

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: P307694

Luminaire Tested: **14FCZ2-35-UNV-L82765-CP250-W2A-U-4000K**

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: P307694
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-CP250-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS, 0.250" POLYCARB SHEET
Light Source: (168) 4000K 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: 3121.0 lumens
Efficiency: N/A
Efficacy: 104.7 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

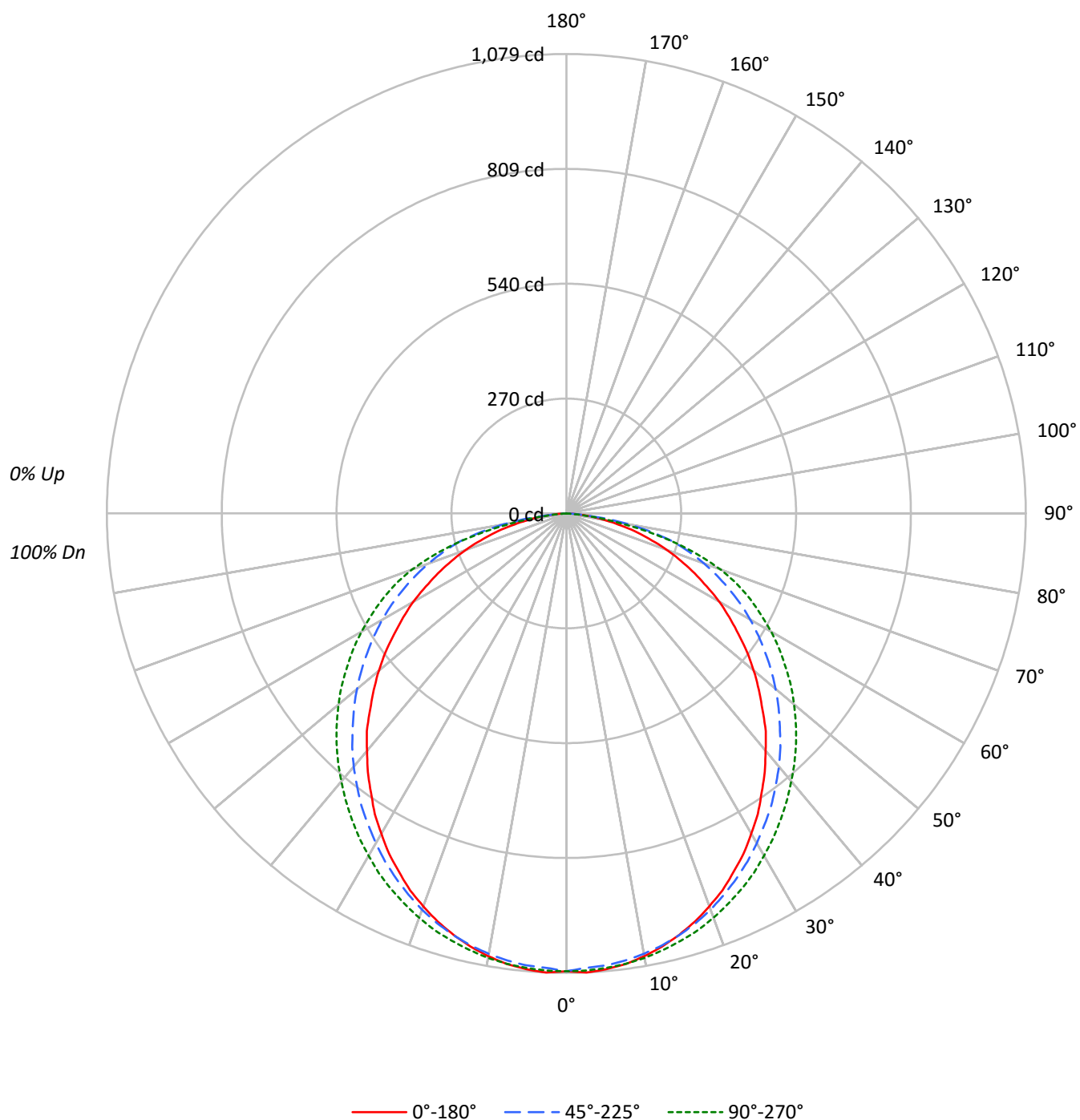
Input Watts (W): 29.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307694

