

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: P312185

Luminaire Tested: **14FCZ2-25-UNV-L83050-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: P312185  
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-L83050-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**

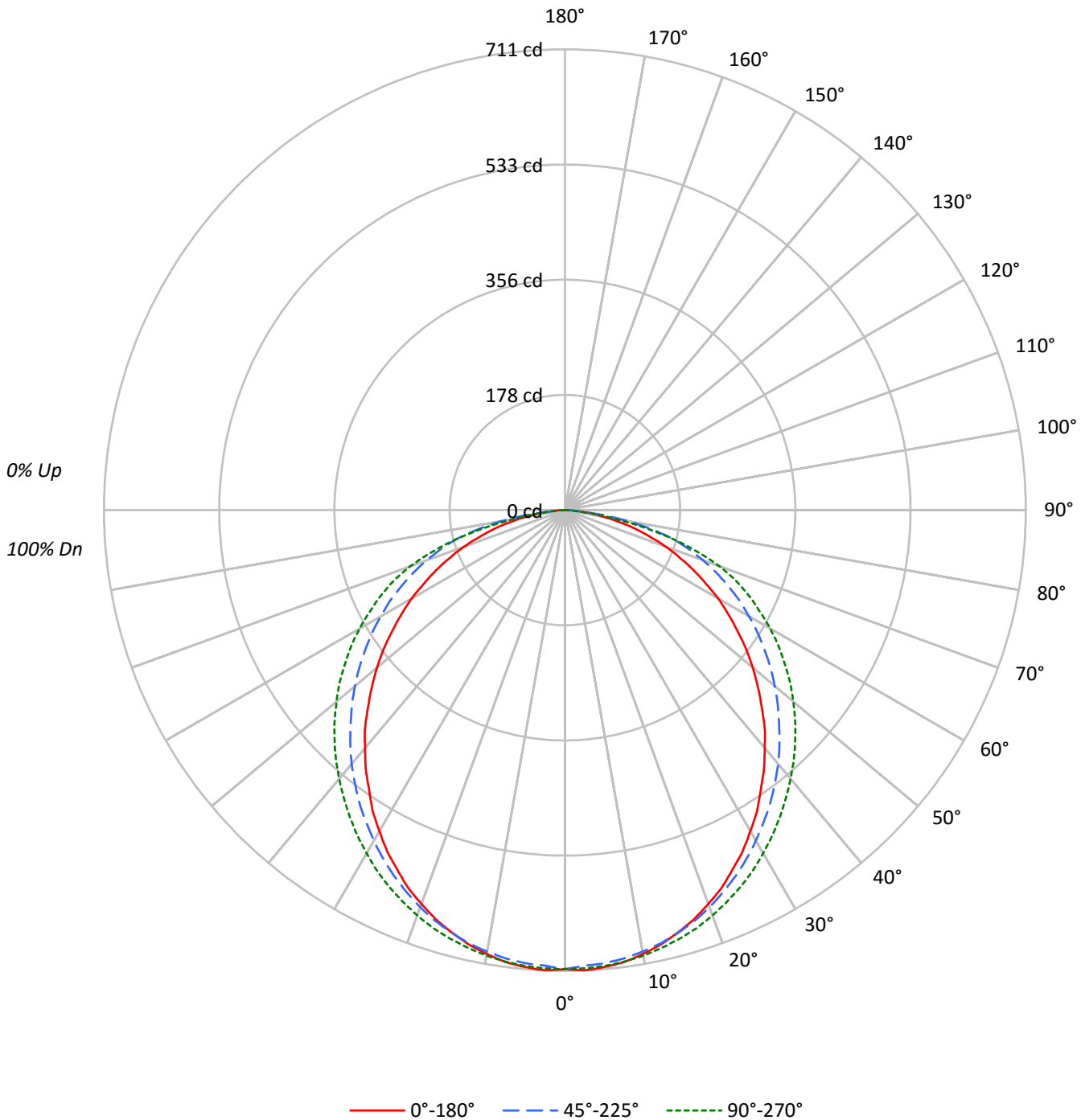
Lumens per Lamp: N/A  
Luminaire Lumens: 2056.0 lumens  
Efficiency: N/A  
Efficacy: 104.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 19.6  
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°	1906	1906	1906
5°	1912	1896	1907
10°	1900	1890	1908
15°	1880	1881	1907
20°	1853	1868	1906
25°	1817	1850	1904
30°	1778	1830	1900
35°	1731	1815	1899
40°	1684	1797	1902
45°	1633	1778	1912
50°	1585	1770	1925
55°	1525	1764	1942
60°	1470	1766	1969
65°	1395	1772	1999
70°	1309	1785	1998
75°	1187	1802	1807
80°	973	1556	1286
85°	722	735	296



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.0	3.3
10°-20°	191.5	9.3
20°-30°	288.4	14.0
30°-40°	346.1	16.8
40°-50°	360.7	17.5
50°-60°	333.9	16.2
60°-70°	269.8	13.1
70°-80°	164.5	8.0
80°-90°	34.0	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°	546.9	26.6
0°-40°	893.0	43.4
0°-60°	1587.7	77.2
0°-90°	2056.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2056.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	708	708	708	708	708	
5°	708	706	702	707	706	67
15°	675	675	675	684	684	190
25°	612	616	623	639	641	282
35°	527	535	552	573	578	330
45°	429	442	467	493	502	332
55°	325	342	376	405	414	291
65°	219	241	278	306	314	217
75°	114	139	173	176	174	120
85°	23	35	24	13	10	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	708.3	708.3	708.3	708.3	708.3
2.5°	711.0	708.8	703.7	708.8	707.8
5°	707.8	706.0	701.9	706.9	706.0
7.5°	703.3	701.4	697.8	703.7	702.8
10°	695.5	694.5	691.8	698.7	698.2
12.5°	686.3	685.8	684.5	692.3	691.8
15°	674.8	675.3	675.3	684.5	684.5
17.5°	662.0	662.9	664.7	674.8	676.2
20°	646.9	648.7	652.4	663.8	665.7
22.5°	631.3	632.7	638.2	651.9	653.7
25°	612.0	615.7	623.0	638.6	641.4
27.5°	593.7	596.9	607.0	623.0	627.6
30°	572.1	577.2	589.1	606.5	611.6
32.5°	551.5	557.0	570.8	590.9	595.5
35°	526.8	535.0	552.4	572.6	578.1
37.5°	504.3	512.1	531.8	553.8	560.2
40°	479.5	489.2	511.6	535.0	541.4
42.5°	456.6	465.8	490.1	513.9	522.6
45°	429.1	441.9	467.2	493.3	502.5
47.5°	403.9	416.7	445.6	473.6	481.8
50°	378.7	392.4	422.7	451.6	459.8
52.5°	352.5	367.2	399.8	428.6	438.3
55°	325.0	342.0	375.9	405.3	414.0
57.5°	298.9	316.3	352.5	382.3	391.1
60°	273.2	291.1	328.2	356.7	365.8
62.5°	244.8	265.9	304.4	332.4	339.2
65°	219.1	240.7	278.3	306.2	314.0
67.5°	192.1	215.5	253.1	278.7	286.1
70°	166.4	190.7	226.9	250.8	254.0
72.5°	138.9	163.7	200.3	215.5	215.5
75°	114.2	139.4	173.3	176.0	173.8
77.5°	87.1	115.1	137.1	131.6	126.1
80°	62.8	90.3	100.4	90.3	83.0
82.5°	42.2	65.6	60.5	48.1	42.6
85°	23.4	34.8	23.8	13.3	9.6
87.5°	8.7	7.8	2.3	2.3	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)