

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: P307095

Luminaire Tested: **14FCZ2-29-UNV-L82765-HRP-CP125-W2A-U-5700K**

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: P307095
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-29-UNV-L82765-HRP-CP125-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125"
POLYCARB SHEET
Light Source: (168) 5700K 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: 2165.0 lumens
Efficiency: N/A
Efficacy: 88.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

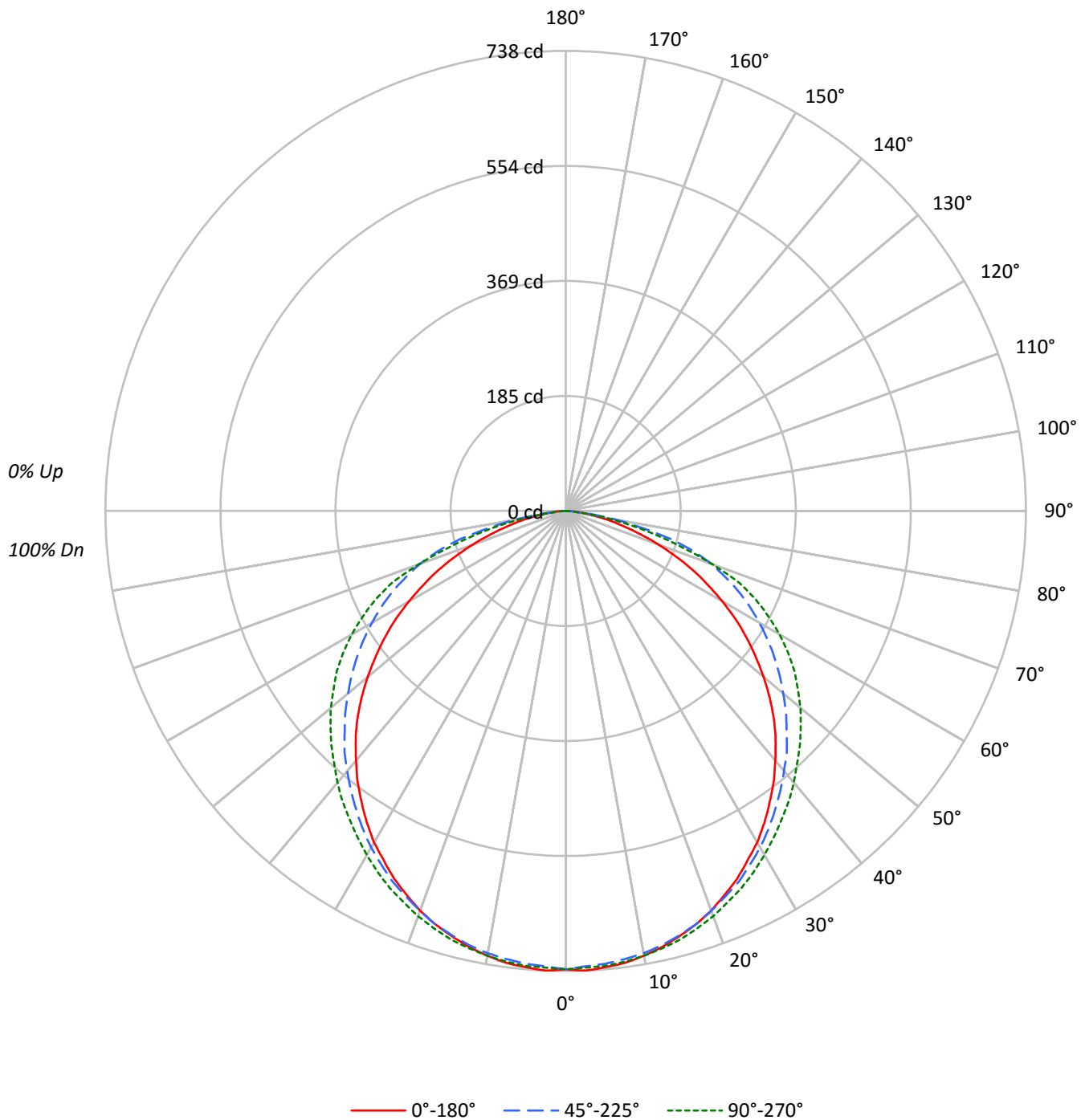
Input Watts (W): 24.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	109	104	100	96	106	102	98	94	97	94	91		93	91	88		84
2	99	90	83	78	96	88	82	77	85	79	75		82	77	73		69
3	90	79	71	64	87	77	70	64	74	68	62		72	66	61		58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		42
6	69	56	47	40	68	55	46	40	53	45	40		51	45	39		37
7	64	51	42	36	63	50	41	35	48	41	35		47	40	35		33
8	60	46	38	32	58	45	37	32	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		26
10	52	39	31	26	51	38	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1978	1978	1978
5°	1984	1969	1979
10°	1979	1968	1979
15°	1967	1963	1982
20°	1953	1955	1981
25°	1932	1949	1981
30°	1908	1938	1980
35°	1874	1923	1984
40°	1837	1913	1999
45°	1798	1907	2021
50°	1736	1906	2058
55°	1661	1917	2102
60°	1561	1931	2129
65°	1439	1951	2141
70°	1253	1955	1971
75°	1033	1820	1593
80°	812	1308	1066
85°	630	503	253



