

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: P307697

Luminaire Tested: **14FCZ2-35-UNV-L82765-CP250-W2A-U-5500K**

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: P307697
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-5500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.250" POLYCARB SHEET
Light Source: (168) 5500K 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: 3251.0 lumens
Efficiency: N/A
Efficacy: 107.3 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

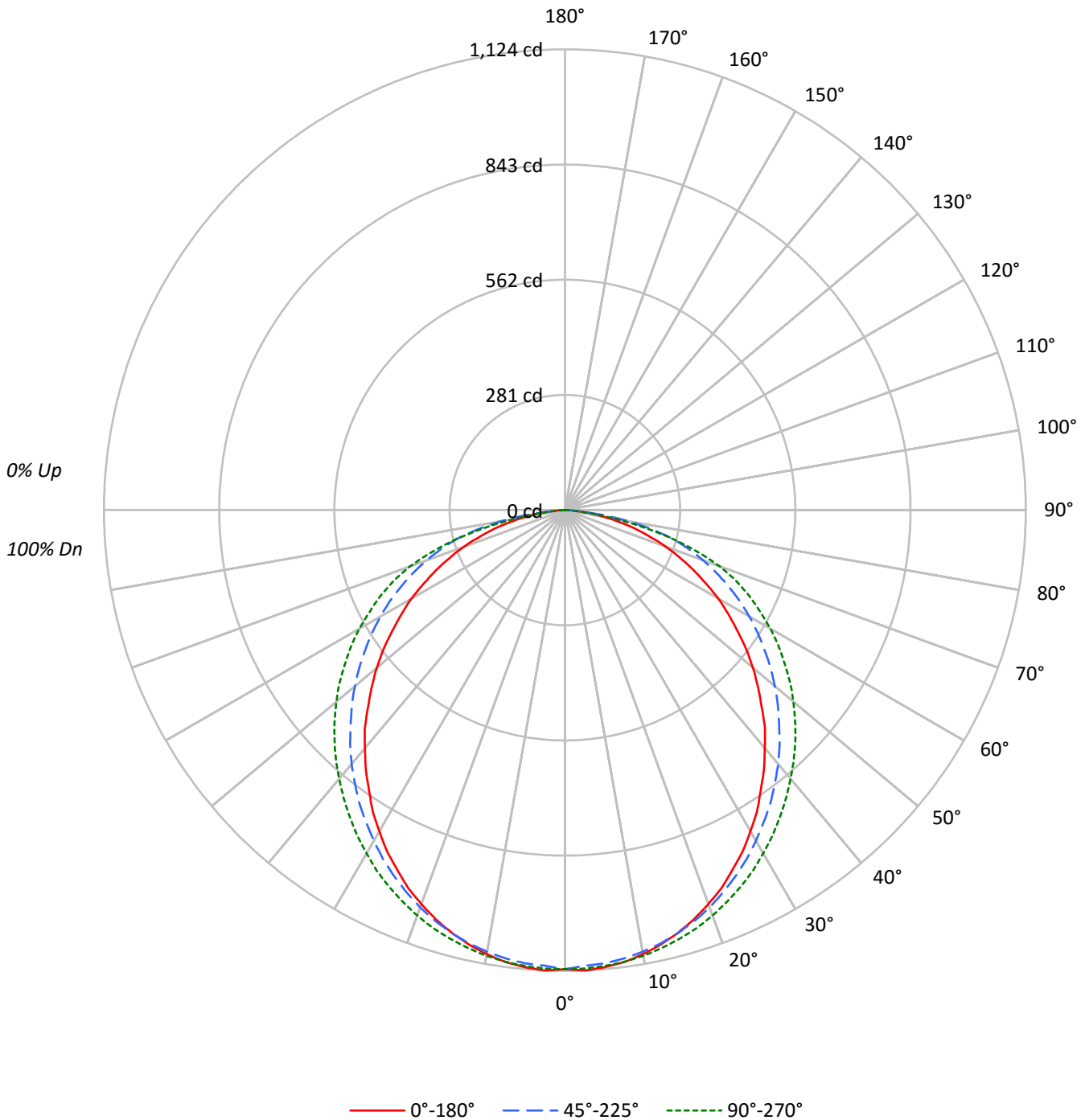
Input Watts (W): 30.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3014	3014	3014
5°	3024	2998	3016
10°	3005	2989	3017
15°	2973	2975	3015
20°	2929	2954	3014
25°	2873	2925	3011
30°	2811	2894	3005
35°	2736	2870	3003
40°	2664	2842	3007
45°	2582	2811	3024
50°	2507	2798	3044
55°	2411	2789	3071
60°	2325	2793	3113
65°	2206	2802	3162
70°	2070	2823	3160
75°	1877	2849	2856
80°	1539	2461	2033
85°	1142	1164	469



