

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: P307885

Luminaire Tested: **14FCZ2-29-UNV-L82765-S-CA08-W2A-U-5000K**

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: P307885
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: 14FCZ2-29-UNV-L82765-S-CA08-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 5000K 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: 2915.0 lumens
Efficiency: N/A
Efficacy: 119.5 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

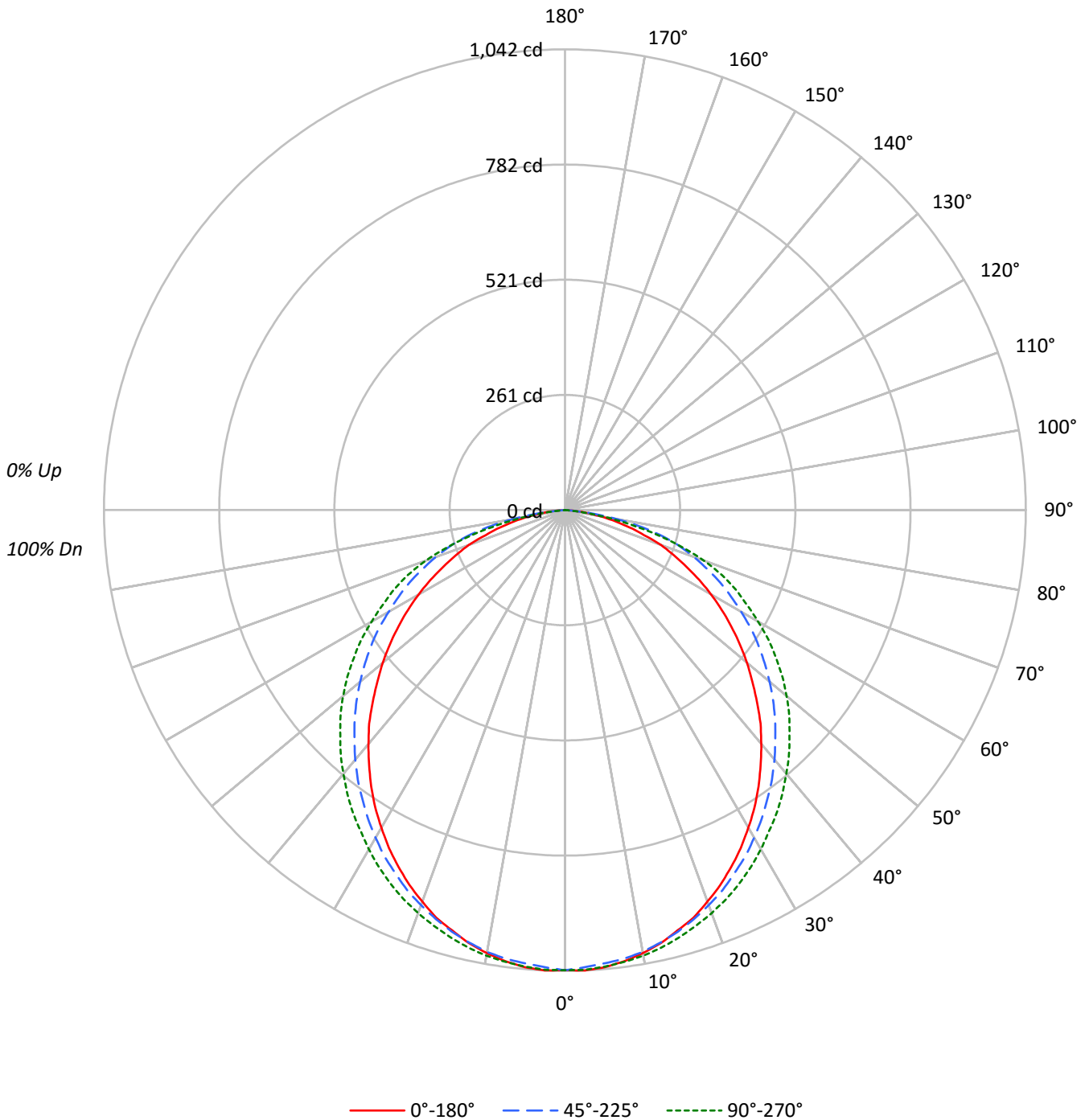
Input Watts (W): 24.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2800	2800	2800
5°	2803	2780	2799
10°	2780	2772	2796
15°	2742	2750	2786
20°	2698	2723	2777
25°	2643	2691	2768
30°	2578	2659	2753
35°	2507	2621	2744
40°	2427	2589	2736
45°	2337	2558	2734
50°	2251	2529	2741
55°	2156	2509	2733
60°	2054	2474	2715
65°	1933	2466	2715
70°	1819	2445	2638
75°	1578	2389	2254
80°	1277	1926	1500
85°	849	670	448



