

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: P312579

Luminaire Tested: **22FCZ2-44HE-UNV-L83050-HRP-CP125-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: P312579  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-22)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 22FCZ2-44HE-UNV-L83050-HRP-CP125-W2A-U-5000K  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" POLYCARB 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: 3318.0 lumens  
Efficiency: N/A  
Efficacy: 85.1 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

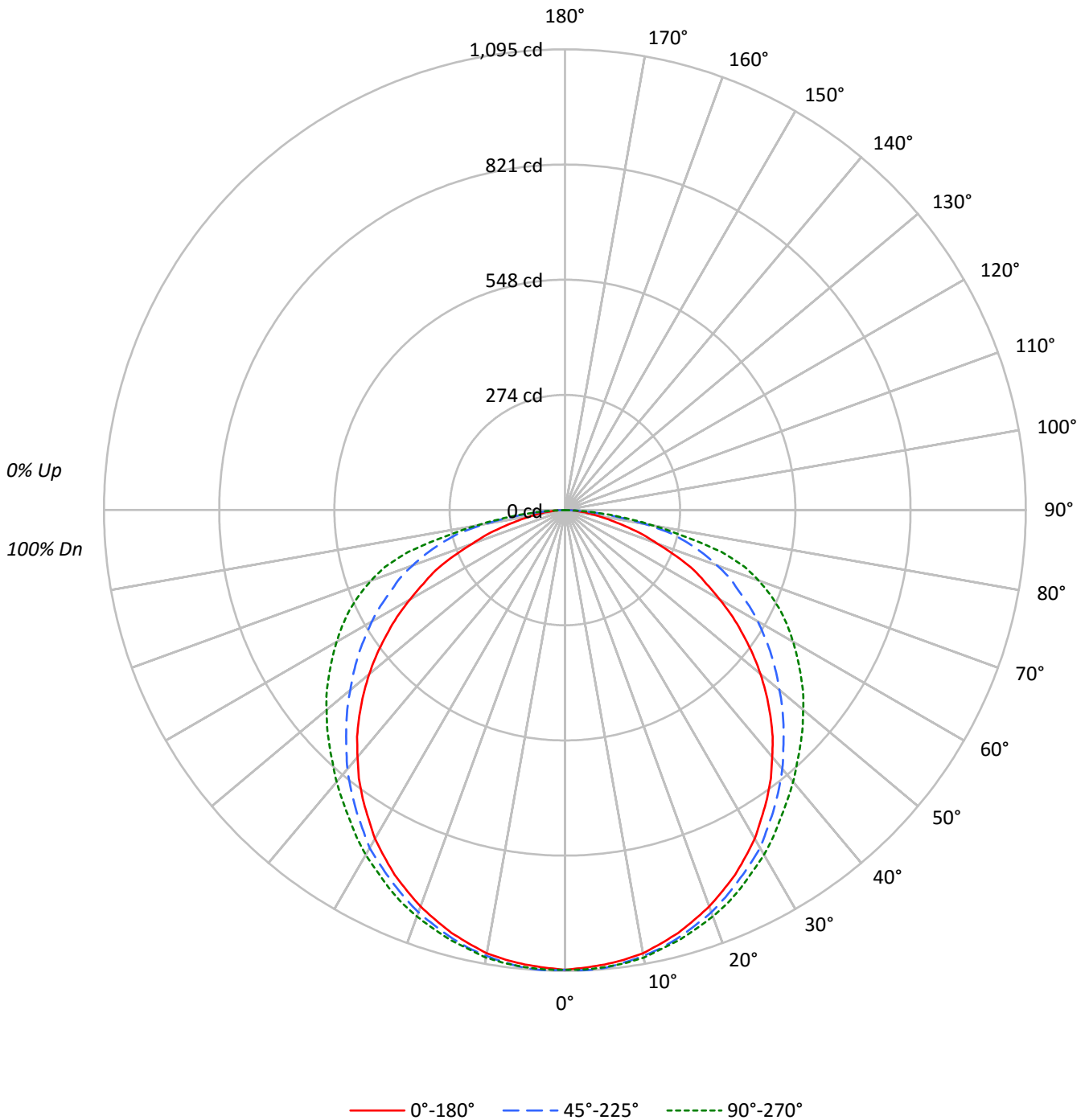
Input Watts (W): 39  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	84	78	73	80	75	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2940	2940	2940
5°	2929	2951	2946
10°	2923	2940	2951
15°	2898	2927	2945
20°	2871	2913	2943
25°	2840	2890	2939
30°	2803	2881	2940
35°	2750	2847	2936
40°	2691	2823	2963
45°	2629	2796	3011
50°	2541	2786	3093
55°	2426	2808	3211
60°	2287	2850	3368
65°	2159	2905	3598
70°	1844	3030	3854
75°	1545	3156	4004
80°	1265	3048	3341
85°	1099	2263	2455



