

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: P307656

Luminaire Tested: **14FCZ2-35-UNV-L82765-CA08-W2A-U-3000K**

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: P307656
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: 14FCZ2-35-UNV-L82765-CA08-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 3000K 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: 3180.0 lumens
Efficiency: N/A
Efficacy: 108.5 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

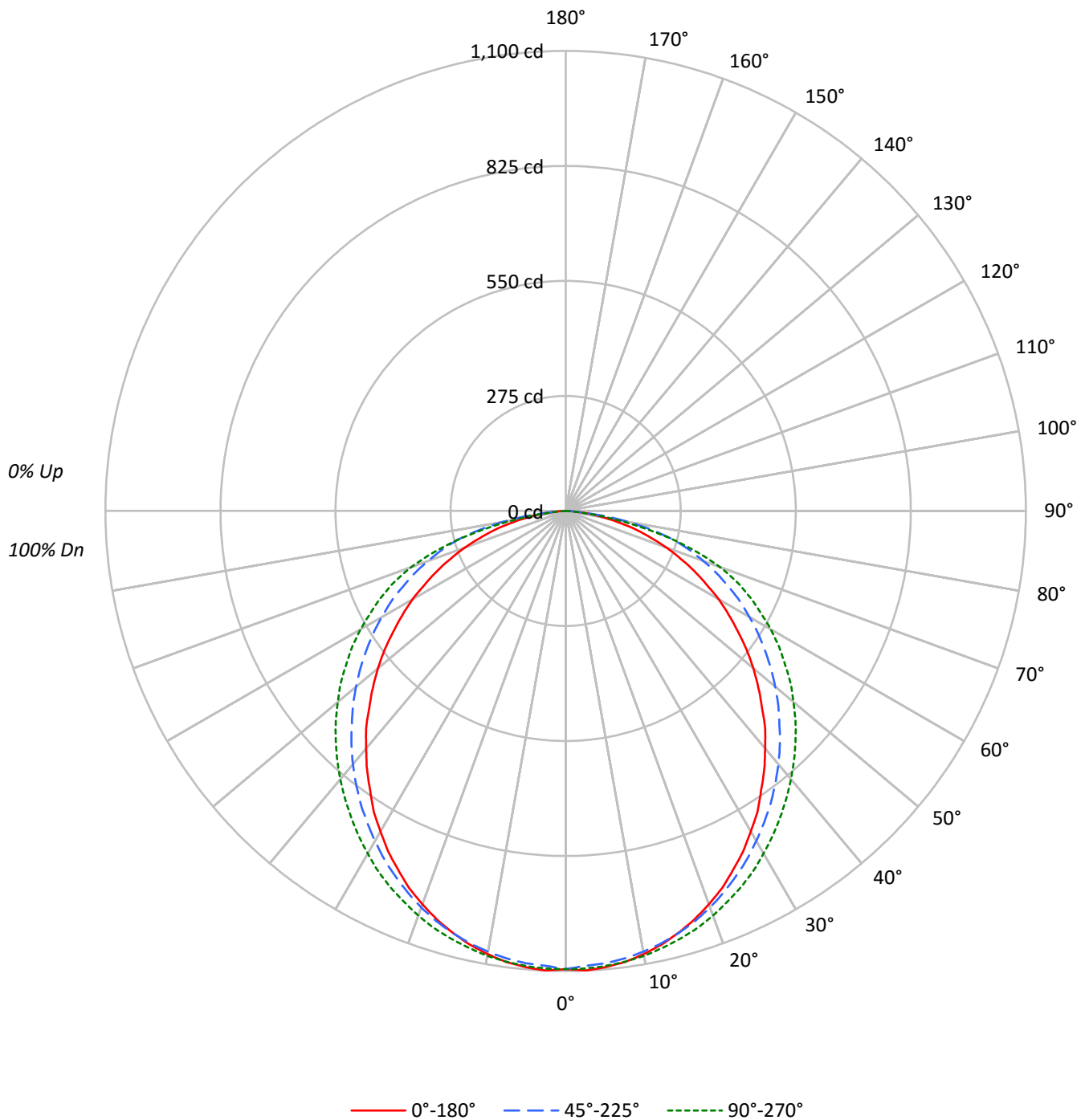
Input Watts (W): 29.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307656

