

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: P307589

Luminaire Tested: **14FCZ2-25-UNV-L82765-CP125-W2A-U-5500K**

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: P307589  
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: 14FCZ2-25-UNV-L82765-CP125-W2A-U-5500K  
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" POLYCARB SHEET  
Light Source: (168) 5500K 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**

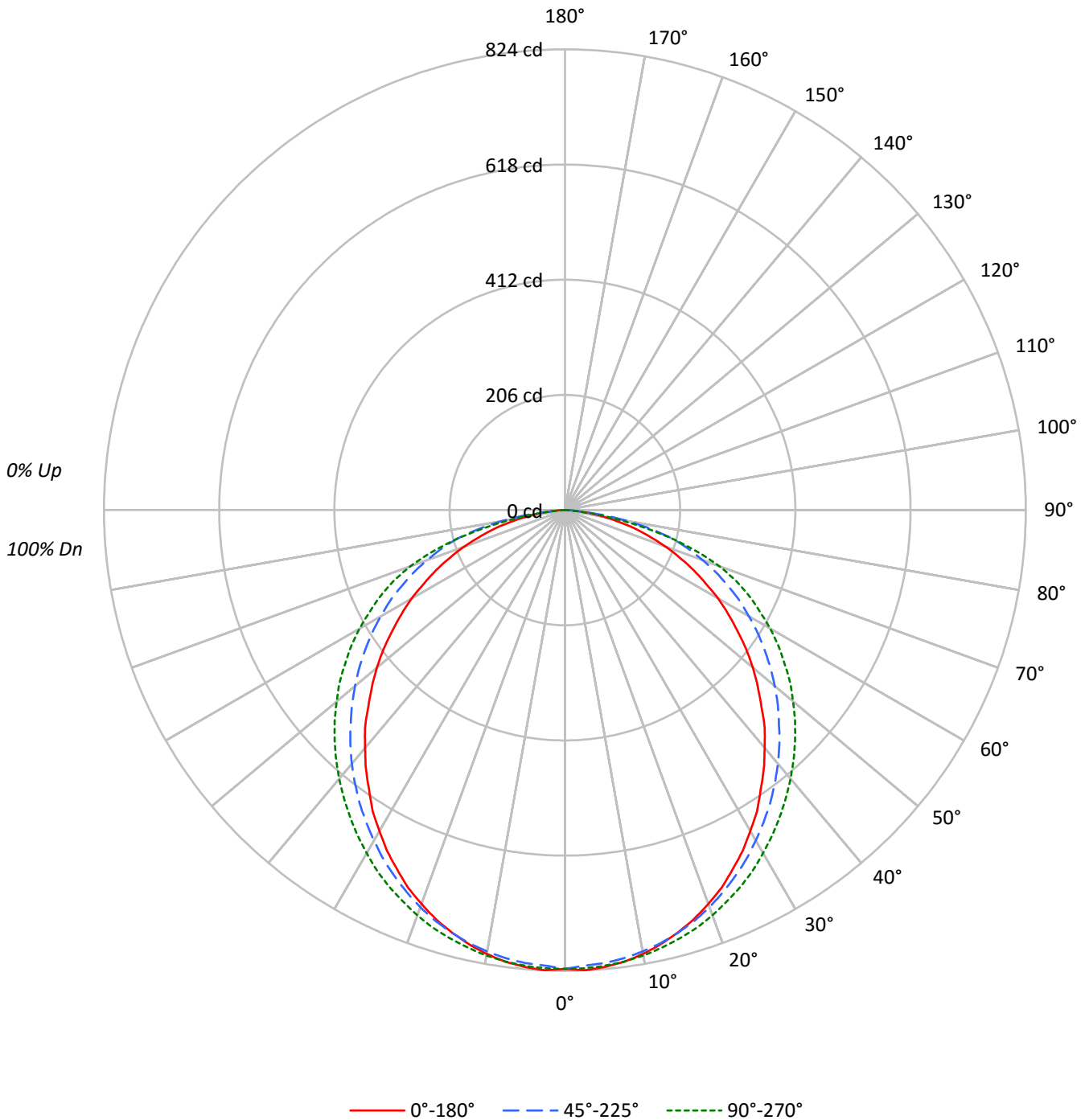
Lumens per Lamp: N/A  
Luminaire Lumens: 2382.0 lumens  
Efficiency: N/A  
Efficacy: 117.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 20.2  
Input Voltage (V): NR  
Input Current (A<sub>in</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



