

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: P307390

Luminaire Tested: **14FCZ2-35-UNV-L82765-RDP-CA08-W2A-U-5000K**

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: P307390
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: 14FCZ2-35-UNV-L82765-RDP-CA08-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" ACRYLIC SHEET
Light Source: (168) 5000K 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: 2226.0 lumens
Efficiency: N/A
Efficacy: 73.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

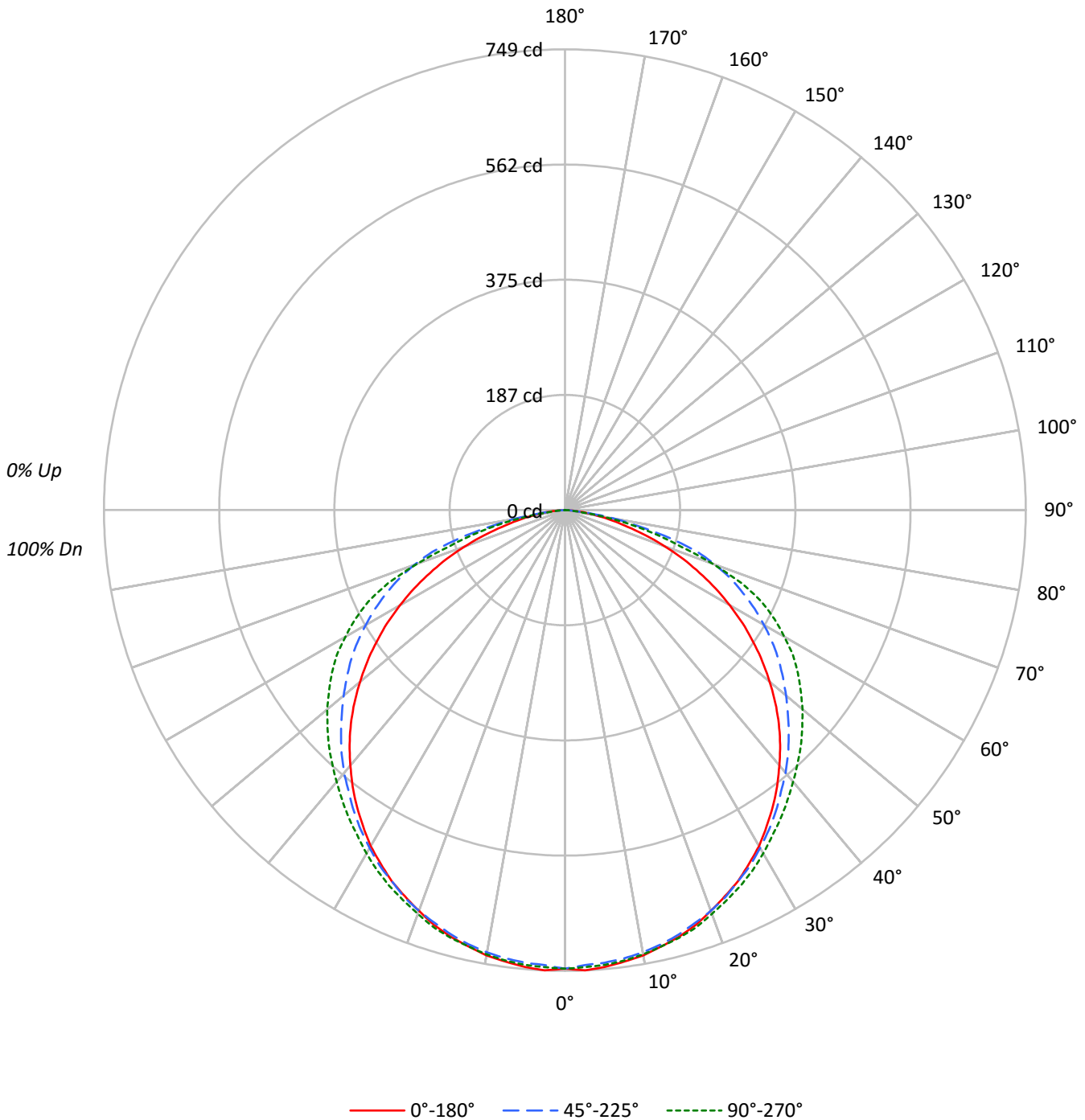
Input Watts (W): 30.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307390

