

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: P307114

Luminaire Tested: **14FCZ2-29-UNV-L82765-HRP-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: P307114
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)
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-HRP-CP250-W2A-U-6500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. 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: 2062.0 lumens
Efficiency: N/A
Efficacy: 82.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

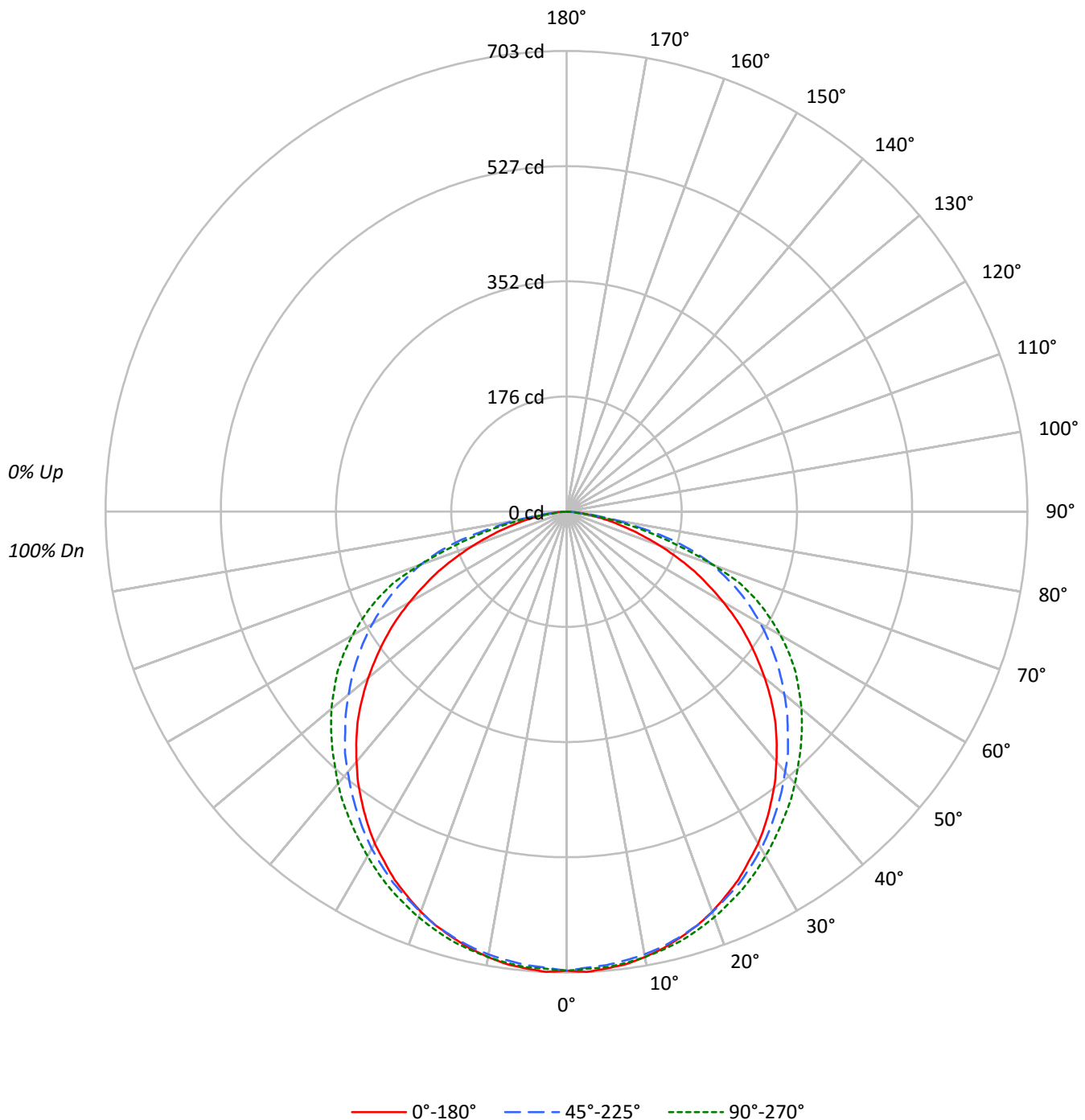
Input Watts (W): 24.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	106	102	98	94	97	94	91		93	91	88		84
2	99	90	83	78	96	88	82	77	85	79	75		82	77	73		69
3	90	79	71	64	87	77	70	64	74	68	62		72	66	61		58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		42
6	69	56	47	40	68	55	46	40	53	45	40		51	45	39		37
7	64	51	42	36	63	50	41	35	48	41	35		47	40	35		33
8	60	46	38	32	58	45	37	32	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	38	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1884	1884	1884
5°	1890	1876	1885
10°	1885	1874	1885
15°	1873	1870	1888
20°	1861	1862	1887
25°	1841	1856	1887
30°	1817	1845	1886
35°	1785	1832	1889
40°	1749	1822	1904
45°	1713	1816	1925
50°	1653	1816	1960
55°	1582	1825	2001
60°	1486	1839	2027
65°	1371	1858	2039
70°	1194	1862	1877
75°	985	1732	1517
80°	773	1246	1015
85°	602	482	241



