

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: P307711

Luminaire Tested: **14FCZ2-39-UNV-L82765-CA125-W2A-U-3500K**

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: P307711
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: 14FCZ2-39-UNV-L82765-CA125-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 3500K 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: 3618.0 lumens
Efficiency: N/A
Efficacy: 108.0 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

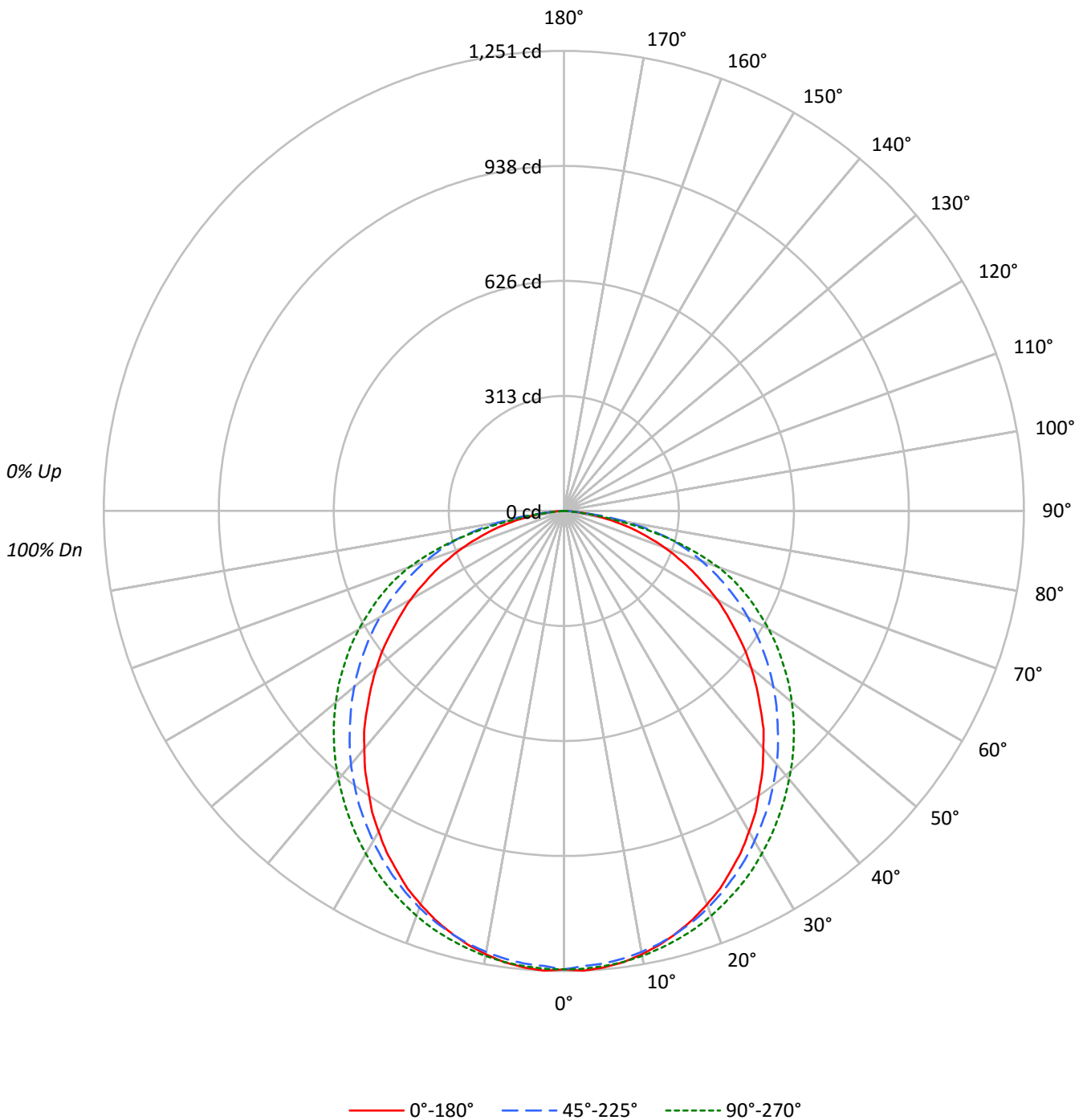
Input Watts (W): 33.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307711

