

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: P307620

Luminaire Tested: **14FCZ2-29-UNV-L82765-CA125-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: P307620
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-3000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" 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: 2636.0 lumens
Efficiency: N/A
Efficacy: 111.7 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

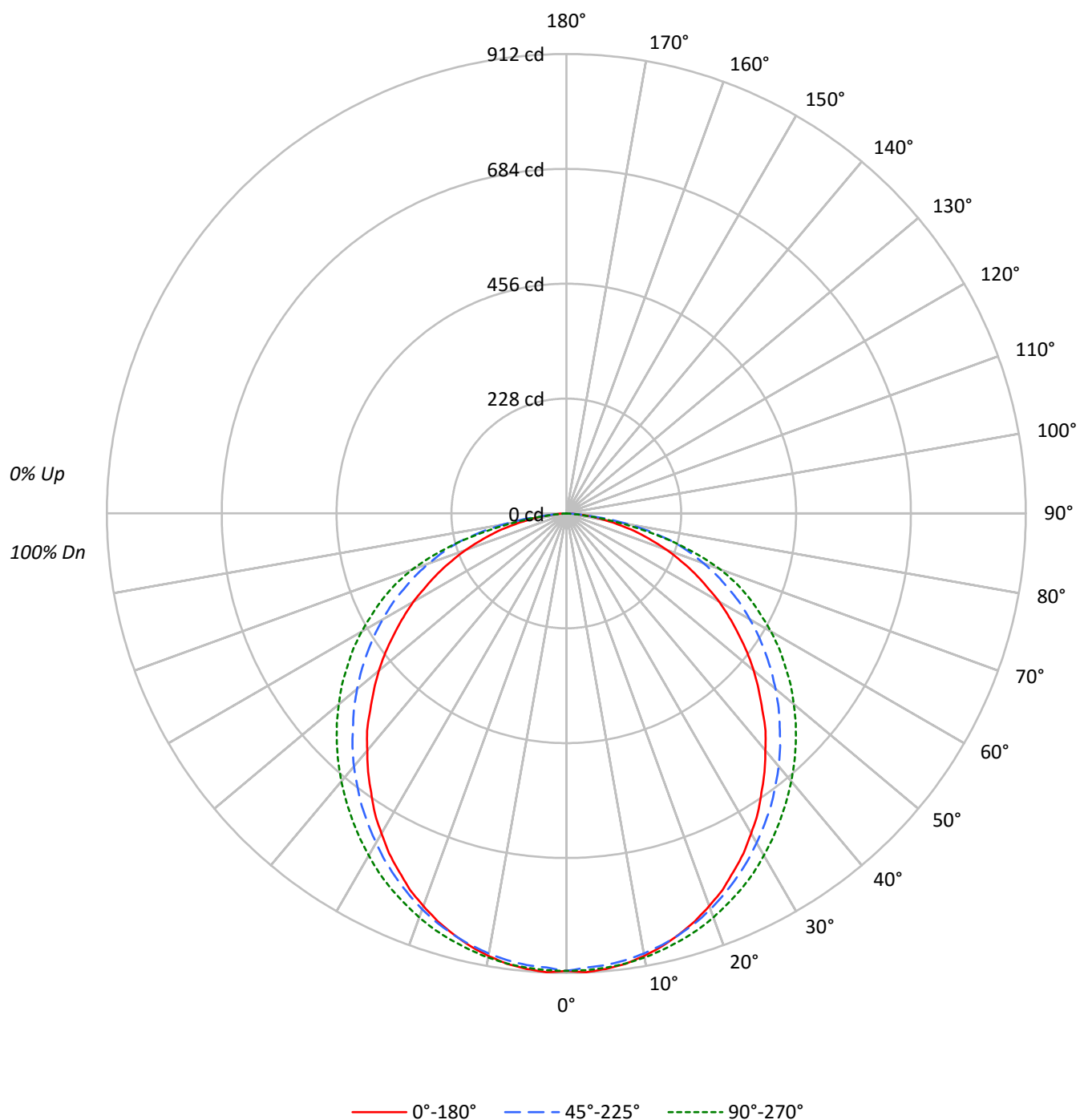
Input Watts (W): 23.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307620

