

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: P307778

Luminaire Tested: **14FCZ2-44-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: P307778  
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: 14FCZ2-44-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**

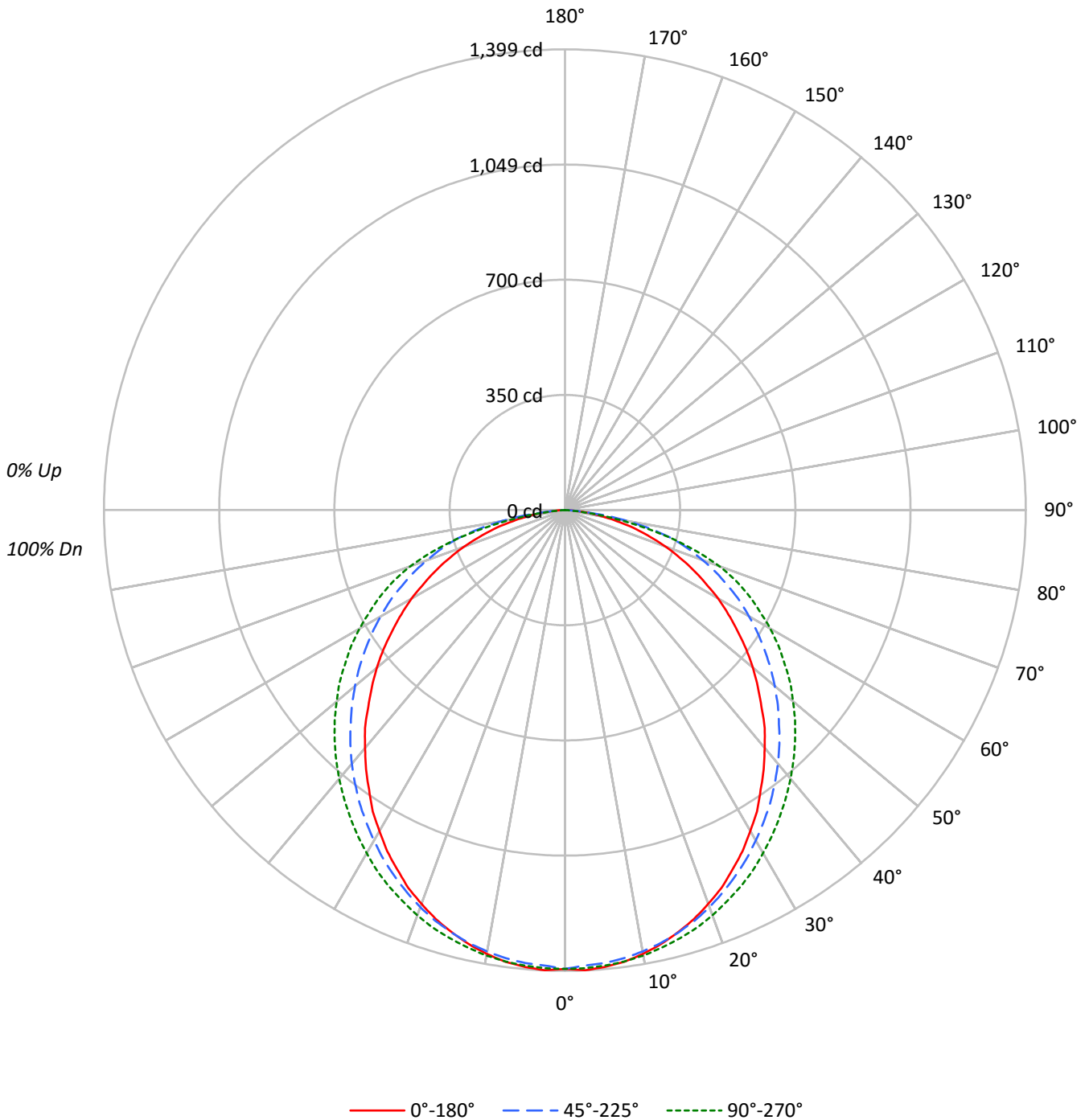
Lumens per Lamp: N/A  
Luminaire Lumens: 4044.0 lumens  
Efficiency: N/A  
Efficacy: 102.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 39.4  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	3749	3749	3749
5°	3761	3729	3751
10°	3738	3718	3753
15°	3698	3700	3751
20°	3643	3675	3749
25°	3574	3638	3746
30°	3497	3600	3738
35°	3404	3570	3735
40°	3313	3535	3741
45°	3212	3497	3761
50°	3118	3481	3786
55°	2999	3469	3820
60°	2892	3475	3873
65°	2744	3485	3933
70°	2575	3512	3931
75°	2334	3544	3554
80°	1914	3061	2529
85°	1420	1448	584



