

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: P307647

Luminaire Tested: **14FCZ2-29-UNV-L82765-CP250-W2A-U-3000K**

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: P307647  
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-CP250-W2A-U-3000K  
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.250" 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**

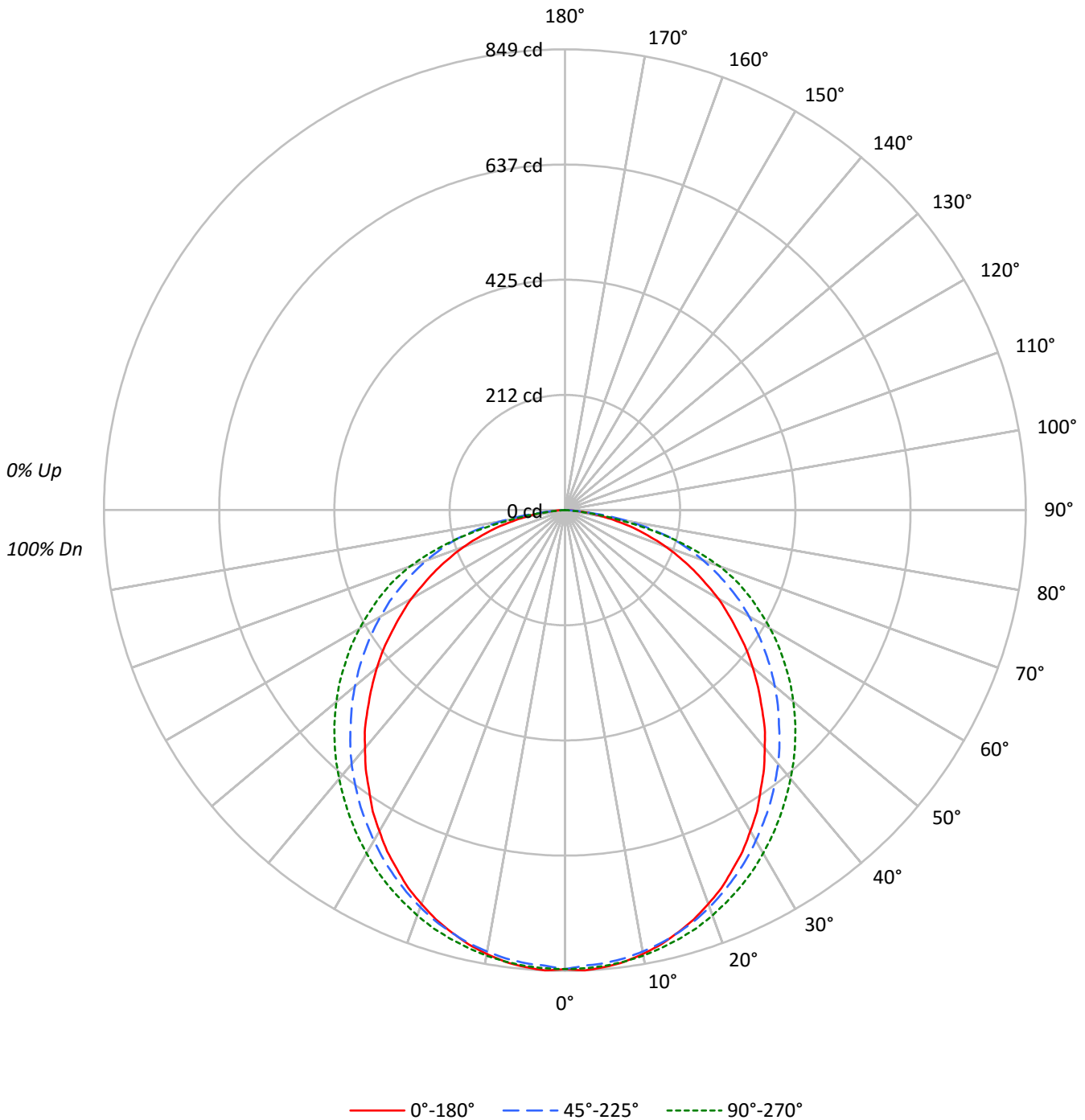
Lumens per Lamp: N/A  
Luminaire Lumens: 2455.0 lumens  
Efficiency: N/A  
Efficacy: 104.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 23.6  
Input Voltage (V): NR  
Input Current (A<sub>in</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	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°	2276	2276	2276
5°	2283	2264	2277
10°	2269	2257	2278
15°	2245	2246	2277
20°	2212	2231	2276
25°	2170	2209	2274
30°	2123	2186	2269
35°	2066	2167	2268
40°	2011	2146	2271
45°	1950	2123	2283
50°	1893	2113	2299
55°	1821	2106	2319
60°	1756	2109	2351
65°	1666	2116	2388
70°	1563	2132	2386
75°	1417	2151	2157
80°	1162	1858	1536
85°	861	880	355



