

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: P307616

Luminaire Tested: **14FCZ2-29-UNV-L82765-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: P307616
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-5500K
Description: 1'X4' TROFFER LED MODULE,RIBBED 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: 2913.0 lumens
Efficiency: N/A
Efficacy: 118.9 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

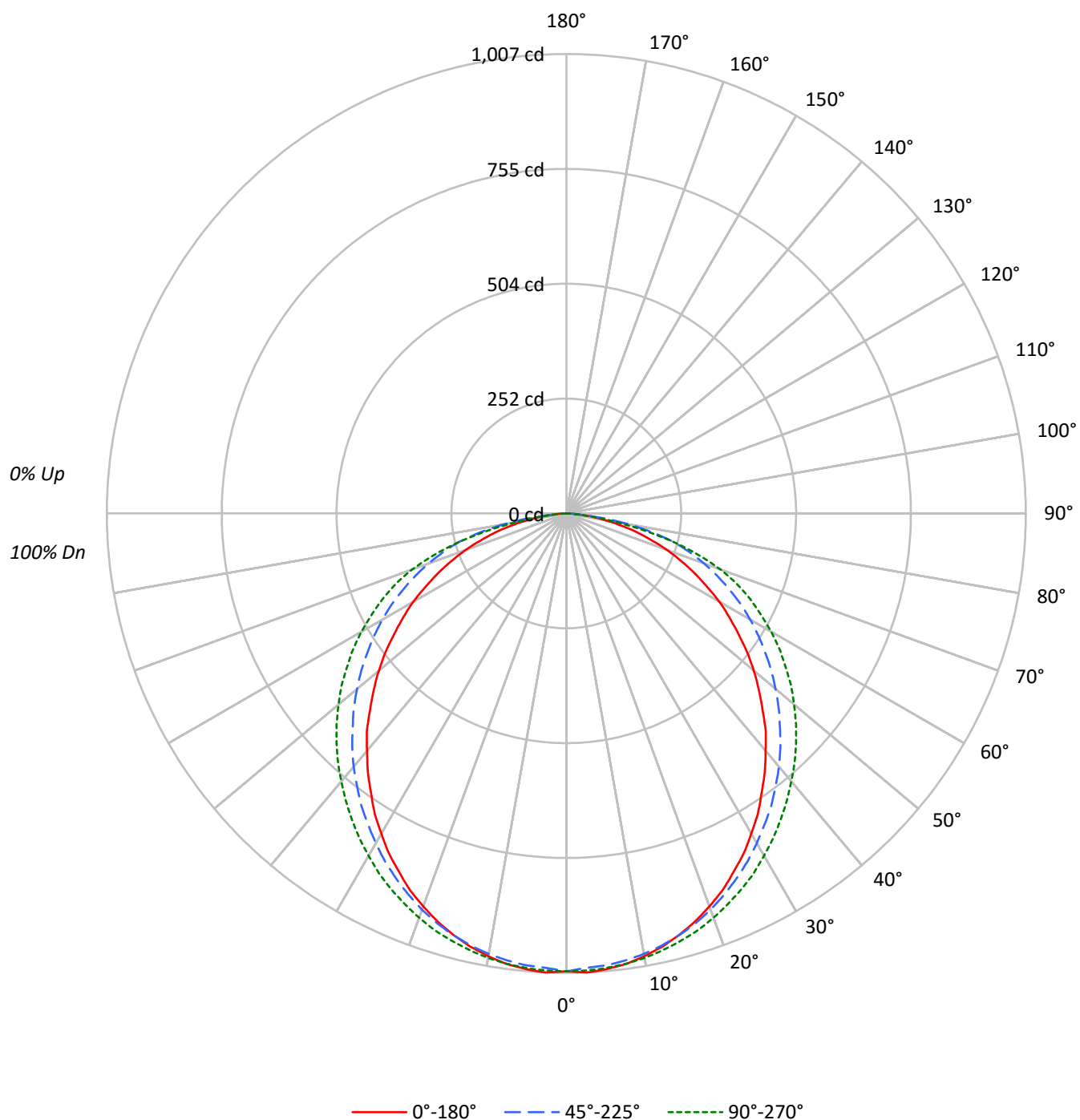
Input Watts (W): 24.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2700	2700	2700
5°	2709	2686	2702
10°	2693	2678	2703
15°	2664	2666	2702
20°	2625	2647	2701
25°	2575	2621	2698
30°	2519	2594	2692
35°	2452	2571	2691
40°	2387	2546	2695
45°	2314	2519	2709
50°	2246	2507	2727
55°	2160	2499	2752
60°	2083	2503	2789
65°	1977	2511	2833
70°	1855	2530	2831
75°	1681	2552	2560
80°	1379	2204	1822
85°	1022	1044	420



