

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: P307448

Luminaire Tested: **14FCZ2-39-UNV-L82765-RDP-CP125-W2A-U-2700K**

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: P307448
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: 14FCZ2-39-UNV-L82765-RDP-CP125-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" POLYCARB SHEET
Light Source: (168) 2700K 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: 2139.0 lumens
Efficiency: N/A
Efficacy: 64.2 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

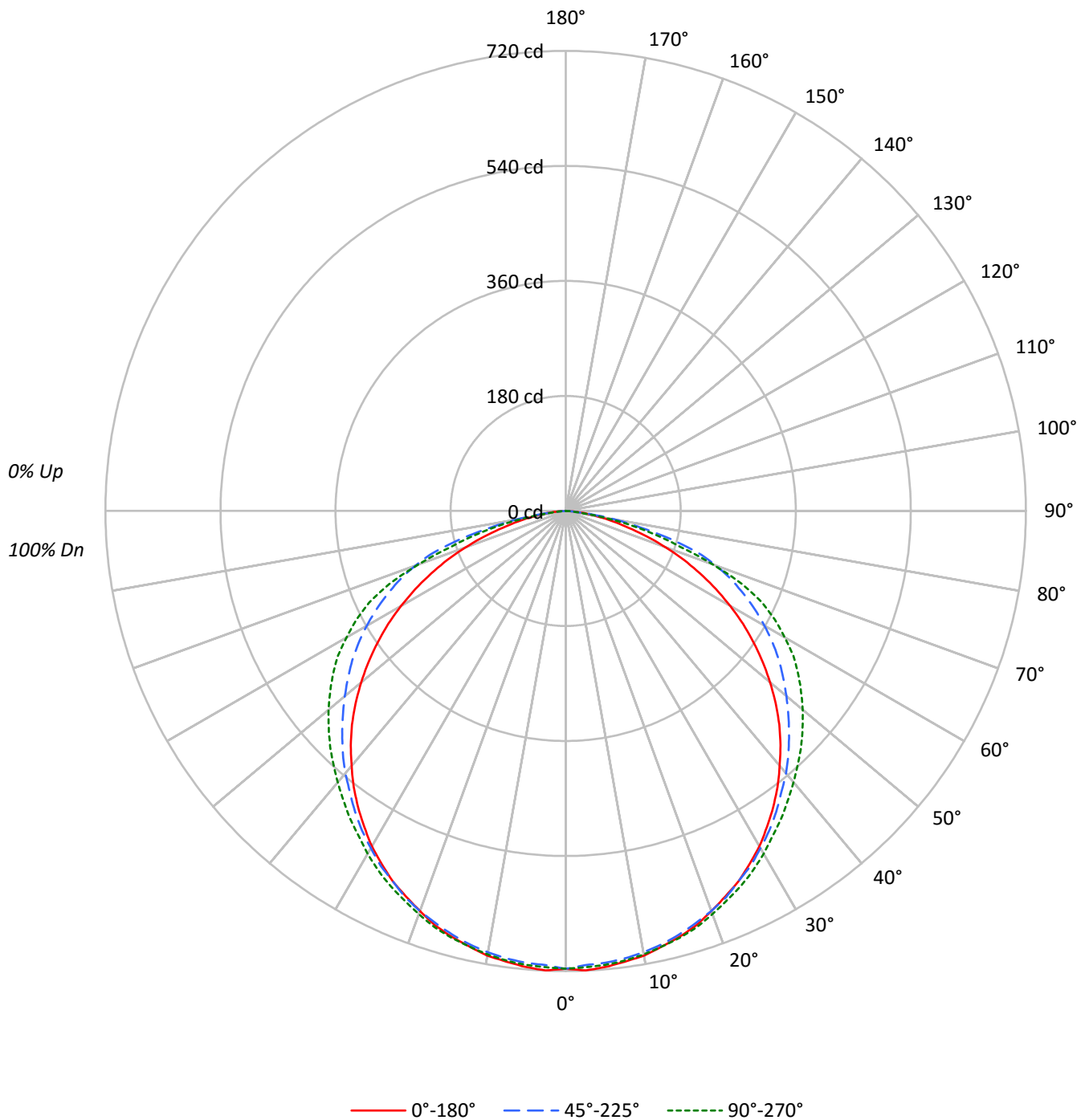
Input Watts (W): 33.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307448

