

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: P312071

Luminaire Tested: **14FCZ2-35-UNV-L83050-RDP-CA125-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: P312071  
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-CA125-W2A-U-3500K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" ACRYLIC 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: 2154.0 lumens  
Efficiency: N/A  
Efficacy: 73.0 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

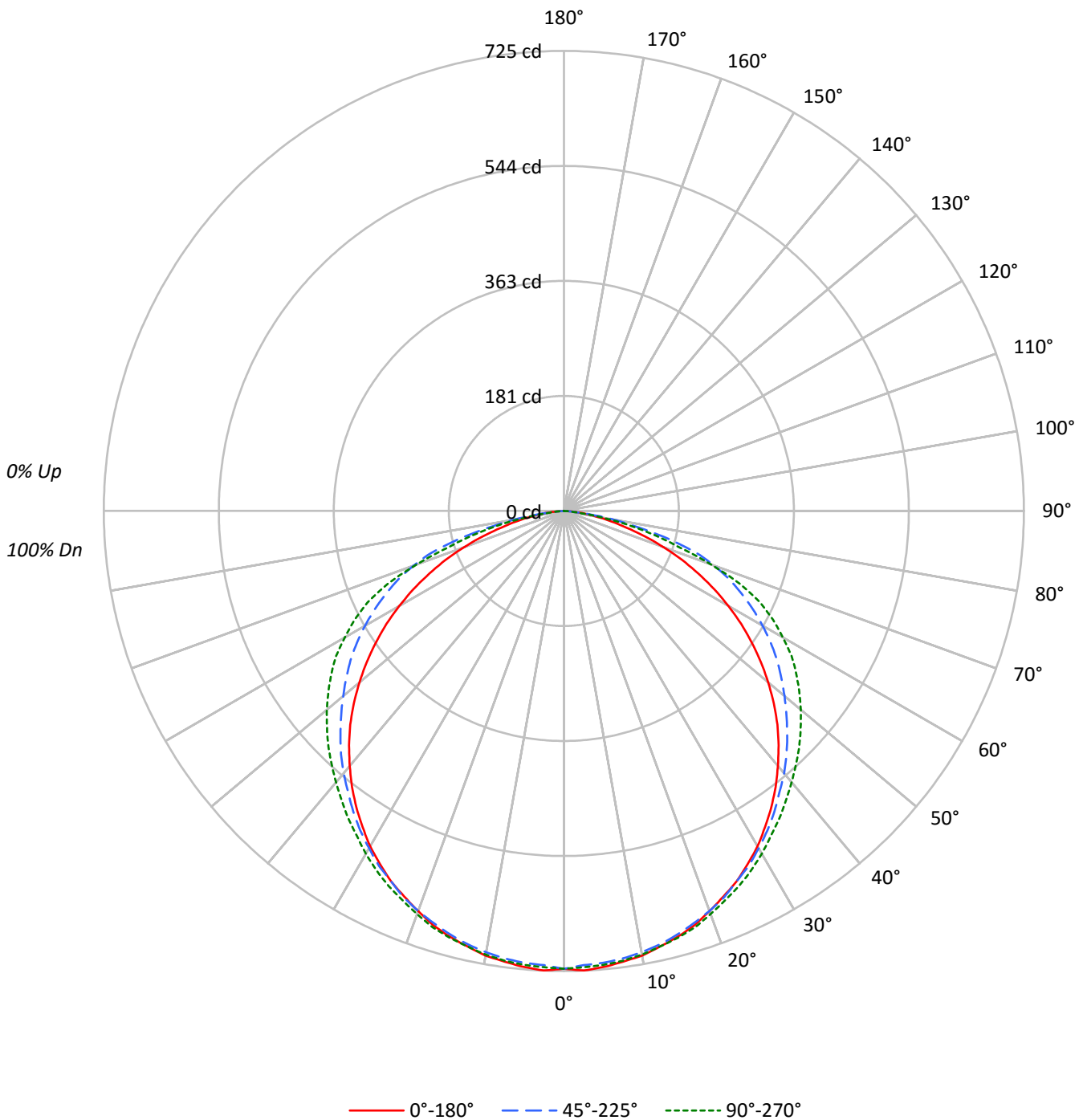
Input Watts (W): 29.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P312071

