

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: P307080

Luminaire Tested: **14FCZ2-29-UNV-L82765-HRP-CA125-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: P307080
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-CA125-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" ACRYLIC 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: 2000.0 lumens
Efficiency: N/A
Efficacy: 84.7 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

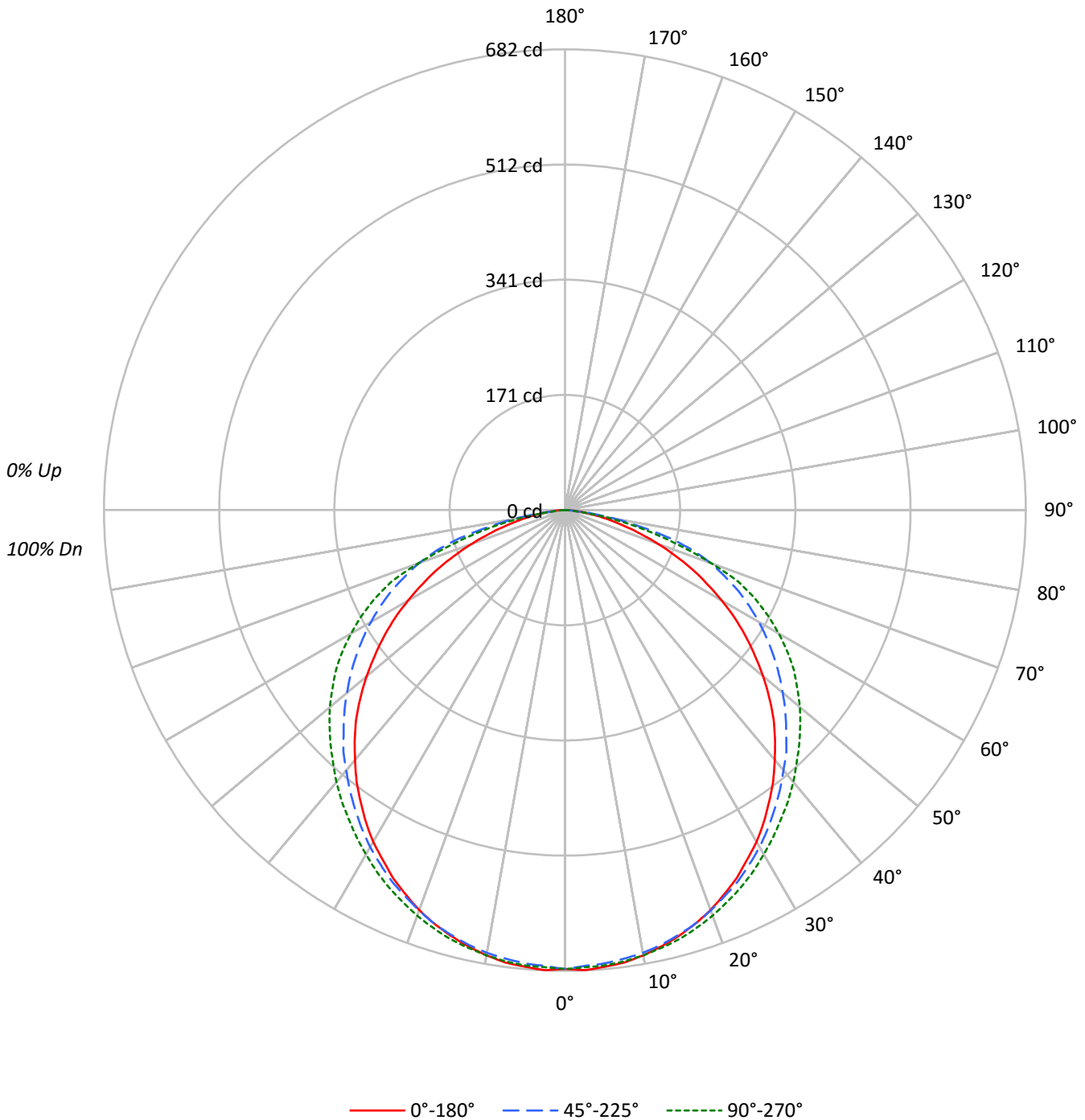
Input Watts (W): 23.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	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	38	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1828	1828	1828
5°	1833	1820	1828
10°	1828	1818	1828
15°	1817	1813	1831
20°	1805	1806	1830
25°	1785	1800	1830
30°	1763	1790	1829
35°	1731	1777	1832
40°	1697	1767	1847
45°	1661	1762	1867
50°	1603	1761	1901
55°	1534	1770	1941
60°	1442	1784	1967
65°	1330	1802	1978
70°	1158	1806	1821
75°	954	1680	1471
80°	750	1209	984
85°	584	466	232



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.3	3.2
10°-20°	184.5	9.2
20°-30°	280.2	14.0
30°-40°	339.5	17.0
40°-50°	357.8	17.9
50°-60°	334.0	16.7
60°-70°	266.9	13.3
70°-80°	146.9	7.3
80°-90°	25.9	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°	529.0	26.5
0°-40°	868.5	43.4
0°-60°	1560.3	78.0
0°-90°	2000.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2000.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	679	679	679	679	679	
5°	679	677	674	678	677	65
15°	652	652	651	657	657	184
25°	601	602	606	615	616	277
35°	527	532	541	555	558	330
45°	436	445	463	484	490	336
55°	327	343	377	404	414	292
65°	209	235	283	306	311	206
75°	92	131	162	145	142	99
85°	19	24	15	9	8	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	679.2	679.2	679.2	679.2	679.2
2.5°	681.7	679.8	675.4	679.2	677.3
5°	678.6	676.7	673.6	678.0	676.7
7.5°	675.4	672.9	669.8	674.8	673.6
10°	669.1	667.3	665.4	669.8	669.1
12.5°	661.6	661.0	659.1	664.1	663.5
15°	652.2	652.2	650.9	657.2	657.2
17.5°	642.1	641.5	642.1	649.0	648.4
20°	630.2	630.2	630.8	639.0	639.0
22.5°	615.7	616.3	618.2	628.3	627.6
25°	601.2	602.5	606.3	615.1	616.3
27.5°	583.6	586.8	591.2	601.9	603.1
30°	567.3	569.2	576.1	586.1	588.6
32.5°	547.8	551.5	559.1	570.4	573.6
35°	527.0	532.0	540.9	554.7	557.8
37.5°	506.3	510.7	522.6	537.1	542.7
40°	483.0	490.5	503.1	519.5	525.8
42.5°	460.4	467.9	484.9	501.9	507.5
45°	436.5	444.6	462.9	483.6	490.5
47.5°	410.0	419.5	442.7	464.8	472.3
50°	383.0	394.9	420.7	445.3	454.1
52.5°	354.7	369.8	399.4	425.1	433.3
55°	327.0	343.4	377.3	403.8	413.8
57.5°	298.7	316.3	354.7	384.9	390.5
60°	267.9	289.3	331.4	357.8	365.4
62.5°	237.7	262.3	307.5	332.7	339.0
65°	208.8	235.2	283.0	306.3	310.7
67.5°	177.3	208.8	256.0	277.3	278.6
70°	147.2	183.6	229.5	239.6	231.4
72.5°	117.6	156.6	198.7	190.6	183.6
75°	91.8	131.4	161.6	145.3	141.5
77.5°	67.9	107.5	115.7	106.9	100.0
80°	48.4	84.9	78.0	66.7	63.5
82.5°	33.3	53.5	42.8	33.3	28.9
85°	18.9	23.9	15.1	9.4	7.5
87.5°	8.2	5.7	3.1	2.5	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)