

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: P307611

Luminaire Tested: **14FCZ2-29-UNV-L82765-CA08-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: P307611
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-3000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" 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: 2645.0 lumens
Efficiency: N/A
Efficacy: 112.1 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

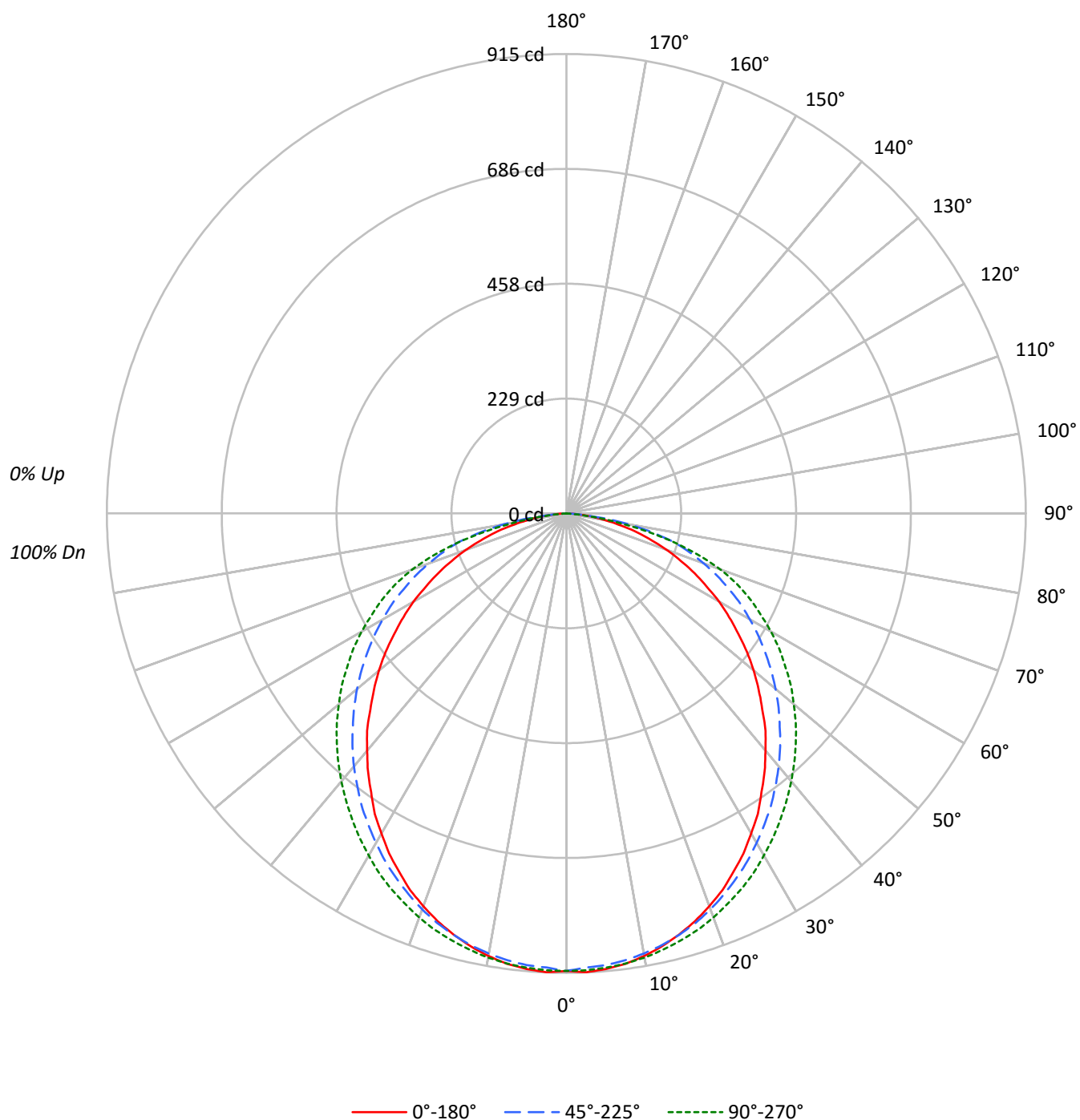
Input Watts (W): 23.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	2452	2452	2452
5°	2460	2439	2454
10°	2445	2432	2454
15°	2419	2420	2453
20°	2383	2403	2452
25°	2338	2380	2450
30°	2287	2355	2445
35°	2226	2335	2443
40°	2167	2312	2447
45°	2101	2287	2460
50°	2040	2277	2476
55°	1962	2269	2499
60°	1892	2273	2533
65°	1795	2280	2572
70°	1685	2297	2570
75°	1527	2318	2324
80°	1252	2002	1655
85°	929	948	383



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.2	3.3
10°-20°	246.3	9.3
20°-30°	371.0	14.0
30°-40°	445.3	16.8
40°-50°	464.1	17.5
50°-60°	429.6	16.2
60°-70°	347.1	13.1
70°-80°	211.6	8.0
80°-90°	43.7	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°	703.6	26.6
0°-40°	1148.8	43.4
0°-60°	2042.5	77.2
0°-90°	2645.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2645.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	911	911	911	911	911	
5°	911	908	903	909	908	86
15°	868	869	869	880	880	245
25°	787	792	802	822	825	363
35°	678	688	711	737	744	425
45°	552	568	601	635	646	427
55°	418	440	484	521	533	375
65°	282	310	358	394	404	279
75°	147	179	223	226	224	154
85°	30	45	31	17	12	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	911.2	911.2	911.2	911.2	911.2
2.5°	914.7	911.8	905.3	911.8	910.6
5°	910.6	908.3	903.0	909.4	908.3
7.5°	904.7	902.4	897.6	905.3	904.1
10°	894.7	893.5	890.0	898.8	898.2
12.5°	882.9	882.3	880.5	890.6	890.0
15°	868.2	868.7	868.7	880.5	880.5
17.5°	851.6	852.8	855.2	868.2	869.9
20°	832.2	834.5	839.3	854.0	856.4
22.5°	812.1	813.9	821.0	838.7	841.0
25°	787.4	792.1	801.5	821.6	825.1
27.5°	763.8	767.9	780.9	801.5	807.4
30°	736.0	742.5	757.9	780.3	786.8
32.5°	709.5	716.6	734.3	760.2	766.1
35°	677.7	688.3	710.7	736.6	743.7
37.5°	648.8	658.8	684.1	712.5	720.7
40°	616.9	629.3	658.2	688.3	696.5
42.5°	587.4	599.2	630.5	661.1	672.3
45°	552.0	568.5	601.0	634.6	646.4
47.5°	519.6	536.1	573.3	609.2	619.9
50°	487.2	504.9	543.8	580.9	591.5
52.5°	453.5	472.4	514.3	551.4	563.8
55°	418.2	440.0	483.6	521.4	532.6
57.5°	384.5	406.9	453.5	491.9	503.1
60°	351.5	374.5	422.3	458.8	470.6
62.5°	314.9	342.1	391.6	427.6	436.4
65°	281.9	309.6	358.0	394.0	404.0
67.5°	247.1	277.2	325.6	358.6	368.0
70°	214.1	245.3	291.9	322.6	326.7
72.5°	178.7	210.6	257.7	277.2	277.2
75°	146.9	179.3	222.9	226.5	223.5
77.5°	112.1	148.0	176.3	169.3	162.2
80°	80.8	116.2	129.2	116.2	106.8
82.5°	54.3	84.3	77.9	61.9	54.8
85°	30.1	44.8	30.7	17.1	12.4
87.5°	11.2	10.0	2.9	2.9	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)