

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: P307632

Luminaire Tested: **14FCZ2-29-UNV-L82765-CP125-W2A-U-4500K**

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: P307632
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-CP125-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" POLYCARB SHEET
Light Source: (168) 4500K 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: 2781.0 lumens
Efficiency: N/A
Efficacy: 114.9 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

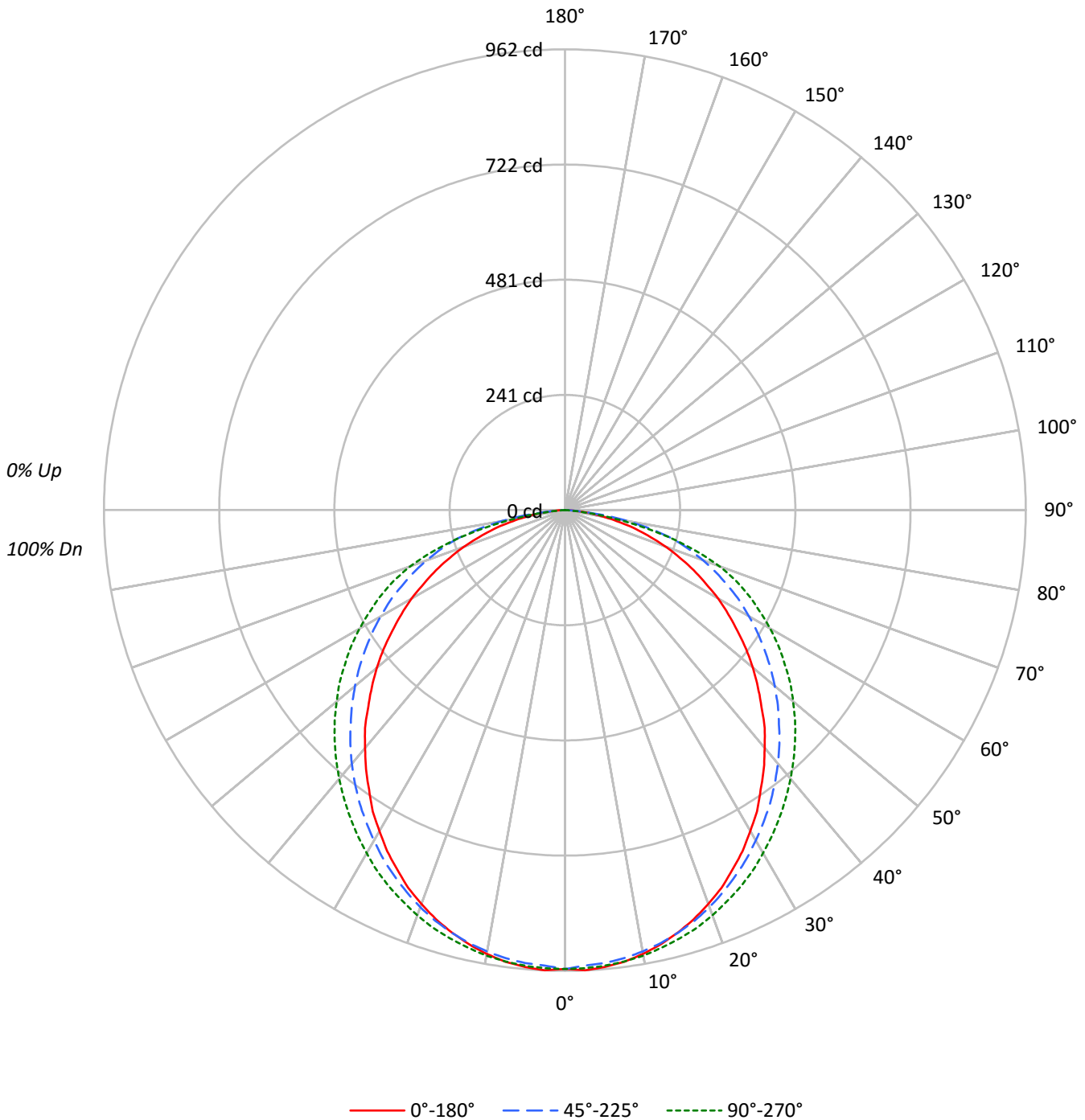
Input Watts (W): 24.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307632

