

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: P307244

Luminaire Tested: **14FCZ2-44-UNV-L82765-HRP-CP250-W2A-U-4000K**

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: P307244
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: 14FCZ2-44-UNV-L82765-HRP-CP250-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.250"
POLYCARB SHEET
Light Source: (168) 4000K 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: 2920.0 lumens
Efficiency: N/A
Efficacy: 75.5 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

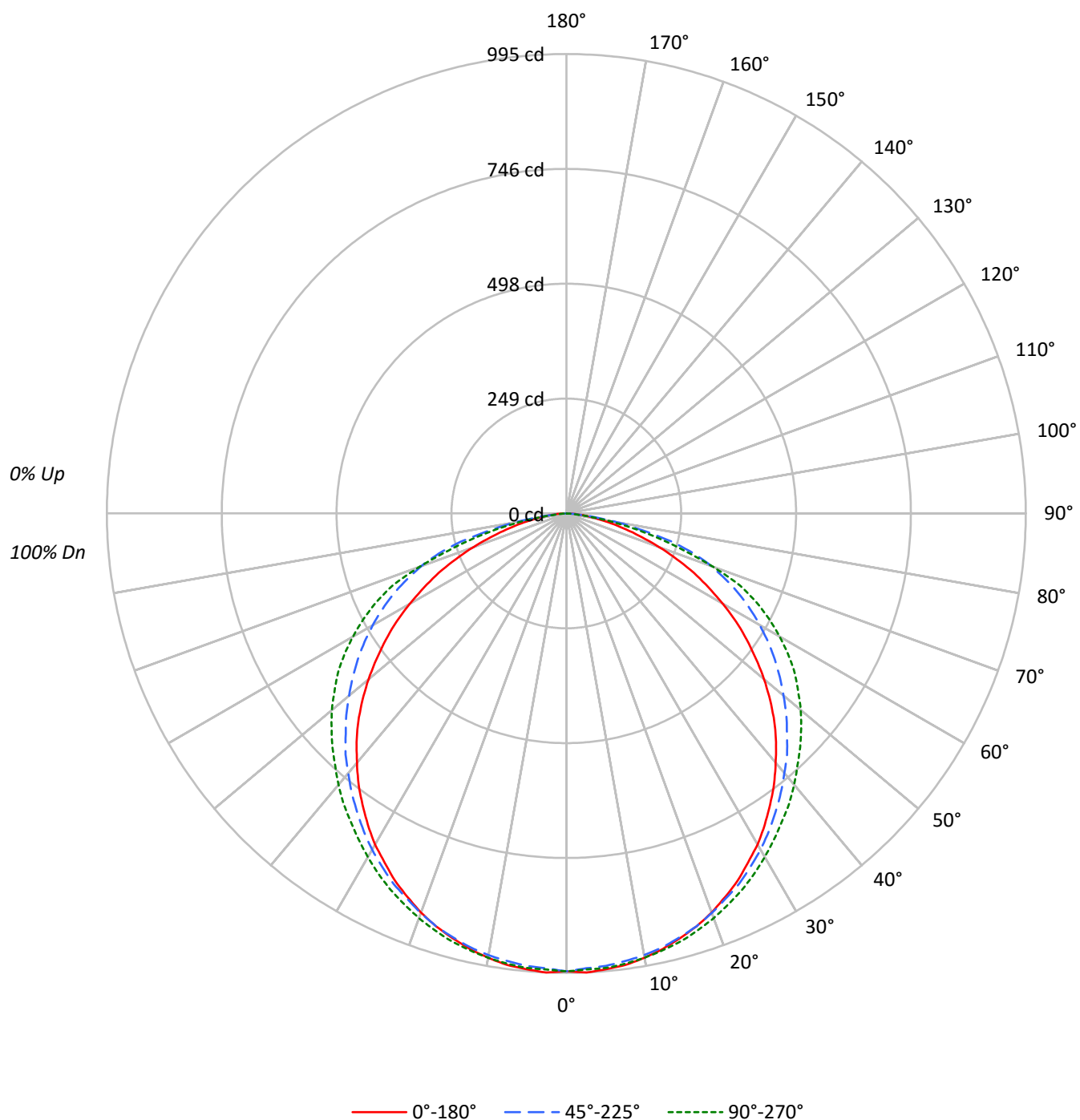
Input Watts (W): 38.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307244

