

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: P307886

Luminaire Tested: **14FCZ2-29-UNV-L82765-S-CA08-W2A-U-5500K**

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: P307886
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
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-S-CA08-W2A-U-5500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 5500K 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: 2944.0 lumens
Efficiency: N/A
Efficacy: 120.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

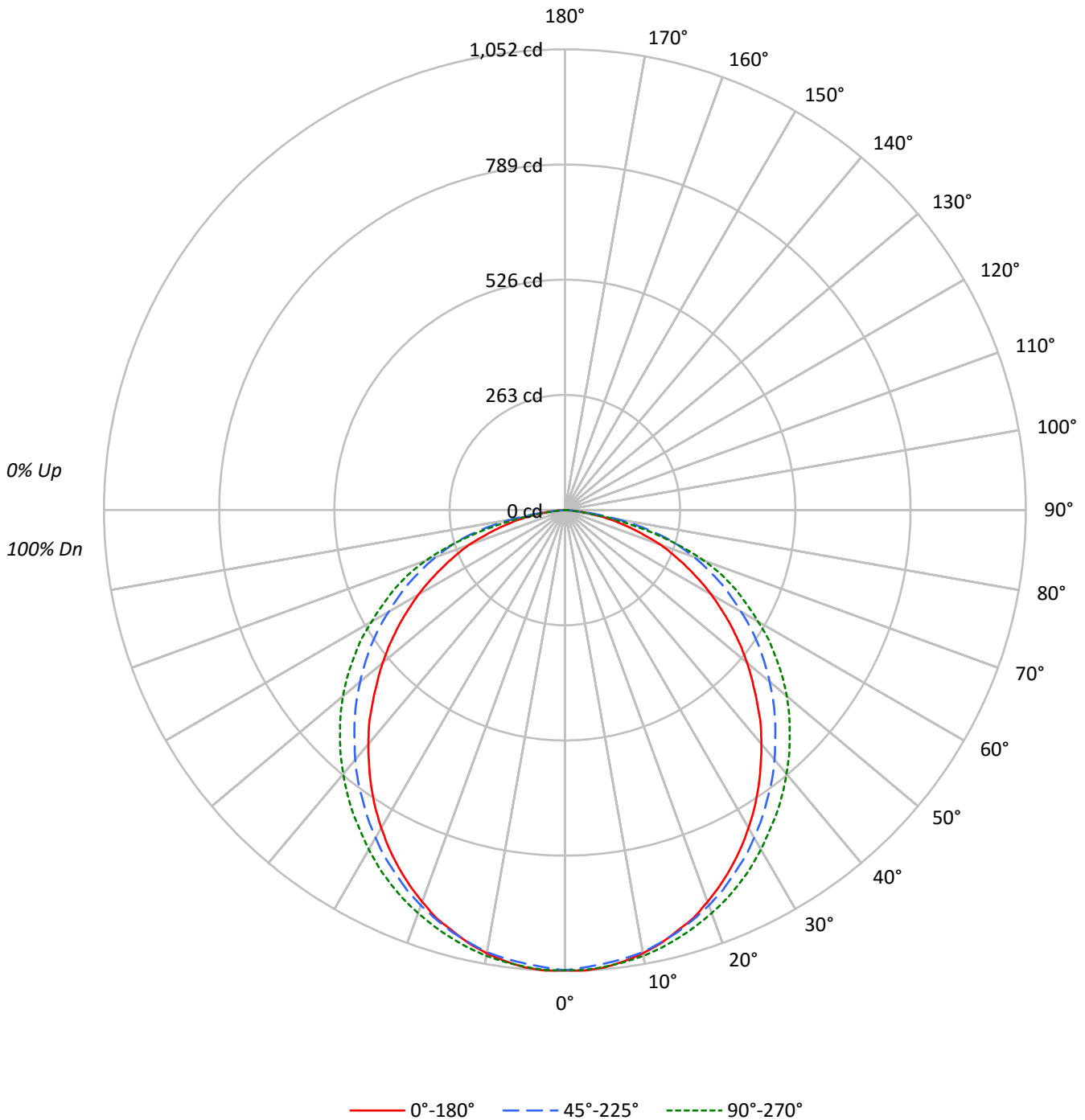
Input Watts (W): 24.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2828	2828	2828
5°	2831	2807	2827
10°	2808	2800	2824
15°	2769	2778	2814
20°	2725	2751	2805
25°	2670	2717	2795
30°	2603	2685	2780
35°	2532	2647	2772
40°	2451	2615	2764
45°	2361	2583	2761
50°	2273	2554	2768
55°	2178	2534	2760
60°	2074	2498	2742
65°	1952	2491	2742
70°	1837	2469	2664
75°	1594	2413	2276
80°	1289	1945	1516
85°	855	676	451



