

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: P307617

Luminaire Tested: **14FCZ2-29-UNV-L82765-CA08-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: P307617
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-5700K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC 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: 2921.0 lumens
Efficiency: N/A
Efficacy: 119.2 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

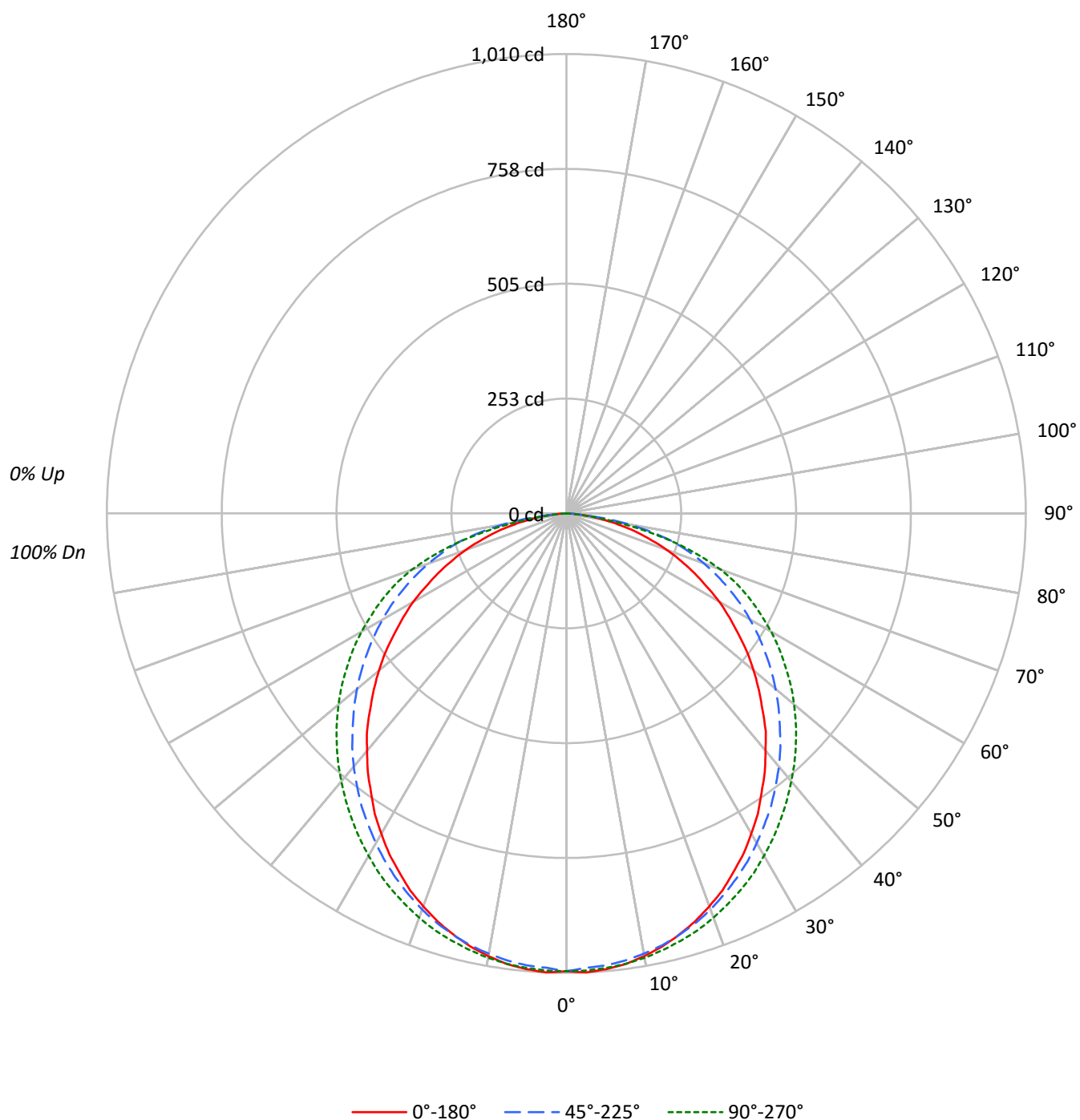
Input Watts (W): 24.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83		
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69		
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58		
4	82	70	61	54	79	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	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32		
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	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	39	31	26	37	30	26	37	30	25	36	30	25	24		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2708	2708	2708
5°	2716	2694	2709
10°	2700	2685	2711
15°	2671	2673	2709
20°	2632	2654	2708
25°	2582	2628	2706
30°	2526	2601	2700
35°	2459	2578	2698
40°	2393	2553	2702
45°	2320	2526	2716
50°	2252	2514	2735
55°	2167	2506	2759
60°	2089	2510	2798
65°	1982	2518	2841
70°	1860	2537	2839
75°	1686	2560	2567
80°	1382	2210	1827
85°	1025	1047	423



