

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: P312080

Luminaire Tested: **14FCZ2-35-UNV-L83050-RDP-CP187-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: P312080  
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: 14FCZ2-35-UNV-L83050-RDP-CP187-W2A-U-3000K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.187" 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**

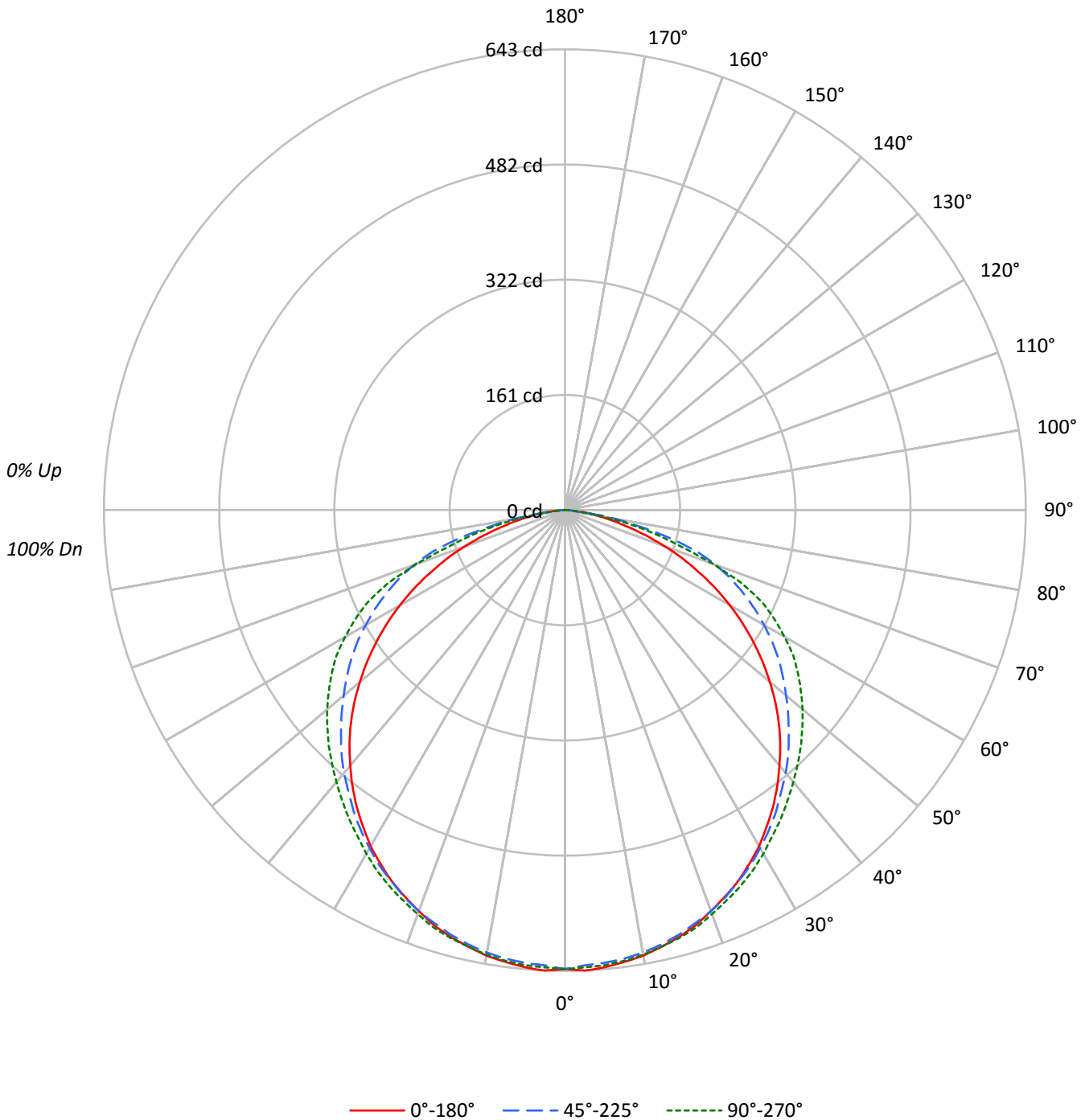
Lumens per Lamp: N/A  
Luminaire Lumens: 1912.0 lumens  
Efficiency: N/A  
Efficacy: 65.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 29.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	1723	1723	1723
5°	1730	1714	1722
10°	1725	1713	1721
15°	1718	1709	1722
20°	1706	1706	1718
25°	1697	1697	1720
30°	1684	1693	1721
35°	1662	1687	1726
40°	1636	1683	1741
45°	1607	1681	1772
50°	1562	1687	1812
55°	1506	1709	1863
60°	1430	1727	1904
65°	1321	1749	1929
70°	1175	1762	1726
75°	947	1583	1382
80°	741	1111	902
85°	506	321	232



