

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: P307248

Luminaire Tested: **14FCZ2-44-UNV-L82765-HRP-CP250-W2A-U-5700K**

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: P307248
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-5700K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.250"
POLYCARB SHEET
Light Source: (168) 5700K 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: 3051.0 lumens
Efficiency: N/A
Efficacy: 77.4 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

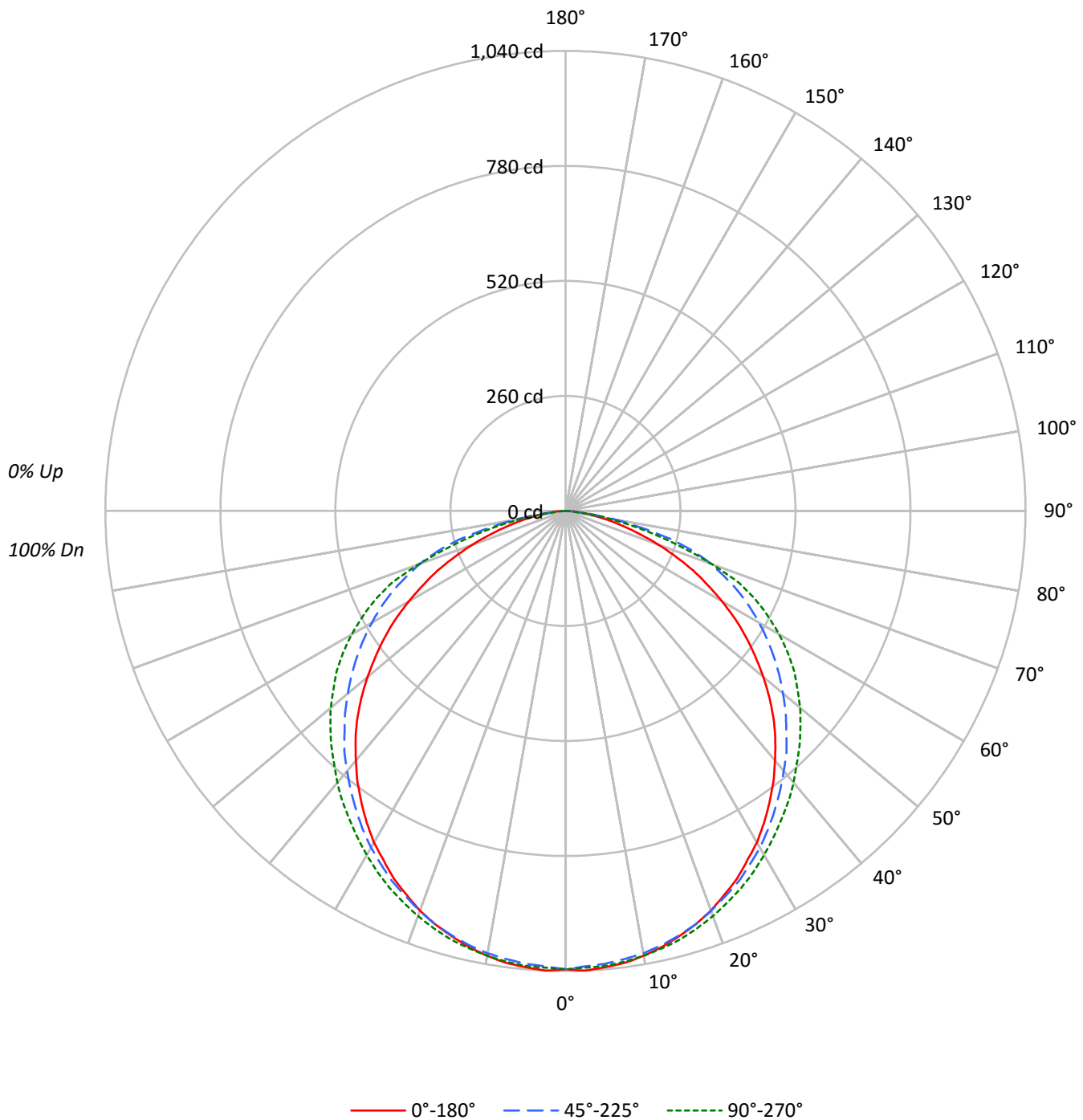
Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2788	2788	2788
5°	2796	2776	2789
10°	2789	2773	2789
15°	2772	2766	2793
20°	2753	2756	2791
25°	2723	2746	2792
30°	2689	2731	2790
35°	2641	2711	2796
40°	2588	2696	2817
45°	2534	2687	2848
50°	2446	2687	2900
55°	2341	2700	2962
60°	2200	2721	3000
65°	2028	2749	3018
70°	1766	2755	2778
75°	1457	2564	2245
80°	1145	1844	1502
85°	889	710	355



