

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: P307705

Luminaire Tested: **14FCZ2-39-UNV-L82765-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: P307705  
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-L82765-CA08-W2A-U-5000K  
Description: 1'X4' TROFFER LED MODULE,RIBBED 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**

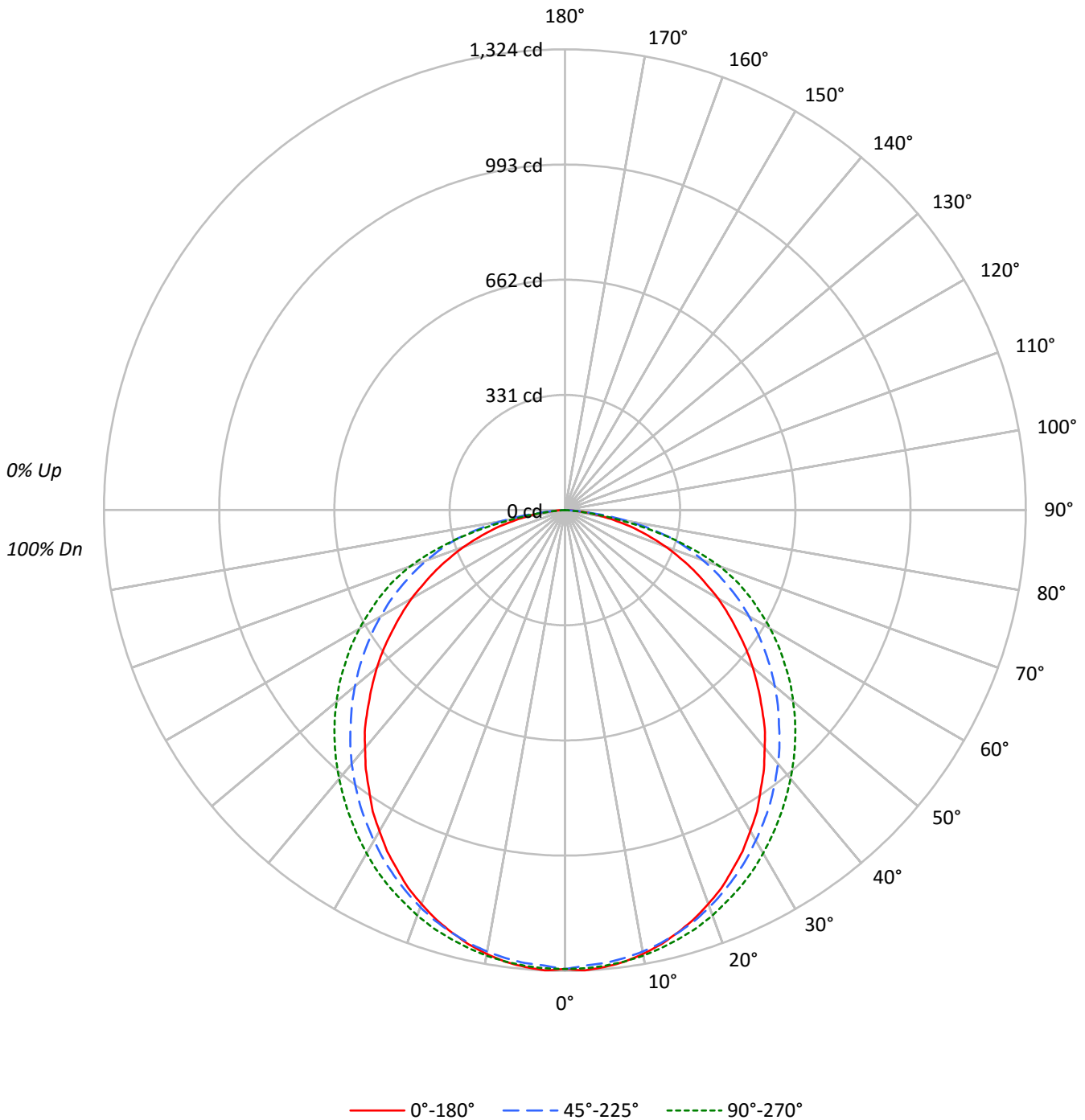
Lumens per Lamp: N/A  
Luminaire Lumens: 3828.0 lumens  
Efficiency: N/A  
Efficacy: 112.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 34.1  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	3549	3549	3549
5°	3560	3530	3551
10°	3538	3519	3552
15°	3500	3503	3550
20°	3449	3478	3549
25°	3383	3444	3545
30°	3310	3408	3538
35°	3222	3379	3536
40°	3136	3346	3541
45°	3040	3310	3560
50°	2951	3295	3584
55°	2839	3284	3616
60°	2738	3289	3666
65°	2598	3299	3723
70°	2437	3324	3721
75°	2209	3354	3363
80°	1812	2896	2394
85°	1343	1371	553