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.6	3.2
10°-20°	173.9	9.1
20°-30°	264.8	13.8
30°-40°	322.5	16.9
40°-50°	342.2	17.9
50°-60°	322.9	16.9
60°-70°	260.7	13.6
70°-80°	141.5	7.4
80°-90°	22.9	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°	499.3	26.1
0°-40°	821.8	43.0
0°-60°	1486.9	77.8
0°-90°	1912.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1912.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	640	640	640	640	640	
5°	640	639	634	639	637	61
15°	616	615	614	618	618	174
25°	572	570	572	578	579	263
35°	506	509	514	524	525	316
45°	422	428	442	458	466	325
55°	321	334	364	388	397	287
65°	208	233	275	297	303	206
75°	91	133	152	137	133	100
85°	16	18	10	9	8	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	640.4	640.4	640.4	640.4	640.4
2.5°	643.4	640.4	635.9	640.4	638.9
5°	640.4	638.9	634.4	638.9	637.4
7.5°	635.9	635.9	631.4	634.4	634.4
10°	631.4	629.9	626.9	631.4	629.9
12.5°	624.0	622.5	621.0	625.5	624.0
15°	616.5	615.0	613.5	618.0	618.0
17.5°	607.5	606.0	604.6	610.5	610.5
20°	595.6	595.6	595.6	601.6	600.1
22.5°	583.7	583.7	585.1	591.1	589.6
25°	571.7	570.2	571.7	577.7	579.2
27.5°	556.8	558.3	559.8	565.7	567.2
30°	541.9	543.4	544.8	552.3	553.8
32.5°	523.9	526.9	529.9	538.9	538.9
35°	506.0	509.0	513.5	523.9	525.4
37.5°	486.6	489.6	495.6	507.5	510.5
40°	465.7	470.2	479.2	491.1	495.6
42.5°	444.8	450.8	461.3	474.7	480.7
45°	422.4	428.4	441.8	458.3	465.7
47.5°	398.6	406.0	422.4	443.3	449.3
50°	373.2	383.6	403.0	425.4	432.9
52.5°	347.8	359.7	383.6	407.5	415.0
55°	320.9	334.4	364.2	388.1	397.1
57.5°	294.1	309.0	343.3	368.7	377.7
60°	265.7	283.6	320.9	346.3	353.8
62.5°	237.3	258.2	298.5	323.9	329.9
65°	207.5	232.9	274.7	297.1	303.0
67.5°	179.1	209.0	250.8	267.2	267.2
70°	149.3	182.1	223.9	228.4	219.4
72.5°	119.4	156.7	194.1	177.6	170.2
75°	91.1	132.9	152.3	137.3	132.9
77.5°	68.7	107.5	107.5	98.5	95.5
80°	47.8	82.1	71.7	62.7	58.2
82.5°	31.3	46.3	37.3	29.9	25.4
85°	16.4	17.9	10.4	9.0	7.5
87.5°	6.0	3.0	1.5	3.0	1.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)