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-CA08-W2A-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P307656

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-CA08-W2A-U-3000K

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	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		58
4	82	70	61	54	79	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	51	42	35	63	50	41	35	48	41	35		47	40	35		32
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		26
10	52	39	31	26	51	39	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2948	2948	2948
5°	2957	2932	2950
10°	2939	2924	2951
15°	2908	2910	2949
20°	2865	2889	2948
25°	2811	2861	2945
30°	2750	2831	2939
35°	2676	2807	2937
40°	2605	2780	2942
45°	2526	2750	2957
50°	2452	2737	2977
55°	2358	2728	3004
60°	2274	2732	3045
65°	2158	2741	3093
70°	2025	2762	3091
75°	1836	2786	2794
80°	1505	2407	1988
85°	1118	1139	460



TEST NUMBER: P307656

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-CA08-W2A-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.7	3.3
10°-20°	296.1	9.3
20°-30°	446.1	14.0
30°-40°	535.3	16.8
40°-50°	557.9	17.5
50°-60°	516.5	16.2
60°-70°	417.3	13.1
70°-80°	254.5	8.0
80°-90°	52.5	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°	845.9	26.6
0°-40°	1381.2	43.4
0°-60°	2455.7	77.2
0°-90°	3180.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3180.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1096	1096	1096	1096	1096	
5°	1095	1092	1086	1093	1092	104
15°	1044	1044	1044	1059	1059	294
25°	947	952	964	988	992	436
35°	815	828	854	886	894	510
45°	664	684	722	763	777	513
55°	503	529	581	627	640	450
65°	339	372	430	474	486	335
75°	177	216	268	272	269	185
85°	36	54	37	21	15	44
90°	0	0	0	0	0	



TEST NUMBER: P307656

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-CA08-W2A-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1095.5	1095.5	1095.5	1095.5	1095.5
2.5°	1099.8	1096.2	1088.4	1096.2	1094.8
5°	1094.8	1092.0	1085.6	1093.4	1092.0
7.5°	1087.7	1084.9	1079.2	1088.4	1087.0
10°	1075.7	1074.2	1070.0	1080.6	1079.9
12.5°	1061.5	1060.8	1058.6	1070.7	1070.0
15°	1043.8	1044.5	1044.5	1058.6	1058.6
17.5°	1023.9	1025.3	1028.2	1043.8	1045.9
20°	1000.5	1003.3	1009.0	1026.7	1029.6
22.5°	976.4	978.5	987.0	1008.3	1011.1
25°	946.6	952.3	963.6	987.7	992.0
27.5°	918.3	923.2	938.8	963.6	970.7
30°	884.9	892.7	911.2	938.1	945.9
32.5°	853.0	861.5	882.8	914.0	921.1
35°	814.7	827.5	854.4	885.6	894.1
37.5°	780.0	792.0	822.5	856.6	866.5
40°	741.7	756.6	791.3	827.5	837.4
42.5°	706.2	720.4	758.0	794.9	808.3
45°	663.7	683.5	722.5	763.0	777.1
47.5°	624.7	644.5	689.2	732.5	745.2
50°	585.7	607.0	653.8	698.4	711.2
52.5°	545.3	568.0	618.3	663.0	677.9
55°	502.7	529.0	581.4	626.8	640.3
57.5°	462.3	489.3	545.3	591.4	604.8
60°	422.6	450.3	507.7	551.7	565.8
62.5°	378.6	411.3	470.8	514.1	524.7
65°	338.9	372.3	430.4	473.7	485.7
67.5°	297.1	333.3	391.4	431.1	442.5
70°	257.4	295.0	351.0	387.9	392.8
72.5°	214.8	253.1	309.9	333.3	333.3
75°	176.6	215.6	268.0	272.3	268.7
77.5°	134.7	178.0	212.0	203.5	195.0
80°	97.1	139.7	155.3	139.7	128.3
82.5°	65.2	101.4	93.6	74.5	65.9
85°	36.2	53.9	36.9	20.6	14.9
87.5°	13.5	12.1	3.5	3.5	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)