

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: P307602

Luminaire Tested: **14FCZ2-25-UNV-L82765-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: P307602  
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-L82765-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**

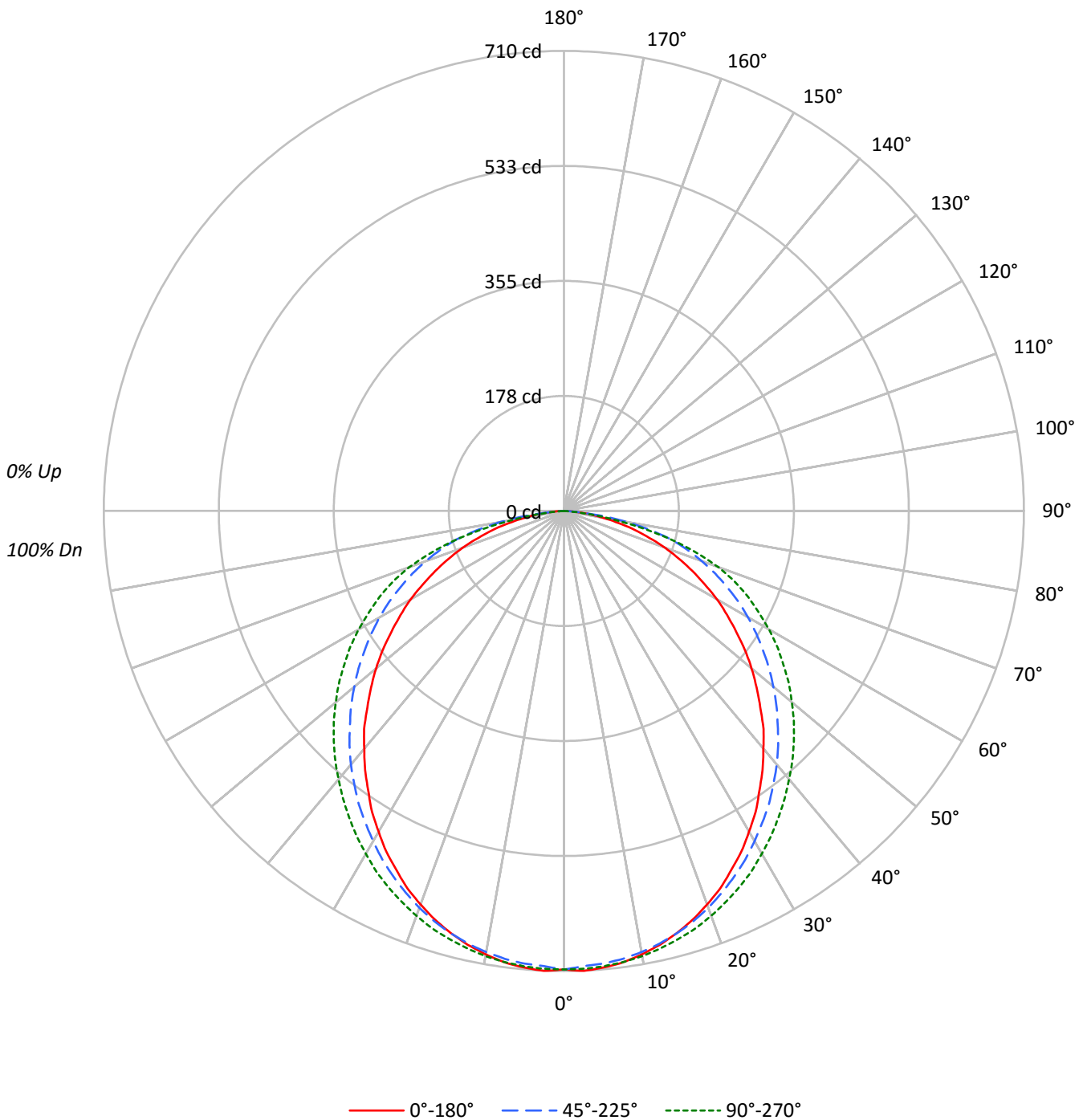
Lumens per Lamp: N/A  
Luminaire Lumens: 2054.0 lumens  
Efficiency: N/A  
Efficacy: 105.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.5  
Input Voltage (V): NR  
Input Current (A<sub>in</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: P307602