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-CP250-W2A-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P307694

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-CP250-W2A-U-4000K

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°	2893	2893	2893
5°	2903	2878	2895
10°	2885	2869	2896
15°	2854	2856	2895
20°	2812	2836	2894
25°	2759	2808	2891
30°	2699	2779	2885
35°	2627	2755	2883
40°	2557	2728	2887
45°	2479	2699	2903
50°	2406	2686	2922
55°	2315	2677	2948
60°	2232	2682	2989
65°	2118	2690	3035
70°	1987	2710	3033
75°	1802	2735	2743
80°	1477	2362	1953
85°	1096	1118	451



TEST NUMBER: P307694

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-CP250-W2A-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.7	3.3
10°-20°	290.6	9.3
20°-30°	437.8	14.0
30°-40°	525.4	16.8
40°-50°	547.6	17.5
50°-60°	506.9	16.2
60°-70°	409.6	13.1
70°-80°	249.7	8.0
80°-90°	51.6	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°	830.2	26.6
0°-40°	1355.6	43.4
0°-60°	2410.1	77.2
0°-90°	3121.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3121.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1075	1075	1075	1075	1075	
5°	1074	1072	1066	1073	1072	102
15°	1024	1025	1025	1039	1039	289
25°	929	935	946	969	974	428
35°	800	812	839	869	878	501
45°	651	671	709	749	763	503
55°	493	519	571	615	628	442
65°	333	365	422	465	477	329
75°	173	212	263	267	264	182
85°	36	53	36	20	15	44
90°	0	0	0	0	0	



TEST NUMBER: P307694

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-CP250-W2A-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1075.2	1075.2	1075.2	1075.2	1075.2
2.5°	1079.4	1075.9	1068.2	1075.9	1074.5
5°	1074.5	1071.7	1065.5	1073.1	1071.7
7.5°	1067.5	1064.8	1059.2	1068.2	1066.8
10°	1055.7	1054.3	1050.1	1060.6	1059.9
12.5°	1041.8	1041.1	1039.0	1050.8	1050.1
15°	1024.4	1025.1	1025.1	1039.0	1039.0
17.5°	1004.9	1006.3	1009.1	1024.4	1026.5
20°	981.9	984.7	990.3	1007.7	1010.5
22.5°	958.3	960.4	968.7	989.6	992.4
25°	929.1	934.6	945.8	969.4	973.6
27.5°	901.2	906.1	921.4	945.8	952.7
30°	868.5	876.2	894.3	920.7	928.4
32.5°	837.2	845.5	866.4	897.0	904.0
35°	799.6	812.1	838.6	869.2	877.6
37.5°	765.5	777.3	807.3	840.7	850.4
40°	727.9	742.5	776.6	812.1	821.9
42.5°	693.1	707.1	743.9	780.1	793.3
45°	651.4	670.9	709.1	748.8	762.7
47.5°	613.1	632.6	676.4	718.9	731.4
50°	574.8	595.7	641.6	685.5	698.0
52.5°	535.2	557.4	606.8	650.7	665.3
55°	493.4	519.2	570.7	615.2	628.4
57.5°	453.7	480.2	535.2	580.4	593.6
60°	414.8	441.9	498.3	541.4	555.3
62.5°	371.6	403.6	462.1	504.5	515.0
65°	332.6	365.4	422.4	464.9	476.7
67.5°	291.6	327.1	384.1	423.1	434.3
70°	252.6	289.5	344.5	380.7	385.5
72.5°	210.9	248.4	304.1	327.1	327.1
75°	173.3	211.6	263.1	267.2	263.8
77.5°	132.2	174.7	208.1	199.7	191.4
80°	95.3	137.1	152.4	137.1	126.0
82.5°	64.0	99.5	91.9	73.1	64.7
85°	35.5	52.9	36.2	20.2	14.6
87.5°	13.2	11.8	3.5	3.5	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)