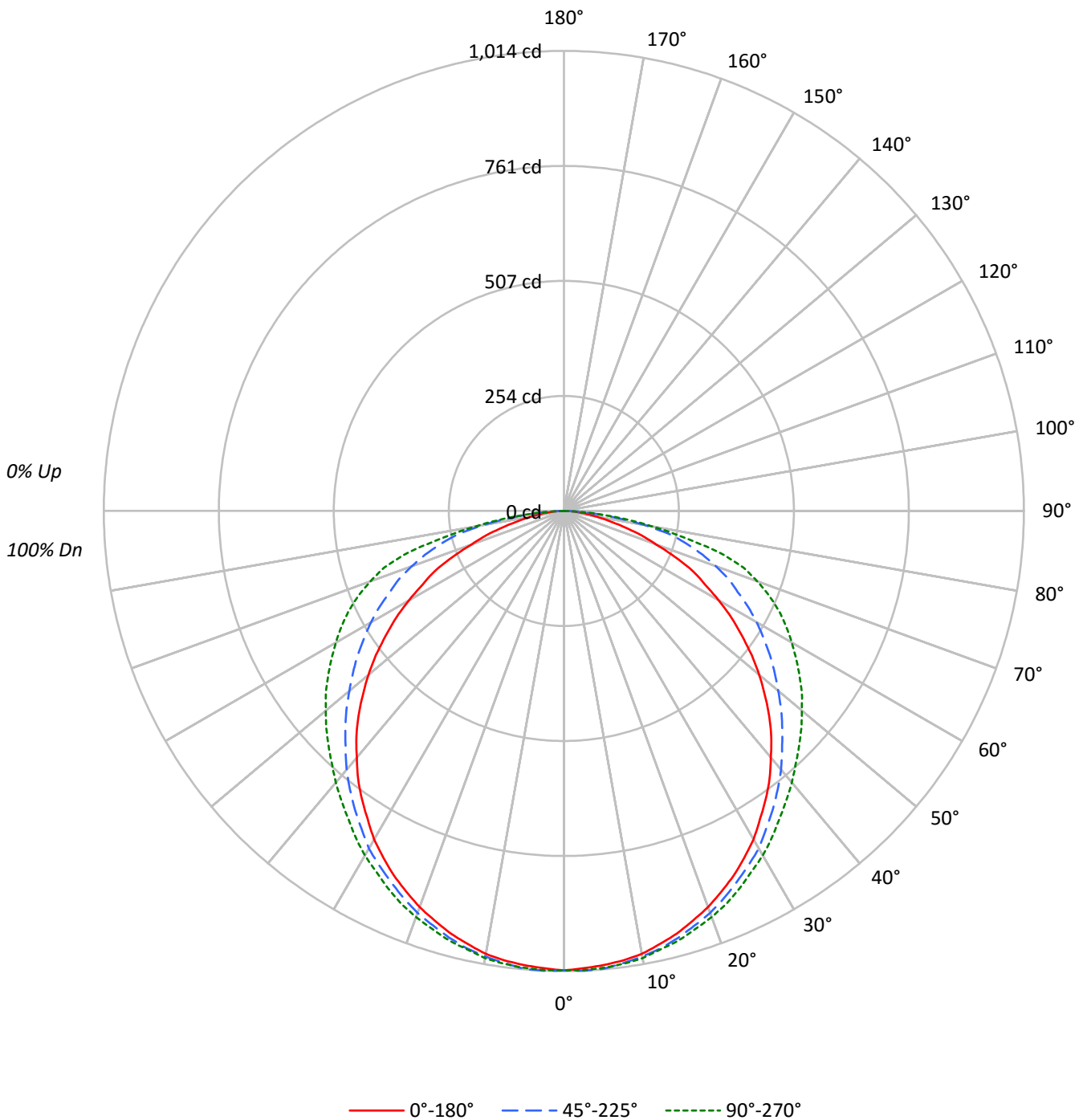
Lumens per Lamp: N/A  
Luminaire Lumens: 3075.0 lumens  
Efficiency: N/A  
Efficacy: 81.8 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 37.6  
Input Voltage (V): NR  
Input Current (A<sub>in</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	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°	2725	2725	2725
5°	2714	2735	2730
10°	2708	2724	2735
15°	2686	2713	2729
20°	2661	2700	2727
25°	2632	2678	2724
30°	2598	2670	2724
35°	2549	2638	2721
40°	2494	2617	2746
45°	2436	2591	2790
50°	2355	2582	2866
55°	2248	2603	2976
60°	2119	2641	3122
65°	2001	2693	3335
70°	1710	2808	3571
75°	1432	2925	3711
80°	1173	2825	3096
85°	1019	2096	2276



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.0	3.1
10°-20°	274.5	8.9
20°-30°	416.0	13.5
30°-40°	502.4	16.3
40°-50°	527.9	17.2
50°-60°	496.7	16.2
60°-70°	414.1	13.5
70°-80°	274.4	8.9
80°-90°	73.1	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°	786.5	25.6
0°-40°	1288.9	41.9
0°-60°	2313.4	75.2
0°-90°	3075.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3075.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1013	1013	1013	1013	1013	
5°	1005	1007	1013	1013	1011	95
15°	964	968	974	978	980	272
25°	886	892	902	914	918	408
35°	776	784	803	820	828	485
45°	640	650	681	716	733	493
55°	479	500	555	611	634	429
65°	314	341	423	493	524	306
75°	138	192	281	340	357	149