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-CP125-W2A-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P307632

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-CP125-W2A-U-4500K

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°	2578	2578	2578
5°	2586	2565	2580
10°	2570	2557	2581
15°	2543	2545	2579
20°	2506	2527	2578
25°	2458	2502	2576
30°	2405	2476	2570
35°	2341	2455	2569
40°	2278	2431	2572
45°	2209	2405	2586
50°	2144	2393	2604
55°	2063	2386	2627
60°	1989	2390	2663
65°	1887	2397	2705
70°	1771	2415	2703
75°	1605	2437	2443
80°	1317	2104	1739
85°	976	994	401



TEST NUMBER: P307632

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-CP125-W2A-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.7	3.3
10°-20°	259.0	9.3
20°-30°	390.1	14.0
30°-40°	468.1	16.8
40°-50°	487.9	17.5
50°-60°	451.7	16.2
60°-70°	365.0	13.1
70°-80°	222.5	8.0
80°-90°	45.9	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°	739.7	26.6
0°-40°	1207.9	43.4
0°-60°	2147.5	77.2
0°-90°	2781.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2781.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	958	958	958	958	958	
5°	957	955	949	956	955	91
15°	913	913	913	926	926	257
25°	828	833	843	864	868	382
35°	712	724	747	774	782	446
45°	580	598	632	667	680	449
55°	440	463	508	548	560	394
65°	296	326	376	414	425	293
75°	154	188	234	238	235	162
85°	32	47	32	18	13	39
90°	0	0	0	0	0	



TEST NUMBER: P307632

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-CP125-W2A-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	958.1	958.1	958.1	958.1	958.1
2.5°	961.8	958.7	951.9	958.7	957.4
5°	957.4	955.0	949.4	956.2	955.0
7.5°	951.2	948.8	943.8	951.9	950.6
10°	940.7	939.5	935.7	945.0	944.4
12.5°	928.3	927.7	925.8	936.4	935.7
15°	912.8	913.4	913.4	925.8	925.8
17.5°	895.4	896.7	899.2	912.8	914.7
20°	875.0	877.4	882.4	897.9	900.4
22.5°	853.9	855.7	863.2	881.8	884.3
25°	827.8	832.8	842.7	863.8	867.5
27.5°	803.0	807.4	821.0	842.7	848.9
30°	773.9	780.7	796.8	820.4	827.2
32.5°	746.0	753.4	772.0	799.3	805.5
35°	712.5	723.7	747.2	774.5	782.0
37.5°	682.1	692.7	719.3	749.1	757.8
40°	648.6	661.7	692.0	723.7	732.3
42.5°	617.6	630.0	662.9	695.1	706.9
45°	580.4	597.8	631.9	667.2	679.6
47.5°	546.3	563.7	602.7	640.6	651.7
50°	512.2	530.8	571.7	610.8	622.0
52.5°	476.9	496.7	540.7	579.8	592.8
55°	439.7	462.6	508.5	548.2	560.0
57.5°	404.3	427.9	476.9	517.2	529.0
60°	369.6	393.8	444.0	482.4	494.8
62.5°	331.1	359.7	411.8	449.6	458.9
65°	296.4	325.6	376.4	414.2	424.8
67.5°	259.8	291.4	342.3	377.0	386.9
70°	225.1	258.0	307.0	339.2	343.5
72.5°	187.9	221.4	271.0	291.4	291.4
75°	154.4	188.5	234.4	238.1	235.0
77.5°	117.8	155.6	185.4	178.0	170.5
80°	85.0	122.2	135.8	122.2	112.2
82.5°	57.0	88.7	81.9	65.1	57.7
85°	31.6	47.1	32.2	18.0	13.0
87.5°	11.8	10.5	3.1	3.1	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)