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.8	3.3
10°-20°	356.5	9.3
20°-30°	537.0	14.0
30°-40°	644.4	16.8
40°-50°	671.6	17.5
50°-60°	621.8	16.2
60°-70°	502.4	13.1
70°-80°	306.3	8.0
80°-90°	63.3	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°	1018.3	26.6
0°-40°	1662.6	43.4
0°-60°	2956.1	77.2
0°-90°	3828.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3828.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1319	1319	1319	1319	1319	
5°	1318	1314	1307	1316	1314	125
15°	1256	1257	1257	1274	1274	354
25°	1140	1146	1160	1189	1194	525
35°	981	996	1028	1066	1076	614
45°	799	823	870	918	936	618
55°	605	637	700	755	771	542
65°	408	448	518	570	585	403
75°	212	260	323	328	324	223
85°	44	65	44	25	18	53
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1318.8	1318.8	1318.8	1318.8	1318.8
2.5°	1323.9	1319.6	1310.2	1319.6	1317.9
5°	1317.9	1314.5	1306.8	1316.2	1314.5
7.5°	1309.4	1306.0	1299.1	1310.2	1308.5
10°	1294.9	1293.2	1288.0	1300.8	1300.0
12.5°	1277.8	1276.9	1274.4	1288.9	1288.0
15°	1256.4	1257.3	1257.3	1274.4	1274.4
17.5°	1232.5	1234.3	1237.7	1256.4	1259.0
20°	1204.4	1207.8	1214.6	1236.0	1239.4
22.5°	1175.4	1177.9	1188.2	1213.8	1217.2
25°	1139.5	1146.3	1160.0	1189.0	1194.1
27.5°	1105.4	1111.3	1130.1	1160.0	1168.5
30°	1065.2	1074.6	1096.8	1129.3	1138.7
32.5°	1026.8	1037.1	1062.7	1100.2	1108.8
35°	980.7	996.1	1028.5	1066.1	1076.3
37.5°	938.9	953.4	990.1	1031.1	1043.1
40°	892.8	910.8	952.6	996.1	1008.1
42.5°	850.2	867.2	912.5	956.8	973.1
45°	798.9	822.8	869.8	918.4	935.5
47.5°	752.0	775.9	829.7	881.7	897.1
50°	705.0	730.7	787.0	840.8	856.1
52.5°	656.4	683.7	744.3	798.1	816.0
55°	605.2	636.8	699.9	754.6	770.8
57.5°	556.5	589.0	656.4	711.9	728.1
60°	508.7	542.0	611.2	664.1	681.1
62.5°	455.8	495.1	566.8	618.8	631.6
65°	408.0	448.1	518.1	570.2	584.7
67.5°	357.6	401.2	471.2	519.0	532.6
70°	309.8	355.1	422.5	466.9	472.9
72.5°	258.6	304.7	373.0	401.2	401.2
75°	212.5	259.5	322.6	327.8	323.5
77.5°	162.2	214.2	255.2	245.0	234.7
80°	116.9	168.2	186.9	168.2	154.5
82.5°	78.5	122.1	112.7	89.6	79.4
85°	43.5	64.9	44.4	24.8	17.9
87.5°	16.2	14.5	4.3	4.3	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)