

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: P308986

Luminaire Tested: **22FCZ2-29HE-UNV-L82765-S-CP125-W2A-U-6500K**

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: P308986  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 22FCZ2-29HE-UNV-L82765-S-CP125-W2A-U-6500K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS, 0.125" POLYCARB 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**

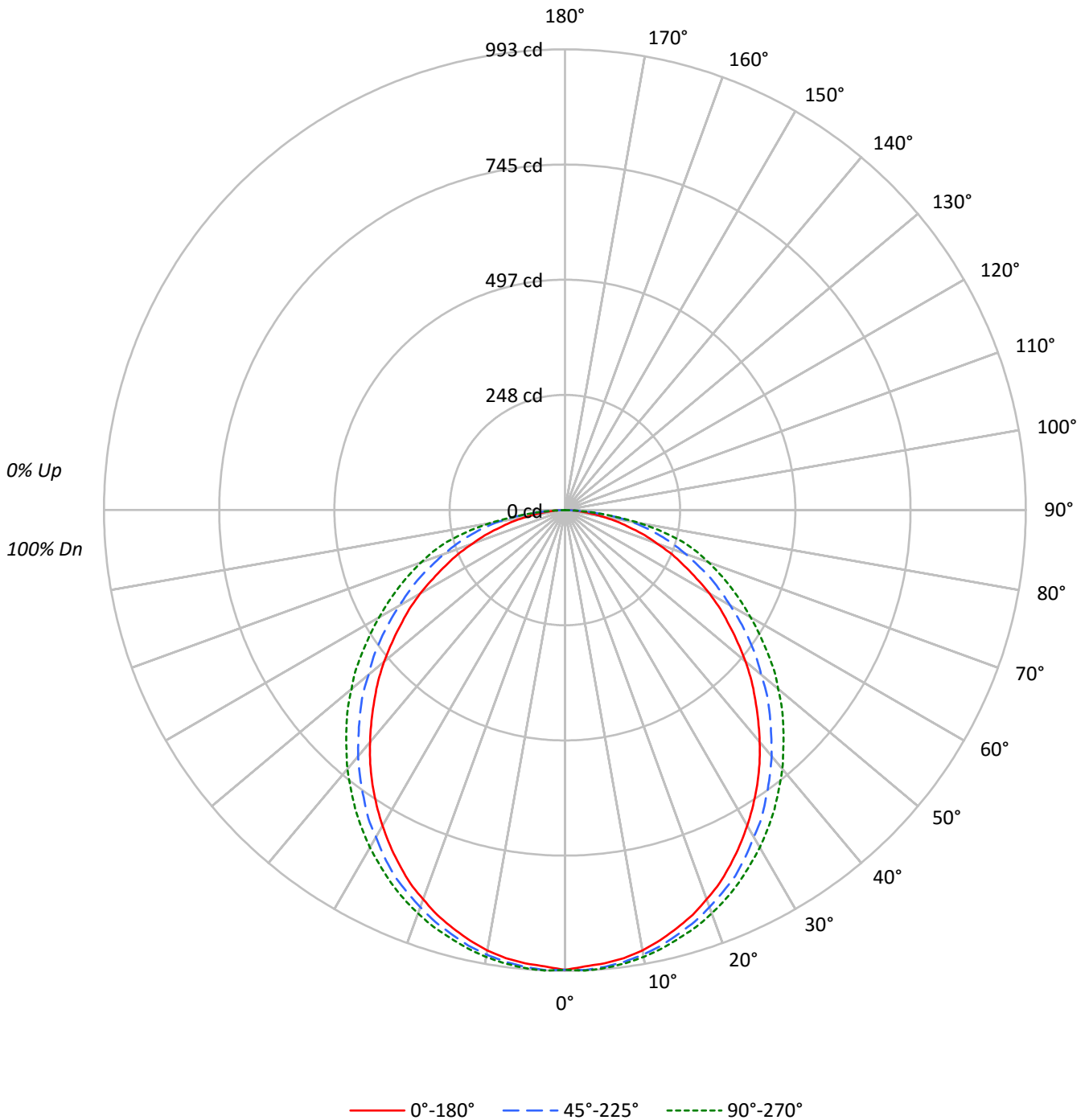
Lumens per Lamp: N/A  
Luminaire Lumens: 2765.0 lumens  
Efficiency: N/A  
Efficacy: 118.2 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 23.4  
Input Voltage (V): NR  
Input Current (A<sub>in</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	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	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	51	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	2666	2666	2666
5°	2649	2669	2676
10°	2633	2658	2672
15°	2598	2634	2660
20°	2556	2608	2649
25°	2505	2582	2632
30°	2441	2529	2609
35°	2373	2484	2585
40°	2293	2434	2560
45°	2209	2376	2533
50°	2128	2312	2511
55°	2028	2270	2494
60°	1937	2215	2486
65°	1807	2201	2514
70°	1665	2183	2589
75°	1502	2214	2723
80°	1300	2280	2559
85°	1074	1911	1911