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-CP250-W2A-U-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P307602

CATALOG NUMBER: 14FC22-25-UNV-L82765-CP250-W2A-U-3000K

**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°	1904	1904	1904
5°	1910	1894	1905
10°	1899	1888	1906
15°	1878	1879	1905
20°	1851	1866	1904
25°	1815	1848	1902
30°	1776	1829	1899
35°	1729	1813	1897
40°	1683	1795	1900
45°	1631	1776	1910
50°	1584	1768	1923
55°	1523	1762	1940
60°	1469	1765	1967
65°	1394	1770	1997
70°	1308	1784	1996
75°	1185	1800	1805
80°	972	1554	1285
85°	722	735	296



TEST NUMBER: P307602

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-CP250-W2A-U-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.0	3.3
10°-20°	191.3	9.3
20°-30°	288.1	14.0
30°-40°	345.8	16.8
40°-50°	360.4	17.5
50°-60°	333.6	16.2
60°-70°	269.6	13.1
70°-80°	164.3	8.0
80°-90°	33.9	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°	546.4	26.6
0°-40°	892.1	43.4
0°-60°	1586.1	77.2
0°-90°	2054.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2054.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	708	708	708	708	708	
5°	707	705	701	706	705	67
15°	674	675	675	684	684	190
25°	611	615	622	638	641	282
35°	526	534	552	572	578	330
45°	429	442	467	493	502	331
55°	325	342	376	405	414	291
65°	219	240	278	306	314	216
75°	114	139	173	176	174	120
85°	23	35	24	13	10	29
90°	0	0	0	0	0	



TEST NUMBER: P307602

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-CP250-W2A-U-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	707.6	707.6	707.6	707.6	707.6
2.5°	710.4	708.1	703.0	708.1	707.2
5°	707.2	705.3	701.2	706.2	705.3
7.5°	702.6	700.7	697.1	703.0	702.1
10°	694.8	693.9	691.1	698.0	697.5
12.5°	685.6	685.2	683.8	691.6	691.1
15°	674.2	674.6	674.6	683.8	683.8
17.5°	661.4	662.3	664.1	674.2	675.5
20°	646.2	648.1	651.7	663.2	665.0
22.5°	630.7	632.0	637.5	651.3	653.1
25°	611.4	615.1	622.4	638.0	640.7
27.5°	593.1	596.3	606.4	622.4	627.0
30°	571.6	576.6	588.5	605.9	611.0
32.5°	551.0	556.5	570.2	590.4	594.9
35°	526.2	534.5	551.9	572.0	577.5
37.5°	503.8	511.6	531.3	553.3	559.7
40°	479.1	488.7	511.1	534.5	540.9
42.5°	456.2	465.3	489.6	513.4	522.1
45°	428.7	441.5	466.7	492.8	502.0
47.5°	403.5	416.3	445.2	473.1	481.4
50°	378.3	392.0	422.3	451.1	459.4
52.5°	352.2	366.9	399.4	428.2	437.8
55°	324.7	341.7	375.6	404.9	413.6
57.5°	298.6	316.0	352.2	382.0	390.7
60°	273.0	290.8	327.9	356.3	365.5
62.5°	244.6	265.6	304.1	332.0	338.9
65°	218.9	240.4	278.0	305.9	313.7
67.5°	191.9	215.3	252.8	278.5	285.8
70°	166.3	190.5	226.7	250.5	253.7
72.5°	138.8	163.5	200.1	215.3	215.3
75°	114.0	139.2	173.1	175.9	173.6
77.5°	87.0	115.0	136.9	131.4	125.9
80°	62.7	90.2	100.3	90.2	82.9
82.5°	42.1	65.5	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)