

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: P307961

Luminaire Tested: **14FCZ2-35-UNV-L82765-S-CP250-W2A-U-2700K**

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: P307961
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
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-S-CP250-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.250" POLYCARB SHEET
Light Source: (168) 2700K 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: 2899.0 lumens
Efficiency: N/A
Efficacy: 98.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

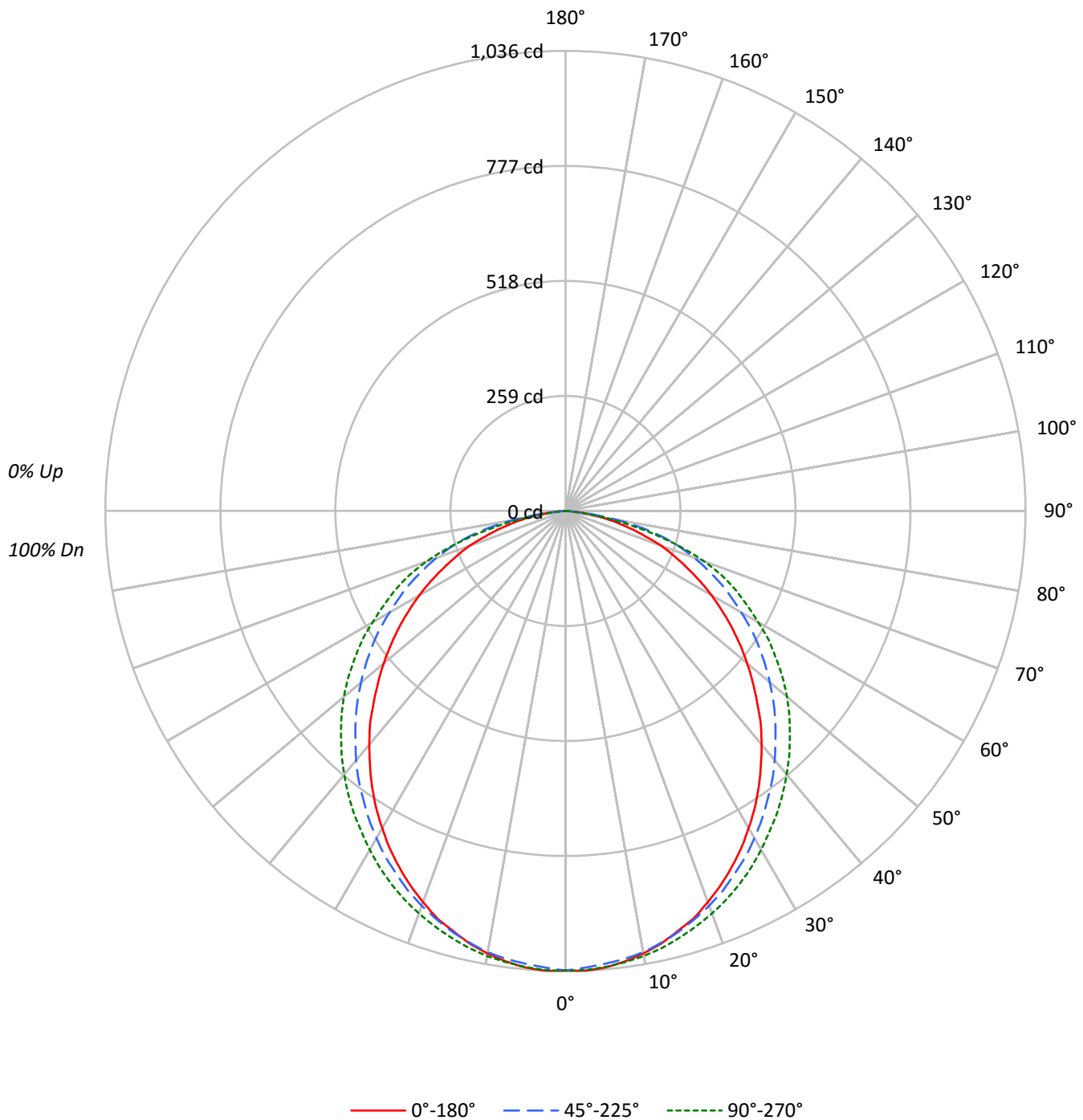
Input Watts (W): 29.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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	100	96	106	102	98	94	97	94	91		94	91	89		84
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		70
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		58
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		50
5	76	63	54	47	74	62	53	47	59	52	46		57	51	46		43
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		38
7	65	51	42	36	63	50	42	36	49	41	36		47	41	35		33
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		30
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		27
10	53	40	32	26	52	39	31	26	38	31	26		37	31	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2785	2785	2785
5°	2788	2764	2784
10°	2765	2757	2781
15°	2727	2735	2771
20°	2684	2708	2762
25°	2629	2676	2753
30°	2564	2644	2738
35°	2493	2606	2729
40°	2414	2575	2721
45°	2325	2544	2719
50°	2238	2515	2726
55°	2145	2495	2718
60°	2042	2460	2700
65°	1922	2453	2700
70°	1810	2431	2624
75°	1569	2376	2242
80°	1269	1915	1492
85°	843	667	445



