

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: P307220

Luminaire Tested: **14FCZ2-44-UNV-L82765-HRP-CA125-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: P307220
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-CA125-W2A-U-5500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" ACRYLIC 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: 3267.0 lumens
Efficiency: N/A
Efficacy: 82.9 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

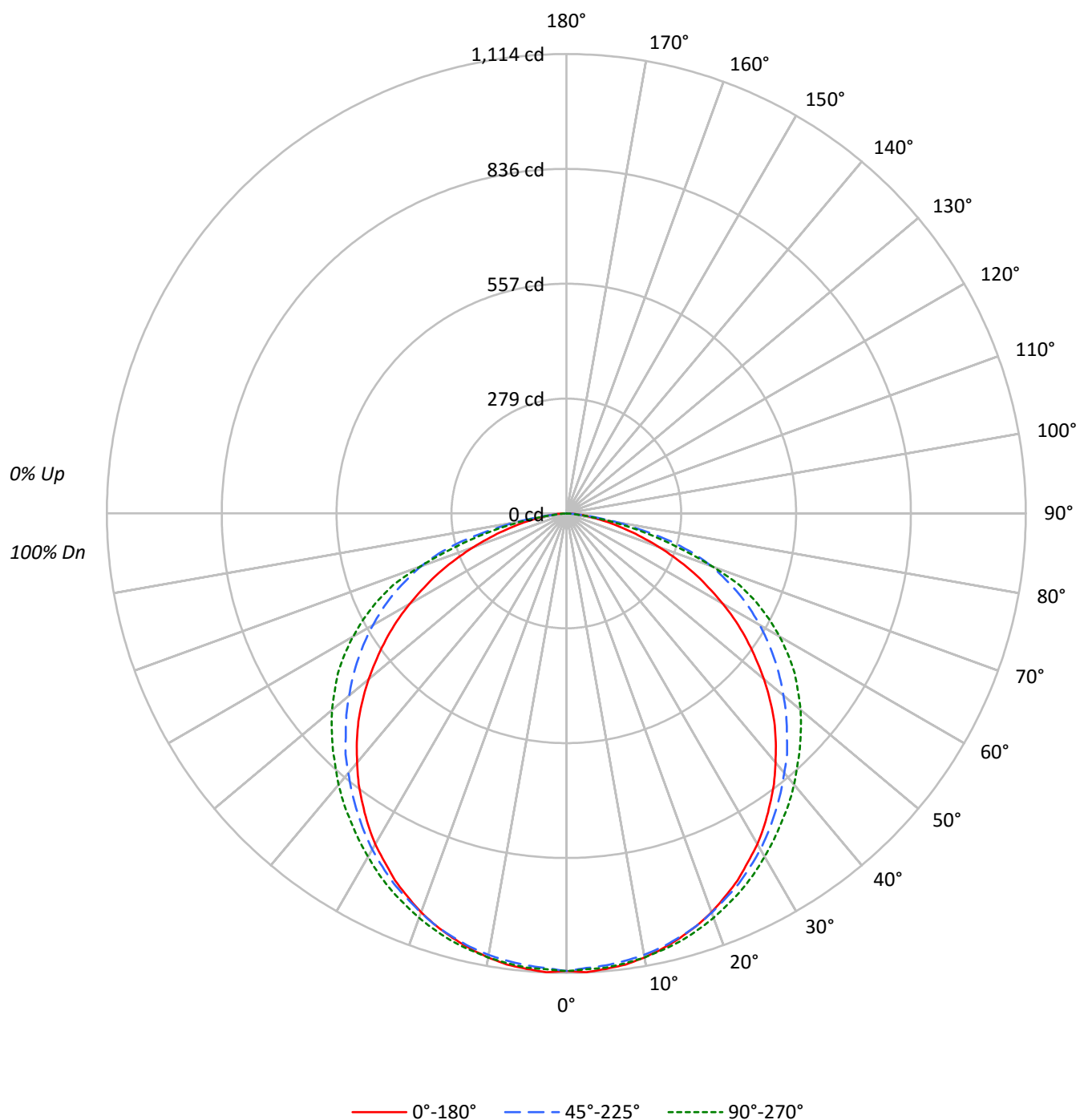
Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2986	2986	2986
5°	2994	2972	2986
10°	2987	2970	2987
15°	2968	2962	2991
20°	2948	2951	2989
25°	2916	2940	2989
30°	2879	2924	2988
35°	2828	2902	2993
40°	2772	2887	3017
45°	2713	2877	3049
50°	2619	2877	3105
55°	2506	2892	3172
60°	2355	2914	3212
65°	2172	2944	3231
70°	1891	2950	2974
75°	1560	2745	2403
80°	1226	1974	1609
85°	951	763	380