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-CA125-W2A-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P307620

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-CA125-W2A-U-3000K

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°	2444	2444	2444
5°	2451	2431	2445
10°	2437	2424	2446
15°	2410	2412	2445
20°	2375	2395	2444
25°	2330	2372	2442
30°	2279	2347	2436
35°	2219	2327	2435
40°	2160	2304	2439
45°	2094	2279	2452
50°	2033	2269	2468
55°	1955	2261	2490
60°	1885	2265	2524
65°	1789	2272	2564
70°	1679	2289	2562
75°	1522	2310	2316
80°	1247	1994	1649
85°	926	945	380



TEST NUMBER: P307620

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-CA125-W2A-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.9	3.3
10°-20°	245.5	9.3
20°-30°	369.8	14.0
30°-40°	443.7	16.8
40°-50°	462.5	17.5
50°-60°	428.2	16.2
60°-70°	346.0	13.1
70°-80°	210.9	8.0
80°-90°	43.5	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°	701.2	26.6
0°-40°	1144.9	43.4
0°-60°	2035.6	77.2
0°-90°	2636.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2636.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	908	908	908	908	908	
5°	908	905	900	906	905	86
15°	865	866	866	878	878	244
25°	785	789	799	819	822	362
35°	675	686	708	734	741	423
45°	550	567	599	632	644	425
55°	417	438	482	520	531	373
65°	281	309	357	393	403	278
75°	146	179	222	226	223	154
85°	30	45	31	17	12	37
90°	0	0	0	0	0	



TEST NUMBER: P307620

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-CA125-W2A-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	908.1	908.1	908.1	908.1	908.1
2.5°	911.6	908.7	902.2	908.7	907.5
5°	907.5	905.2	899.9	906.3	905.2
7.5°	901.6	899.3	894.6	902.2	901.1
10°	891.7	890.5	887.0	895.8	895.2
12.5°	879.9	879.3	877.5	887.5	887.0
15°	865.2	865.8	865.8	877.5	877.5
17.5°	848.7	849.9	852.3	865.2	867.0
20°	829.3	831.7	836.4	851.1	853.4
22.5°	809.4	811.1	818.2	835.8	838.2
25°	784.7	789.4	798.8	818.8	822.3
27.5°	761.2	765.3	778.2	798.8	804.7
30°	733.5	740.0	755.3	777.6	784.1
32.5°	707.1	714.1	731.8	757.6	763.5
35°	675.4	685.9	708.3	734.1	741.2
37.5°	646.6	656.5	681.8	710.0	718.3
40°	614.8	627.2	656.0	685.9	694.2
42.5°	585.4	597.2	628.3	658.9	670.1
45°	550.2	566.6	598.9	632.4	644.2
47.5°	517.8	534.3	571.3	607.2	617.8
50°	485.5	503.1	541.9	579.0	589.5
52.5°	452.0	470.8	512.5	549.6	561.9
55°	416.7	438.5	482.0	519.6	530.8
57.5°	383.2	405.6	452.0	490.2	501.4
60°	350.3	373.2	420.8	457.3	469.0
62.5°	313.9	340.9	390.3	426.1	435.0
65°	281.0	308.6	356.8	392.6	402.6
67.5°	246.3	276.3	324.5	357.4	366.8
70°	213.4	244.5	290.9	321.5	325.6
72.5°	178.1	209.8	256.9	276.3	276.3
75°	146.4	178.7	222.2	225.7	222.8
77.5°	111.7	147.5	175.7	168.7	161.6
80°	80.5	115.8	128.7	115.8	106.4
82.5°	54.1	84.1	77.6	61.7	54.7
85°	30.0	44.7	30.6	17.0	12.3
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)