

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: P307618

Luminaire Tested: **14FCZ2-29-UNV-L82765-CA08-W2A-U-6500K**

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: P307618
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: 14FCZ2-29-UNV-L82765-CA08-W2A-U-6500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 6500K 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: 2928.0 lumens
Efficiency: N/A
Efficacy: 117.6 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

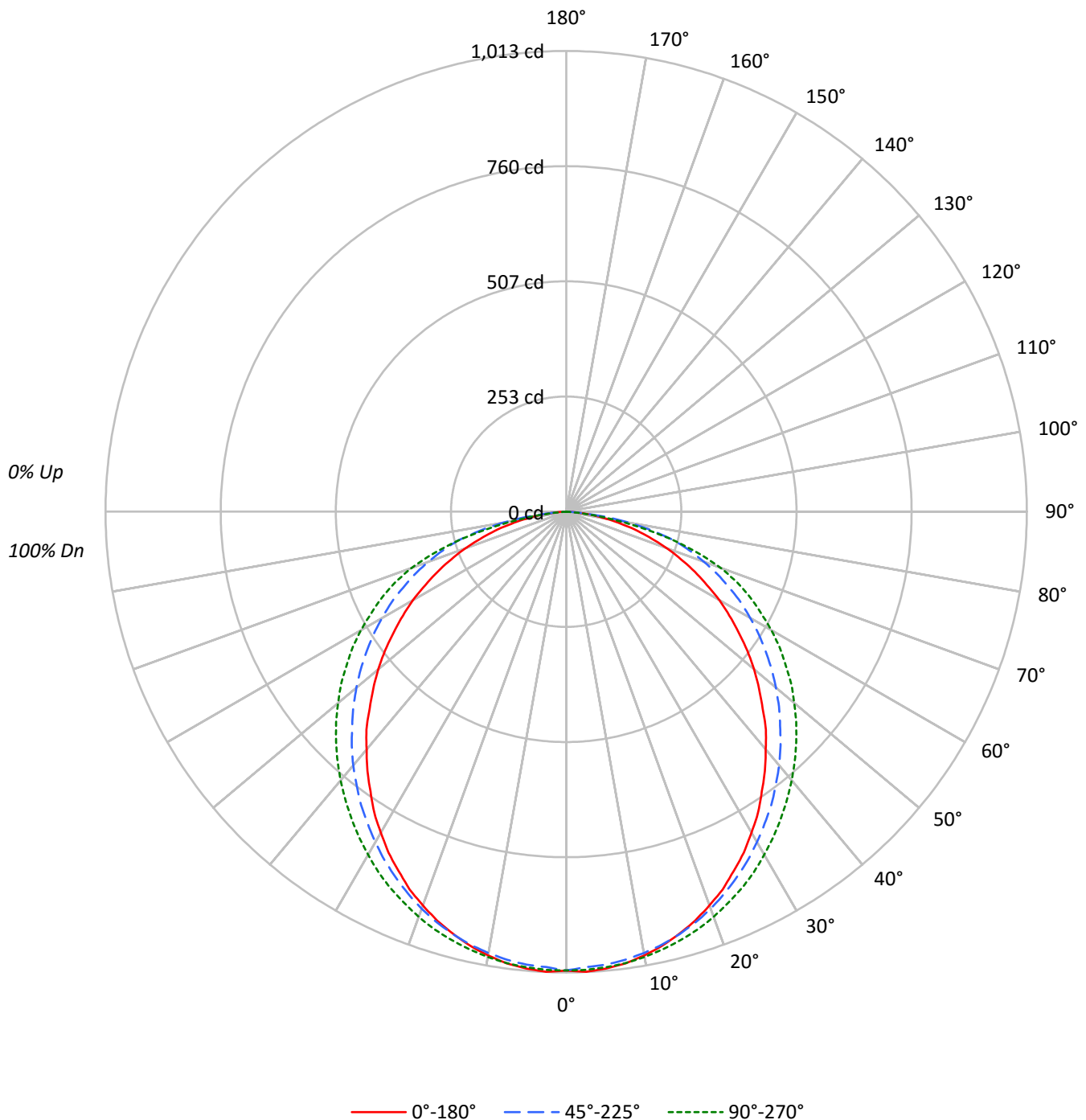
Input Watts (W): 24.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		58
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		32
8	60	46	37	32	58	45	37	31	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	39	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2714	2714	2714
5°	2723	2700	2716
10°	2706	2692	2717
15°	2677	2679	2716
20°	2638	2661	2715
25°	2588	2635	2712
30°	2532	2607	2706
35°	2464	2584	2705
40°	2399	2559	2709
45°	2326	2532	2723
50°	2258	2520	2741
55°	2172	2512	2766
60°	2094	2516	2804
65°	1987	2523	2848
70°	1865	2543	2846
75°	1691	2566	2572
80°	1385	2216	1832
85°	1028	1047	423



