

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: P307666

Luminaire Tested: **14FCZ2-35-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: P307666
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-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: 3279.0 lumens
Efficiency: N/A
Efficacy: 110.8 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

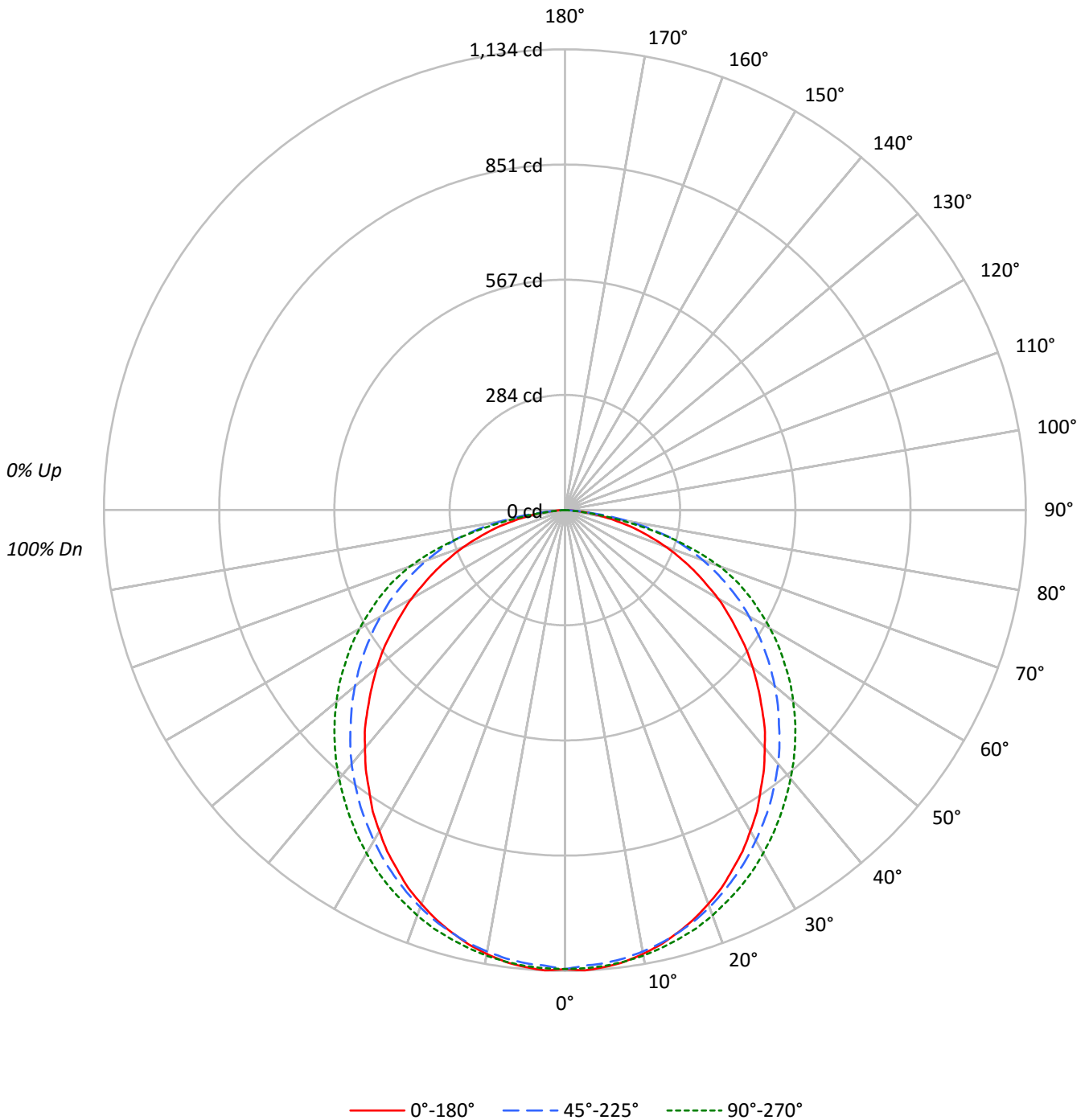
Input Watts (W): 29.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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°	3040	3040	3040
5°	3049	3024	3042
10°	3031	3015	3043
15°	2998	3000	3041
20°	2954	2979	3040
25°	2898	2950	3037
30°	2835	2919	3031
35°	2760	2894	3029
40°	2687	2866	3033
45°	2605	2835	3049
50°	2528	2822	3070
55°	2432	2813	3097
60°	2345	2817	3140
65°	2225	2826	3189
70°	2088	2847	3187
75°	1893	2874	2881
80°	1553	2481	2050
85°	1152	1173	475