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.3	3.4
10°-20°	279.6	9.6
20°-30°	419.4	14.4
30°-40°	500.3	17.2
40°-50°	517.3	17.7
50°-60°	472.3	16.2
60°-70°	371.6	12.7
70°-80°	216.3	7.4
80°-90°	39.9	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°	797.3	27.4
0°-40°	1297.6	44.5
0°-60°	2287.2	78.5
0°-90°	2915.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2915.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1041	1041	1041	1041	1041	
5°	1038	1035	1029	1038	1036	98
15°	984	986	987	1000	1000	278
25°	890	895	906	928	932	410
35°	763	773	798	828	835	477
45°	614	634	672	710	718	474
55°	460	484	535	574	582	411
65°	304	335	387	418	426	301
75°	152	188	230	226	217	161
85°	28	39	22	17	14	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1040.6	1040.6	1040.6	1040.6	1040.6
2.5°	1042.1	1039.2	1034.8	1042.1	1040.6
5°	1037.7	1034.8	1029.0	1037.7	1036.3
7.5°	1029.0	1026.2	1023.3	1031.9	1030.5
10°	1017.5	1016.0	1014.6	1024.7	1023.3
12.5°	1003.0	1003.0	1001.6	1013.1	1013.1
15°	984.2	985.7	987.1	1000.1	1000.1
17.5°	966.9	965.5	969.8	984.2	985.7
20°	942.3	945.2	951.0	968.3	969.8
22.5°	917.8	920.6	930.8	948.1	952.4
25°	890.3	894.6	906.2	927.9	932.2
27.5°	861.4	867.2	883.1	906.2	910.5
30°	829.6	838.3	855.6	881.6	886.0
32.5°	797.8	806.5	828.1	854.2	859.9
35°	763.1	773.2	797.8	828.1	835.4
37.5°	727.0	740.0	768.9	799.2	807.9
40°	690.8	705.3	737.1	768.9	779.0
42.5°	654.7	669.2	703.9	740.0	750.1
45°	614.2	634.5	672.1	709.6	718.3
47.5°	575.2	596.9	638.8	676.4	688.0
50°	537.6	559.3	604.1	643.2	654.7
52.5°	498.6	521.7	569.4	609.9	620.0
55°	459.6	484.2	534.8	573.8	582.5
57.5°	420.6	446.6	498.6	536.2	546.3
60°	381.6	409.0	459.6	497.2	504.4
62.5°	342.5	371.4	423.5	456.7	463.9
65°	303.5	335.3	387.3	417.7	426.4
67.5°	265.9	297.7	348.3	377.2	384.4
70°	231.2	260.2	310.7	332.4	335.3
72.5°	187.9	224.0	273.2	284.7	277.5
75°	151.8	187.9	229.8	225.5	216.8
77.5°	115.6	151.8	179.2	164.8	153.2
80°	82.4	118.5	124.3	102.6	96.8
82.5°	53.5	82.4	69.4	53.5	43.4
85°	27.5	39.0	21.7	17.3	14.5
87.5°	8.7	5.8	2.9	2.9	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)