

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: P307645

Luminaire Tested: **14FCZ2-29-UNV-L82765-CP187-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: P307645
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-CP187-W2A-U-6500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.187" POLYCARB 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: 2740.0 lumens
Efficiency: N/A
Efficacy: 110.0 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

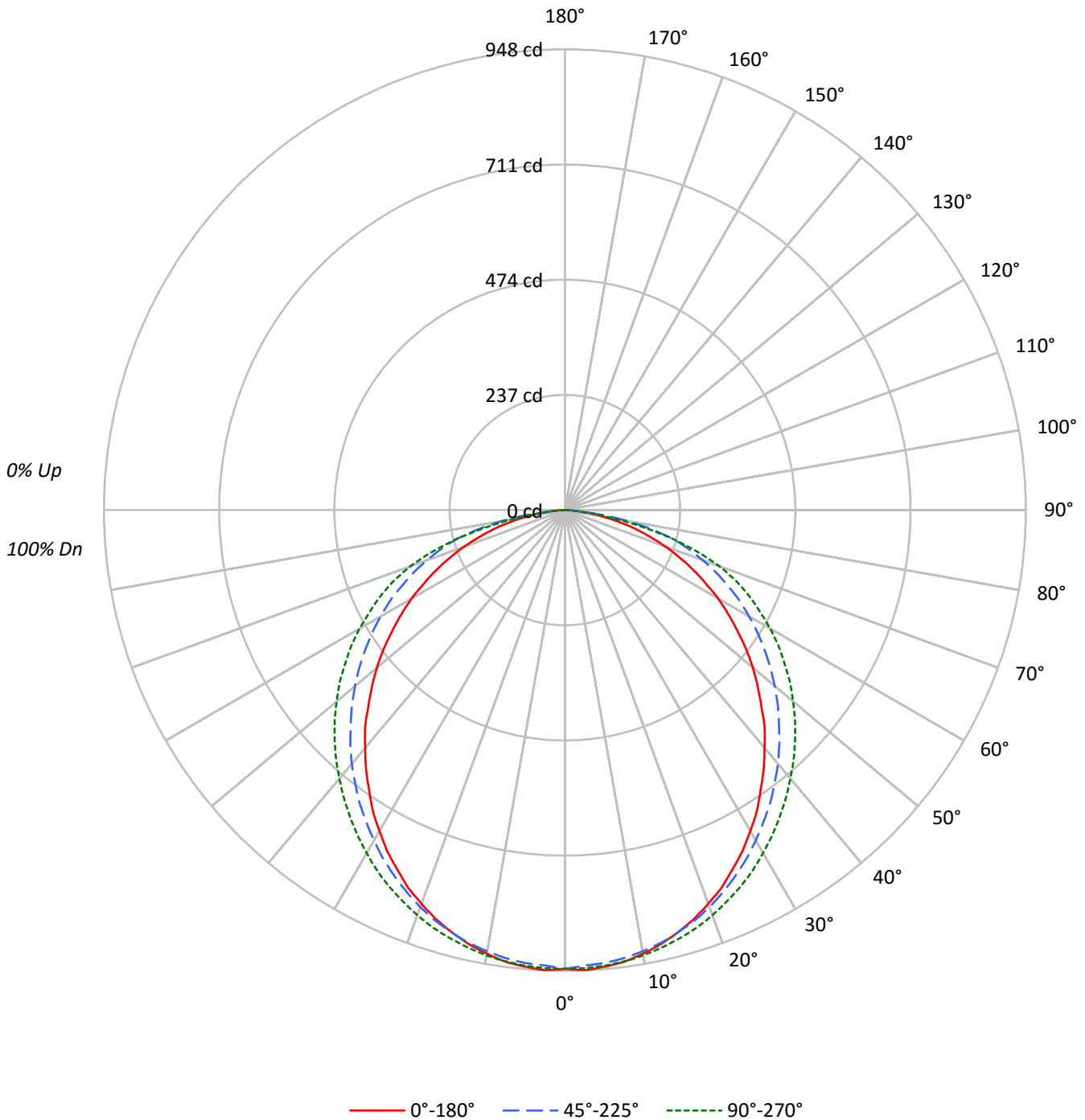
Input Watts (W): 24.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2540	2540	2540
5°	2548	2527	2542
10°	2532	2519	2543
15°	2505	2507	2541
20°	2469	2490	2540
25°	2422	2465	2538
30°	2369	2440	2532
35°	2306	2418	2531
40°	2245	2395	2535
45°	2176	2369	2548
50°	2113	2358	2565
55°	2032	2350	2588
60°	1960	2355	2624
65°	1859	2362	2665
70°	1745	2379	2663
75°	1581	2401	2408
80°	1297	2073	1714
85°	963	982	395



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.3	3.3
10°-20°	255.2	9.3
20°-30°	384.4	14.0
30°-40°	461.2	16.8
40°-50°	480.7	17.5
50°-60°	445.1	16.2
60°-70°	359.6	13.1
70°-80°	219.3	8.0
80°-90°	45.3	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°	728.8	26.6
0°-40°	1190.1	43.4
0°-60°	2115.9	77.2
0°-90°	2740.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2740.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	944	944	944	944	944	
5°	943	941	935	942	941	90
15°	899	900	900	912	912	254
25°	816	820	830	851	855	376
35°	702	713	736	763	770	440
45°	572	589	623	657	670	442
55°	433	456	501	540	552	388
65°	292	321	371	408	418	289
75°	152	186	231	235	232	160
85°	31	46	32	18	13	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	943.9	943.9	943.9	943.9	943.9
2.5°	947.6	944.5	937.8	944.5	943.3
5°	943.3	940.9	935.4	942.1	940.9
7.5°	937.2	934.8	929.9	937.8	936.6
10°	926.8	925.6	921.9	931.1	930.5
12.5°	914.6	914.0	912.2	922.6	921.9
15°	899.3	899.9	899.9	912.2	912.2
17.5°	882.2	883.5	885.9	899.3	901.2
20°	862.1	864.5	869.4	884.7	887.1
22.5°	841.3	843.1	850.5	868.8	871.2
25°	815.6	820.5	830.3	851.1	854.7
27.5°	791.2	795.5	808.9	830.3	836.4
30°	762.5	769.2	785.1	808.3	815.0
32.5°	735.0	742.3	760.6	787.5	793.6
35°	702.0	713.0	736.2	763.1	770.4
37.5°	672.1	682.4	708.7	738.0	746.6
40°	639.1	651.9	681.8	713.0	721.5
42.5°	608.5	620.7	653.1	684.9	696.5
45°	571.9	589.0	622.6	657.4	669.6
47.5°	538.3	555.4	593.9	631.1	642.1
50°	504.7	523.0	563.3	601.8	612.8
52.5°	469.8	489.4	532.8	571.3	584.1
55°	433.2	455.8	501.0	540.1	551.7
57.5°	398.3	421.6	469.8	509.5	521.2
60°	364.1	388.0	437.5	475.3	487.5
62.5°	326.3	354.4	405.7	442.9	452.1
65°	292.0	320.8	370.9	408.1	418.5
67.5°	256.0	287.2	337.3	371.5	381.2
70°	221.8	254.2	302.4	334.2	338.5
72.5°	185.1	218.1	267.0	287.2	287.2
75°	152.1	185.7	230.9	234.6	231.6
77.5°	116.1	153.4	182.7	175.3	168.0
80°	83.7	120.4	133.8	120.4	110.6
82.5°	56.2	87.4	80.6	64.2	56.8
85°	31.2	46.4	31.8	17.7	12.8
87.5°	11.6	10.4	3.1	3.1	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)