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	131.8	3.3
10°-20°	376.6	9.3
20°-30°	567.3	14.0
30°-40°	680.8	16.8
40°-50°	709.5	17.5
50°-60°	656.9	16.2
60°-70°	530.7	13.1
70°-80°	323.6	8.0
80°-90°	66.8	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°	1075.7	26.6
0°-40°	1756.5	43.4
0°-60°	3122.9	77.2
0°-90°	4044.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4044.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1393	1393	1393	1393	1393	
5°	1392	1389	1380	1390	1389	132
15°	1327	1328	1328	1346	1346	374
25°	1204	1211	1225	1256	1262	555
35°	1036	1052	1087	1126	1137	649
45°	844	869	919	970	988	652
55°	639	673	739	797	814	573
65°	431	473	547	602	618	426
75°	224	274	341	346	342	236
85°	46	68	47	26	19	57
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1393.2	1393.2	1393.2	1393.2	1393.2
2.5°	1398.6	1394.1	1384.2	1394.1	1392.3
5°	1392.3	1388.7	1380.5	1390.5	1388.7
7.5°	1383.3	1379.6	1372.4	1384.2	1382.4
10°	1367.9	1366.1	1360.7	1374.2	1373.3
12.5°	1349.9	1349.0	1346.3	1361.6	1360.7
15°	1327.3	1328.2	1328.2	1346.3	1346.3
17.5°	1302.1	1303.9	1307.5	1327.3	1330.1
20°	1272.3	1275.9	1283.2	1305.7	1309.3
22.5°	1241.7	1244.4	1255.2	1282.3	1285.9
25°	1203.8	1211.0	1225.4	1256.1	1261.5
27.5°	1167.7	1174.1	1193.9	1225.4	1234.5
30°	1125.4	1135.3	1158.7	1193.0	1202.9
32.5°	1084.8	1095.6	1122.7	1162.3	1171.3
35°	1036.1	1052.3	1086.6	1126.3	1137.1
37.5°	991.9	1007.2	1046.0	1089.3	1101.9
40°	943.2	962.1	1006.3	1052.3	1064.9
42.5°	898.1	916.2	963.9	1010.8	1028.0
45°	844.0	869.3	918.9	970.3	988.3
47.5°	794.4	819.7	876.5	931.5	947.7
50°	744.8	771.9	831.4	888.2	904.4
52.5°	693.4	722.3	786.3	843.1	862.1
55°	639.3	672.7	739.4	797.1	814.3
57.5°	587.9	622.2	693.4	752.0	769.2
60°	537.4	572.6	645.6	701.5	719.6
62.5°	481.5	523.0	598.7	653.8	667.3
65°	431.0	473.4	547.3	602.4	617.7
67.5°	377.8	423.8	497.8	548.3	562.7
70°	327.3	375.1	446.4	493.2	499.6
72.5°	273.2	321.9	394.1	423.8	423.8
75°	224.5	274.1	340.9	346.3	341.8
77.5°	171.3	226.3	269.6	258.8	248.0
80°	123.5	177.6	197.5	177.6	163.2
82.5°	83.0	128.9	119.0	94.7	83.9
85°	46.0	68.5	46.9	26.2	18.9
87.5°	17.1	15.3	4.5	4.5	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)