

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: P308779

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-CP250-W2A-U-6500K**

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: P308779
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-33)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 22FCZ2-34HE-UNV-L82765-CP250-W2A-U-6500K
Description: 2'X2' 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: 3003.0 lumens
Efficiency: N/A
Efficacy: 104.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

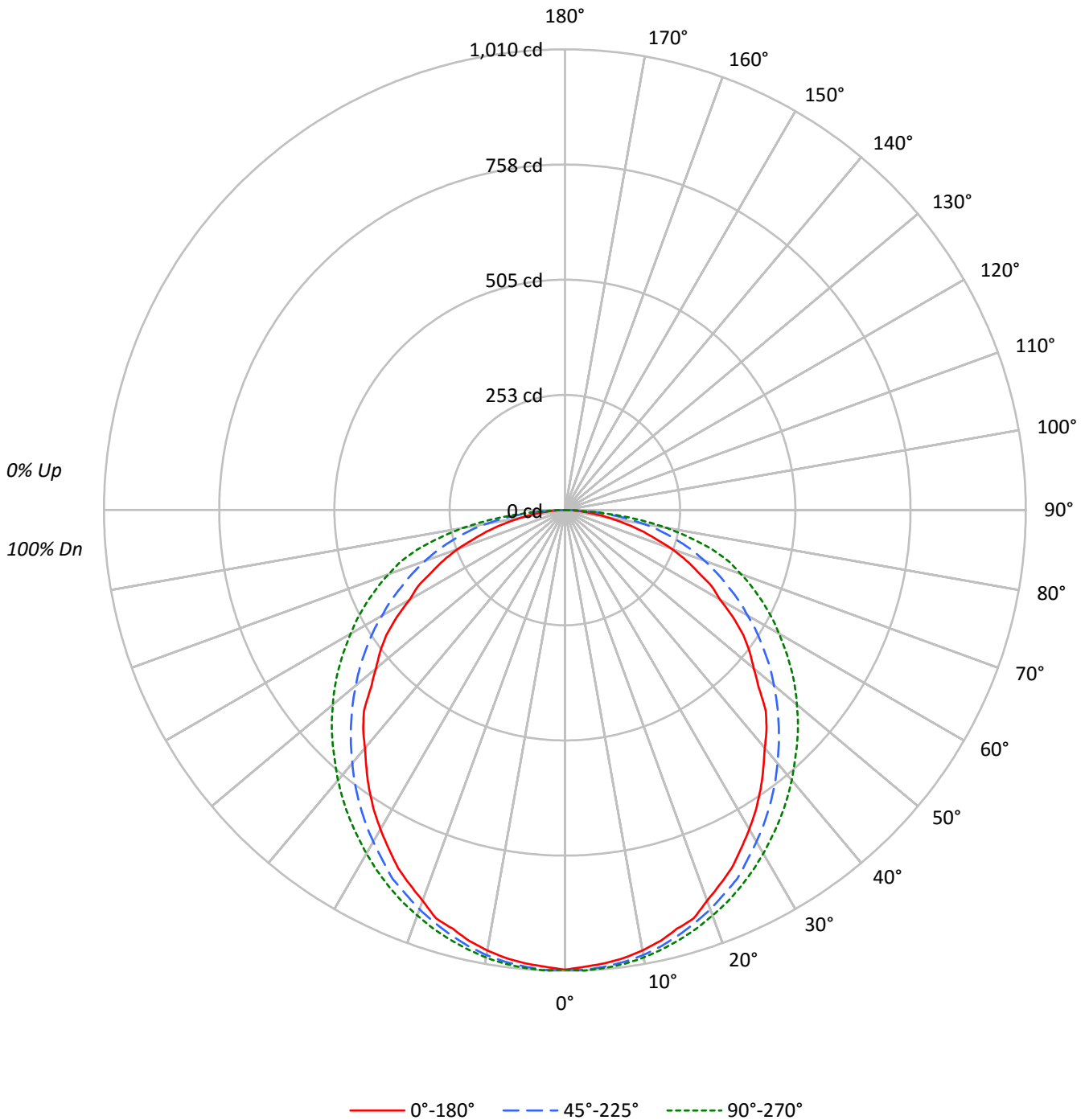
Input Watts (W): 28.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	108	103	98	94	105	100	96	92	96	93	90	92	89	87	89	86	84	82				
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67				
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56				
4	81	69	60	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48				
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41				
6	69	55	46	39	67	54	45	39	52	44	39	51	44	38	49	43	38	36				
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32				
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28				
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25				
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2711	2711	2711
5°	2695	2714	2722
10°	2678	2706	2722
15°	2647	2687	2715
20°	2609	2667	2708
25°	2569	2650	2706
30°	2510	2608	2702
35°	2455	2578	2706
40°	2393	2545	2716
45°	2368	2522	2740
50°	2262	2503	2780
55°	2239	2495	2839
60°	2112	2491	2916
65°	2050	2507	3047
70°	1968	2567	3234
75°	1794	2645	3482
80°	1537	2740	3519
85°	1241	2618	3017



