

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: P312415

Luminaire Tested: **14FCZ2-44-UNV-L83050-S-CA08-W2A-U-3000K**

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: P312415  
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-CA08-W2A-U-3000K  
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" ACRYLIC SHEET  
Light Source: (168) 3000K 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

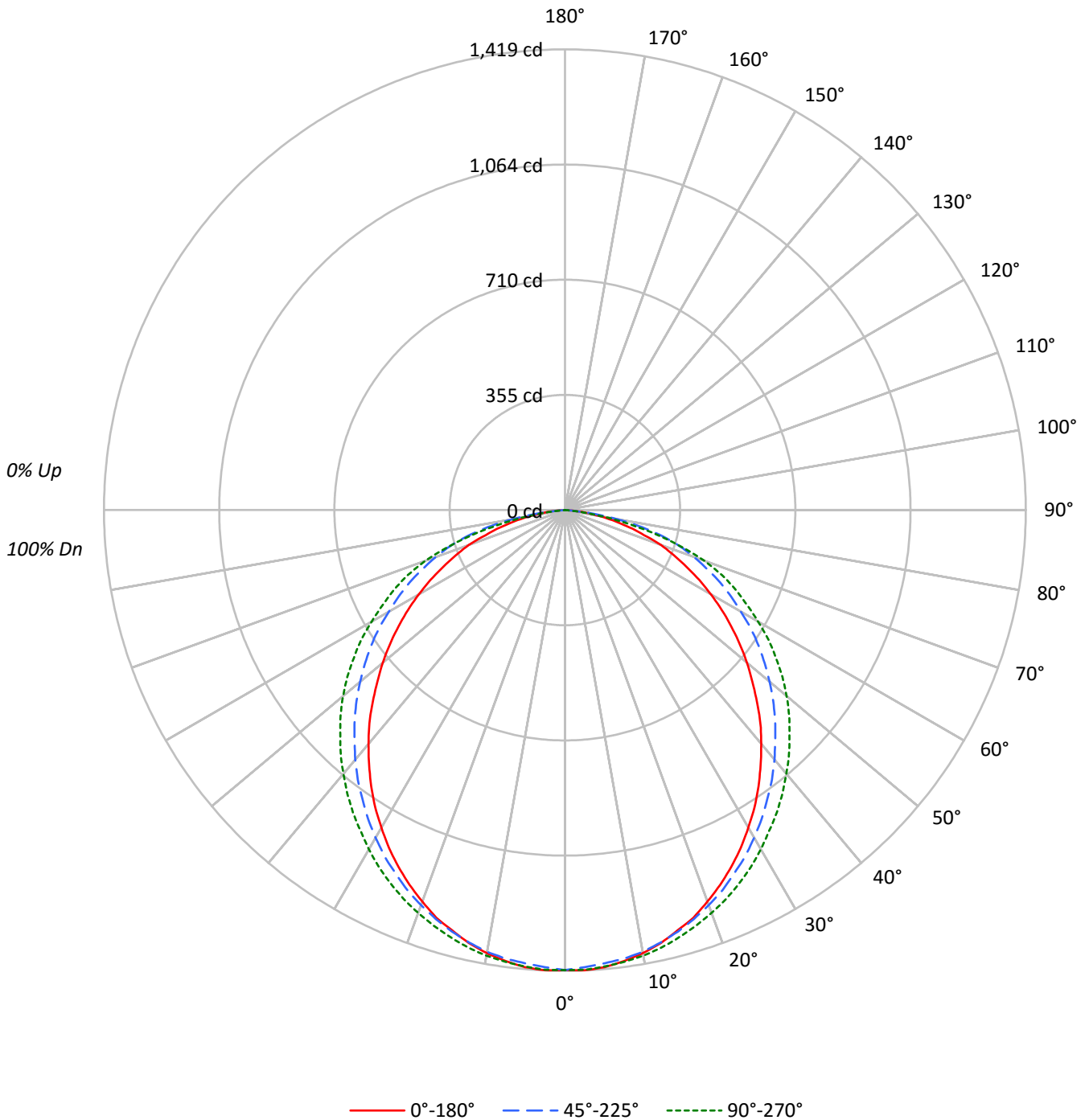
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3969.0 lumens  
Efficiency: N/A  
Efficacy: 103.9 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): 38.2  
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



