

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: P312246

Luminaire Tested: **14FCZ2-39-UNV-L83050-CA125-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: P312246  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 14FCZ2-39-UNV-L83050-CA125-W2A-U-3500K  
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" ACRYLIC 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**

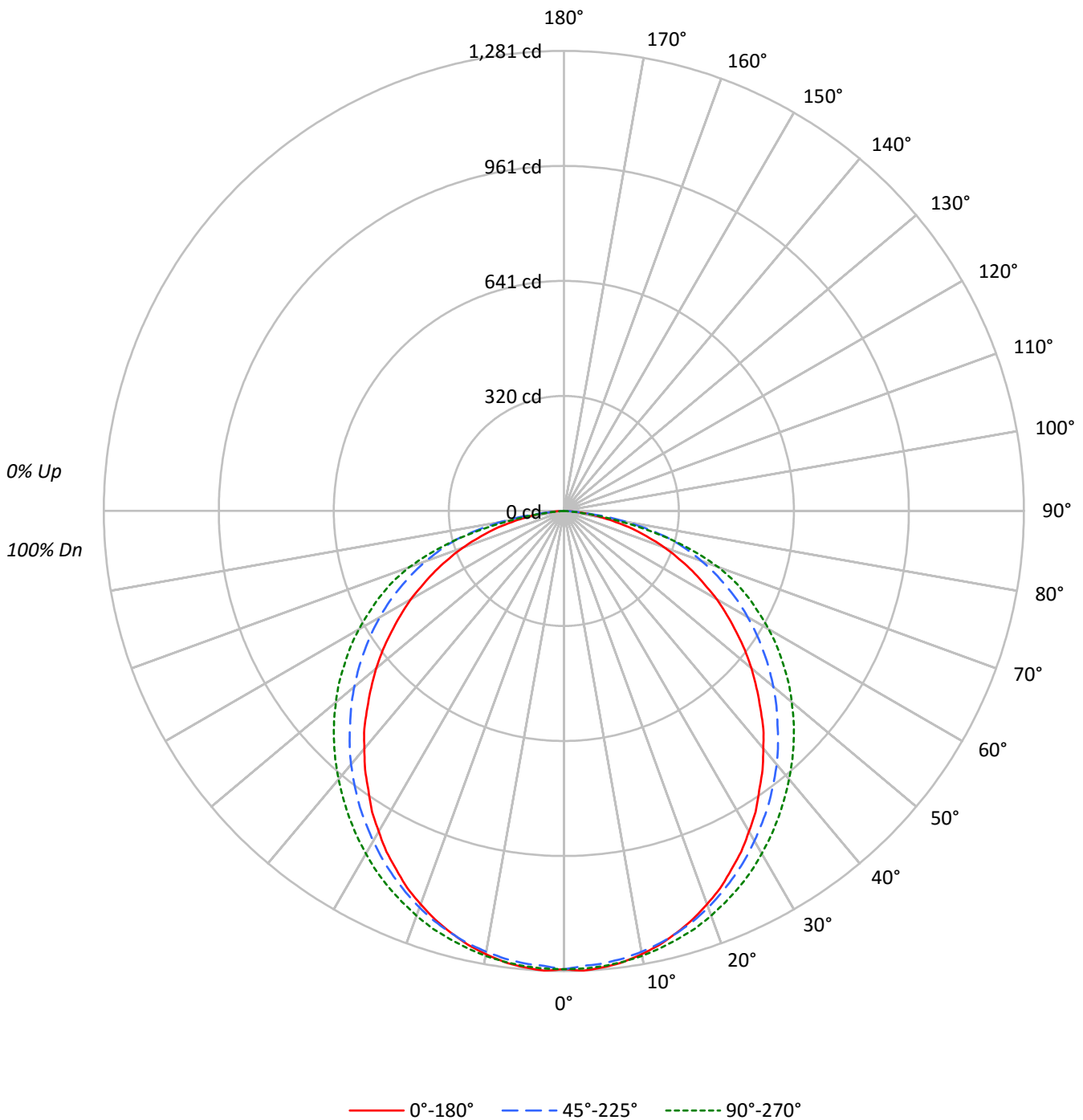
Lumens per Lamp: N/A  
Luminaire Lumens: 3704.0 lumens  
Efficiency: N/A  
Efficacy: 111.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (A<sub>in</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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	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	39	31	26	37	30	26	37	30	25	36	30	25	24