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.2	3.4
10°-20°	282.4	9.6
20°-30°	423.6	14.4
30°-40°	505.3	17.2
40°-50°	522.4	17.7
50°-60°	477.0	16.2
60°-70°	375.3	12.7
70°-80°	218.5	7.4
80°-90°	40.3	1.4
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°	805.2	27.4
0°-40°	1310.6	44.5
0°-60°	2309.9	78.5
0°-90°	2944.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2944.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1051	1051	1051	1051	1051	
5°	1048	1045	1039	1048	1047	99
15°	994	996	997	1010	1010	280
25°	899	904	915	937	942	414
35°	771	781	806	836	844	482
45°	620	641	679	717	726	479
55°	464	489	540	580	588	415
65°	306	339	391	422	431	304
75°	153	190	232	228	219	163
85°	28	39	22	18	15	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1051.0	1051.0	1051.0	1051.0	1051.0
2.5°	1052.4	1049.5	1045.1	1052.4	1051.0
5°	1048.0	1045.1	1039.3	1048.0	1046.6
7.5°	1039.3	1036.4	1033.4	1042.2	1040.7
10°	1027.6	1026.1	1024.7	1034.9	1033.4
12.5°	1013.0	1013.0	1011.5	1023.2	1023.2
15°	994.0	995.5	997.0	1010.1	1010.1
17.5°	976.5	975.1	979.4	994.0	995.5
20°	951.7	954.6	960.5	978.0	979.4
22.5°	926.9	929.8	940.0	957.5	961.9
25°	899.2	903.5	915.2	937.1	941.5
27.5°	870.0	875.8	891.9	915.2	919.6
30°	837.8	846.6	864.1	890.4	894.8
32.5°	805.7	814.5	836.4	862.7	868.5
35°	770.7	780.9	805.7	836.4	843.7
37.5°	734.2	747.3	776.5	807.2	816.0
40°	697.7	712.3	744.4	776.5	786.8
42.5°	661.2	675.8	710.9	747.3	757.6
45°	620.4	640.8	678.7	716.7	725.5
47.5°	580.9	602.8	645.2	683.1	694.8
50°	543.0	564.9	610.1	649.6	661.2
52.5°	503.6	526.9	575.1	616.0	626.2
55°	464.2	489.0	540.1	579.5	588.2
57.5°	424.8	451.0	503.6	541.5	551.8
60°	385.4	413.1	464.2	502.1	509.4
62.5°	345.9	375.1	427.7	461.3	468.6
65°	306.5	338.6	391.2	421.8	430.6
67.5°	268.6	300.7	351.8	381.0	388.3
70°	233.5	262.7	313.8	335.7	338.6
72.5°	189.8	226.2	275.9	287.6	280.3
75°	153.3	189.8	232.1	227.7	218.9
77.5°	116.8	153.3	181.0	166.4	154.7
80°	83.2	119.7	125.5	103.6	97.8
82.5°	54.0	83.2	70.1	54.0	43.8
85°	27.7	39.4	21.9	17.5	14.6
87.5°	8.8	5.8	2.9	2.9	1.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)