TEST NUMBER: P312415  
CATALOG NUMBER: 14FCZ2-44-UNV-L83050-S-CA08-W2A-U-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P312415

CATALOG NUMBER: 14FCZ2-44-UNV-L83050-S-CA08-W2A-U-3000K

**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°	3813	3813	3813
5°	3817	3785	3811
10°	3786	3775	3807
15°	3733	3745	3794
20°	3674	3708	3781
25°	3599	3664	3769
30°	3510	3620	3748
35°	3413	3569	3736
40°	3304	3525	3726
45°	3183	3483	3722
50°	3064	3444	3732
55°	2936	3416	3721
60°	2796	3368	3696
65°	2632	3358	3696
70°	2478	3329	3592
75°	2148	3253	3069
80°	1739	2622	2042
85°	1155	911	608



TEST NUMBER: P312415

CATALOG NUMBER: 14FCZ2-44-UNV-L83050-S-CA08-W2A-U-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.8	3.4
10°-20°	380.7	9.6
20°-30°	571.1	14.4
30°-40°	681.3	17.2
40°-50°	704.3	17.7
50°-60°	643.0	16.2
60°-70°	506.0	12.7
70°-80°	294.5	7.4
80°-90°	54.3	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°	1085.6	27.4
0°-40°	1766.9	44.5
0°-60°	3114.1	78.5
0°-90°	3969.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3969.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1417	1417	1417	1417	1417	
5°	1413	1409	1401	1413	1411	134
15°	1340	1342	1344	1362	1362	378
25°	1212	1218	1234	1263	1269	558
35°	1039	1053	1086	1128	1137	649
45°	836	864	915	966	978	646
55°	626	659	728	781	793	560
65°	413	456	527	569	580	410
75°	207	256	313	307	295	220
85°	37	53	30	24	20	48
90°	0	0	0	0	0	



TEST NUMBER: P312415

CATALOG NUMBER: 14FCZ2-44-UNV-L83050-S-CA08-W2A-U-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1416.9	1416.9	1416.9	1416.9	1416.9
2.5°	1418.8	1414.9	1409.0	1418.8	1416.9
5°	1412.9	1409.0	1401.1	1412.9	1411.0
7.5°	1401.1	1397.2	1393.3	1405.1	1403.1
10°	1385.4	1383.4	1381.4	1395.2	1393.3
12.5°	1365.7	1365.7	1363.7	1379.5	1379.5
15°	1340.1	1342.1	1344.1	1361.8	1361.8
17.5°	1316.5	1314.5	1320.4	1340.1	1342.1
20°	1283.1	1287.0	1294.9	1318.5	1320.4
22.5°	1249.6	1253.5	1267.3	1290.9	1296.8
25°	1212.2	1218.1	1233.9	1263.4	1269.3
27.5°	1172.9	1180.7	1202.4	1233.9	1239.8
30°	1129.6	1141.4	1165.0	1200.4	1206.3
32.5°	1086.3	1098.1	1127.6	1163.0	1170.9
35°	1039.0	1052.8	1086.3	1127.6	1137.4
37.5°	989.8	1007.5	1046.9	1088.2	1100.0
40°	940.6	960.3	1003.6	1046.9	1060.7
42.5°	891.4	911.1	958.4	1007.5	1021.3
45°	836.3	863.9	915.1	966.2	978.0
47.5°	783.2	812.7	869.8	921.0	936.7
50°	732.0	761.6	822.6	875.7	891.4
52.5°	678.9	710.4	775.3	830.4	844.2
55°	625.8	659.2	728.1	781.2	793.1
57.5°	572.7	608.1	678.9	730.1	743.9
60°	519.5	556.9	625.8	676.9	686.8
62.5°	466.4	505.7	576.6	621.8	631.7
65°	413.3	456.5	527.4	568.7	580.5
67.5°	362.1	405.4	474.3	513.6	523.5
70°	314.9	354.2	423.1	452.6	456.5
72.5°	255.8	305.0	371.9	387.7	377.8
75°	206.6	255.8	312.9	307.0	295.2
77.5°	157.4	206.6	244.0	224.3	208.6
80°	112.2	161.4	169.2	139.7	131.8
82.5°	72.8	112.2	94.5	72.8	59.0
85°	37.4	53.1	29.5	23.6	19.7
87.5°	11.8	7.9	3.9	3.9	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)