

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: P307780

Luminaire Tested: **14FCZ2-44-UNV-L82765-CP187-W2A-U-6500K**

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: P307780  
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-6500K  
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.187" POLYCARB SHEET  
Light Source: (168) 6500K 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**

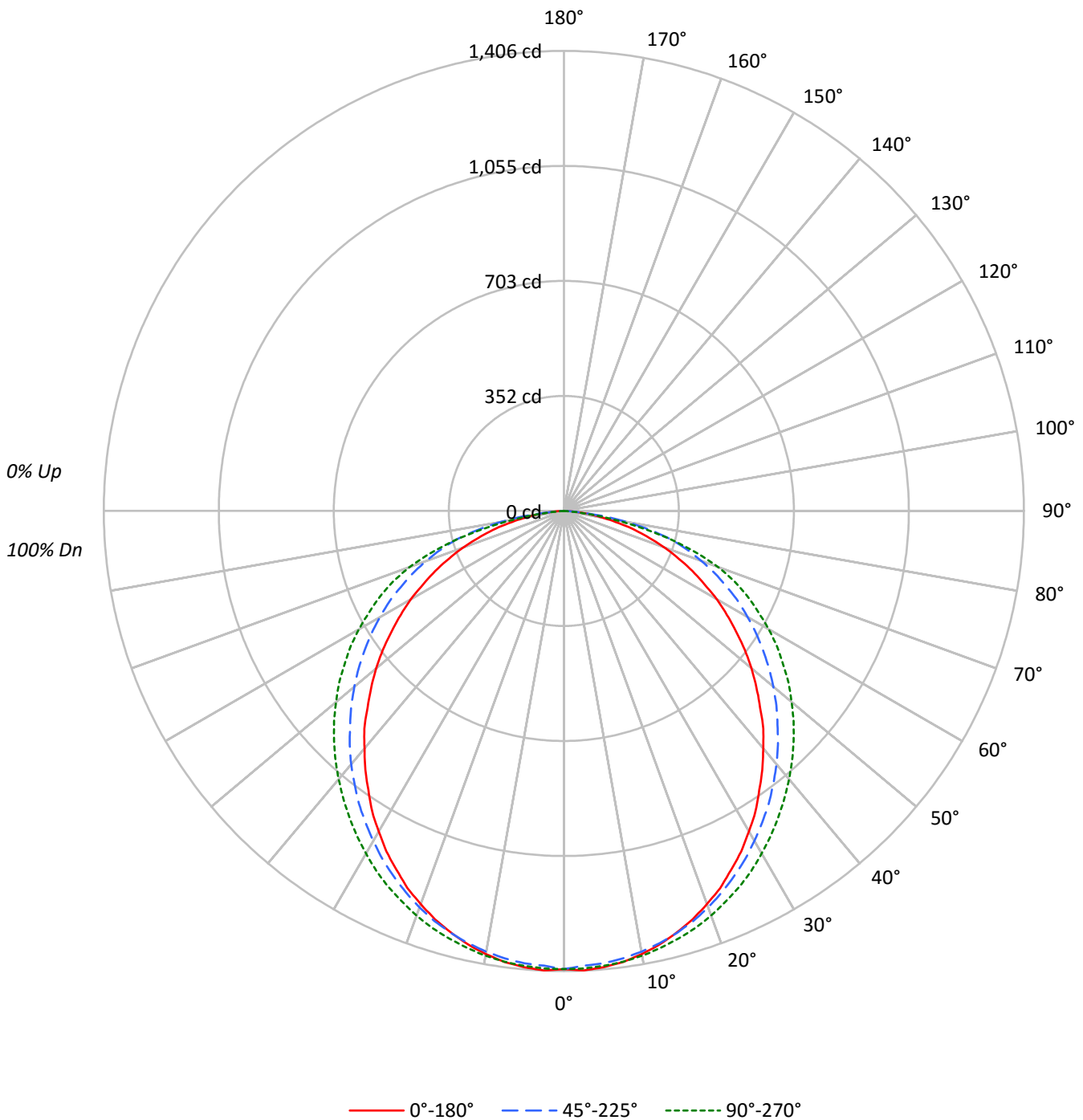
Lumens per Lamp: N/A  
Luminaire Lumens: 4064.0 lumens  
Efficiency: N/A  
Efficacy: 101.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 40  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	3768	3768	3768
5°	3780	3748	3770
10°	3756	3736	3771
15°	3716	3719	3769
20°	3662	3693	3768
25°	3592	3657	3764
30°	3514	3618	3756
35°	3420	3587	3754
40°	3330	3553	3759
45°	3228	3514	3780
50°	3134	3498	3805
55°	3014	3486	3839
60°	2907	3492	3892
65°	2758	3503	3952
70°	2588	3530	3950
75°	2346	3561	3570
80°	1923	3076	2541
85°	1426	1454	587



