

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: P307652

Luminaire Tested: **14FCZ2-29-UNV-L82765-CP250-W2A-U-5500K**

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: P307652
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: 14FCZ2-29-UNV-L82765-CP250-W2A-U-5500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.250" POLYCARB SHEET
Light Source: (168) 5500K 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: 2704.0 lumens
Efficiency: N/A
Efficacy: 110.4 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

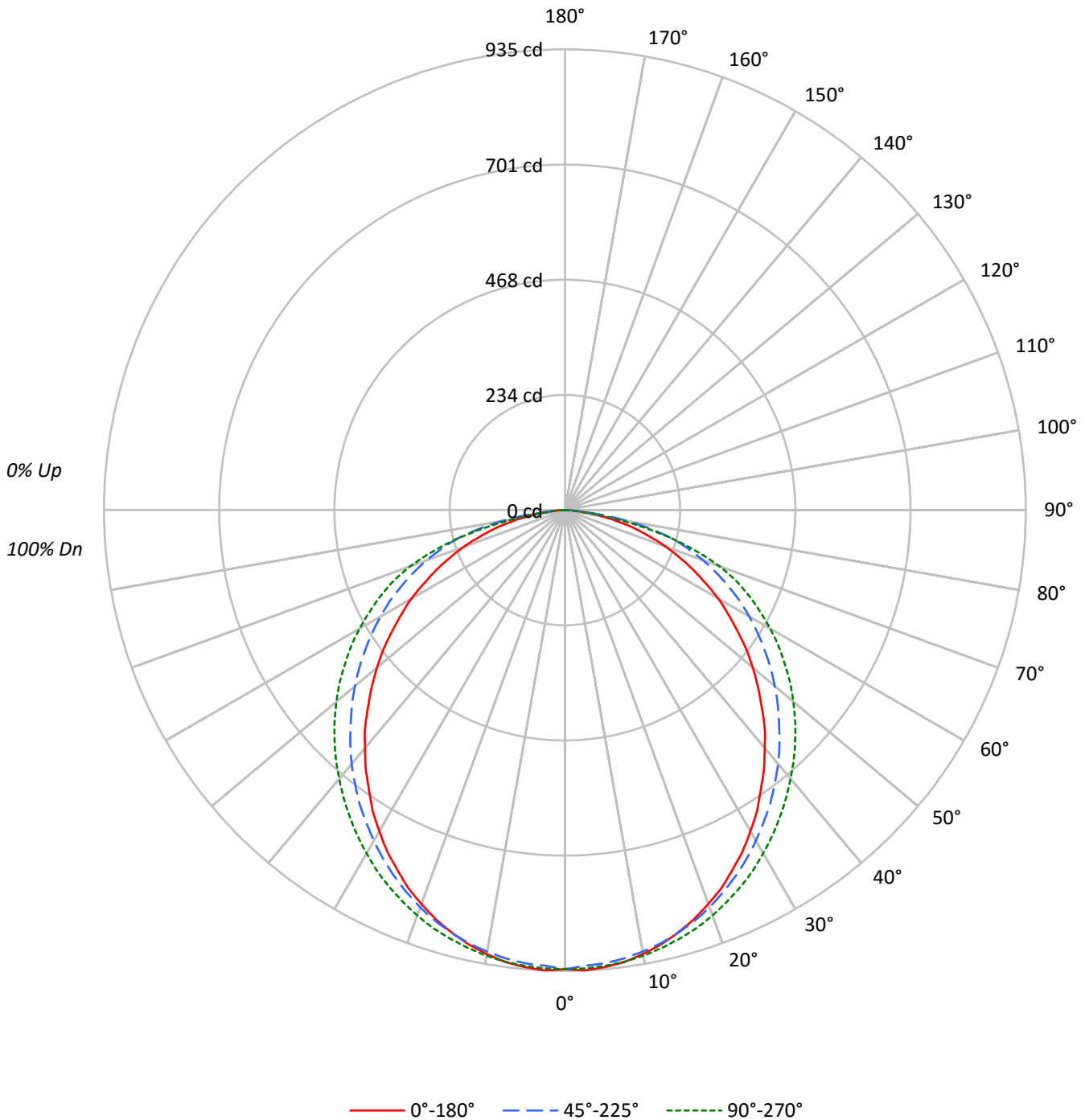
Input Watts (W): 24.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2507	2507	2507
5°	2515	2494	2508
10°	2499	2486	2509
15°	2472	2474	2508
20°	2436	2457	2507
25°	2390	2433	2504
30°	2338	2408	2499
35°	2276	2387	2498
40°	2216	2364	2501
45°	2148	2338	2515
50°	2085	2327	2532
55°	2006	2320	2555
60°	1934	2323	2589
65°	1835	2330	2630
70°	1722	2349	2628
75°	1561	2370	2376
80°	1280	2046	1691
85°	948	969	392