CATALOG NUMBER: 14FCZ2-35-UNV-L83050-RDP-CA125-W2A-U-3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P312071

CATALOG NUMBER: 14FCZ2-35-UNV-L83050-RDP-CA125-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	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°	1941	1941	1941
5°	1949	1931	1940
10°	1944	1930	1939
15°	1935	1926	1940
20°	1922	1922	1936
25°	1912	1912	1937
30°	1897	1907	1939
35°	1873	1900	1944
40°	1843	1896	1961
45°	1811	1894	1997
50°	1760	1901	2042
55°	1696	1925	2099
60°	1611	1946	2145
65°	1488	1970	2174
70°	1323	1984	1945
75°	1067	1783	1556
80°	834	1251	1017
85°	571	364	259



TEST NUMBER: P312071

CATALOG NUMBER: 14FCZ2-35-UNV-L83050-RDP-CA125-W2A-U-3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.3	3.2
10°-20°	195.9	9.1
20°-30°	298.3	13.8
30°-40°	363.3	16.9
40°-50°	385.5	17.9
50°-60°	363.8	16.9
60°-70°	293.7	13.6
70°-80°	159.3	7.4
80°-90°	25.8	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°	562.5	26.1
0°-40°	925.8	43.0
0°-60°	1675.1	77.8
0°-90°	2154.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2154.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	721	721	721	721	721	
5°	721	720	715	720	718	69
15°	694	693	691	696	696	196
25°	644	642	644	651	652	297
35°	570	573	578	590	592	356
45°	476	483	498	516	525	366
55°	362	377	410	437	447	323
65°	234	262	309	335	341	232
75°	103	150	172	155	150	112
85°	18	20	12	10	8	24
90°	0	0	0	0	0	



TEST NUMBER: P312071

CATALOG NUMBER: 14FC22-35-UNV-L83050-RDP-CA125-W2A-U-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	721.4	721.4	721.4	721.4	721.4
2.5°	724.8	721.4	716.4	721.4	719.7
5°	721.4	719.7	714.7	719.7	718.1
7.5°	716.4	716.4	711.3	714.7	714.7
10°	711.3	709.7	706.3	711.3	709.7
12.5°	702.9	701.2	699.6	704.6	702.9
15°	694.5	692.8	691.2	696.2	696.2
17.5°	684.4	682.8	681.1	687.8	687.8
20°	671.0	671.0	671.0	677.7	676.0
22.5°	657.5	657.5	659.2	665.9	664.3
25°	644.1	642.4	644.1	650.8	652.5
27.5°	627.3	628.9	630.6	637.3	639.0
30°	610.4	612.1	613.8	622.2	623.9
32.5°	590.3	593.6	597.0	607.1	607.1
35°	570.1	573.4	578.5	590.3	591.9
37.5°	548.2	551.6	558.3	571.8	575.1
40°	524.7	529.7	539.8	553.3	558.3
42.5°	501.1	507.9	519.6	534.8	541.5
45°	475.9	482.6	497.8	516.3	524.7
47.5°	449.0	457.4	475.9	499.5	506.2
50°	420.4	432.2	454.0	479.3	487.7
52.5°	391.8	405.3	432.2	459.1	467.5
55°	361.6	376.7	410.3	437.2	447.3
57.5°	331.3	348.1	386.8	415.4	425.5
60°	299.3	319.5	361.6	390.1	398.6
62.5°	267.4	290.9	336.3	364.9	371.6
65°	233.7	262.3	309.4	334.6	341.4
67.5°	201.8	235.4	282.5	301.0	301.0
70°	168.2	205.2	252.2	257.3	247.2
72.5°	134.5	176.6	218.6	200.1	191.7
75°	102.6	149.7	171.5	154.7	149.7
77.5°	77.4	121.1	121.1	111.0	107.6
80°	53.8	92.5	80.7	70.6	65.6
82.5°	35.3	52.1	42.0	33.6	28.6
85°	18.5	20.2	11.8	10.1	8.4
87.5°	6.7	3.4	1.7	3.4	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)