

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: P307733

Luminaire Tested: **14FCZ2-39-UNV-L82765-CP187-W2A-U-5500K**

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: P307733  
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-CP187-W2A-U-5500K  
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.187" POLYCARB SHEET  
Light Source: (168) 5500K 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**

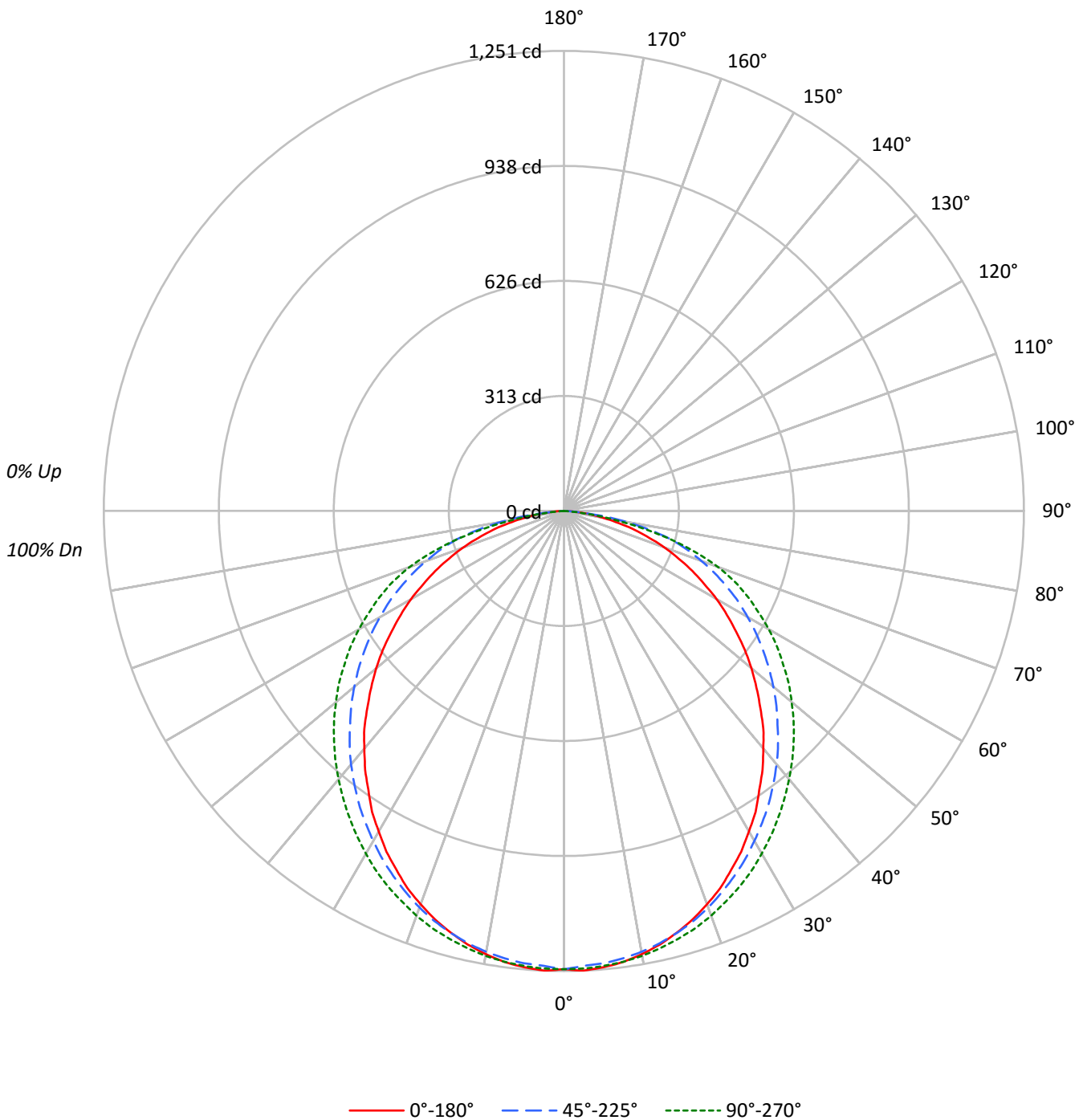
Lumens per Lamp: N/A  
Luminaire Lumens: 3617.0 lumens  
Efficiency: N/A  
Efficacy: 105.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 34.2  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	3353	3353	3353
5°	3364	3336	3355
10°	3343	3325	3356
15°	3307	3310	3355
20°	3259	3287	3354
25°	3197	3255	3350
30°	3127	3220	3343
35°	3044	3193	3341
40°	2963	3162	3346
45°	2873	3127	3364
50°	2789	3113	3386
55°	2683	3103	3417
60°	2587	3108	3464
65°	2455	3117	3518
70°	2304	3141	3515
75°	2088	3170	3178
80°	1712	2737	2263
85°	1269	1294	522



