

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: P307347

Luminaire Tested: **14FCZ2-29-UNV-L82765-RDP-CA08-W2A-U-5700K**

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: P307347
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)
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-RDP-CA08-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" ACRYLIC SHEET
Light Source: (168) 5700K 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: 1874.0 lumens
Efficiency: N/A
Efficacy: 76.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

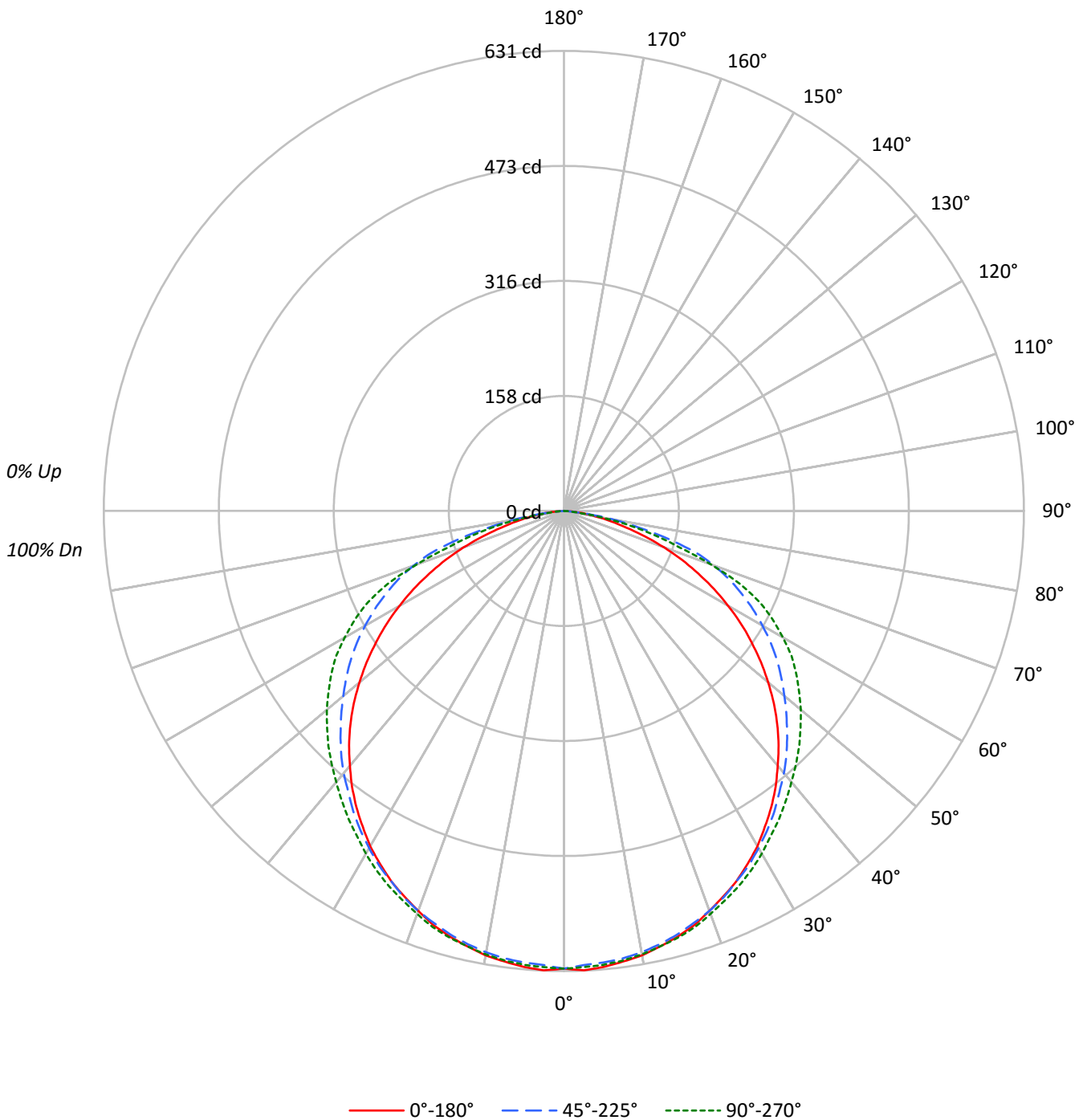
Input Watts (W): 24.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307347

