

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: P307210

Luminaire Tested: **14FCZ2-44-UNV-L82765-HRP-CA08-W2A-U-5000K**

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: P307210
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-CA08-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 5000K 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: 3246.0 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

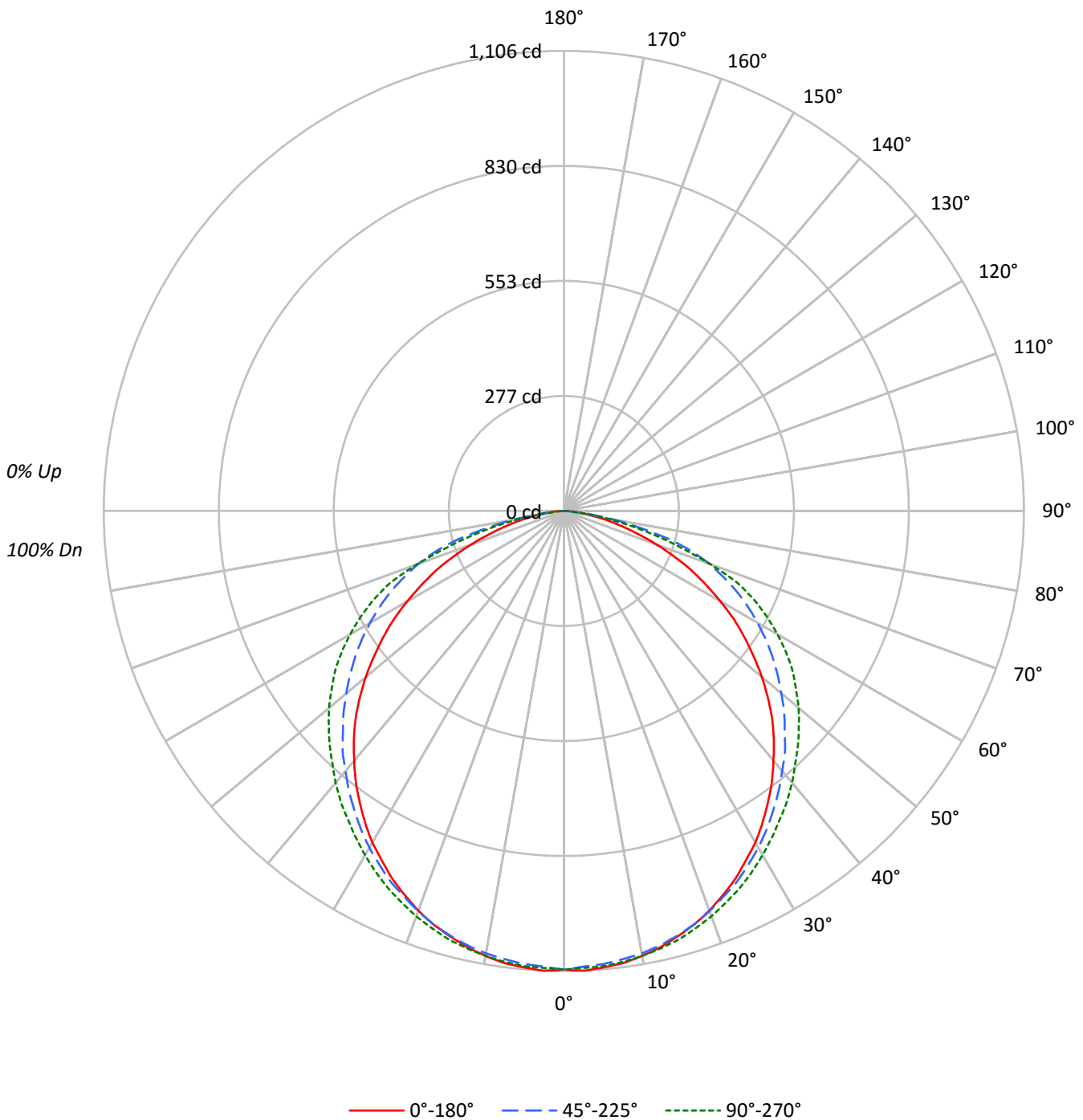
Input Watts (W): 39.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				10	0
RW	70	50	30	10	70	50	30	10	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	102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2967	2967	2967
5°	2975	2953	2967
10°	2967	2951	2967
15°	2949	2943	2971
20°	2929	2932	2970
25°	2897	2922	2970
30°	2861	2905	2969
35°	2810	2884	2974
40°	2754	2869	2997
45°	2696	2859	3030
50°	2602	2858	3085
55°	2490	2873	3151
60°	2340	2895	3192
65°	2158	2925	3210
70°	1879	2932	2955
75°	1549	2727	2388
80°	1218	1962	1598
85°	945	756	377