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

	0°	45°	90°
0°	3434	3434	3434
5°	3445	3416	3436
10°	3424	3406	3437
15°	3387	3389	3435
20°	3337	3366	3434
25°	3274	3333	3431
30°	3203	3298	3424
35°	3118	3269	3421
40°	3035	3238	3426
45°	2942	3203	3445
50°	2856	3188	3468
55°	2747	3178	3499
60°	2649	3183	3547
65°	2514	3192	3603
70°	2359	3216	3600
75°	2139	3246	3254
80°	1754	2803	2317
85°	1300	1325	534



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.7	3.3
10°-20°	344.9	9.3
20°-30°	519.6	14.0
30°-40°	623.5	16.8
40°-50°	649.9	17.5
50°-60°	601.6	16.2
60°-70°	486.1	13.1
70°-80°	296.4	8.0
80°-90°	61.2	1.7
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°	985.3	26.6
0°-40°	1608.8	43.4
0°-60°	2860.3	77.2
0°-90°	3704.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3704.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1276	1276	1276	1276	1276	
5°	1275	1272	1264	1274	1272	121
15°	1216	1217	1217	1233	1233	343
25°	1103	1109	1122	1150	1156	508
35°	949	964	995	1032	1042	594
45°	773	796	842	889	905	598
55°	586	616	677	730	746	525
65°	395	434	501	552	566	390
75°	206	251	312	317	313	216
85°	42	63	43	24	17	52
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1276.0	1276.0	1276.0	1276.0	1276.0
2.5°	1281.0	1276.9	1267.8	1276.9	1275.2
5°	1275.2	1271.9	1264.5	1273.6	1271.9
7.5°	1267.0	1263.7	1257.0	1267.8	1266.1
10°	1252.9	1251.3	1246.3	1258.7	1257.9
12.5°	1236.4	1235.6	1233.1	1247.1	1246.3
15°	1215.7	1216.6	1216.6	1233.1	1233.1
17.5°	1192.6	1194.3	1197.6	1215.7	1218.2
20°	1165.4	1168.7	1175.3	1195.9	1199.2
22.5°	1137.3	1139.8	1149.7	1174.5	1177.8
25°	1102.6	1109.2	1122.4	1150.5	1155.5
27.5°	1069.6	1075.3	1093.5	1122.4	1130.7
30°	1030.7	1039.8	1061.3	1092.7	1101.8
32.5°	993.6	1003.5	1028.3	1064.6	1072.9
35°	949.0	963.8	995.2	1031.6	1041.5
37.5°	908.5	922.5	958.1	997.7	1009.3
40°	863.9	881.3	921.7	963.8	975.4
42.5°	822.6	839.1	882.9	925.9	941.5
45°	773.1	796.2	841.6	888.7	905.2
47.5°	727.6	750.8	802.8	853.2	868.0
50°	682.2	707.0	761.5	813.5	828.4
52.5°	635.1	661.6	720.2	772.2	789.6
55°	585.6	616.1	677.3	730.1	745.8
57.5°	538.5	569.9	635.1	688.8	704.5
60°	492.2	524.5	591.4	642.6	659.1
62.5°	441.0	479.0	548.4	598.8	611.2
65°	394.8	433.6	501.3	551.7	565.8
67.5°	346.1	388.2	455.9	502.2	515.4
70°	299.8	343.6	408.8	451.8	457.6
72.5°	250.3	294.9	360.9	388.2	388.2
75°	205.7	251.1	312.2	317.2	313.0
77.5°	156.9	207.3	246.9	237.0	227.1
80°	113.2	162.7	180.9	162.7	149.5
82.5°	76.0	118.1	109.0	86.7	76.8
85°	42.1	62.8	42.9	24.0	17.3
87.5°	15.7	14.0	4.1	4.1	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)