

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: P312101

Luminaire Tested: **14FCZ2-39-UNV-L83050-RDP-CP125-W2A-U-3500K**

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: P312101  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 14FCZ2-39-UNV-L83050-RDP-CP125-W2A-U-3500K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" POLYCARB SHEET  
Light Source: (168) 3500K 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**

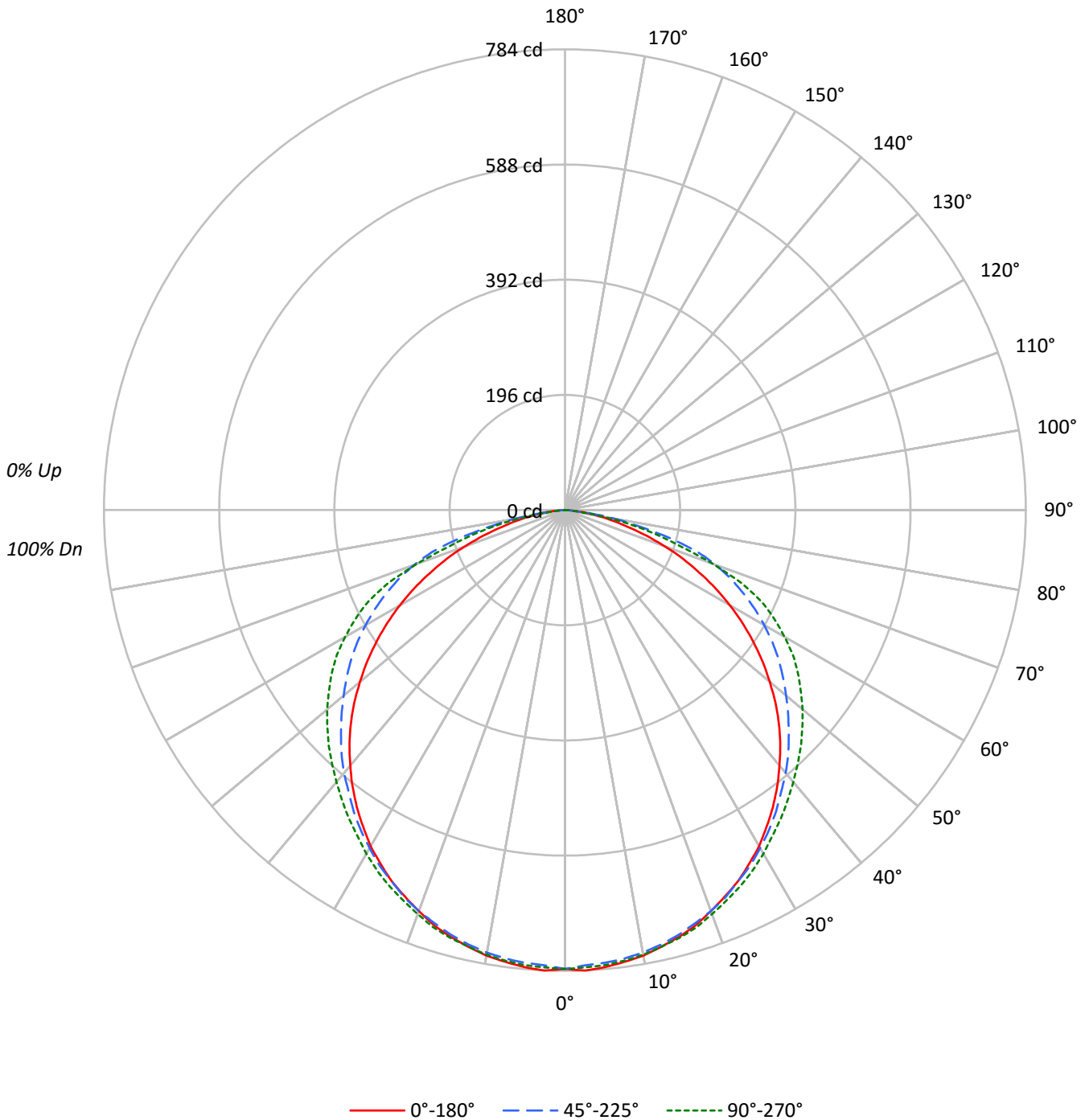
Lumens per Lamp: N/A  
Luminaire Lumens: 2331.0 lumens  
Efficiency: N/A  
Efficacy: 70.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (A<sub>in</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	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	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	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

