

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: P307577

Luminaire Tested: **14FCZ2-25-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: P307577
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: 14FCZ2-25-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

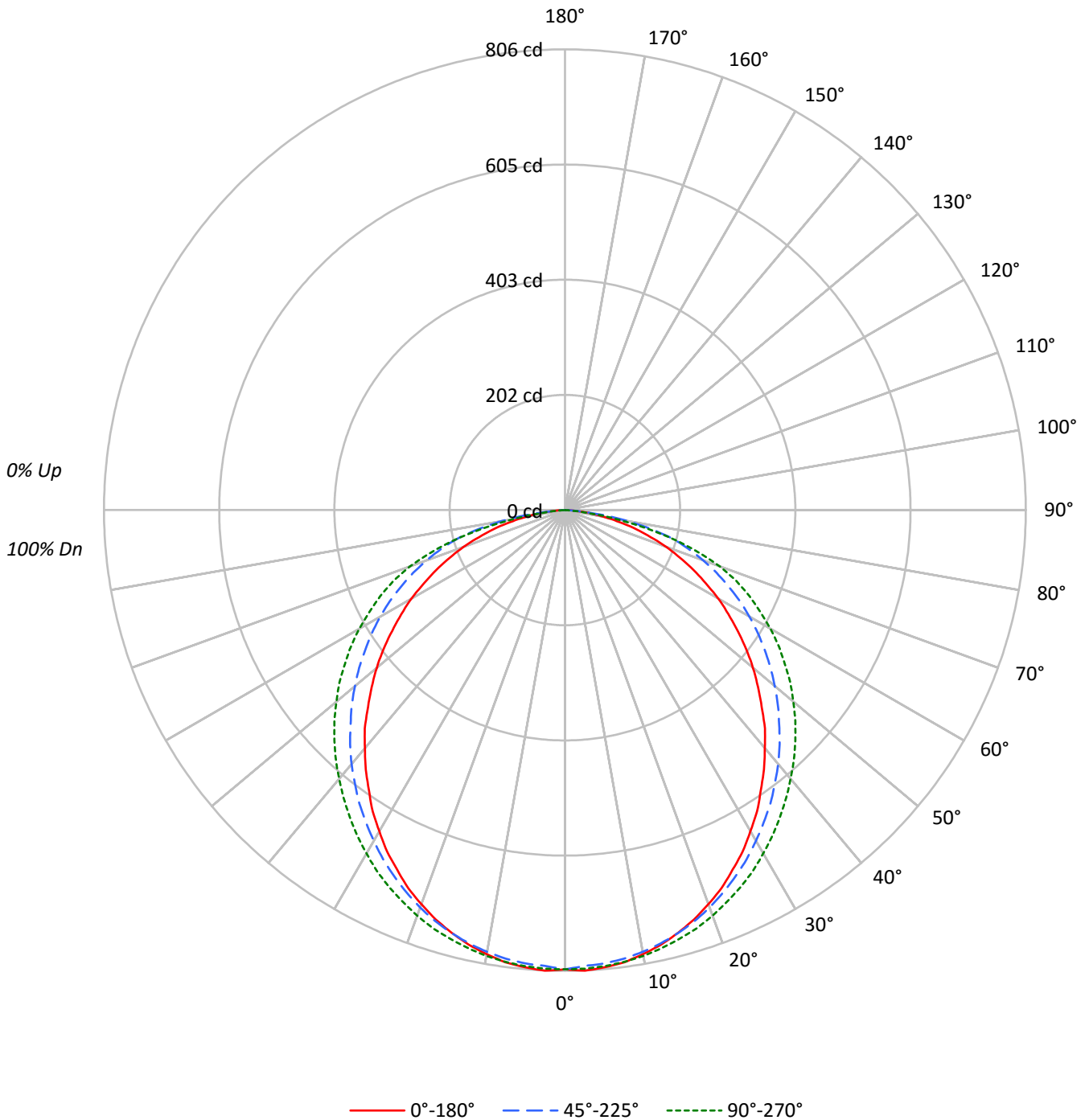
Lumens per Lamp: N/A
Luminaire Lumens: 2332.0 lumens
Efficiency: N/A
Efficacy: 117.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.8
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: P307577
CATALOG NUMBER: 14FCZ2-25-UNV-L82765-CA125-W2A-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P307577