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.3	3.2
10°-20°	272.0	9.1
20°-30°	409.3	13.6
30°-40°	491.3	16.4
40°-50°	513.5	17.1
50°-60°	478.5	15.9
60°-70°	392.5	13.1
70°-80°	264.5	8.8
80°-90°	86.1	2.9
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°	776.6	25.9
0°-40°	1267.9	42.2
0°-60°	2259.9	75.3
0°-90°	3003.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3003.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1008	1008	1008	1008	1008	
5°	998	1000	1005	1006	1008	95
15°	950	956	964	973	974	268
25°	865	871	892	906	911	398
35°	747	757	785	812	824	467
45°	622	627	663	703	720	475
55°	477	486	532	582	605	423
65°	322	336	394	451	479	320
75°	172	191	254	312	335	181
85°	40	58	85	99	98	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1007.5	1007.5	1007.5	1007.5	1007.5
2.5°	1001.8	1004.7	1009.0	1010.4	1010.4
5°	997.5	1000.3	1004.7	1006.1	1007.5
7.5°	990.3	993.2	998.9	1001.8	1003.2
10°	980.2	983.1	990.3	994.6	996.0
12.5°	967.3	970.2	978.8	984.5	986.0
15°	950.0	955.8	964.4	973.0	974.5
17.5°	938.5	937.1	948.6	958.7	961.5
20°	911.2	918.4	931.4	942.9	945.7
22.5°	888.2	894.0	911.2	924.2	929.9
25°	865.2	871.0	892.5	905.5	911.2
27.5°	836.5	845.1	865.2	883.9	891.1
30°	807.8	816.4	839.4	860.9	869.6
32.5°	779.0	789.1	813.5	836.5	846.6
35°	747.4	757.4	784.8	812.1	823.6
37.5°	714.3	727.3	756.0	786.2	799.1
40°	681.3	694.2	724.4	758.9	773.3
42.5°	654.0	659.7	694.2	731.6	745.9
45°	622.3	626.7	662.6	702.8	720.1
47.5°	576.3	592.2	631.0	675.5	692.8
50°	540.4	557.7	597.9	645.3	664.0
52.5°	510.2	521.7	566.3	613.7	635.3
55°	477.2	485.8	531.8	582.1	605.1
57.5°	436.9	452.7	498.7	550.5	573.5
60°	392.4	412.5	462.8	518.9	541.9
62.5°	363.6	375.1	429.7	485.8	511.7
65°	322.0	336.3	393.8	451.3	478.6
67.5°	287.5	301.8	360.8	418.2	445.6
70°	250.1	264.5	326.3	383.8	411.1
72.5°	207.0	227.1	291.8	349.3	378.0
75°	172.5	191.2	254.4	311.9	334.9
77.5°	133.7	158.1	217.0	264.5	281.7
80°	99.2	123.6	176.8	211.3	227.1
82.5°	67.6	92.0	132.2	158.1	166.7
85°	40.2	57.5	84.8	99.2	97.7
87.5°	18.7	24.4	34.5	34.5	33.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)