

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: P307622

Luminaire Tested: **14FCZ2-29-UNV-L82765-CA125-W2A-U-4000K**

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: P307622
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-CA125-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 4000K 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: 2787.0 lumens
Efficiency: N/A
Efficacy: 115.6 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

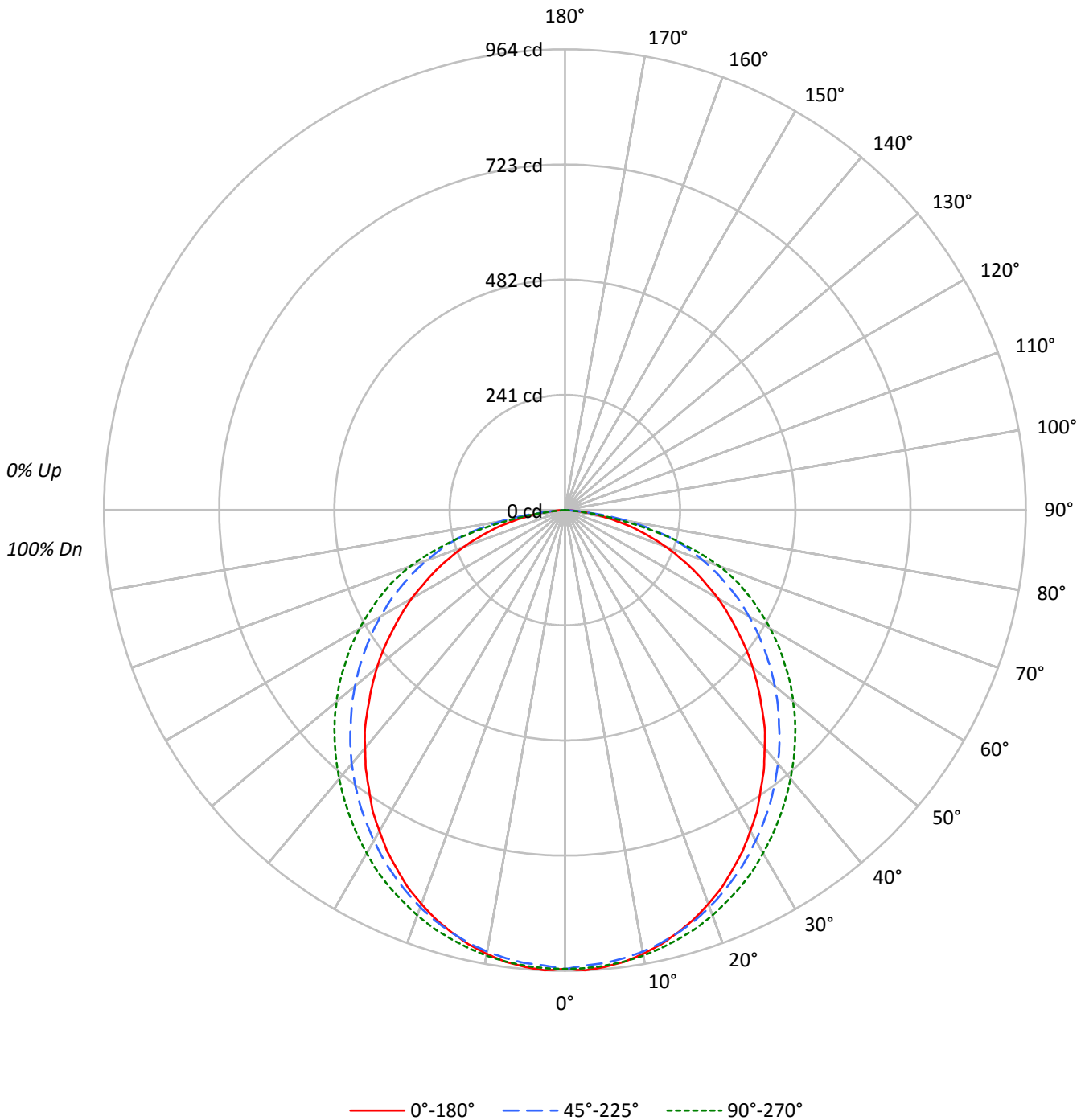
Input Watts (W): 24.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2584	2584	2584
5°	2592	2570	2585
10°	2576	2563	2586
15°	2549	2550	2585
20°	2511	2532	2584
25°	2463	2507	2581
30°	2410	2481	2576
35°	2346	2460	2574
40°	2283	2436	2578
45°	2214	2410	2592
50°	2149	2399	2609
55°	2067	2391	2633
60°	1993	2395	2669
65°	1892	2402	2711
70°	1775	2420	2709
75°	1608	2442	2449
80°	1319	2109	1743
85°	979	997	404



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.9	3.3
10°-20°	259.5	9.3
20°-30°	391.0	14.0
30°-40°	469.2	16.8
40°-50°	489.0	17.5
50°-60°	452.7	16.2
60°-70°	365.8	13.1
70°-80°	223.0	8.0
80°-90°	46.0	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°	741.3	26.6
0°-40°	1210.5	43.4
0°-60°	2152.2	77.2
0°-90°	2787.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2787.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	960	960	960	960	960	
5°	960	957	951	958	957	91
15°	915	915	915	928	928	258
25°	830	835	844	866	869	382
35°	714	725	749	776	784	447
45°	582	599	633	669	681	450
55°	441	464	510	549	561	395
65°	297	326	377	415	426	294
75°	155	189	235	239	236	162
85°	32	47	32	18	13	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	960.1	960.1	960.1	960.1	960.1
2.5°	963.9	960.8	953.9	960.8	959.5
5°	959.5	957.0	951.4	958.3	957.0
7.5°	953.3	950.8	945.8	953.9	952.7
10°	942.7	941.5	937.8	947.1	946.5
12.5°	930.3	929.7	927.8	938.4	937.8
15°	914.8	915.4	915.4	927.8	927.8
17.5°	897.4	898.6	901.1	914.8	916.6
20°	876.9	879.3	884.3	899.9	902.3
22.5°	855.7	857.6	865.0	883.7	886.2
25°	829.6	834.6	844.5	865.7	869.4
27.5°	804.8	809.1	822.8	844.5	850.8
30°	775.6	782.4	798.6	822.2	829.0
32.5°	747.6	755.1	773.7	801.0	807.3
35°	714.0	725.2	748.8	776.2	783.6
37.5°	683.6	694.2	720.9	750.7	759.4
40°	650.0	663.1	693.5	725.2	733.9
42.5°	619.0	631.4	664.3	696.6	708.4
45°	581.7	599.1	633.3	668.7	681.1
47.5°	547.5	564.9	604.0	642.0	653.1
50°	513.3	532.0	573.0	612.1	623.3
52.5°	477.9	497.8	541.9	581.0	594.1
55°	440.6	463.6	509.6	549.4	561.2
57.5°	405.2	428.8	477.9	518.3	530.1
60°	370.4	394.6	445.0	483.5	495.9
62.5°	331.9	360.4	412.6	450.5	459.9
65°	297.1	326.3	377.2	415.1	425.7
67.5°	260.4	292.1	343.0	377.8	387.8
70°	225.6	258.5	307.6	339.9	344.3
72.5°	188.3	221.9	271.6	292.1	292.1
75°	154.7	188.9	234.9	238.6	235.5
77.5°	118.1	156.0	185.8	178.4	170.9
80°	85.1	122.4	136.1	122.4	112.5
82.5°	57.2	88.9	82.0	65.3	57.8
85°	31.7	47.2	32.3	18.0	13.1
87.5°	11.8	10.6	3.1	3.1	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)