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

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

	0°	45°	90°
0°	2208	2208	2208
5°	2215	2197	2210
10°	2202	2190	2210
15°	2178	2180	2209
20°	2146	2164	2208
25°	2105	2143	2206
30°	2060	2121	2202
35°	2005	2102	2200
40°	1952	2082	2204
45°	1892	2060	2215
50°	1837	2050	2230
55°	1767	2043	2250
60°	1704	2047	2281
65°	1617	2053	2316
70°	1517	2068	2315
75°	1376	2088	2093
80°	1128	1802	1489
85°	837	852	346



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.7	3.3
10°-20°	221.8	9.3
20°-30°	334.1	14.0
30°-40°	401.0	16.8
40°-50°	417.9	17.5
50°-60°	386.9	16.2
60°-70°	312.6	13.1
70°-80°	190.6	8.0
80°-90°	39.4	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°	633.6	26.6
0°-40°	1034.6	43.4
0°-60°	1839.4	77.2
0°-90°	2382.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2382.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	821	821	821	821	821	
5°	820	818	813	819	818	78
15°	782	782	782	793	793	220
25°	709	713	722	740	743	327
35°	610	620	640	663	670	382
45°	497	512	541	572	582	384
55°	377	396	436	470	480	337
65°	254	279	322	355	364	251
75°	132	162	201	204	201	139
85°	27	40	28	15	11	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	820.6	820.6	820.6	820.6	820.6
2.5°	823.8	821.1	815.3	821.1	820.1
5°	820.1	818.0	813.2	819.0	818.0
7.5°	814.8	812.6	808.4	815.3	814.2
10°	805.7	804.7	801.5	809.5	808.9
12.5°	795.1	794.6	793.0	802.0	801.5
15°	781.8	782.4	782.4	793.0	793.0
17.5°	767.0	768.0	770.1	781.8	783.4
20°	749.4	751.6	755.8	769.1	771.2
22.5°	731.4	733.0	739.3	755.3	757.4
25°	709.1	713.3	721.8	739.9	743.1
27.5°	687.8	691.5	703.2	721.8	727.1
30°	662.9	668.7	682.5	702.7	708.5
32.5°	639.0	645.3	661.3	684.6	689.9
35°	610.3	619.8	640.0	663.4	669.8
37.5°	584.3	593.3	616.1	641.6	649.0
40°	555.6	566.7	592.7	619.8	627.3
42.5°	529.0	539.6	567.8	595.4	605.5
45°	497.1	512.0	541.2	571.5	582.1
47.5°	467.9	482.8	516.3	548.7	558.2
50°	438.7	454.7	489.7	523.2	532.7
52.5°	408.4	425.4	463.2	496.6	507.8
55°	376.6	396.2	435.5	469.5	479.6
57.5°	346.3	366.5	408.4	443.0	453.1
60°	316.6	337.3	380.3	413.2	423.8
62.5°	283.6	308.1	352.7	385.1	393.0
65°	253.9	278.8	322.4	354.8	363.8
67.5°	222.5	249.6	293.2	322.9	331.4
70°	192.8	221.0	262.9	290.5	294.2
72.5°	160.9	189.6	232.1	249.6	249.6
75°	132.3	161.5	200.8	204.0	201.3
77.5°	100.9	133.3	158.8	152.4	146.1
80°	72.8	104.6	116.3	104.6	96.1
82.5°	48.9	76.0	70.1	55.8	49.4
85°	27.1	40.4	27.6	15.4	11.2
87.5°	10.1	9.0	2.7	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)