85°	33	50	68	74	74	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1012.6	1012.6	1012.6	1012.6	1012.6
2.5°	1008.7	1010.6	1014.5	1014.5	1012.6
5°	1004.8	1006.7	1012.6	1012.6	1010.6
7.5°	999.0	1000.9	1004.8	1008.7	1006.7
10°	991.2	993.2	997.0	1000.9	1000.9
12.5°	977.6	979.6	987.3	989.3	989.3
15°	964.1	967.9	973.8	977.6	979.6
17.5°	946.6	950.5	958.2	966.0	966.0
20°	929.2	933.0	942.7	950.5	952.4
22.5°	907.8	913.6	923.3	933.0	936.9
25°	886.5	892.3	902.0	913.6	917.5
27.5°	861.3	867.1	880.7	894.2	896.2
30°	836.0	841.9	859.3	871.0	876.8
32.5°	805.0	812.8	830.2	847.7	853.5
35°	775.9	783.7	803.1	820.5	828.3
37.5°	744.9	752.6	774.0	795.3	805.0
40°	710.0	719.7	744.9	768.2	781.7
42.5°	677.0	686.7	711.9	742.9	756.5
45°	640.1	649.8	680.9	715.8	733.2
47.5°	601.3	613.0	649.8	692.5	710.0
50°	562.5	576.1	616.8	665.3	684.7
52.5°	521.8	539.3	585.8	638.2	661.5
55°	479.1	500.5	554.8	611.0	634.3
57.5°	438.4	457.8	521.8	581.9	607.1
60°	393.8	419.0	490.8	552.8	580.0
62.5°	351.1	378.3	457.8	523.7	552.8
65°	314.2	341.4	422.9	492.7	523.7
67.5°	265.7	302.6	393.8	459.7	490.8
70°	217.3	267.7	356.9	424.8	453.9
72.5°	180.4	228.9	320.1	388.0	415.1
75°	137.7	192.0	281.3	339.5	356.9
77.5°	102.8	159.1	240.5	269.6	271.6
80°	75.7	122.2	182.3	192.0	199.8
82.5°	52.4	85.4	118.3	130.0	133.8
85°	33.0	50.4	67.9	73.7	73.7
87.5°	17.5	19.4	23.3	23.3	23.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)