

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: P307692

Luminaire Tested: **14FCZ2-35-UNV-L82765-CP250-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: P307692
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-3000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.250" POLYCARB 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: 2951.0 lumens
Efficiency: N/A
Efficacy: 100.7 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

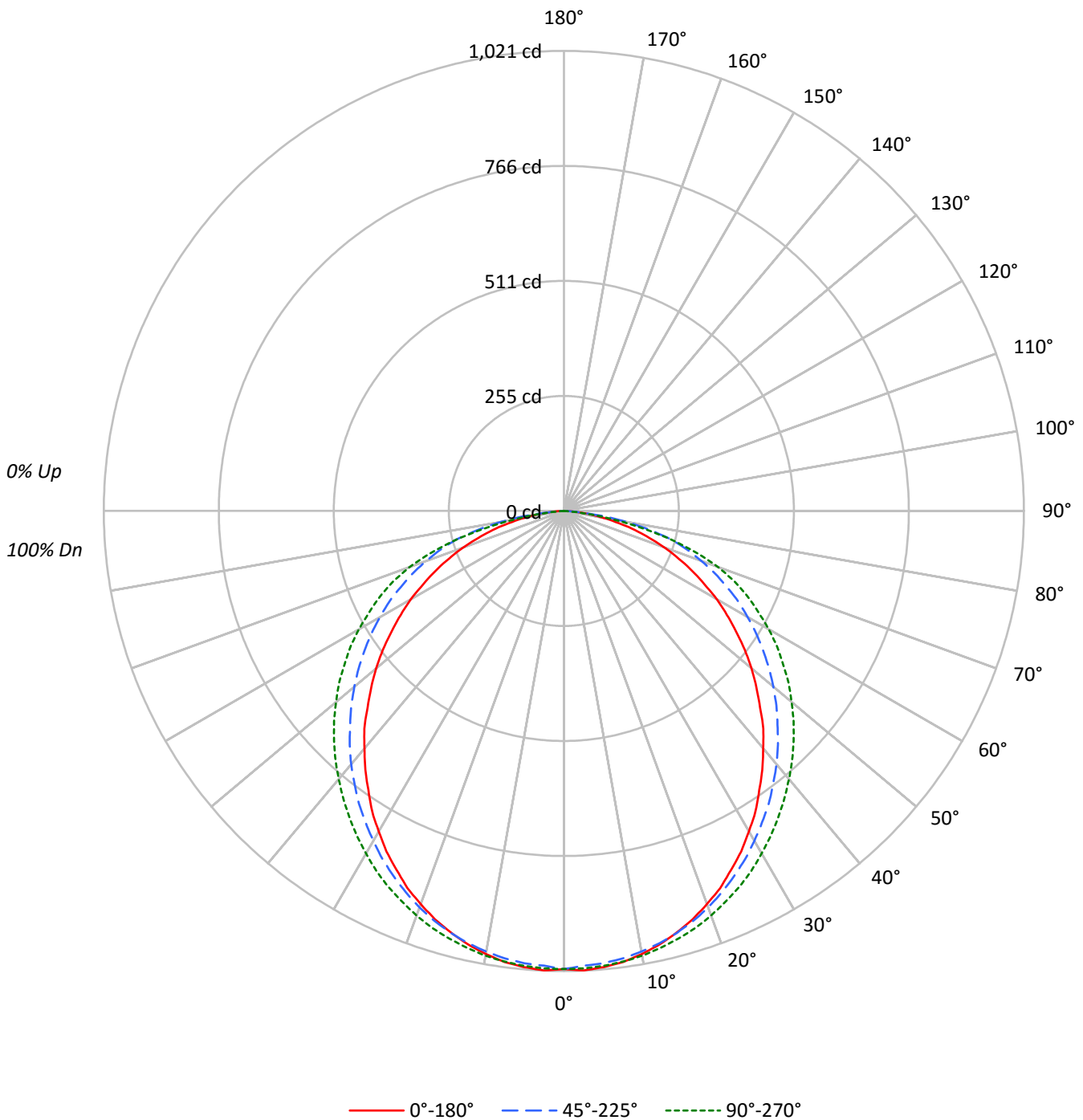
Input Watts (W): 29.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2736	2736	2736
5°	2744	2721	2737
10°	2728	2713	2739
15°	2698	2700	2737
20°	2659	2682	2736
25°	2608	2655	2733
30°	2552	2627	2728
35°	2484	2605	2726
40°	2418	2579	2730
45°	2344	2552	2745
50°	2275	2540	2763
55°	2189	2532	2788
60°	2111	2535	2826
65°	2003	2543	2870
70°	1880	2563	2868
75°	1703	2586	2593
80°	1396	2233	1846
85°	1037	1056	426