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-RDP-CA08-W2A-U-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P307390

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-RDP-CA08-W2A-U-5000K

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°	2006	2006	2006
5°	2014	1995	2005
10°	2009	1994	2004
15°	1999	1990	2004
20°	1986	1986	2001
25°	1976	1976	2002
30°	1960	1971	2003
35°	1935	1964	2009
40°	1905	1960	2027
45°	1872	1958	2063
50°	1819	1964	2110
55°	1753	1989	2169
60°	1665	2011	2217
65°	1538	2036	2246
70°	1367	2051	2010
75°	1102	1843	1608
80°	862	1292	1051
85°	590	377	269



TEST NUMBER: P307390

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-RDP-CA08-W2A-U-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.6	3.2
10°-20°	202.5	9.1
20°-30°	308.3	13.8
30°-40°	375.5	16.9
40°-50°	398.4	17.9
50°-60°	376.0	16.9
60°-70°	303.6	13.6
70°-80°	164.7	7.4
80°-90°	26.7	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°	581.3	26.1
0°-40°	956.8	43.0
0°-60°	1731.1	77.8
0°-90°	2226.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2226.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	746	746	746	746	746	
5°	746	744	739	744	742	71
15°	718	716	714	720	720	202
25°	666	664	666	673	674	306
35°	589	593	598	610	612	368
45°	492	499	514	534	542	379
55°	374	389	424	452	462	334
65°	242	271	320	346	353	239
75°	106	155	177	160	155	116
85°	19	21	12	10	9	25
90°	0	0	0	0	0	



TEST NUMBER: P307390

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-RDP-CA08-W2A-U-5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	745.5	745.5	745.5	745.5	745.5
2.5°	749.0	745.5	740.3	745.5	743.8
5°	745.5	743.8	738.6	743.8	742.1
7.5°	740.3	740.3	735.1	738.6	738.6
10°	735.1	733.4	729.9	735.1	733.4
12.5°	726.4	724.7	723.0	728.2	726.4
15°	717.7	716.0	714.3	719.5	719.5
17.5°	707.3	705.6	703.8	710.8	710.8
20°	693.4	693.4	693.4	700.4	698.6
22.5°	679.5	679.5	681.2	688.2	686.5
25°	665.6	663.9	665.6	672.6	674.3
27.5°	648.2	650.0	651.7	658.7	660.4
30°	630.8	632.6	634.3	643.0	644.7
32.5°	610.0	613.5	616.9	627.4	627.4
35°	589.1	592.6	597.8	610.0	611.7
37.5°	566.5	570.0	577.0	590.9	594.3
40°	542.2	547.4	557.9	571.8	577.0
42.5°	517.9	524.8	537.0	552.6	559.6
45°	491.8	498.8	514.4	533.5	542.2
47.5°	464.0	472.7	491.8	516.1	523.1
50°	434.5	446.6	469.2	495.3	504.0
52.5°	404.9	418.8	446.6	474.4	483.1
55°	373.6	389.3	424.0	451.8	462.3
57.5°	342.4	359.7	399.7	429.3	439.7
60°	309.3	330.2	373.6	403.2	411.9
62.5°	276.3	300.7	347.6	377.1	384.1
65°	241.6	271.1	319.8	345.8	352.8
67.5°	208.5	243.3	292.0	311.1	311.1
70°	173.8	212.0	260.7	265.9	255.5
72.5°	139.0	182.5	225.9	206.8	198.1
75°	106.0	154.7	177.3	159.9	154.7
77.5°	79.9	125.1	125.1	114.7	111.2
80°	55.6	95.6	83.4	73.0	67.8
82.5°	36.5	53.9	43.4	34.8	29.5
85°	19.1	20.9	12.2	10.4	8.7
87.5°	7.0	3.5	1.7	3.5	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)