

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: P312436

Luminaire Tested: **14FCZ2-44-UNV-L83050-S-CP250-W2A-U-3500K**

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: P312436  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)  
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-L83050-S-CP250-W2A-U-3500K  
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.250" POLYCARB SHEET  
Light Source: (168) 3500K 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**

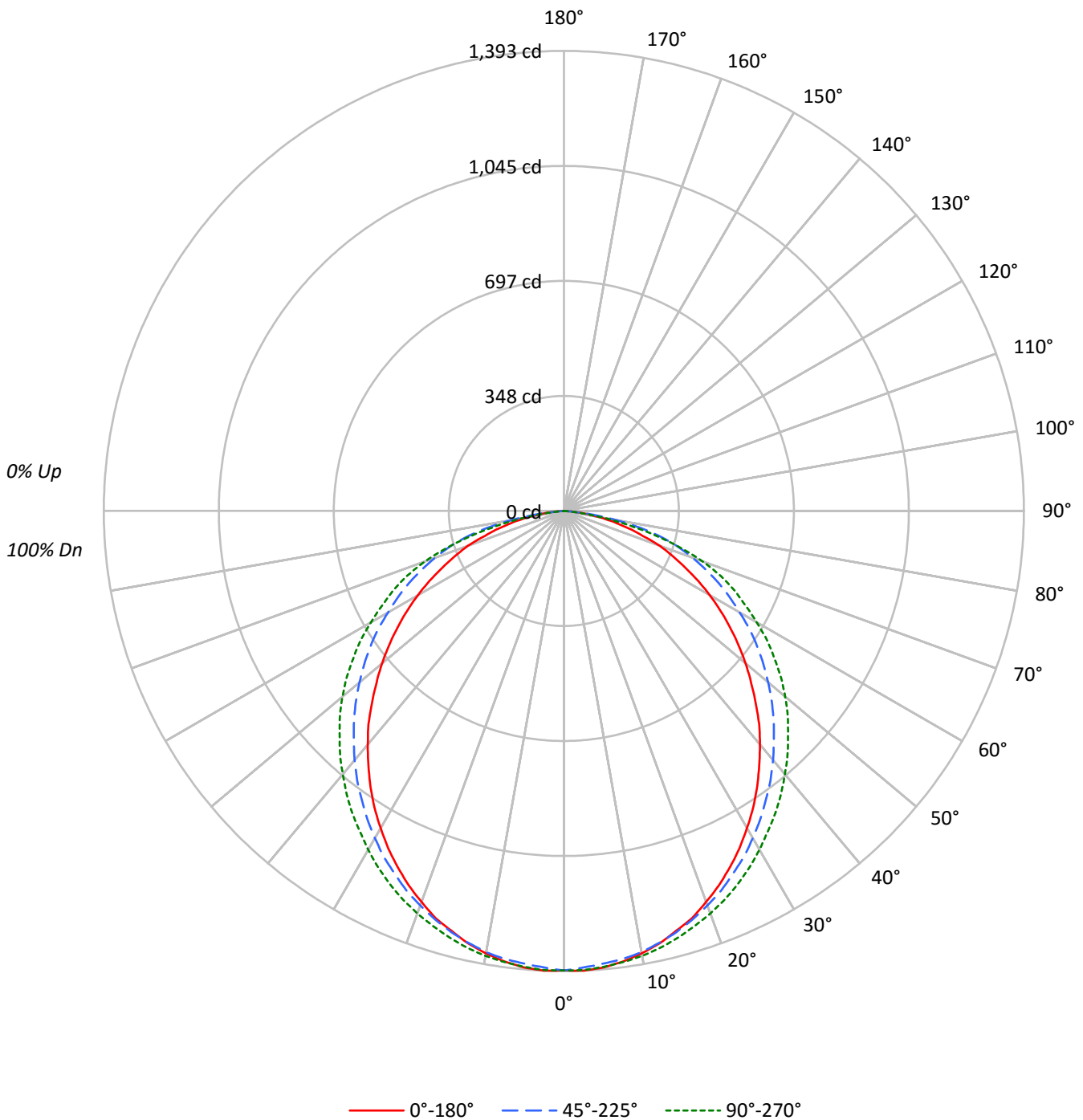
Lumens per Lamp: N/A  
Luminaire Lumens: 3897.0 lumens  
Efficiency: N/A  
Efficacy: 101.8 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 38.3  
Input Voltage (V): NR  
Input Current (A<sub>in</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	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	3744	3744	3744
5°	3747	3716	3742
10°	3717	3706	3738
15°	3666	3677	3725
20°	3608	3641	3713
25°	3534	3597	3700
30°	3446	3554	3680
35°	3351	3504	3669
40°	3244	3462	3658
45°	3125	3419	3655
50°	3009	3381	3664
55°	2883	3354	3653
60°	2745	3307	3629
65°	2584	3297	3629
70°	2432	3268	3527
75°	2110	3194	3013
80°	1706	2576	2007
85°	1133	895	596