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.6	3.2
10°-20°	199.7	9.2
20°-30°	303.3	14.0
30°-40°	367.5	17.0
40°-50°	387.3	17.9
50°-60°	361.6	16.7
60°-70°	288.9	13.3
70°-80°	159.0	7.3
80°-90°	28.1	1.3
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°	572.7	26.5
0°-40°	940.2	43.4
0°-60°	1689.0	78.0
0°-90°	2165.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2165.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	735	735	735	735	735	
5°	735	732	729	734	732	70
15°	706	706	705	711	711	199
25°	651	652	656	666	667	300
35°	570	576	586	600	604	357
45°	472	481	501	524	531	364
55°	354	372	408	437	448	316
65°	226	255	306	332	336	223
75°	99	142	175	157	153	107
85°	20	26	16	10	8	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	735.2	735.2	735.2	735.2	735.2
2.5°	738.0	735.9	731.2	735.2	733.2
5°	734.6	732.5	729.1	733.9	732.5
7.5°	731.2	728.4	725.0	730.5	729.1
10°	724.4	722.3	720.3	725.0	724.4
12.5°	716.2	715.5	713.5	718.9	718.2
15°	706.0	706.0	704.6	711.4	711.4
17.5°	695.1	694.4	695.1	702.6	701.9
20°	682.1	682.1	682.8	691.7	691.7
22.5°	666.5	667.2	669.2	680.1	679.4
25°	650.8	652.2	656.3	665.8	667.2
27.5°	631.8	635.2	639.9	651.5	652.9
30°	614.1	616.1	623.6	634.5	637.2
32.5°	593.0	597.0	605.2	617.5	620.9
35°	570.5	575.9	585.5	600.5	603.9
37.5°	548.0	552.8	565.7	581.4	587.5
40°	522.8	531.0	544.6	562.3	569.1
42.5°	498.3	506.5	524.9	543.3	549.4
45°	472.5	481.3	501.1	523.5	531.0
47.5°	443.9	454.1	479.3	503.1	511.3
50°	414.6	427.5	455.4	482.0	491.5
52.5°	384.0	400.3	432.3	460.2	469.1
55°	354.0	371.7	408.5	437.1	448.0
57.5°	323.4	342.4	384.0	416.6	422.8
60°	290.0	313.2	358.8	387.4	395.5
62.5°	257.3	283.9	332.9	360.1	366.9
65°	226.0	254.6	306.4	331.5	336.3
67.5°	192.0	226.0	277.1	300.2	301.6
70°	159.3	198.8	248.5	259.4	250.5
72.5°	127.3	169.5	215.1	206.3	198.8
75°	99.4	142.3	175.0	157.3	153.2
77.5°	73.5	116.4	125.3	115.7	108.2
80°	52.4	91.9	84.4	72.2	68.8
82.5°	36.1	57.9	46.3	36.1	31.3
85°	20.4	25.9	16.3	10.2	8.2
87.5°	8.9	6.1	3.4	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)