

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: P307540

Luminaire Tested: **14FCZ2-20-UNV-L82765-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: P307540  
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-L82765-CP125-W2A-U-3500K  
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 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**

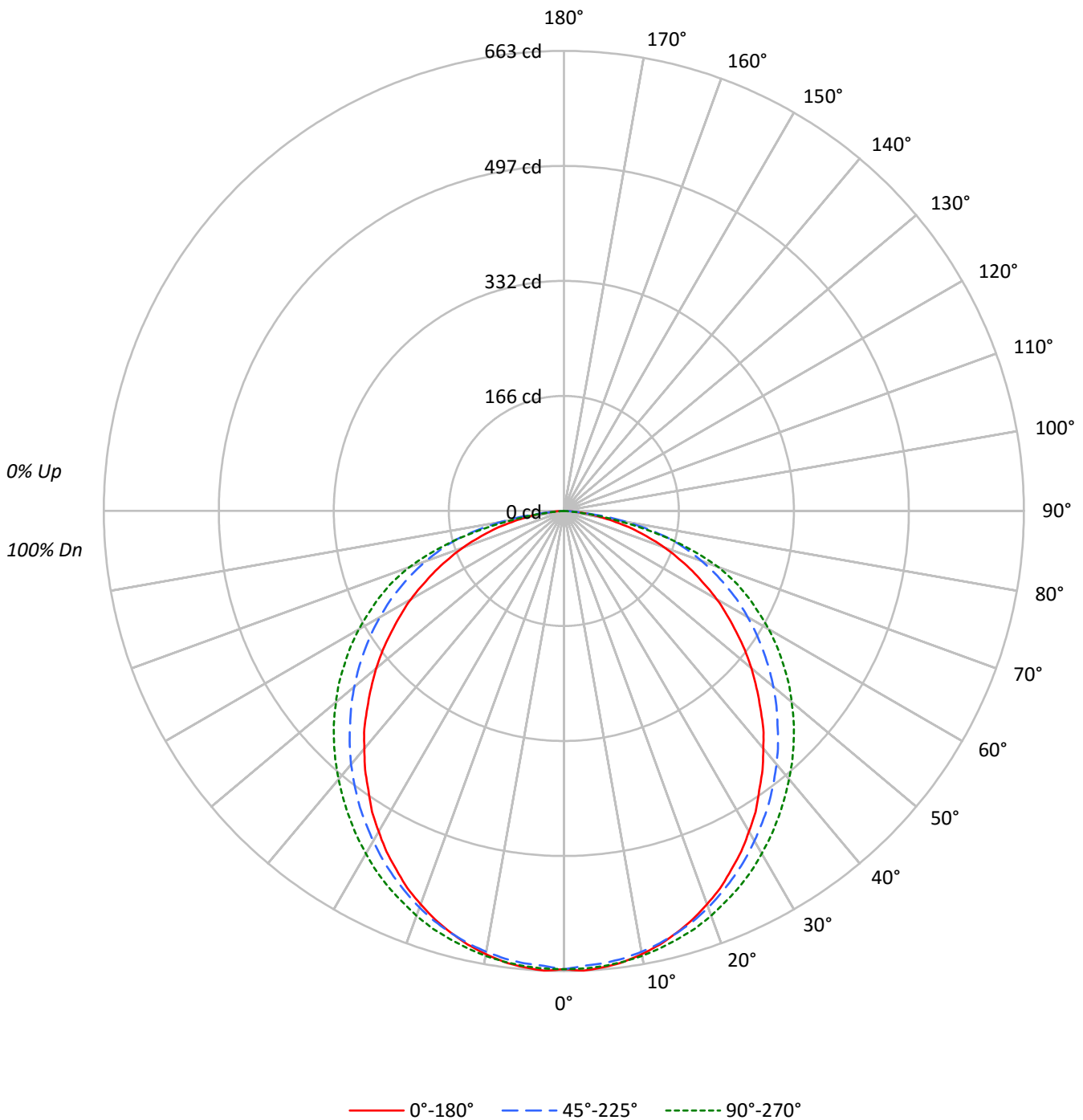
Lumens per Lamp: N/A  
Luminaire Lumens: 1917.0 lumens  
Efficiency: N/A  
Efficacy: 115.5 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 16.6  
Input Voltage (V): NR  
Input Current (A<sub>in</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



