

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: P307623

Luminaire Tested: **14FCZ2-29-UNV-L82765-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: P307623  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 14FCZ2-29-UNV-L82765-CA125-W2A-U-4500K  
Description: 1'X4' TROFFER LED MODULE,RIBBED 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**

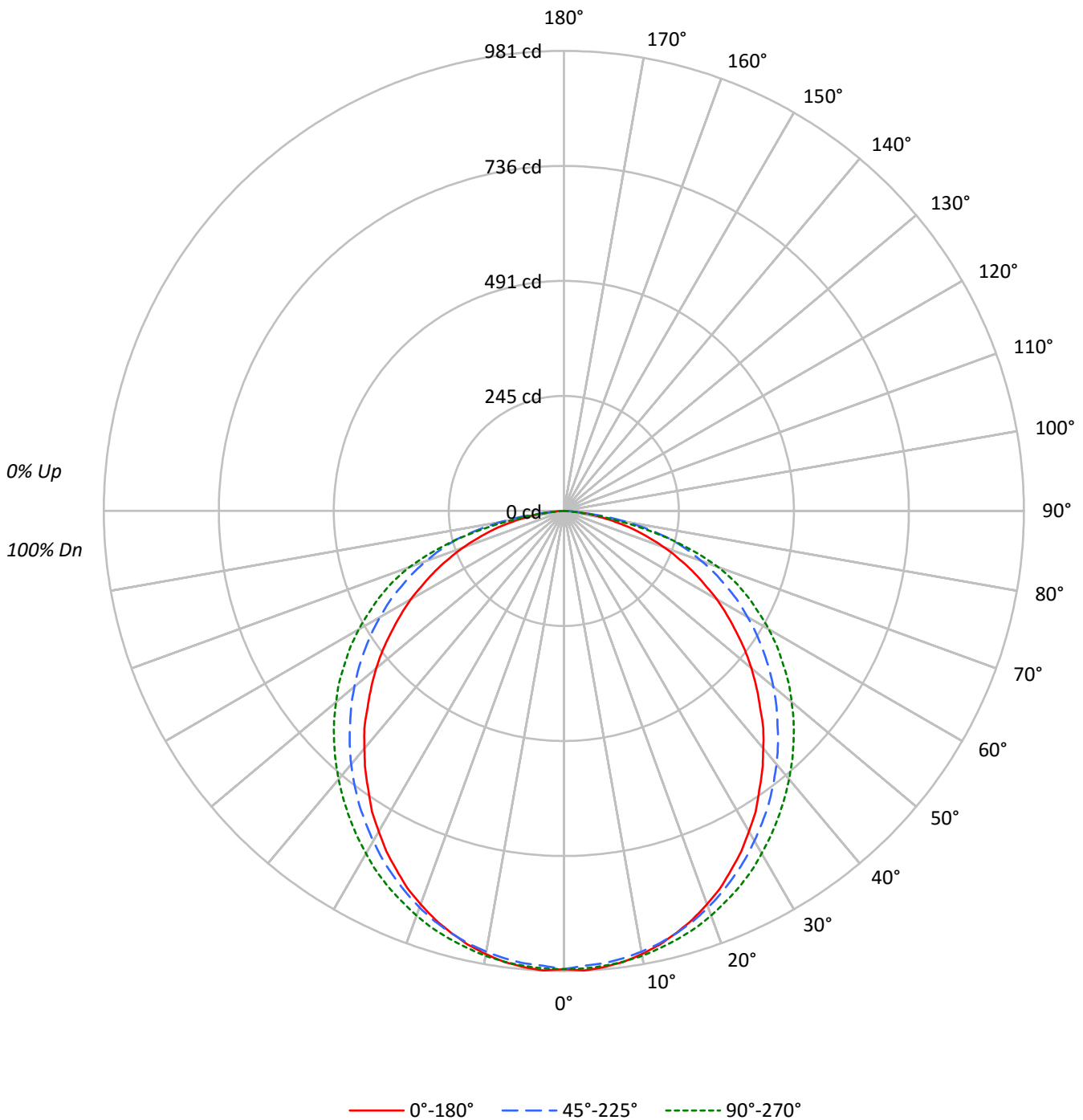
Lumens per Lamp: N/A  
Luminaire Lumens: 2836.0 lumens  
Efficiency: N/A  
Efficacy: 117.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 24.2  
Input Voltage (V): NR  
Input Current (A<sub>in</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