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.9	3.3
10°-20°	336.8	9.3
20°-30°	507.4	14.0
30°-40°	608.9	16.8
40°-50°	634.6	17.5
50°-60°	587.5	16.2
60°-70°	474.7	13.1
70°-80°	289.4	8.0
80°-90°	59.7	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°	962.1	26.6
0°-40°	1571.0	43.4
0°-60°	2793.1	77.2
0°-90°	3617.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3617.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1246	1246	1246	1246	1246	
5°	1245	1242	1235	1244	1242	118
15°	1187	1188	1188	1204	1204	335
25°	1077	1083	1096	1124	1128	496
35°	927	941	972	1007	1017	581
45°	755	778	822	868	884	583
55°	572	602	661	713	728	512
65°	386	423	490	539	552	381
75°	201	245	305	310	306	211
85°	41	61	42	23	17	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1246.1	1246.1	1246.1	1246.1	1246.1
2.5°	1250.9	1246.9	1238.0	1246.9	1245.3
5°	1245.3	1242.0	1234.8	1243.6	1242.0
7.5°	1237.2	1234.0	1227.5	1238.0	1236.4
10°	1223.5	1221.9	1217.0	1229.1	1228.3
12.5°	1207.4	1206.5	1204.1	1217.8	1217.0
15°	1187.2	1188.0	1188.0	1204.1	1204.1
17.5°	1164.6	1166.2	1169.4	1187.2	1189.6
20°	1138.0	1141.2	1147.7	1167.8	1171.1
22.5°	1110.6	1113.0	1122.7	1146.9	1150.1
25°	1076.7	1083.2	1096.1	1123.5	1128.3
27.5°	1044.4	1050.1	1067.8	1096.1	1104.1
30°	1006.5	1015.4	1036.4	1067.0	1075.9
32.5°	970.2	979.9	1004.1	1039.6	1047.7
35°	926.7	941.2	971.9	1007.3	1017.0
37.5°	887.2	900.9	935.6	974.3	985.6
40°	843.6	860.6	900.1	941.2	952.5
42.5°	803.3	819.4	862.2	904.1	919.4
45°	754.9	777.5	821.8	867.8	883.9
47.5°	710.5	733.1	783.9	833.1	847.6
50°	666.2	690.4	743.6	794.4	808.9
52.5°	620.2	646.0	703.3	754.1	771.0
55°	571.8	601.7	661.3	713.0	728.3
57.5°	525.8	556.5	620.2	672.6	688.0
60°	480.7	512.1	577.5	627.5	643.6
62.5°	430.7	467.8	535.5	584.7	596.8
65°	385.5	423.4	489.6	538.8	552.5
67.5°	337.9	379.1	445.2	490.4	503.3
70°	292.8	335.5	399.2	441.2	446.8
72.5°	244.4	287.9	352.4	379.1	379.1
75°	200.8	245.2	304.9	309.7	305.7
77.5°	153.2	202.4	241.1	231.5	221.8
80°	110.5	158.9	176.6	158.9	146.0
82.5°	74.2	115.3	106.5	84.7	75.0
85°	41.1	61.3	41.9	23.4	16.9
87.5°	15.3	13.7	4.0	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)