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CA125-W2A-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P307711

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CA125-W2A-U-3500K

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°	3354	3354	3354
5°	3365	3336	3356
10°	3344	3327	3357
15°	3308	3310	3356
20°	3260	3288	3355
25°	3198	3255	3351
30°	3128	3221	3344
35°	3045	3193	3342
40°	2964	3163	3347
45°	2874	3129	3365
50°	2790	3114	3388
55°	2684	3103	3418
60°	2588	3109	3465
65°	2455	3118	3519
70°	2304	3142	3516
75°	2089	3170	3179
80°	1712	2738	2263
85°	1269	1297	522



TEST NUMBER: P307711

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CA125-W2A-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.9	3.3
10°-20°	336.9	9.3
20°-30°	507.5	14.0
30°-40°	609.0	16.8
40°-50°	634.8	17.5
50°-60°	587.7	16.2
60°-70°	474.8	13.1
70°-80°	289.5	8.0
80°-90°	59.8	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°	962.4	26.6
0°-40°	1571.4	43.4
0°-60°	2793.9	77.2
0°-90°	3618.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3618.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1246	1246	1246	1246	1246	
5°	1246	1242	1235	1244	1242	118
15°	1188	1188	1188	1204	1204	335
25°	1077	1084	1096	1124	1129	496
35°	927	942	972	1008	1017	581
45°	755	778	822	868	884	584
55°	572	602	662	713	728	512
65°	386	424	490	539	553	381
75°	201	245	305	310	306	211
85°	41	61	42	23	17	51
90°	0	0	0	0	0	



TEST NUMBER: P307711

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CA125-W2A-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1246.4	1246.4	1246.4	1246.4	1246.4
2.5°	1251.3	1247.2	1238.3	1247.2	1245.6
5°	1245.6	1242.4	1235.1	1244.0	1242.4
7.5°	1237.5	1234.3	1227.9	1238.3	1236.7
10°	1223.8	1222.2	1217.4	1229.5	1228.7
12.5°	1207.7	1206.9	1204.5	1218.2	1217.4
15°	1187.5	1188.3	1188.3	1204.5	1204.5
17.5°	1164.9	1166.5	1169.8	1187.5	1189.9
20°	1138.3	1141.5	1148.0	1168.2	1171.4
22.5°	1110.9	1113.3	1123.0	1147.2	1150.4
25°	1077.0	1083.5	1096.4	1123.8	1128.6
27.5°	1044.7	1050.4	1068.1	1096.4	1104.4
30°	1006.8	1015.7	1036.7	1067.3	1076.2
32.5°	970.5	980.2	1004.4	1039.9	1048.0
35°	926.9	941.5	972.1	1007.6	1017.3
37.5°	887.4	901.1	935.8	974.5	985.8
40°	843.8	860.8	900.3	941.5	952.8
42.5°	803.5	819.6	862.4	904.4	919.7
45°	755.1	777.7	822.1	868.1	884.2
47.5°	710.7	733.3	784.2	833.4	847.9
50°	666.4	690.6	743.8	794.6	809.2
52.5°	620.4	646.2	703.5	754.3	771.2
55°	572.0	601.8	661.5	713.2	728.5
57.5°	526.0	556.7	620.4	672.8	688.1
60°	480.8	512.3	577.6	627.6	643.8
62.5°	430.8	467.9	535.7	584.9	597.0
65°	385.6	423.5	489.7	538.9	552.6
67.5°	338.0	379.2	445.3	490.5	503.4
70°	292.8	335.6	399.3	441.3	446.9
72.5°	244.4	288.0	352.5	379.2	379.2
75°	200.9	245.2	304.9	309.8	305.8
77.5°	153.3	202.5	241.2	231.5	221.9
80°	110.5	158.9	176.7	158.9	146.0
82.5°	74.2	115.4	106.5	84.7	75.0
85°	41.1	61.3	42.0	23.4	16.9
87.5°	15.3	13.7	4.0	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)