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-RDP-CA08-W2A-U-5700K

Luminous Intensity Polar Plot





TEST NUMBER: P307347

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-RDP-CA08-W2A-U-5700K

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	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	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	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1689	1689	1689
5°	1696	1680	1687
10°	1691	1679	1687
15°	1683	1675	1687
20°	1672	1672	1684
25°	1664	1664	1686
30°	1650	1659	1687
35°	1629	1653	1692
40°	1604	1650	1706
45°	1576	1648	1737
50°	1531	1654	1776
55°	1476	1675	1826
60°	1401	1693	1866
65°	1295	1714	1891
70°	1151	1727	1692
75°	927	1551	1354
80°	725	1088	885
85°	497	315	225



TEST NUMBER: P307347

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-RDP-CA08-W2A-U-5700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.4	3.2
10°-20°	170.4	9.1
20°-30°	259.5	13.8
30°-40°	316.1	16.9
40°-50°	335.4	17.9
50°-60°	316.5	16.9
60°-70°	255.6	13.6
70°-80°	138.6	7.4
80°-90°	22.4	1.2
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°	489.4	26.1
0°-40°	805.5	43.0
0°-60°	1457.4	77.8
0°-90°	1874.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1874.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	628	628	628	628	628	
5°	628	626	622	626	625	60
15°	604	603	601	606	606	170
25°	560	559	560	566	568	258
35°	496	499	503	514	515	310
45°	414	420	433	449	456	319
55°	315	328	357	380	389	281
65°	203	228	269	291	297	202
75°	89	130	149	135	130	97
85°	16	18	10	9	7	21
90°	0	0	0	0	0	



TEST NUMBER: P307347

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-RDP-CA08-W2A-U-5700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	627.7	627.7	627.7	627.7	627.7
2.5°	630.6	627.7	623.3	627.7	626.2
5°	627.7	626.2	621.8	626.2	624.7
7.5°	623.3	623.3	618.9	621.8	621.8
10°	618.9	617.4	614.5	618.9	617.4
12.5°	611.6	610.1	608.6	613.0	611.6
15°	604.2	602.8	601.3	605.7	605.7
17.5°	595.5	594.0	592.5	598.4	598.4
20°	583.8	583.8	583.8	589.6	588.1
22.5°	572.1	572.1	573.5	579.4	577.9
25°	560.3	558.9	560.3	566.2	567.7
27.5°	545.7	547.2	548.6	554.5	556.0
30°	531.1	532.6	534.0	541.3	542.8
32.5°	513.5	516.5	519.4	528.2	528.2
35°	496.0	498.9	503.3	513.5	515.0
37.5°	477.0	479.9	485.7	497.4	500.4
40°	456.5	460.9	469.6	481.3	485.7
42.5°	436.0	441.8	452.1	465.3	471.1
45°	414.0	419.9	433.1	449.2	456.5
47.5°	390.6	398.0	414.0	434.5	440.4
50°	365.8	376.0	395.0	417.0	424.3
52.5°	340.9	352.6	376.0	399.4	406.7
55°	314.6	327.7	357.0	380.4	389.2
57.5°	288.2	302.9	336.5	361.4	370.2
60°	260.4	278.0	314.6	339.4	346.7
62.5°	232.6	253.1	292.6	317.5	323.3
65°	203.4	228.2	269.2	291.1	297.0
67.5°	175.6	204.8	245.8	261.9	261.9
70°	146.3	178.5	219.5	223.8	215.1
72.5°	117.0	153.6	190.2	174.1	166.8
75°	89.2	130.2	149.2	134.6	130.2
77.5°	67.3	105.3	105.3	96.6	93.6
80°	46.8	80.5	70.2	61.4	57.1
82.5°	30.7	45.4	36.6	29.3	24.9
85°	16.1	17.6	10.2	8.8	7.3
87.5°	5.9	2.9	1.5	2.9	1.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)