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

	0°	45°	90°
0°	2101	2101	2101
5°	2109	2089	2099
10°	2103	2088	2099
15°	2094	2084	2099
20°	2079	2079	2095
25°	2070	2070	2097
30°	2053	2064	2098
35°	2027	2056	2104
40°	1995	2052	2122
45°	1960	2050	2161
50°	1905	2057	2210
55°	1836	2083	2271
60°	1743	2106	2321
65°	1611	2132	2352
70°	1432	2148	2105
75°	1154	1930	1684
80°	902	1354	1100
85°	618	392	281



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.9	3.2
10°-20°	212.0	9.1
20°-30°	322.8	13.8
30°-40°	393.2	16.9
40°-50°	417.2	17.9
50°-60°	393.7	16.9
60°-70°	317.9	13.6
70°-80°	172.4	7.4
80°-90°	27.9	1.2
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°	608.7	26.1
0°-40°	1001.9	43.0
0°-60°	1812.8	77.8
0°-90°	2331.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2331.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	781	781	781	781	781	
5°	781	779	773	779	777	74
15°	752	750	748	753	753	212
25°	697	695	697	704	706	321
35°	617	621	626	639	641	386
45°	515	522	539	559	568	397
55°	391	408	444	473	484	349
65°	253	284	335	362	369	251
75°	111	162	186	167	162	121
85°	20	22	13	11	9	26
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	780.7	780.7	780.7	780.7	780.7
2.5°	784.4	780.7	775.3	780.7	778.9
5°	780.7	778.9	773.4	778.9	777.1
7.5°	775.3	775.3	769.8	773.4	773.4
10°	769.8	768.0	764.3	769.8	768.0
12.5°	760.7	758.9	757.1	762.5	760.7
15°	751.6	749.8	748.0	753.4	753.4
17.5°	740.7	738.9	737.0	744.3	744.3
20°	726.1	726.1	726.1	733.4	731.6
22.5°	711.6	711.6	713.4	720.7	718.8
25°	697.0	695.2	697.0	704.3	706.1
27.5°	678.8	680.6	682.4	689.7	691.5
30°	660.6	662.4	664.2	673.3	675.2
32.5°	638.8	642.4	646.0	657.0	657.0
35°	616.9	620.6	626.0	638.8	640.6
37.5°	593.3	596.9	604.2	618.7	622.4
40°	567.8	573.2	584.2	598.7	604.2
42.5°	542.3	549.6	562.3	578.7	586.0
45°	515.0	522.3	538.7	558.7	567.8
47.5°	485.9	495.0	515.0	540.5	547.8
50°	455.0	467.7	491.4	518.7	527.8
52.5°	424.0	438.6	467.7	496.8	505.9
55°	391.3	407.6	444.0	473.2	484.1
57.5°	358.5	376.7	418.6	449.5	460.4
60°	323.9	345.8	391.3	422.2	431.3
62.5°	289.4	314.8	364.0	394.9	402.2
65°	253.0	283.9	334.9	362.1	369.4
67.5°	218.4	254.8	305.7	325.8	325.8
70°	182.0	222.0	273.0	278.4	267.5
72.5°	145.6	191.1	236.6	216.6	207.5
75°	111.0	162.0	185.6	167.4	162.0
77.5°	83.7	131.0	131.0	120.1	116.5
80°	58.2	100.1	87.4	76.4	71.0
82.5°	38.2	56.4	45.5	36.4	30.9
85°	20.0	21.8	12.7	10.9	9.1
87.5°	7.3	3.6	1.8	3.6	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)