

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: P307112

Luminaire Tested: **14FCZ2-29-UNV-L82765-HRP-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: P307112
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-5500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. 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: 2051.0 lumens
Efficiency: N/A
Efficacy: 83.7 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

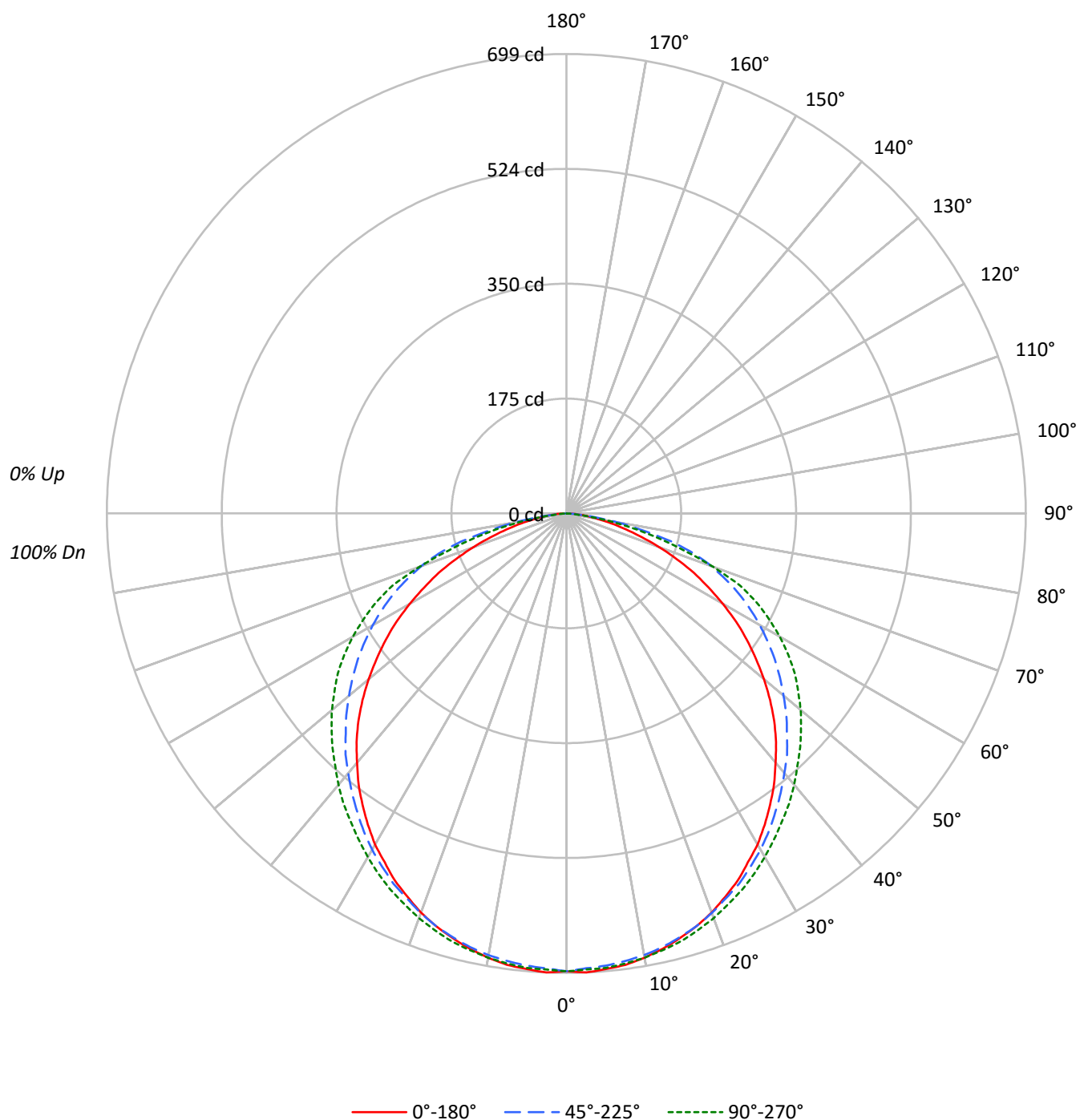
Input Watts (W): 24.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1874	1874	1874
5°	1880	1866	1875
10°	1875	1864	1875
15°	1863	1860	1878
20°	1851	1853	1877
25°	1831	1846	1877
30°	1808	1836	1876
35°	1776	1822	1879
40°	1740	1812	1894
45°	1703	1807	1914
50°	1644	1806	1949
55°	1574	1816	1991
60°	1478	1829	2017
65°	1363	1848	2029
70°	1187	1852	1867
75°	979	1723	1509
80°	770	1240	1009
85°	596	479	238



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.9	3.2
10°-20°	189.2	9.2
20°-30°	287.3	14.0
30°-40°	348.2	17.0
40°-50°	366.9	17.9
50°-60°	342.5	16.7
60°-70°	273.7	13.3
70°-80°	150.6	7.3
80°-90°	26.6	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°	542.5	26.5
0°-40°	890.7	43.4
0°-60°	1600.1	78.0
0°-90°	2051.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2051.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	696	696	696	696	696	
5°	696	694	691	695	694	66
15°	669	669	668	674	674	189
25°	617	618	622	631	632	284
35°	540	546	555	569	572	338
45°	448	456	475	496	503	344
55°	335	352	387	414	424	299
65°	214	241	290	314	319	211
75°	94	135	166	149	145	101
85°	19	24	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°	696.5	696.5	696.5	696.5	696.5
2.5°	699.1	697.2	692.7	696.5	694.6
5°	695.9	694.0	690.7	695.2	694.0
7.5°	692.7	690.1	686.9	692.0	690.7
10°	686.2	684.3	682.3	686.9	686.2
12.5°	678.5	677.8	675.9	681.1	680.4
15°	668.8	668.8	667.5	674.0	674.0
17.5°	658.5	657.8	658.5	665.6	664.9
20°	646.2	646.2	646.9	655.3	655.3
22.5°	631.4	632.0	634.0	644.3	643.6
25°	616.6	617.8	621.7	630.7	632.0
27.5°	598.5	601.7	606.2	617.2	618.5
30°	581.7	583.7	590.8	601.1	603.7
32.5°	561.7	565.6	573.3	585.0	588.2
35°	540.5	545.6	554.6	568.8	572.1
37.5°	519.2	523.7	535.9	550.8	556.6
40°	495.3	503.0	515.9	532.7	539.2
42.5°	472.1	479.8	497.2	514.7	520.5
45°	447.6	456.0	474.7	496.0	503.0
47.5°	420.5	430.2	454.0	476.6	484.3
50°	392.8	405.0	431.5	456.6	465.6
52.5°	363.7	379.2	409.5	436.0	444.4
55°	335.4	352.1	387.0	414.0	424.4
57.5°	306.3	324.4	363.7	394.7	400.5
60°	274.7	296.7	339.9	367.0	374.7
62.5°	243.8	268.9	315.4	341.2	347.6
65°	214.1	241.2	290.2	314.1	318.6
67.5°	181.9	214.1	262.5	284.4	285.7
70°	150.9	188.3	235.4	245.7	237.3
72.5°	120.6	160.6	203.8	195.4	188.3
75°	94.2	134.8	165.7	149.0	145.1
77.5°	69.7	110.3	118.7	109.6	102.5
80°	49.7	87.1	80.0	68.4	65.1
82.5°	34.2	54.8	43.9	34.2	29.7
85°	19.3	24.5	15.5	9.7	7.7
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)