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	131.4	3.4
10°-20°	373.8	9.6
20°-30°	560.7	14.4
30°-40°	668.9	17.2
40°-50°	691.5	17.7
50°-60°	631.3	16.2
60°-70°	496.8	12.7
70°-80°	289.2	7.4
80°-90°	53.3	1.4
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°	1065.9	27.4
0°-40°	1734.8	44.5
0°-60°	3057.7	78.5
0°-90°	3897.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3897.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1391	1391	1391	1391	1391	
5°	1387	1383	1376	1387	1385	132
15°	1316	1318	1320	1337	1337	371
25°	1190	1196	1212	1240	1246	548
35°	1020	1034	1067	1107	1117	638
45°	821	848	898	949	960	634
55°	614	647	715	767	779	549
65°	406	448	518	558	570	403
75°	203	251	307	301	290	216
85°	37	52	29	23	19	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1391.2	1391.2	1391.2	1391.2	1391.2
2.5°	1393.1	1389.2	1383.4	1393.1	1391.2
5°	1387.3	1383.4	1375.7	1387.3	1385.4
7.5°	1375.7	1371.8	1368.0	1379.6	1377.6
10°	1360.2	1358.3	1356.4	1369.9	1368.0
12.5°	1340.9	1340.9	1339.0	1354.5	1354.5
15°	1315.8	1317.7	1319.7	1337.1	1337.1
17.5°	1292.6	1290.7	1296.5	1315.8	1317.7
20°	1259.8	1263.6	1271.4	1294.6	1296.5
22.5°	1226.9	1230.8	1244.3	1267.5	1273.3
25°	1190.2	1196.0	1211.5	1240.5	1246.3
27.5°	1151.6	1159.3	1180.6	1211.5	1217.3
30°	1109.1	1120.7	1143.8	1178.6	1184.4
32.5°	1066.6	1078.2	1107.1	1141.9	1149.6
35°	1020.2	1033.7	1066.6	1107.1	1116.8
37.5°	971.9	989.3	1027.9	1068.5	1080.1
40°	923.6	942.9	985.4	1027.9	1041.4
42.5°	875.3	894.6	941.0	989.3	1002.8
45°	821.2	848.2	898.5	948.7	960.3
47.5°	769.0	798.0	854.0	904.3	919.7
50°	718.8	747.8	807.6	859.8	875.3
52.5°	666.6	697.5	761.3	815.4	828.9
55°	614.4	647.3	714.9	767.1	778.7
57.5°	562.3	597.0	666.6	716.8	730.4
60°	510.1	546.8	614.4	664.7	674.3
62.5°	457.9	496.6	566.1	610.6	620.2
65°	405.8	448.3	517.8	558.4	570.0
67.5°	355.5	398.0	465.7	504.3	514.0
70°	309.1	347.8	415.4	444.4	448.3
72.5°	251.2	299.5	365.2	380.6	371.0
75°	202.9	251.2	307.2	301.4	289.8
77.5°	154.6	202.9	239.6	220.3	204.8
80°	110.1	158.4	166.2	137.2	129.5
82.5°	71.5	110.1	92.7	71.5	58.0
85°	36.7	52.2	29.0	23.2	19.3
87.5°	11.6	7.7	3.9	3.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)