TEST NUMBER: P307623

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-CA125-W2A-U-4500K

### Luminous Intensity Polar Plot





TEST NUMBER: P307623

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-CA125-W2A-U-4500K

**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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83				83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69				69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58				58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49				49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42				42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37				37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32				32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29				29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26				26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24				24

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

	0°	45°	90°
0°	2629	2629	2629
5°	2638	2615	2630
10°	2621	2607	2632
15°	2593	2595	2630
20°	2555	2577	2629
25°	2507	2552	2627
30°	2452	2525	2621
35°	2387	2503	2620
40°	2324	2479	2623
45°	2253	2452	2638
50°	2187	2441	2655
55°	2104	2433	2679
60°	2028	2437	2716
65°	1925	2444	2758
70°	1806	2463	2756
75°	1638	2485	2492
80°	1342	2146	1774
85°	997	1016	411



TEST NUMBER: P307623

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-CA125-W2A-U-4500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.5	3.3
10°-20°	264.1	9.3
20°-30°	397.8	14.0
30°-40°	477.4	16.8
40°-50°	497.6	17.5
50°-60°	460.6	16.2
60°-70°	372.2	13.1
70°-80°	226.9	8.0
80°-90°	46.9	1.7
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°	754.4	26.6
0°-40°	1231.8	43.4
0°-60°	2190.0	77.2
0°-90°	2836.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2836.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	977	977	977	977	977	
5°	976	974	968	975	974	93
15°	931	932	932	944	944	262
25°	844	849	859	881	885	389
35°	727	738	762	790	797	455
45°	592	610	644	680	693	457
55°	448	472	518	559	571	402
65°	302	332	384	422	433	299
75°	158	192	239	243	240	165
85°	32	48	33	18	13	40
90°	0	0	0	0	0	



TEST NUMBER: P307623

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-CA125-W2A-U-4500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	977.0	977.0	977.0	977.0	977.0
2.5°	980.8	977.6	970.7	977.6	976.4
5°	976.4	973.8	968.2	975.1	973.8
7.5°	970.1	967.5	962.5	970.7	969.4
10°	959.3	958.0	954.2	963.7	963.1
12.5°	946.7	946.0	944.1	954.9	954.2
15°	930.8	931.5	931.5	944.1	944.1
17.5°	913.1	914.4	916.9	930.8	932.7
20°	892.3	894.8	899.9	915.7	918.2
22.5°	870.8	872.7	880.3	899.2	901.8
25°	844.2	849.3	859.4	880.9	884.7
27.5°	818.9	823.3	837.3	859.4	865.7
30°	789.2	796.2	812.6	836.6	843.6
32.5°	760.7	768.3	787.3	815.1	821.4
35°	726.6	738.0	762.0	789.8	797.4
37.5°	695.6	706.4	733.5	763.9	772.8
40°	661.5	674.7	705.7	738.0	746.8
42.5°	629.8	642.5	676.0	708.9	720.9
45°	591.9	609.6	644.4	680.4	693.1
47.5°	557.1	574.8	614.7	653.2	664.6
50°	522.3	541.3	583.0	622.9	634.3
52.5°	486.3	506.5	551.4	591.3	604.5
55°	448.4	471.7	518.5	559.0	571.0
57.5°	412.3	436.3	486.3	527.4	539.4
60°	376.9	401.6	452.8	492.0	504.6
62.5°	337.7	366.8	419.9	458.5	468.0
65°	302.3	332.0	383.8	422.4	433.2
67.5°	265.0	297.2	349.1	384.5	394.6
70°	229.6	263.1	313.0	345.9	350.3
72.5°	191.6	225.8	276.3	297.2	297.2
75°	157.5	192.2	239.0	242.8	239.7
77.5°	120.2	158.7	189.1	181.5	173.9
80°	86.6	124.6	138.5	124.6	114.5
82.5°	58.2	90.4	83.5	66.4	58.8
85°	32.3	48.1	32.9	18.3	13.3
87.5°	12.0	10.8	3.2	3.2	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)