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.9	3.3
10°-20°	305.3	9.3
20°-30°	460.0	14.0
30°-40°	552.0	16.8
40°-50°	575.3	17.5
50°-60°	532.6	16.2
60°-70°	430.3	13.1
70°-80°	262.4	8.0
80°-90°	54.2	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°	872.2	26.6
0°-40°	1424.2	43.4
0°-60°	2532.1	77.2
0°-90°	3279.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3279.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1130	1130	1130	1130	1130	
5°	1129	1126	1119	1127	1126	107
15°	1076	1077	1077	1092	1092	303
25°	976	982	994	1018	1023	450
35°	840	853	881	913	922	526
45°	684	705	745	787	801	529
55°	518	545	600	646	660	464
65°	350	384	444	488	501	346
75°	182	222	276	281	277	191
85°	37	56	38	21	15	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1129.6	1129.6	1129.6	1129.6	1129.6
2.5°	1134.0	1130.4	1122.3	1130.4	1128.9
5°	1128.9	1126.0	1119.4	1127.4	1126.0
7.5°	1121.6	1118.7	1112.8	1122.3	1120.9
10°	1109.2	1107.7	1103.3	1114.3	1113.5
12.5°	1094.5	1093.8	1091.6	1104.0	1103.3
15°	1076.3	1077.0	1077.0	1091.6	1091.6
17.5°	1055.8	1057.2	1060.2	1076.3	1078.4
20°	1031.7	1034.6	1040.4	1058.7	1061.6
22.5°	1006.8	1009.0	1017.8	1039.7	1042.6
25°	976.1	981.9	993.6	1018.5	1022.9
27.5°	946.8	952.0	968.0	993.6	1000.9
30°	912.5	920.5	939.5	967.3	975.4
32.5°	879.6	888.3	910.3	942.5	949.8
35°	840.1	853.3	881.0	913.2	922.0
37.5°	804.3	816.7	848.1	883.2	893.5
40°	764.8	780.1	816.0	853.3	863.5
42.5°	728.2	742.8	781.6	819.6	833.5
45°	684.4	704.8	745.0	786.7	801.3
47.5°	644.1	664.6	710.7	755.3	768.4
50°	603.9	625.9	674.1	720.2	733.3
52.5°	562.3	585.7	637.6	683.6	699.0
55°	518.4	545.4	599.5	646.3	660.2
57.5°	476.7	504.5	562.3	609.8	623.7
60°	435.8	464.3	523.5	568.8	583.5
62.5°	390.4	424.1	485.5	530.1	541.1
65°	349.5	383.9	443.8	488.4	500.8
67.5°	306.4	343.6	403.6	444.5	456.2
70°	265.4	304.2	361.9	399.9	405.1
72.5°	221.5	261.0	319.5	343.6	343.6
75°	182.1	222.3	276.4	280.8	277.1
77.5°	138.9	183.5	218.6	209.8	201.1
80°	100.2	144.0	160.1	144.0	132.3
82.5°	67.3	104.6	96.5	76.8	68.0
85°	37.3	55.6	38.0	21.2	15.4
87.5°	13.9	12.4	3.7	3.7	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)