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.6	3.1
10°-20°	296.2	8.9
20°-30°	448.9	13.5
30°-40°	542.0	16.3
40°-50°	569.6	17.2
50°-60°	535.9	16.2
60°-70°	446.8	13.5
70°-80°	296.1	8.9
80°-90°	78.9	2.4
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°	848.7	25.6
0°-40°	1390.7	41.9
0°-60°	2496.2	75.2
0°-90°	3318.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3318.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1093	1093	1093	1093	1093	
5°	1084	1086	1093	1093	1090	103
15°	1040	1044	1051	1055	1057	293
25°	956	963	973	986	990	440
35°	837	846	866	885	894	523
45°	691	701	735	772	791	532
55°	517	540	599	659	684	462
65°	339	368	456	532	565	330
75°	149	207	304	366	385	161
85°	36	54	73	80	80	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1092.6	1092.6	1092.6	1092.6	1092.6
2.5°	1088.4	1090.5	1094.7	1094.7	1092.6
5°	1084.2	1086.3	1092.6	1092.6	1090.5
7.5°	1077.9	1080.0	1084.2	1088.4	1086.3
10°	1069.6	1071.6	1075.8	1080.0	1080.0
12.5°	1054.9	1057.0	1065.4	1067.5	1067.5
15°	1040.3	1044.4	1050.7	1054.9	1057.0
17.5°	1021.4	1025.6	1034.0	1042.3	1042.3
20°	1002.6	1006.8	1017.2	1025.6	1027.7
22.5°	979.6	985.8	996.3	1006.8	1011.0
25°	956.5	962.8	973.3	985.8	990.0
27.5°	929.3	935.6	950.3	964.9	967.0
30°	902.1	908.4	927.2	939.8	946.1
32.5°	868.6	877.0	895.8	914.7	920.9
35°	837.2	845.6	866.5	885.4	893.7
37.5°	803.7	812.1	835.1	858.2	868.6
40°	766.1	776.5	803.7	828.9	843.5
42.5°	730.5	740.9	768.2	801.6	816.3
45°	690.7	701.2	734.7	772.3	791.2
47.5°	648.9	661.4	701.2	747.2	766.1
50°	607.0	621.6	665.6	717.9	738.9
52.5°	563.0	581.9	632.1	688.6	713.7
55°	517.0	540.0	598.6	659.3	684.4
57.5°	473.0	494.0	563.0	627.9	655.1
60°	424.9	452.1	529.5	596.5	625.8
62.5°	378.8	408.1	494.0	565.1	596.5
65°	339.1	368.4	456.3	531.6	565.1
67.5°	286.7	326.5	424.9	496.1	529.5
70°	234.4	288.8	385.1	458.4	489.8
72.5°	194.7	247.0	345.4	418.6	447.9
75°	148.6	207.2	303.5	366.3	385.1
77.5°	110.9	171.6	259.5	290.9	293.0
80°	81.6	131.9	196.7	207.2	215.6
82.5°	56.5	92.1	127.7	140.2	144.4
85°	35.6	54.4	73.3	79.5	79.5
87.5°	18.8	20.9	25.1	25.1	25.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)