

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: P307654

Luminaire Tested: **14FCZ2-29-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: P307654
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-6500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.250" POLYCARB SHEET
Light Source: (168) 6500K 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: 2718.0 lumens
Efficiency: N/A
Efficacy: 109.2 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

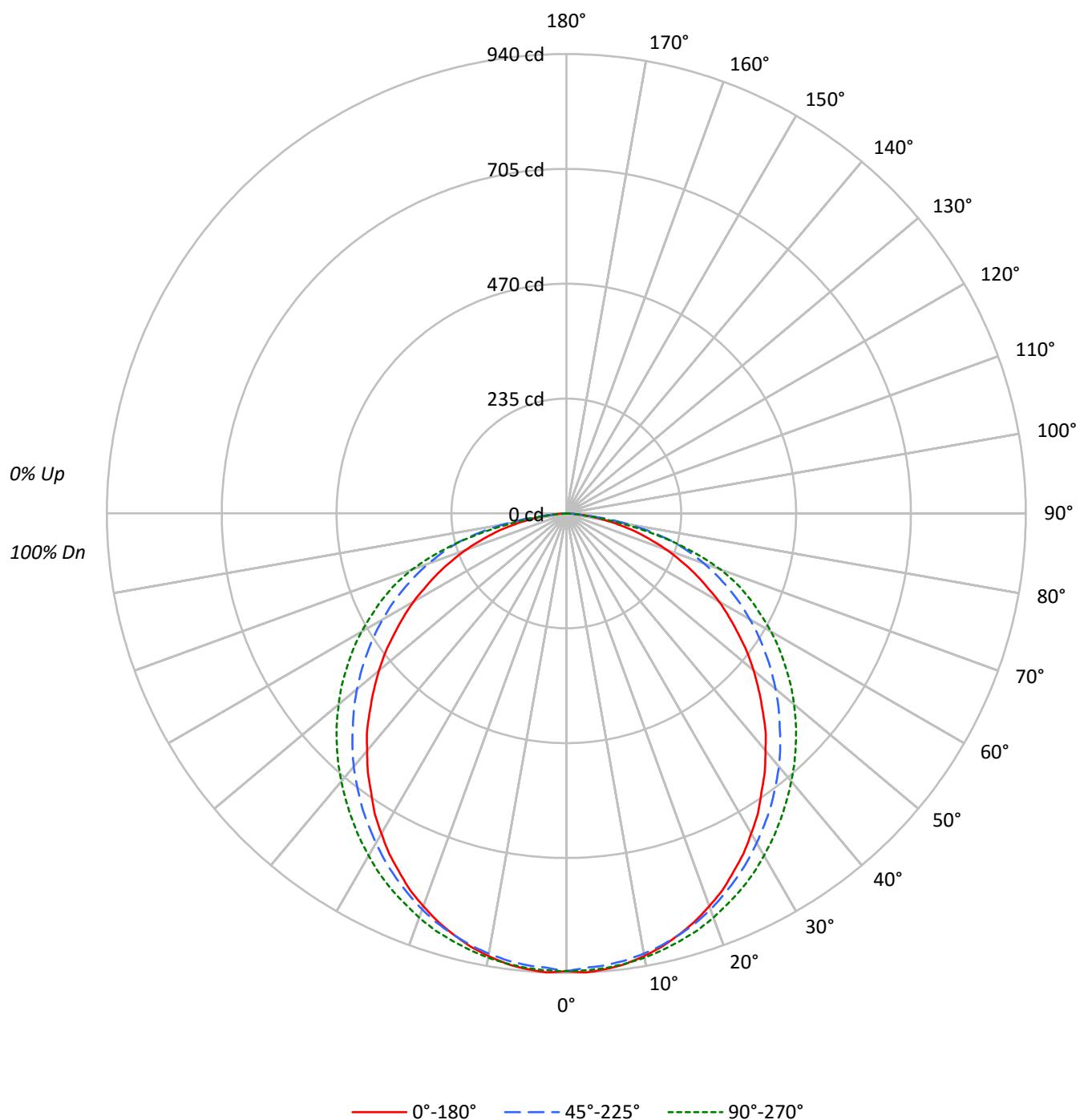
Input Watts (W): 24.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		58
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		32
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		26
10	52	39	31	26	51	39	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2520	2520	2520
5°	2528	2506	2521
10°	2512	2499	2522
15°	2485	2487	2521
20°	2449	2470	2520
25°	2402	2445	2518
30°	2350	2420	2512
35°	2288	2399	2510
40°	2227	2376	2514
45°	2159	2350	2528
50°	2096	2339	2545
55°	2016	2332	2568
60°	1944	2335	2603
65°	1845	2343	2643
70°	1731	2360	2642
75°	1569	2382	2388
80°	1286	2056	1700
85°	954	973	392