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.0	3.2
10°-20°	301.4	9.2
20°-30°	457.7	14.0
30°-40°	554.6	17.0
40°-50°	584.4	17.9
50°-60°	545.6	16.7
60°-70°	436.0	13.3
70°-80°	239.9	7.3
80°-90°	42.4	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°	864.2	26.5
0°-40°	1418.7	43.4
0°-60°	2548.7	78.0
0°-90°	3267.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3267.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1110	1110	1110	1110	1110	
5°	1108	1105	1100	1107	1105	105
15°	1065	1065	1063	1074	1074	301
25°	982	984	990	1005	1007	452
35°	861	869	884	906	911	539
45°	713	726	756	790	801	549
55°	534	561	616	660	676	477
65°	341	384	462	500	508	336
75°	150	215	264	237	231	161
85°	31	39	25	15	12	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1109.5	1109.5	1109.5	1109.5	1109.5
2.5°	1113.6	1110.5	1103.3	1109.5	1106.4
5°	1108.5	1105.4	1100.2	1107.4	1105.4
7.5°	1103.3	1099.2	1094.1	1102.3	1100.2
10°	1093.1	1090.0	1086.9	1094.1	1093.1
12.5°	1080.7	1079.7	1076.6	1084.8	1083.8
15°	1065.3	1065.3	1063.3	1073.5	1073.5
17.5°	1048.9	1047.9	1048.9	1060.2	1059.2
20°	1029.4	1029.4	1030.4	1043.7	1043.7
22.5°	1005.7	1006.8	1009.8	1026.3	1025.3
25°	982.1	984.2	990.3	1004.7	1006.8
27.5°	953.3	958.5	965.7	983.1	985.2
30°	926.6	929.7	941.0	957.4	961.6
32.5°	894.8	900.9	913.3	931.8	936.9
35°	860.9	869.1	883.5	906.1	911.2
37.5°	827.0	834.2	853.7	877.3	886.6
40°	789.0	801.3	821.8	848.6	858.8
42.5°	752.0	764.3	792.1	819.8	829.0
45°	712.9	726.3	756.1	790.0	801.3
47.5°	669.8	685.2	723.2	759.2	771.5
50°	625.6	645.1	687.3	727.3	741.7
52.5°	579.4	604.1	652.3	694.5	707.8
55°	534.2	560.9	616.4	659.5	676.0
57.5°	488.0	516.7	579.4	628.7	638.0
60°	437.6	472.6	541.4	584.5	596.9
62.5°	388.3	428.4	502.4	543.4	553.7
65°	341.1	384.2	462.3	500.3	507.5
67.5°	289.7	341.1	418.1	453.0	455.1
70°	240.4	300.0	375.0	391.4	378.0
72.5°	192.1	255.8	324.6	311.3	300.0
75°	150.0	214.7	264.0	237.3	231.1
77.5°	110.9	175.7	189.0	174.6	163.3
80°	79.1	138.7	127.4	108.9	103.8
82.5°	54.4	87.3	69.9	54.4	47.3
85°	30.8	39.0	24.7	15.4	12.3
87.5°	13.4	9.2	5.1	4.1	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)