

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: P307693

Luminaire Tested: **14FCZ2-35-UNV-L82765-CP250-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: P307693
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-3500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.250" POLYCARB 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: 3054.0 lumens
Efficiency: N/A
Efficacy: 103.2 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

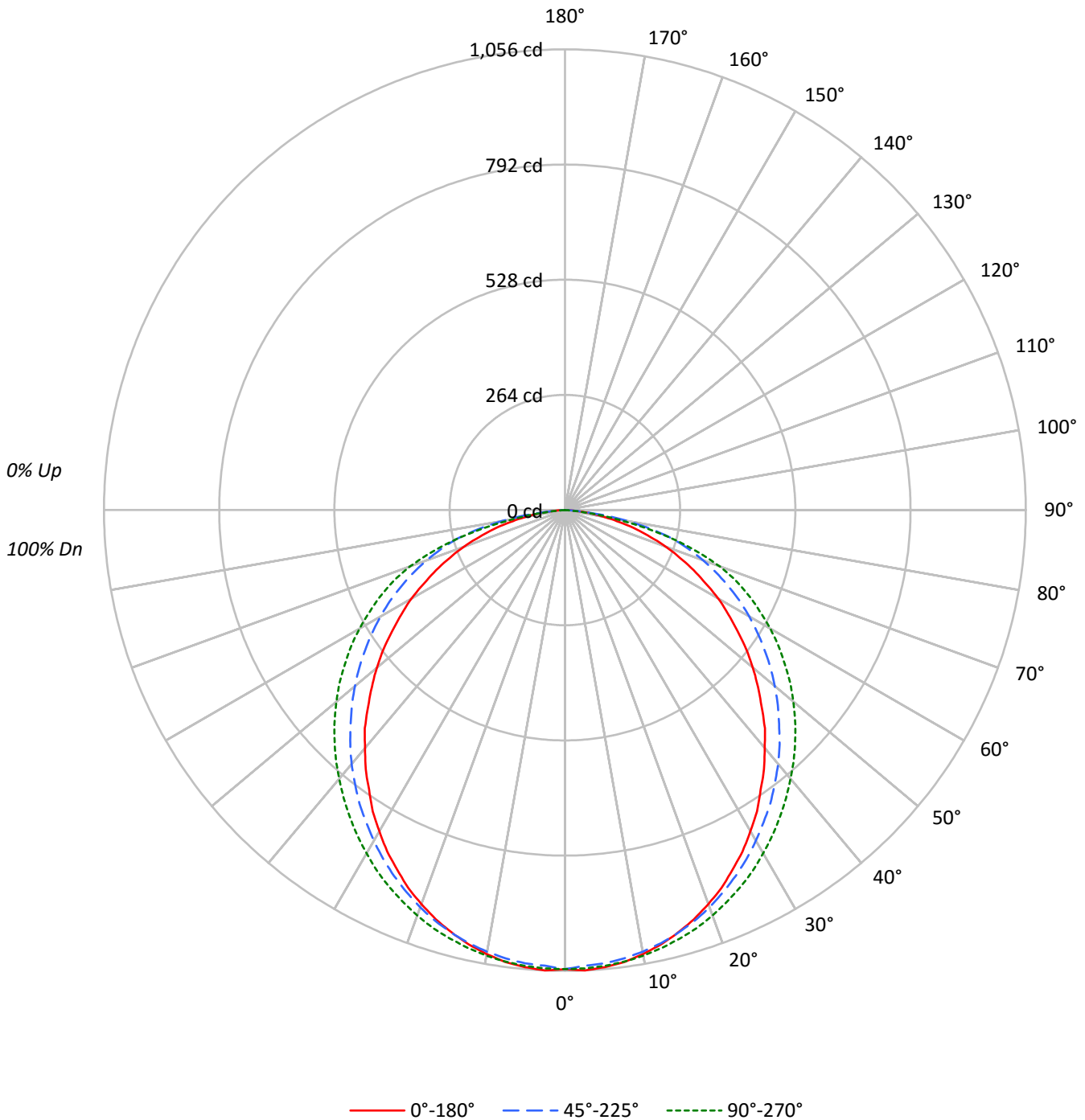
Input Watts (W): 29.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2831	2831	2831
5°	2840	2816	2833
10°	2823	2808	2834
15°	2793	2795	2832
20°	2752	2775	2832
25°	2699	2748	2829
30°	2641	2719	2823
35°	2570	2696	2821
40°	2502	2670	2825
45°	2426	2641	2841
50°	2355	2629	2859
55°	2265	2620	2885
60°	2185	2624	2925
65°	2073	2632	2970
70°	1945	2652	2969
75°	1763	2676	2684
80°	1446	2311	1911
85°	1071	1093	442