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.6	3.3
10°-20°	253.1	9.3
20°-30°	381.3	14.0
30°-40°	457.5	16.8
40°-50°	476.9	17.5
50°-60°	441.5	16.2
60°-70°	356.7	13.1
70°-80°	217.5	8.0
80°-90°	44.9	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°	723.0	26.6
0°-40°	1180.5	43.4
0°-60°	2098.9	77.2
0°-90°	2718.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2718.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	936	936	936	936	936	
5°	936	933	928	934	933	89
15°	892	893	893	905	905	251
25°	809	814	824	844	848	373
35°	696	707	730	757	764	436
45°	567	584	618	652	664	438
55°	430	452	497	536	547	385
65°	290	318	368	405	415	286
75°	151	184	229	233	230	158
85°	31	46	32	18	13	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	936.4	936.4	936.4	936.4	936.4
2.5°	940.0	937.0	930.3	937.0	935.8
5°	935.8	933.3	927.9	934.5	933.3
7.5°	929.7	927.3	922.4	930.3	929.1
10°	919.4	918.2	914.5	923.6	923.0
12.5°	907.3	906.7	904.8	915.1	914.5
15°	892.1	892.7	892.7	904.8	904.8
17.5°	875.1	876.4	878.8	892.1	893.9
20°	855.1	857.6	862.4	877.6	880.0
22.5°	834.5	836.4	843.6	861.8	864.2
25°	809.1	813.9	823.6	844.2	847.9
27.5°	784.8	789.1	802.4	823.6	829.7
30°	756.4	763.0	778.8	801.8	808.5
32.5°	729.1	736.4	754.5	781.2	787.3
35°	696.4	707.3	730.3	757.0	764.2
37.5°	666.7	677.0	703.0	732.1	740.6
40°	633.9	646.7	676.4	707.3	715.8
42.5°	603.6	615.8	647.9	679.4	690.9
45°	567.3	584.2	617.6	652.1	664.2
47.5°	533.9	550.9	589.1	626.1	637.0
50°	500.6	518.8	558.8	597.0	607.9
52.5°	466.1	485.5	528.5	566.7	579.4
55°	429.7	452.1	497.0	535.8	547.3
57.5°	395.1	418.2	466.1	505.5	517.0
60°	361.2	384.8	433.9	471.5	483.6
62.5°	323.6	351.5	402.4	439.4	448.5
65°	289.7	318.2	367.9	404.8	415.1
67.5°	253.9	284.8	334.5	368.5	378.2
70°	220.0	252.1	300.0	331.5	335.8
72.5°	183.6	216.4	264.8	284.8	284.8
75°	150.9	184.2	229.1	232.7	229.7
77.5°	115.2	152.1	181.2	173.9	166.7
80°	83.0	119.4	132.7	119.4	109.7
82.5°	55.8	86.7	80.0	63.6	56.4
85°	30.9	46.1	31.5	17.6	12.7
87.5°	11.5	10.3	3.0	3.0	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)