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.7	3.4
10°-20°	278.1	9.6
20°-30°	417.1	14.4
30°-40°	497.6	17.2
40°-50°	514.4	17.7
50°-60°	469.7	16.2
60°-70°	369.6	12.7
70°-80°	215.2	7.4
80°-90°	39.6	1.4
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°	792.9	27.4
0°-40°	1290.5	44.5
0°-60°	2274.6	78.5
0°-90°	2899.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2899.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1035	1035	1035	1035	1035	
5°	1032	1029	1023	1032	1031	98
15°	979	980	982	995	995	276
25°	885	890	901	923	927	408
35°	759	769	793	824	831	474
45°	611	631	668	706	714	472
55°	457	482	532	571	579	409
65°	302	334	385	415	424	300
75°	151	187	228	224	216	160
85°	27	39	22	17	14	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1034.9	1034.9	1034.9	1034.9	1034.9
2.5°	1036.3	1033.5	1029.1	1036.3	1034.9
5°	1032.0	1029.1	1023.4	1032.0	1030.6
7.5°	1023.4	1020.5	1017.6	1026.3	1024.8
10°	1011.9	1010.5	1009.0	1019.1	1017.6
12.5°	997.5	997.5	996.1	1007.6	1007.6
15°	978.8	980.3	981.7	994.6	994.6
17.5°	961.6	960.2	964.5	978.8	980.3
20°	937.2	940.0	945.8	963.0	964.5
22.5°	912.7	915.6	925.7	942.9	947.2
25°	885.4	889.7	901.2	922.8	927.1
27.5°	856.7	862.4	878.2	901.2	905.5
30°	825.0	833.7	850.9	876.8	881.1
32.5°	793.4	802.0	823.6	849.5	855.2
35°	758.9	769.0	793.4	823.6	830.8
37.5°	723.0	735.9	764.7	794.9	803.5
40°	687.1	701.4	733.1	764.7	774.7
42.5°	651.1	665.5	700.0	735.9	746.0
45°	610.9	631.0	668.4	705.7	714.4
47.5°	572.1	593.6	635.3	672.7	684.2
50°	534.7	556.3	600.8	639.6	651.1
52.5°	495.9	518.9	566.3	606.6	616.6
55°	457.1	481.5	531.8	570.6	579.3
57.5°	418.3	444.1	495.9	533.3	543.3
60°	379.5	406.8	457.1	494.4	501.6
62.5°	340.7	369.4	421.1	454.2	461.4
65°	301.8	333.5	385.2	415.4	424.0
67.5°	264.5	296.1	346.4	375.1	382.3
70°	230.0	258.7	309.0	330.6	333.5
72.5°	186.9	222.8	271.7	283.2	276.0
75°	150.9	186.9	228.5	224.2	215.6
77.5°	115.0	150.9	178.2	163.9	152.4
80°	81.9	117.9	123.6	102.1	96.3
82.5°	53.2	81.9	69.0	53.2	43.1
85°	27.3	38.8	21.6	17.2	14.4
87.5°	8.6	5.7	2.9	2.9	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)