TEST NUMBER: P307540

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-CP125-W2A-U-3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P307540

CATALOG NUMBER: 14FC22-20-UNV-L82765-CP125-W2A-U-3500K

**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°	1777	1777	1777
5°	1783	1768	1778
10°	1772	1762	1779
15°	1753	1754	1778
20°	1727	1742	1777
25°	1694	1725	1776
30°	1658	1707	1772
35°	1613	1692	1771
40°	1571	1676	1773
45°	1523	1658	1783
50°	1478	1650	1795
55°	1422	1644	1811
60°	1371	1647	1836
65°	1301	1652	1864
70°	1221	1665	1863
75°	1106	1680	1684
80°	908	1450	1199
85°	673	685	278



TEST NUMBER: P307540

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-CP125-W2A-U-3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.5	3.3
10°-20°	178.5	9.3
20°-30°	268.9	14.0
30°-40°	322.7	16.8
40°-50°	336.4	17.5
50°-60°	311.4	16.2
60°-70°	251.6	13.1
70°-80°	153.4	8.0
80°-90°	31.7	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°	509.9	26.6
0°-40°	832.6	43.4
0°-60°	1480.4	77.2
0°-90°	1917.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1917.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	660	660	660	660	660	
5°	660	658	654	659	658	63
15°	629	630	630	638	638	177
25°	571	574	581	595	598	263
35°	491	499	515	534	539	308
45°	400	412	436	460	468	309
55°	303	319	350	378	386	272
65°	204	224	260	286	293	202
75°	106	130	162	164	162	112
85°	22	32	22	12	9	27
90°	0	0	0	0	0	



TEST NUMBER: P307540

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-CP125-W2A-U-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	660.4	660.4	660.4	660.4	660.4
2.5°	663.0	660.8	656.1	660.8	660.0
5°	660.0	658.3	654.4	659.1	658.3
7.5°	655.7	654.0	650.6	656.1	655.3
10°	648.4	647.6	645.0	651.4	651.0
12.5°	639.9	639.5	638.2	645.5	645.0
15°	629.2	629.6	629.6	638.2	638.2
17.5°	617.2	618.1	619.8	629.2	630.5
20°	603.1	604.8	608.3	618.9	620.7
22.5°	588.6	589.9	595.0	607.8	609.5
25°	570.6	574.1	580.9	595.4	598.0
27.5°	553.5	556.5	565.9	580.9	585.2
30°	533.5	538.2	549.3	565.5	570.2
32.5°	514.2	519.4	532.2	551.0	555.3
35°	491.1	498.8	515.1	533.9	539.0
37.5°	470.2	477.5	495.8	516.4	522.3
40°	447.1	456.1	477.0	498.8	504.8
42.5°	425.7	434.3	456.9	479.2	487.3
45°	400.1	412.1	435.6	459.9	468.5
47.5°	376.6	388.6	415.5	441.6	449.3
50°	353.1	365.9	394.1	421.0	428.7
52.5°	328.7	342.4	372.7	399.7	408.6
55°	303.1	318.9	350.5	377.9	386.0
57.5°	278.7	294.9	328.7	356.5	364.6
60°	254.8	271.4	306.1	332.6	341.1
62.5°	228.3	247.9	283.8	309.9	316.3
65°	204.3	224.4	259.5	285.5	292.8
67.5°	179.1	200.9	236.0	259.9	266.7
70°	155.2	177.8	211.6	233.8	236.8
72.5°	129.5	152.6	186.8	200.9	200.9
75°	106.4	129.9	161.6	164.1	162.0
77.5°	81.2	107.3	127.8	122.7	117.5
80°	58.6	84.2	93.6	84.2	77.4
82.5°	39.3	61.1	56.4	44.9	39.8
85°	21.8	32.5	22.2	12.4	9.0
87.5°	8.1	7.3	2.1	2.1	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)