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.0	3.3
10°-20°	302.7	9.3
20°-30°	456.0	14.0
30°-40°	547.3	16.8
40°-50°	570.4	17.5
50°-60°	528.1	16.2
60°-70°	426.6	13.1
70°-80°	260.1	8.0
80°-90°	53.7	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°	864.8	26.6
0°-40°	1412.0	43.4
0°-60°	2510.5	77.2
0°-90°	3251.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3251.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1120	1120	1120	1120	1120	
5°	1119	1116	1110	1118	1116	106
15°	1067	1068	1068	1082	1082	301
25°	968	974	985	1010	1014	446
35°	833	846	874	905	914	522
45°	678	699	739	780	794	524
55°	514	541	594	641	655	460
65°	346	381	440	484	497	343
75°	180	220	274	278	275	190
85°	37	55	38	21	15	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1120.0	1120.0	1120.0	1120.0	1120.0
2.5°	1124.3	1120.7	1112.7	1120.7	1119.3
5°	1119.3	1116.4	1109.8	1117.8	1116.4
7.5°	1112.0	1109.1	1103.3	1112.7	1111.3
10°	1099.7	1098.2	1093.9	1104.8	1104.0
12.5°	1085.2	1084.5	1082.3	1094.6	1093.9
15°	1067.1	1067.8	1067.8	1082.3	1082.3
17.5°	1046.8	1048.2	1051.1	1067.1	1069.2
20°	1022.8	1025.7	1031.5	1049.7	1052.6
22.5°	998.2	1000.4	1009.1	1030.8	1033.7
25°	967.7	973.5	985.1	1009.8	1014.1
27.5°	938.8	943.8	959.8	985.1	992.4
30°	904.7	912.7	931.5	959.1	967.0
32.5°	872.1	880.8	902.5	934.4	941.7
35°	832.9	846.0	873.5	905.4	914.1
37.5°	797.4	809.7	840.9	875.7	885.8
40°	758.3	773.5	809.0	846.0	856.1
42.5°	722.0	736.5	774.9	812.6	826.4
45°	678.5	698.8	738.7	780.0	794.5
47.5°	638.6	658.9	704.6	748.8	761.9
50°	598.8	620.5	668.4	714.0	727.1
52.5°	557.5	580.6	632.1	677.8	693.0
55°	514.0	540.8	594.4	640.8	654.6
57.5°	472.6	500.2	557.5	604.6	618.3
60°	432.0	460.3	519.0	564.0	578.5
62.5°	387.1	420.4	481.3	525.6	536.4
65°	346.5	380.6	440.0	484.2	496.6
67.5°	303.7	340.7	400.1	440.7	452.3
70°	263.1	301.6	358.8	396.5	401.6
72.5°	219.6	258.8	316.8	340.7	340.7
75°	180.5	220.4	274.0	278.4	274.7
77.5°	137.7	182.0	216.7	208.0	199.3
80°	99.3	142.8	158.8	142.8	131.2
82.5°	66.7	103.7	95.7	76.1	67.4
85°	37.0	55.1	37.7	21.0	15.2
87.5°	13.8	12.3	3.6	3.6	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)