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.0	3.3
10°-20°	271.3	9.3
20°-30°	408.6	14.0
30°-40°	490.4	16.8
40°-50°	511.1	17.5
50°-60°	473.2	16.2
60°-70°	382.3	13.1
70°-80°	233.1	8.0
80°-90°	48.1	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°	774.9	26.6
0°-40°	1265.2	43.4
0°-60°	2249.5	77.2
0°-90°	2913.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2913.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1004	1004	1004	1004	1004	
5°	1003	1000	994	1002	1000	95
15°	956	957	957	970	970	270
25°	867	872	883	905	909	400
35°	746	758	783	811	819	468
45°	608	626	662	699	712	470
55°	460	485	533	574	586	413
65°	310	341	394	434	445	307
75°	162	198	246	249	246	170
85°	33	49	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°	1003.5	1003.5	1003.5	1003.5	1003.5
2.5°	1007.4	1004.2	997.0	1004.2	1002.9
5°	1002.9	1000.3	994.4	1001.6	1000.3
7.5°	996.4	993.8	988.6	997.0	995.7
10°	985.4	984.1	980.2	989.9	989.2
12.5°	972.4	971.7	969.8	980.8	980.2
15°	956.1	956.8	956.8	969.8	969.8
17.5°	937.9	939.2	941.8	956.1	958.1
20°	916.5	919.1	924.3	940.5	943.1
22.5°	894.4	896.4	904.2	923.6	926.2
25°	867.1	872.3	882.7	904.8	908.7
27.5°	841.2	845.7	860.0	882.7	889.2
30°	810.6	817.8	834.7	859.3	866.5
32.5°	781.4	789.2	808.7	837.3	843.8
35°	746.3	758.0	782.7	811.3	819.1
37.5°	714.5	725.5	753.5	784.6	793.7
40°	679.4	693.1	724.9	758.0	767.1
42.5°	646.9	659.9	694.4	728.1	740.5
45°	608.0	626.2	661.9	698.9	711.9
47.5°	572.2	590.4	631.4	671.0	682.7
50°	536.5	556.0	598.9	639.8	651.5
52.5°	499.5	520.3	566.4	607.3	621.0
55°	460.5	484.6	532.6	574.2	586.5
57.5°	423.5	448.2	499.5	541.7	554.1
60°	387.1	412.5	465.1	505.3	518.3
62.5°	346.9	376.7	431.3	470.9	480.7
65°	310.5	341.0	394.3	433.9	444.9
67.5°	272.2	305.3	358.5	394.9	405.3
70°	235.8	270.2	321.5	355.3	359.8
72.5°	196.8	231.9	283.8	305.3	305.3
75°	161.7	197.5	245.5	249.4	246.2
77.5°	123.4	163.0	194.2	186.4	178.6
80°	89.0	128.0	142.2	128.0	117.6
82.5°	59.8	92.9	85.7	68.2	60.4
85°	33.1	49.4	33.8	18.8	13.6
87.5°	12.3	11.0	3.2	3.2	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)