CATALOG NUMBER: 14FCZ2-44-UNV-L82765-HRP-CP250-W2A-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P307244

CATALOG NUMBER: 14FCZ2-44-UNV-L82765-HRP-CP250-W2A-U-4000K

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°	2668	2668	2668
5°	2676	2656	2669
10°	2670	2654	2670
15°	2653	2647	2673
20°	2635	2637	2672
25°	2606	2628	2672
30°	2573	2614	2670
35°	2528	2594	2675
40°	2477	2581	2696
45°	2425	2572	2726
50°	2341	2572	2775
55°	2240	2585	2835
60°	2105	2604	2871
65°	1941	2631	2888
70°	1691	2637	2659
75°	1394	2454	2148
80°	1096	1765	1437
85°	849	679	340



TEST NUMBER: P307244

CATALOG NUMBER: 14FCZ2-44-UNV-L82765-HRP-CP250-W2A-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.9	3.2
10°-20°	269.4	9.2
20°-30°	409.1	14.0
30°-40°	495.7	17.0
40°-50°	522.3	17.9
50°-60°	487.6	16.7
60°-70°	389.7	13.3
70°-80°	214.4	7.3
80°-90°	37.9	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°	772.4	26.5
0°-40°	1268.0	43.4
0°-60°	2278.0	78.0
0°-90°	2920.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2920.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	992	992	992	992	992	
5°	991	988	983	990	988	94
15°	952	952	950	960	960	269
25°	878	880	885	898	900	404
35°	769	777	790	810	814	481
45°	637	649	676	706	716	490
55°	478	501	551	590	604	426
65°	305	343	413	447	454	300
75°	134	192	236	212	207	144
85°	28	35	22	14	11	34
90°	0	0	0	0	0	



TEST NUMBER: P307244

CATALOG NUMBER: 14FCZ2-44-UNV-L82765-HRP-CP250-W2A-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	991.6	991.6	991.6	991.6	991.6
2.5°	995.3	992.6	986.1	991.6	988.9
5°	990.7	988.0	983.4	989.8	988.0
7.5°	986.1	982.5	977.9	985.2	983.4
10°	977.0	974.2	971.4	977.9	977.0
12.5°	965.9	965.0	962.3	969.6	968.7
15°	952.2	952.2	950.3	959.5	959.5
17.5°	937.5	936.6	937.5	947.6	946.7
20°	920.0	920.0	920.9	932.9	932.9
22.5°	898.9	899.8	902.6	917.3	916.4
25°	877.8	879.6	885.1	898.0	899.8
27.5°	852.1	856.7	863.1	878.7	880.5
30°	828.2	831.0	841.1	855.8	859.4
32.5°	799.7	805.3	816.3	832.8	837.4
35°	769.4	776.8	789.6	809.8	814.4
37.5°	739.1	745.6	763.0	784.1	792.4
40°	705.2	716.2	734.6	758.4	767.6
42.5°	672.1	683.1	707.9	732.7	741.0
45°	637.2	649.2	675.8	706.1	716.2
47.5°	598.7	612.4	646.4	678.5	689.6
50°	559.2	576.6	614.3	650.1	662.9
52.5°	517.9	539.9	583.1	620.7	632.6
55°	477.5	501.3	550.9	589.5	604.2
57.5°	436.1	461.9	517.9	561.9	570.2
60°	391.1	422.4	483.9	522.5	533.5
62.5°	347.1	382.9	449.0	485.7	494.9
65°	304.8	343.4	413.2	447.2	453.6
67.5°	258.9	304.8	373.7	404.9	406.8
70°	214.9	268.1	335.1	349.8	337.9
72.5°	171.7	228.6	290.1	278.2	268.1
75°	134.1	191.9	236.0	212.1	206.6
77.5°	99.2	157.0	168.9	156.1	146.0
80°	70.7	124.0	113.9	97.3	92.7
82.5°	48.7	78.0	62.4	48.7	42.2
85°	27.5	34.9	22.0	13.8	11.0
87.5°	11.9	8.3	4.6	3.7	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)