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-RDP-CP125-W2A-U-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P307448

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-RDP-CP125-W2A-U-2700K

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1928	1928	1928
5°	1935	1917	1926
10°	1930	1917	1926
15°	1921	1912	1926
20°	1908	1908	1922
25°	1899	1899	1924
30°	1884	1894	1925
35°	1860	1887	1931
40°	1830	1883	1948
45°	1799	1881	1983
50°	1748	1888	2027
55°	1684	1912	2084
60°	1600	1932	2130
65°	1478	1957	2159
70°	1314	1971	1932
75°	1059	1771	1545
80°	828	1243	1009
85°	568	361	256



TEST NUMBER: P307448

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-RDP-CP125-W2A-U-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.8	3.2
10°-20°	194.5	9.1
20°-30°	296.2	13.8
30°-40°	360.8	16.9
40°-50°	382.8	17.9
50°-60°	361.3	16.9
60°-70°	291.7	13.6
70°-80°	158.2	7.4
80°-90°	25.6	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°	558.6	26.1
0°-40°	919.4	43.0
0°-60°	1663.5	77.8
0°-90°	2139.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2139.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	716	716	716	716	716	
5°	716	715	710	715	713	68
15°	690	688	686	691	691	195
25°	640	638	640	646	648	294
35°	566	570	574	586	588	354
45°	473	479	494	513	521	364
55°	359	374	408	434	444	321
65°	232	260	307	332	339	230
75°	102	149	170	154	149	111
85°	18	20	12	10	8	24
90°	0	0	0	0	0	



TEST NUMBER: P307448

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-RDP-CP125-W2A-U-2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	716.4	716.4	716.4	716.4	716.4
2.5°	719.7	716.4	711.4	716.4	714.7
5°	716.4	714.7	709.7	714.7	713.1
7.5°	711.4	711.4	706.4	709.7	709.7
10°	706.4	704.7	701.4	706.4	704.7
12.5°	698.0	696.4	694.7	699.7	698.0
15°	689.7	688.0	686.3	691.4	691.4
17.5°	679.7	678.0	676.3	683.0	683.0
20°	666.3	666.3	666.3	673.0	671.3
22.5°	652.9	652.9	654.6	661.3	659.6
25°	639.6	637.9	639.6	646.3	647.9
27.5°	622.9	624.6	626.2	632.9	634.6
30°	606.2	607.9	609.5	617.9	619.5
32.5°	586.2	589.5	592.8	602.8	602.8
35°	566.1	569.5	574.5	586.2	587.8
37.5°	544.4	547.7	554.4	567.8	571.1
40°	521.0	526.0	536.1	549.4	554.4
42.5°	497.6	504.3	516.0	531.0	537.7
45°	472.6	479.3	494.3	512.7	521.0
47.5°	445.9	454.2	472.6	496.0	502.7
50°	417.5	429.2	450.9	475.9	484.3
52.5°	389.1	402.5	429.2	455.9	464.2
55°	359.0	374.1	407.5	434.2	444.2
57.5°	329.0	345.7	384.1	412.5	422.5
60°	297.2	317.3	359.0	387.4	395.8
62.5°	265.5	288.9	334.0	362.4	369.1
65°	232.1	260.5	307.3	332.3	339.0
67.5°	200.4	233.8	280.6	298.9	298.9
70°	167.0	203.7	250.5	255.5	245.5
72.5°	133.6	175.3	217.1	198.7	190.4
75°	101.9	148.6	170.3	153.6	148.6
77.5°	76.8	120.2	120.2	110.2	106.9
80°	53.4	91.8	80.2	70.1	65.1
82.5°	35.1	51.8	41.7	33.4	28.4
85°	18.4	20.0	11.7	10.0	8.3
87.5°	6.7	3.3	1.7	3.3	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)