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.3	3.2
10°-20°	190.2	9.2
20°-30°	288.9	14.0
30°-40°	350.0	17.0
40°-50°	368.9	17.9
50°-60°	344.3	16.7
60°-70°	275.2	13.3
70°-80°	151.4	7.3
80°-90°	26.7	1.3
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°	545.4	26.5
0°-40°	895.5	43.4
0°-60°	1608.7	78.0
0°-90°	2062.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2062.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	700	700	700	700	700	
5°	700	698	694	699	698	67
15°	672	672	671	678	678	190
25°	620	621	625	634	635	285
35°	543	548	558	572	575	340
45°	450	458	477	499	506	346
55°	337	354	389	416	427	301
65°	215	242	292	316	320	212
75°	95	136	167	150	146	102
85°	20	25	16	10	8	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	700.3	700.3	700.3	700.3	700.3
2.5°	702.9	700.9	696.4	700.3	698.3
5°	699.6	697.7	694.4	699.0	697.7
7.5°	696.4	693.8	690.5	695.7	694.4
10°	689.9	687.9	686.0	690.5	689.9
12.5°	682.1	681.5	679.5	684.7	684.1
15°	672.4	672.4	671.1	677.6	677.6
17.5°	662.0	661.4	662.0	669.1	668.5
20°	649.7	649.7	650.3	658.8	658.8
22.5°	634.8	635.4	637.4	647.7	647.1
25°	619.9	621.2	625.1	634.1	635.4
27.5°	601.7	605.0	609.5	620.5	621.8
30°	584.9	586.8	593.9	604.3	606.9
32.5°	564.8	568.6	576.4	588.1	591.3
35°	543.4	548.5	557.6	571.9	575.1
37.5°	522.0	526.5	538.8	553.7	559.6
40°	498.0	505.7	518.7	535.6	542.1
42.5°	474.6	482.4	499.9	517.4	523.3
45°	450.0	458.4	477.2	498.6	505.7
47.5°	422.8	432.5	456.5	479.2	486.9
50°	394.9	407.2	433.8	459.1	468.1
52.5°	365.7	381.3	411.7	438.3	446.7
55°	337.2	354.0	389.0	416.3	426.6
57.5°	308.0	326.1	365.7	396.8	402.7
60°	276.2	298.3	341.7	368.9	376.7
62.5°	245.1	270.4	317.1	343.0	349.5
65°	215.3	242.5	291.8	315.8	320.3
67.5°	182.8	215.3	263.9	285.9	287.2
70°	151.7	189.3	236.7	247.0	238.6
72.5°	121.2	161.5	204.9	196.5	189.3
75°	94.7	135.5	166.6	149.8	145.9
77.5°	70.0	110.9	119.3	110.2	103.1
80°	49.9	87.5	80.4	68.7	65.5
82.5°	34.4	55.1	44.1	34.4	29.8
85°	19.5	24.6	15.6	9.7	7.8
87.5°	8.4	5.8	3.2	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)