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.1	3.2
10°-20°	281.5	9.2
20°-30°	427.4	14.0
30°-40°	517.9	17.0
40°-50°	545.8	17.9
50°-60°	509.5	16.7
60°-70°	407.2	13.3
70°-80°	224.1	7.3
80°-90°	39.5	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°	807.0	26.5
0°-40°	1324.9	43.4
0°-60°	2380.2	78.0
0°-90°	3051.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3051.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1036	1036	1036	1036	1036	
5°	1035	1032	1028	1034	1032	98
15°	995	995	993	1003	1003	281
25°	917	919	925	938	940	422
35°	804	812	825	846	851	503
45°	666	678	706	738	748	512
55°	499	524	576	616	631	445
65°	318	359	432	467	474	314
75°	140	200	247	222	216	151
85°	29	36	23	14	12	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1036.1	1036.1	1036.1	1036.1	1036.1
2.5°	1040.0	1037.1	1030.4	1036.1	1033.3
5°	1035.2	1032.3	1027.5	1034.2	1032.3
7.5°	1030.4	1026.5	1021.7	1029.4	1027.5
10°	1020.8	1017.9	1015.0	1021.7	1020.8
12.5°	1009.3	1008.3	1005.4	1013.1	1012.2
15°	994.9	994.9	993.0	1002.6	1002.6
17.5°	979.5	978.6	979.5	990.1	989.1
20°	961.3	961.3	962.3	974.7	974.7
22.5°	939.2	940.2	943.1	958.4	957.5
25°	917.2	919.1	924.8	938.3	940.2
27.5°	890.3	895.1	901.8	918.1	920.0
30°	865.4	868.2	878.8	894.1	898.0
32.5°	835.6	841.4	852.9	870.2	875.0
35°	804.0	811.6	825.1	846.2	851.0
37.5°	772.3	779.0	797.2	819.3	827.9
40°	736.8	748.3	767.5	792.5	802.0
42.5°	702.3	713.8	739.7	765.6	774.2
45°	665.8	678.3	706.1	737.8	748.3
47.5°	625.5	639.9	675.4	709.0	720.5
50°	584.3	602.5	641.8	679.2	692.7
52.5°	541.1	564.1	609.2	648.5	661.0
55°	498.9	523.8	575.6	615.9	631.3
57.5°	455.7	482.6	541.1	587.1	595.8
60°	408.7	441.3	505.6	545.9	557.4
62.5°	362.6	400.1	469.1	507.5	517.1
65°	318.5	358.8	431.7	467.2	473.9
67.5°	270.5	318.5	390.5	423.1	425.0
70°	224.5	280.1	350.2	365.5	353.1
72.5°	179.4	238.9	303.2	290.7	280.1
75°	140.1	200.5	246.6	221.6	215.9
77.5°	103.6	164.1	176.5	163.1	152.5
80°	73.9	129.5	119.0	101.7	96.9
82.5°	50.8	81.5	65.2	50.8	44.1
85°	28.8	36.5	23.0	14.4	11.5
87.5°	12.5	8.6	4.8	3.8	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)