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.4	3.2
10°-20°	299.5	9.2
20°-30°	454.8	14.0
30°-40°	551.0	17.0
40°-50°	580.6	17.9
50°-60°	542.1	16.7
60°-70°	433.2	13.3
70°-80°	238.4	7.3
80°-90°	42.1	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°	858.6	26.5
0°-40°	1409.6	43.4
0°-60°	2532.3	78.0
0°-90°	3246.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3246.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1102	1102	1102	1102	1102	
5°	1101	1098	1093	1100	1098	105
15°	1058	1058	1056	1067	1067	299
25°	976	978	984	998	1000	449
35°	855	864	878	900	905	535
45°	708	722	751	785	796	545
55°	531	557	612	655	672	474
65°	339	382	459	497	504	334
75°	149	213	262	236	230	160
85°	31	39	24	15	12	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1102.4	1102.4	1102.4	1102.4	1102.4
2.5°	1106.4	1103.4	1096.2	1102.4	1099.3
5°	1101.3	1098.3	1093.2	1100.3	1098.3
7.5°	1096.2	1092.2	1087.0	1095.2	1093.2
10°	1086.0	1083.0	1079.9	1087.0	1086.0
12.5°	1073.8	1072.8	1069.7	1077.9	1076.8
15°	1058.5	1058.5	1056.4	1066.6	1066.6
17.5°	1042.1	1041.1	1042.1	1053.4	1052.3
20°	1022.7	1022.7	1023.8	1037.0	1037.0
22.5°	999.3	1000.3	1003.4	1019.7	1018.7
25°	975.8	977.8	984.0	998.2	1000.3
27.5°	947.2	952.3	959.5	976.8	978.9
30°	920.7	923.7	935.0	951.3	955.4
32.5°	889.0	895.2	907.4	925.8	930.9
35°	855.3	863.5	877.8	900.3	905.4
37.5°	821.7	828.8	848.2	871.7	880.9
40°	783.9	796.1	816.6	843.1	853.3
42.5°	747.2	759.4	787.0	814.5	823.7
45°	708.4	721.6	751.2	784.9	796.1
47.5°	665.5	680.8	718.6	754.3	766.5
50°	621.6	641.0	682.8	722.7	736.9
52.5°	575.7	600.2	648.1	690.0	703.3
55°	530.8	557.3	612.4	655.3	671.6
57.5°	484.8	513.4	575.7	624.7	633.9
60°	434.8	469.5	537.9	580.8	593.0
62.5°	385.8	425.6	499.1	540.0	550.2
65°	338.9	381.7	459.3	497.1	504.2
67.5°	287.8	338.9	415.4	450.1	452.2
70°	238.8	298.0	372.6	388.9	375.6
72.5°	190.9	254.2	322.5	309.3	298.0
75°	149.0	213.3	262.3	235.8	229.7
77.5°	110.2	174.5	187.8	173.5	162.3
80°	78.6	137.8	126.6	108.2	103.1
82.5°	54.1	86.8	69.4	54.1	47.0
85°	30.6	38.8	24.5	15.3	12.2
87.5°	13.3	9.2	5.1	4.1	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)