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.6	3.3
10°-20°	284.4	9.3
20°-30°	428.4	14.0
30°-40°	514.1	16.8
40°-50°	535.8	17.5
50°-60°	496.1	16.2
60°-70°	400.8	13.1
70°-80°	244.4	8.0
80°-90°	50.5	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°	812.4	26.6
0°-40°	1326.5	43.4
0°-60°	2358.4	77.2
0°-90°	3054.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3054.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1052	1052	1052	1052	1052	
5°	1051	1049	1043	1050	1049	100
15°	1002	1003	1003	1017	1017	283
25°	909	915	926	949	953	419
35°	782	795	821	850	859	490
45°	637	656	694	733	746	493
55°	483	508	558	602	615	433
65°	326	358	413	455	466	322
75°	170	207	257	262	258	178
85°	35	52	35	20	14	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1052.1	1052.1	1052.1	1052.1	1052.1
2.5°	1056.2	1052.8	1045.3	1052.8	1051.4
5°	1051.4	1048.7	1042.6	1050.1	1048.7
7.5°	1044.6	1041.9	1036.5	1045.3	1043.9
10°	1033.0	1031.7	1027.6	1037.8	1037.1
12.5°	1019.4	1018.7	1016.7	1028.3	1027.6
15°	1002.4	1003.1	1003.1	1016.7	1016.7
17.5°	983.3	984.7	987.4	1002.4	1004.4
20°	960.9	963.6	969.0	986.1	988.8
22.5°	937.7	939.8	947.9	968.4	971.1
25°	909.1	914.6	925.5	948.6	952.7
27.5°	881.9	886.6	901.6	925.5	932.3
30°	849.9	857.4	875.1	900.9	908.4
32.5°	819.2	827.4	847.8	877.8	884.6
35°	782.4	794.7	820.6	850.5	858.7
37.5°	749.1	760.7	789.9	822.6	832.2
40°	712.3	726.6	760.0	794.7	804.2
42.5°	678.3	691.9	728.0	763.4	776.3
45°	637.4	656.5	693.9	732.7	746.4
47.5°	599.9	619.0	661.9	703.5	715.7
50°	562.5	582.9	627.9	670.8	683.0
52.5°	523.7	545.5	593.8	636.7	651.0
55°	482.8	508.0	558.4	602.0	614.9
57.5°	444.0	469.9	523.7	567.9	580.9
60°	405.9	432.4	487.6	529.8	543.4
62.5°	363.6	395.0	452.2	493.7	503.9
65°	325.5	357.5	413.4	454.9	466.5
67.5°	285.3	320.1	375.9	414.0	424.9
70°	247.2	283.3	337.1	372.5	377.3
72.5°	206.3	243.1	297.6	320.1	320.1
75°	169.6	207.0	257.4	261.5	258.1
77.5°	129.4	170.9	203.6	195.4	187.3
80°	93.3	134.2	149.1	134.2	123.3
82.5°	62.7	97.4	89.9	71.5	63.3
85°	34.7	51.8	35.4	19.7	14.3
87.5°	12.9	11.6	3.4	3.4	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)