CATALOG NUMBER: 14FC22-25-UNV-L82765-CA125-W2A-U-4000K

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°	2162	2162	2162
5°	2169	2150	2163
10°	2155	2144	2164
15°	2132	2134	2163
20°	2101	2119	2162
25°	2061	2098	2160
30°	2016	2076	2156
35°	1963	2058	2154
40°	1911	2038	2157
45°	1852	2017	2169
50°	1798	2007	2183
55°	1730	2000	2203
60°	1668	2004	2234
65°	1583	2010	2268
70°	1485	2025	2267
75°	1346	2044	2049
80°	1103	1765	1458
85°	818	834	337



TEST NUMBER: P307577

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-CA125-W2A-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.0	3.3
10°-20°	217.2	9.3
20°-30°	327.1	14.0
30°-40°	392.6	16.8
40°-50°	409.2	17.5
50°-60°	378.8	16.2
60°-70°	306.1	13.1
70°-80°	186.6	8.0
80°-90°	38.5	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°	620.3	26.6
0°-40°	1012.9	43.4
0°-60°	1800.8	77.2
0°-90°	2332.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2332.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	803	803	803	803	803	
5°	803	801	796	802	801	76
15°	765	766	766	776	776	216
25°	694	698	707	724	728	320
35°	598	607	627	650	656	374
45°	487	501	530	560	570	376
55°	369	388	426	460	470	330
65°	249	273	316	347	356	246
75°	130	158	197	200	197	136
85°	26	40	27	15	11	33
90°	0	0	0	0	0	



TEST NUMBER: P307577

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-CA125-W2A-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	803.4	803.4	803.4	803.4	803.4
2.5°	806.5	803.9	798.2	803.9	802.9
5°	802.9	800.8	796.1	801.8	800.8
7.5°	797.7	795.6	791.4	798.2	797.1
10°	788.8	787.8	784.7	792.5	791.9
12.5°	778.4	777.9	776.3	785.2	784.7
15°	765.4	765.9	765.9	776.3	776.3
17.5°	750.9	751.9	754.0	765.4	767.0
20°	733.7	735.8	739.9	752.9	755.0
22.5°	716.0	717.6	723.8	739.4	741.5
25°	694.2	698.3	706.7	724.3	727.5
27.5°	673.4	677.0	688.5	706.7	711.9
30°	648.9	654.7	668.2	687.9	693.7
32.5°	625.5	631.8	647.4	670.3	675.5
35°	597.5	606.8	626.6	649.5	655.7
37.5°	572.0	580.8	603.2	628.1	635.4
40°	543.9	554.8	580.3	606.8	614.1
42.5°	517.9	528.3	555.9	582.9	592.8
45°	486.7	501.3	529.9	559.5	569.9
47.5°	458.1	472.7	505.4	537.1	546.5
50°	429.5	445.1	479.4	512.2	521.5
52.5°	399.9	416.5	453.4	486.2	497.1
55°	368.7	387.9	426.4	459.7	469.5
57.5°	339.0	358.8	399.9	433.7	443.5
60°	309.9	330.2	372.3	404.6	415.0
62.5°	277.7	301.6	345.3	377.0	384.8
65°	248.6	273.0	315.6	347.4	356.2
67.5°	217.9	244.4	287.0	316.2	324.5
70°	188.8	216.3	257.4	284.4	288.1
72.5°	157.6	185.6	227.2	244.4	244.4
75°	129.5	158.1	196.6	199.7	197.1
77.5°	98.8	130.5	155.5	149.2	143.0
80°	71.2	102.4	113.9	102.4	94.1
82.5°	47.8	74.4	68.6	54.6	48.4
85°	26.5	39.5	27.0	15.1	10.9
87.5°	9.9	8.8	2.6	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)