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	132.5	3.3
10°-20°	378.4	9.3
20°-30°	570.1	14.0
30°-40°	684.1	16.8
40°-50°	713.0	17.5
50°-60°	660.1	16.2
60°-70°	533.4	13.1
70°-80°	325.2	8.0
80°-90°	67.1	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°	1081.0	26.6
0°-40°	1765.2	43.4
0°-60°	3138.3	77.2
0°-90°	4064.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4064.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1400	1400	1400	1400	1400	
5°	1399	1396	1387	1397	1396	133
15°	1334	1335	1335	1353	1353	376
25°	1210	1217	1232	1262	1268	558
35°	1041	1058	1092	1132	1143	652
45°	848	874	923	975	993	656
55°	642	676	743	801	818	576
65°	433	476	550	605	621	428
75°	226	276	342	348	343	237
85°	46	69	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°	1400.1	1400.1	1400.1	1400.1	1400.1
2.5°	1405.5	1401.0	1391.0	1401.0	1399.2
5°	1399.2	1395.5	1387.4	1397.3	1395.5
7.5°	1390.1	1386.5	1379.2	1391.0	1389.2
10°	1374.7	1372.9	1367.4	1381.0	1380.1
12.5°	1356.6	1355.7	1352.9	1368.3	1367.4
15°	1333.9	1334.8	1334.8	1352.9	1352.9
17.5°	1308.5	1310.3	1314.0	1333.9	1336.6
20°	1278.6	1282.3	1289.5	1312.2	1315.8
22.5°	1247.8	1250.5	1261.4	1288.6	1292.2
25°	1209.8	1217.0	1231.5	1262.3	1267.8
27.5°	1173.5	1179.9	1199.8	1231.5	1240.6
30°	1130.9	1140.9	1164.5	1198.9	1208.9
32.5°	1090.1	1101.0	1128.2	1168.1	1177.1
35°	1041.2	1057.5	1092.0	1131.8	1142.7
37.5°	996.8	1012.2	1051.2	1094.7	1107.4
40°	947.9	966.9	1011.3	1057.5	1070.2
42.5°	902.6	920.7	968.7	1015.8	1033.1
45°	848.2	873.6	923.4	975.1	993.2
47.5°	798.4	823.7	880.8	936.1	952.4
50°	748.5	775.7	835.5	892.6	908.9
52.5°	696.9	725.9	790.2	847.3	866.3
55°	642.5	676.0	743.1	801.1	818.3
57.5°	590.8	625.3	696.9	755.8	773.0
60°	540.1	575.4	648.8	705.0	723.1
62.5°	483.9	525.6	601.7	657.0	670.6
65°	433.2	475.7	550.1	605.3	620.7
67.5°	379.7	425.9	500.2	551.0	565.5
70°	328.9	377.0	448.6	495.7	502.0
72.5°	274.6	323.5	396.0	425.9	425.9
75°	225.6	275.5	342.5	348.0	343.4
77.5°	172.2	227.5	271.0	260.1	249.2
80°	124.1	178.5	198.5	178.5	164.0
82.5°	83.4	129.6	119.6	95.1	84.3
85°	46.2	68.9	47.1	26.3	19.0
87.5°	17.2	15.4	4.5	4.5	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)