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.2	3.3
10°-20°	274.8	9.3
20°-30°	414.0	14.0
30°-40°	496.8	16.8
40°-50°	517.8	17.5
50°-60°	479.3	16.2
60°-70°	387.3	13.1
70°-80°	236.1	8.0
80°-90°	48.8	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°	785.0	26.6
0°-40°	1281.7	43.4
0°-60°	2278.8	77.2
0°-90°	2951.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2951.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1017	1017	1017	1017	1017	
5°	1016	1013	1007	1015	1013	96
15°	969	969	969	982	982	273
25°	878	884	894	917	921	405
35°	756	768	793	822	830	474
45°	616	634	670	708	721	476
55°	466	491	540	582	594	418
65°	314	346	399	440	451	311
75°	164	200	249	253	249	172
85°	34	50	34	19	14	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1016.6	1016.6	1016.6	1016.6	1016.6
2.5°	1020.6	1017.3	1010.0	1017.3	1016.0
5°	1016.0	1013.3	1007.4	1014.7	1013.3
7.5°	1009.4	1006.8	1001.5	1010.0	1008.7
10°	998.2	996.9	992.9	1002.8	1002.2
12.5°	985.0	984.4	982.4	993.6	992.9
15°	968.6	969.3	969.3	982.4	982.4
17.5°	950.2	951.5	954.1	968.6	970.6
20°	928.5	931.1	936.4	952.8	955.4
22.5°	906.1	908.1	916.0	935.7	938.3
25°	878.4	883.7	894.2	916.6	920.6
27.5°	852.1	856.7	871.2	894.2	900.8
30°	821.2	828.4	845.5	870.6	877.8
32.5°	791.6	799.5	819.2	848.2	854.8
35°	756.1	767.9	792.9	821.9	829.8
37.5°	723.8	735.0	763.3	794.9	804.1
40°	688.3	702.1	734.3	767.9	777.1
42.5°	655.4	668.5	703.4	737.6	750.1
45°	615.9	634.3	670.5	708.0	721.2
47.5°	579.7	598.1	639.6	679.7	691.6
50°	543.5	563.3	606.7	648.1	660.0
52.5°	506.0	527.1	573.8	615.2	629.1
55°	466.5	490.9	539.6	581.7	594.2
57.5°	429.0	454.0	506.0	548.8	561.3
60°	392.2	417.8	471.1	511.9	525.1
62.5°	351.4	381.6	436.9	477.1	486.9
65°	314.5	345.5	399.4	439.6	450.7
67.5°	275.7	309.3	363.2	400.1	410.6
70°	238.9	273.7	325.7	359.9	364.5
72.5°	199.4	234.9	287.6	309.3	309.3
75°	163.8	200.0	248.7	252.7	249.4
77.5°	125.0	165.2	196.7	188.8	181.0
80°	90.1	129.6	144.1	129.6	119.1
82.5°	60.5	94.1	86.9	69.1	61.2
85°	33.6	50.0	34.2	19.1	13.8
87.5°	12.5	11.2	3.3	3.3	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)