

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: P312152

Luminaire Tested: **14FCZ2-20-UNV-L83050-CP125-W2A-U-4000K**

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: P312152  
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: 14FCZ2-20-UNV-L83050-CP125-W2A-U-4000K  
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS, 0.125" POLYCARB SHEET  
Light Source: (168) 4000K 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

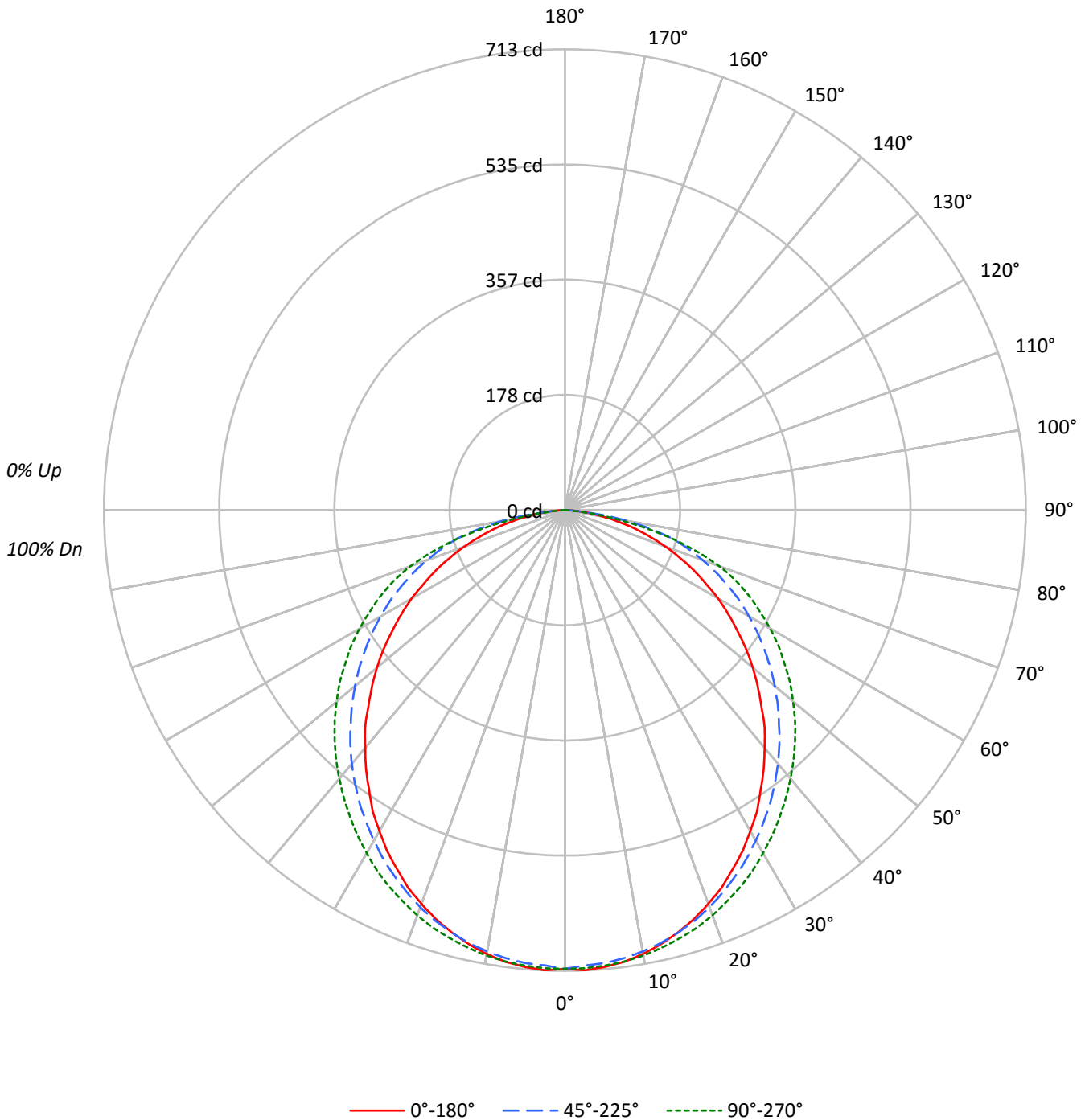
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2061.0 lumens  
Efficiency: N/A  
Efficacy: 122.0 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): 16.9  
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°	1911	1911	1911
5°	1917	1901	1912
10°	1905	1895	1912
15°	1885	1886	1911
20°	1857	1873	1911
25°	1822	1854	1909
30°	1782	1835	1905
35°	1735	1819	1904
40°	1689	1802	1906
45°	1637	1782	1917
50°	1589	1774	1930
55°	1529	1768	1947
60°	1474	1771	1974
65°	1399	1777	2004
70°	1312	1790	2003
75°	1189	1806	1811
80°	976	1559	1289
85°	722	738	299



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.2	3.3
10°-20°	191.9	9.3
20°-30°	289.1	14.0
30°-40°	346.9	16.8
40°-50°	361.6	17.5
50°-60°	334.8	16.2
60°-70°	270.5	13.1
70°-80°	164.9	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°	548.2	26.6
0°-40°	895.2	43.4
0°-60°	1591.5	77.2
0°-90°	2061.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2061.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	710	710	710	710	710	
5°	710	708	704	709	708	67
15°	676	677	677	686	686	191
25°	614	617	624	640	643	283
35°	528	536	554	574	580	331
45°	430	443	468	494	504	332
55°	326	343	377	406	415	292
65°	220	241	279	307	315	217
75°	114	140	174	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°	710.0	710.0	710.0	710.0	710.0
2.5°	712.8	710.5	705.4	710.5	709.6
5°	709.6	707.7	703.6	708.6	707.7
7.5°	705.0	703.1	699.5	705.4	704.5
10°	697.2	696.2	693.5	700.4	699.9
12.5°	688.0	687.5	686.1	693.9	693.5
15°	676.5	676.9	676.9	686.1	686.1
17.5°	663.6	664.5	666.4	676.5	677.9
20°	648.4	650.3	654.0	665.4	667.3
22.5°	632.8	634.2	639.7	653.5	655.3
25°	613.5	617.2	624.5	640.2	642.9
27.5°	595.1	598.3	608.5	624.5	629.1
30°	573.5	578.6	590.5	608.0	613.1
32.5°	552.9	558.4	572.2	592.4	597.0
35°	528.0	536.3	553.8	574.0	579.5
37.5°	505.5	513.3	533.1	555.1	561.6
40°	480.7	490.4	512.9	536.3	542.7
42.5°	457.7	466.9	491.3	515.2	523.9
45°	430.1	443.0	468.3	494.5	503.7
47.5°	404.9	417.7	446.7	474.7	483.0
50°	379.6	393.4	423.7	452.7	460.9
52.5°	353.4	368.1	400.7	429.7	439.3
55°	325.8	342.8	376.8	406.3	415.0
57.5°	299.6	317.1	353.4	383.3	392.0
60°	273.9	291.8	329.0	357.5	366.7
62.5°	245.4	266.5	305.1	333.2	340.1
65°	219.7	241.3	279.0	307.0	314.8
67.5°	192.6	216.0	253.7	279.4	286.8
70°	166.8	191.2	227.5	251.4	254.6
72.5°	139.2	164.1	200.8	216.0	216.0
75°	114.4	139.7	173.7	176.5	174.2
77.5°	87.3	115.3	137.4	131.9	126.4
80°	63.0	90.5	100.6	90.5	83.2
82.5°	42.3	65.7	60.7	48.3	42.7
85°	23.4	34.9	23.9	13.3	9.7
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)