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.0	3.3
10°-20°	228.6	9.3
20°-30°	344.4	14.0
30°-40°	413.3	16.8
40°-50°	430.7	17.5
50°-60°	398.8	16.2
60°-70°	322.2	13.1
70°-80°	196.4	8.0
80°-90°	40.6	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°	653.0	26.6
0°-40°	1066.3	43.4
0°-60°	1895.8	77.2
0°-90°	2455.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2455.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	846	846	846	846	846	
5°	845	843	838	844	843	80
15°	806	806	806	817	817	227
25°	731	735	744	762	766	337
35°	629	639	660	684	690	394
45°	512	528	558	589	600	396
55°	388	408	449	484	494	348
65°	262	287	332	366	375	259
75°	136	166	207	210	208	143
85°	28	42	28	16	12	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	845.8	845.8	845.8	845.8	845.8
2.5°	849.0	846.3	840.3	846.3	845.2
5°	845.2	843.0	838.1	844.1	843.0
7.5°	839.7	837.5	833.2	840.3	839.2
10°	830.4	829.3	826.0	834.3	833.7
12.5°	819.5	818.9	817.3	826.6	826.0
15°	805.8	806.3	806.3	817.3	817.3
17.5°	790.5	791.6	793.8	805.8	807.4
20°	772.4	774.6	779.0	792.7	794.8
22.5°	753.8	755.4	762.0	778.4	780.6
25°	730.8	735.2	743.9	762.5	765.8
27.5°	708.9	712.7	724.8	743.9	749.4
30°	683.2	689.2	703.4	724.2	730.3
32.5°	658.5	665.1	681.5	705.6	711.1
35°	629.0	638.8	659.6	683.7	690.3
37.5°	602.2	611.5	635.0	661.3	668.9
40°	572.6	584.1	610.9	638.8	646.5
42.5°	545.2	556.2	585.2	613.7	624.1
45°	512.4	527.7	557.8	589.0	600.0
47.5°	482.3	497.6	532.1	565.5	575.3
50°	452.2	468.6	504.7	539.2	549.1
52.5°	421.0	438.5	477.3	511.8	523.3
55°	388.1	408.4	448.9	483.9	494.3
57.5°	356.9	377.7	421.0	456.5	466.9
60°	326.3	347.6	391.9	425.9	436.8
62.5°	292.3	317.5	363.5	396.9	405.1
65°	261.7	287.4	332.3	365.7	375.0
67.5°	229.4	257.3	302.2	332.8	341.6
70°	198.7	227.7	271.0	299.4	303.3
72.5°	165.9	195.4	239.2	257.3	257.3
75°	136.3	166.4	206.9	210.2	207.5
77.5°	104.0	137.4	163.7	157.1	150.5
80°	75.0	107.8	119.9	107.8	99.1
82.5°	50.4	78.3	72.3	57.5	50.9
85°	27.9	41.6	28.5	15.9	11.5
87.5°	10.4	9.3	2.7	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)