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.7	3.4
10°-20°	266.6	9.6
20°-30°	399.0	14.4
30°-40°	472.5	17.1
40°-50°	481.5	17.4
50°-60°	431.6	15.6
60°-70°	337.9	12.2
70°-80°	217.9	7.9
80°-90°	64.4	2.3
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°	759.3	27.5
0°-40°	1231.8	44.5
0°-60°	2144.9	77.6
0°-90°	2765.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2765.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	991	991	991	991	991	
5°	980	983	988	990	991	93
15°	933	938	946	953	955	263
25°	844	852	870	881	886	388
35°	722	732	756	779	787	452
45°	580	593	624	657	666	448
55°	432	446	484	517	532	387
65°	284	301	346	379	395	282
75°	144	166	213	249	262	155
85°	35	48	62	62	62	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	990.8	990.8	990.8	990.8	990.8
2.5°	984.3	986.9	992.1	993.4	993.4
5°	980.5	983.0	988.2	989.5	990.8
7.5°	974.0	975.3	981.8	984.3	985.6
10°	963.7	966.3	972.7	976.6	977.9
12.5°	949.5	953.4	961.1	966.3	967.6
15°	932.7	937.9	945.6	953.4	954.7
17.5°	914.7	919.8	930.2	939.2	941.8
20°	892.7	899.2	910.8	921.1	925.0
22.5°	870.8	876.0	890.2	903.1	906.9
25°	843.7	851.5	869.5	881.1	886.3
27.5°	815.3	824.4	842.4	857.9	863.1
30°	785.7	794.7	814.0	833.4	839.8
32.5°	754.7	765.0	788.2	807.6	814.0
35°	722.4	731.5	756.0	779.2	787.0
37.5°	688.9	696.6	725.0	749.5	757.3
40°	652.8	663.1	692.8	721.2	728.9
42.5°	616.7	628.3	657.9	688.9	696.6
45°	580.5	593.4	624.4	656.7	665.7
47.5°	545.7	556.0	590.9	621.8	634.7
50°	508.3	518.6	552.2	587.0	599.9
52.5°	469.6	483.8	519.9	553.4	568.9
55°	432.2	446.4	483.8	517.3	531.5
57.5°	397.3	409.0	447.7	482.5	496.7
60°	359.9	370.3	411.5	448.9	461.9
62.5°	319.9	335.4	378.0	412.8	428.3
65°	283.8	300.6	345.7	379.3	394.8
67.5°	250.3	265.8	309.6	345.7	362.5
70°	211.6	232.2	277.4	313.5	329.0
72.5°	180.6	198.7	245.1	281.2	298.0
75°	144.5	166.4	212.9	249.0	261.9
77.5°	114.8	136.7	180.6	209.0	215.4
80°	83.9	105.8	147.1	161.3	165.1
82.5°	56.8	77.4	105.8	109.7	110.9
85°	34.8	47.7	61.9	61.9	61.9
87.5°	16.8	19.4	21.9	20.6	20.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)