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.1	3.3
10°-20°	251.8	9.3
20°-30°	379.3	14.0
30°-40°	455.2	16.8
40°-50°	474.4	17.5
50°-60°	439.2	16.2
60°-70°	354.9	13.1
70°-80°	216.4	8.0
80°-90°	44.7	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°	719.3	26.6
0°-40°	1174.5	43.4
0°-60°	2088.1	77.2
0°-90°	2704.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2704.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	932	932	932	932	932	
5°	931	928	923	930	928	88
15°	888	888	888	900	900	250
25°	805	810	819	840	844	371
35°	693	704	726	753	760	434
45°	564	581	614	649	661	436
55°	428	450	494	533	544	383
65°	288	316	366	403	413	285
75°	150	183	228	232	228	158
85°	31	46	31	18	13	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	931.5	931.5	931.5	931.5	931.5
2.5°	935.2	932.1	925.5	932.1	930.9
5°	930.9	928.5	923.1	929.7	928.5
7.5°	924.9	922.5	917.7	925.5	924.3
10°	914.7	913.4	909.8	918.9	918.3
12.5°	902.6	902.0	900.2	910.4	909.8
15°	887.5	888.1	888.1	900.2	900.2
17.5°	870.6	871.8	874.3	887.5	889.3
20°	850.7	853.2	858.0	873.1	875.5
22.5°	830.2	832.1	839.3	857.4	859.8
25°	804.9	809.7	819.4	839.9	843.5
27.5°	780.8	785.0	798.3	819.4	825.4
30°	752.5	759.1	774.8	797.7	804.3
32.5°	725.3	732.6	750.7	777.2	783.2
35°	692.8	703.6	726.5	753.1	760.3
37.5°	663.2	673.5	699.4	728.3	736.8
40°	630.7	643.3	672.9	703.6	712.1
42.5°	600.5	612.6	644.5	675.9	687.3
45°	564.3	581.2	614.4	648.8	660.8
47.5°	531.2	548.1	586.1	622.8	633.7
50°	498.0	516.1	555.9	593.9	604.7
52.5°	463.7	483.0	525.8	563.7	576.4
55°	427.5	449.8	494.4	533.0	544.5
57.5°	393.1	416.0	463.7	502.8	514.3
60°	359.4	382.9	431.7	469.1	481.1
62.5°	322.0	349.7	400.3	437.1	446.2
65°	288.2	316.5	366.0	402.8	413.0
67.5°	252.6	283.4	332.8	366.6	376.2
70°	218.9	250.8	298.5	329.8	334.0
72.5°	182.7	215.2	263.5	283.4	283.4
75°	150.1	183.3	227.9	231.5	228.5
77.5°	114.6	151.3	180.3	173.0	165.8
80°	82.6	118.8	132.0	118.8	109.1
82.5°	55.5	86.2	79.6	63.3	56.1
85°	30.7	45.8	31.4	17.5	12.7
87.5°	11.5	10.2	3.0	3.0	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)