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.4	3.3
10°-20°	272.7	9.3
20°-30°	410.7	14.0
30°-40°	492.9	16.8
40°-50°	513.7	17.5
50°-60°	475.6	16.2
60°-70°	384.3	13.1
70°-80°	234.3	8.0
80°-90°	48.4	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°	778.9	26.6
0°-40°	1271.8	43.4
0°-60°	2261.1	77.2
0°-90°	2928.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2928.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1009	1009	1009	1009	1009	
5°	1008	1005	1000	1007	1005	96
15°	961	962	962	975	975	271
25°	872	877	887	910	913	402
35°	750	762	787	816	823	470
45°	611	629	665	702	716	472
55°	463	487	535	577	590	415
65°	312	343	396	436	447	309
75°	163	198	247	251	247	171
85°	33	50	34	19	14	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1008.7	1008.7	1008.7	1008.7	1008.7
2.5°	1012.6	1009.4	1002.2	1009.4	1008.1
5°	1008.1	1005.4	999.6	1006.7	1005.4
7.5°	1001.5	998.9	993.7	1002.2	1000.9
10°	990.4	989.1	985.2	995.0	994.3
12.5°	977.4	976.7	974.8	985.9	985.2
15°	961.0	961.7	961.7	974.8	974.8
17.5°	942.8	944.1	946.7	961.0	963.0
20°	921.2	923.8	929.1	945.4	948.0
22.5°	899.0	901.0	908.8	928.4	931.0
25°	871.6	876.8	887.3	909.5	913.4
27.5°	845.5	850.1	864.4	887.3	893.8
30°	814.8	822.0	839.0	863.8	870.9
32.5°	785.4	793.3	812.8	841.6	848.1
35°	750.2	761.9	786.7	815.5	823.3
37.5°	718.2	729.3	757.3	788.7	797.8
40°	682.9	696.6	728.6	761.9	771.1
42.5°	650.3	663.3	697.9	731.9	744.3
45°	611.1	629.4	665.3	702.5	715.6
47.5°	575.2	593.5	634.6	674.4	686.2
50°	539.3	558.9	602.0	643.1	654.8
52.5°	502.1	523.0	569.3	610.4	624.2
55°	462.9	487.1	535.4	577.1	589.6
57.5°	425.7	450.5	502.1	544.5	556.9
60°	389.1	414.6	467.5	507.9	521.0
62.5°	348.6	378.7	433.5	473.3	483.1
65°	312.1	342.8	396.3	436.1	447.2
67.5°	273.6	306.9	360.4	397.0	407.4
70°	237.0	271.6	323.2	357.1	361.7
72.5°	197.8	233.1	285.3	306.9	306.9
75°	162.6	198.5	246.8	250.7	247.4
77.5°	124.0	163.9	195.2	187.4	179.5
80°	89.4	128.6	143.0	128.6	118.2
82.5°	60.1	93.4	86.2	68.6	60.7
85°	33.3	49.6	33.9	18.9	13.7
87.5°	12.4	11.1	3.3	3.3	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)