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.2	3.3
10°-20°	272.0	9.3
20°-30°	409.8	14.0
30°-40°	491.7	16.8
40°-50°	512.5	17.5
50°-60°	474.5	16.2
60°-70°	383.3	13.1
70°-80°	233.7	8.0
80°-90°	48.3	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°	777.0	26.6
0°-40°	1268.7	43.4
0°-60°	2255.7	77.2
0°-90°	2921.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2921.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1006	1006	1006	1006	1006	
5°	1006	1003	997	1004	1003	95
15°	959	959	959	972	972	270
25°	870	875	885	907	911	401
35°	748	760	785	814	821	469
45°	610	628	664	701	714	471
55°	462	486	534	576	588	414
65°	311	342	395	435	446	308
75°	162	198	246	250	247	170
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°	1006.3	1006.3	1006.3	1006.3	1006.3
2.5°	1010.2	1006.9	999.8	1006.9	1005.6
5°	1005.6	1003.0	997.2	1004.3	1003.0
7.5°	999.1	996.5	991.3	999.8	998.5
10°	988.1	986.8	982.8	992.6	992.0
12.5°	975.0	974.4	972.4	983.5	982.8
15°	958.7	959.4	959.4	972.4	972.4
17.5°	940.5	941.8	944.4	958.7	960.7
20°	919.0	921.6	926.8	943.1	945.7
22.5°	896.9	898.8	906.6	926.2	928.8
25°	869.5	874.7	885.1	907.3	911.2
27.5°	843.5	848.0	862.4	885.1	891.7
30°	812.9	820.0	837.0	861.7	868.9
32.5°	783.5	791.4	810.9	839.6	846.1
35°	748.4	760.1	784.8	813.5	821.3
37.5°	716.5	727.5	755.5	786.8	795.9
40°	681.3	695.0	726.9	760.1	769.2
42.5°	648.7	661.7	696.3	730.1	742.5
45°	609.6	627.9	663.7	700.8	713.8
47.5°	573.8	592.1	633.1	672.8	684.5
50°	538.0	557.5	600.5	641.6	653.3
52.5°	500.9	521.7	568.0	609.0	622.7
55°	461.8	485.9	534.1	575.8	588.1
57.5°	424.7	449.4	500.9	543.2	555.6
60°	388.2	413.6	466.3	506.7	519.8
62.5°	347.8	377.8	432.5	472.2	482.0
65°	311.3	341.9	395.4	435.1	446.2
67.5°	272.9	306.1	359.5	396.0	406.4
70°	236.4	271.0	322.4	356.3	360.8
72.5°	197.4	232.5	284.6	306.1	306.1
75°	162.2	198.0	246.2	250.1	246.9
77.5°	123.8	163.5	194.7	186.9	179.1
80°	89.2	128.3	142.6	128.3	117.9
82.5°	59.9	93.1	86.0	68.4	60.6
85°	33.2	49.5	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)