

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: P307785

Luminaire Tested: **14FCZ2-44-UNV-L82765-CP250-W2A-U-4500K**

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: P307785  
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-CP250-W2A-U-4500K  
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.250" POLYCARB SHEET  
Light Source: (168) 4500K 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: 3918.0 lumens  
Efficiency: N/A  
Efficacy: 100.5 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

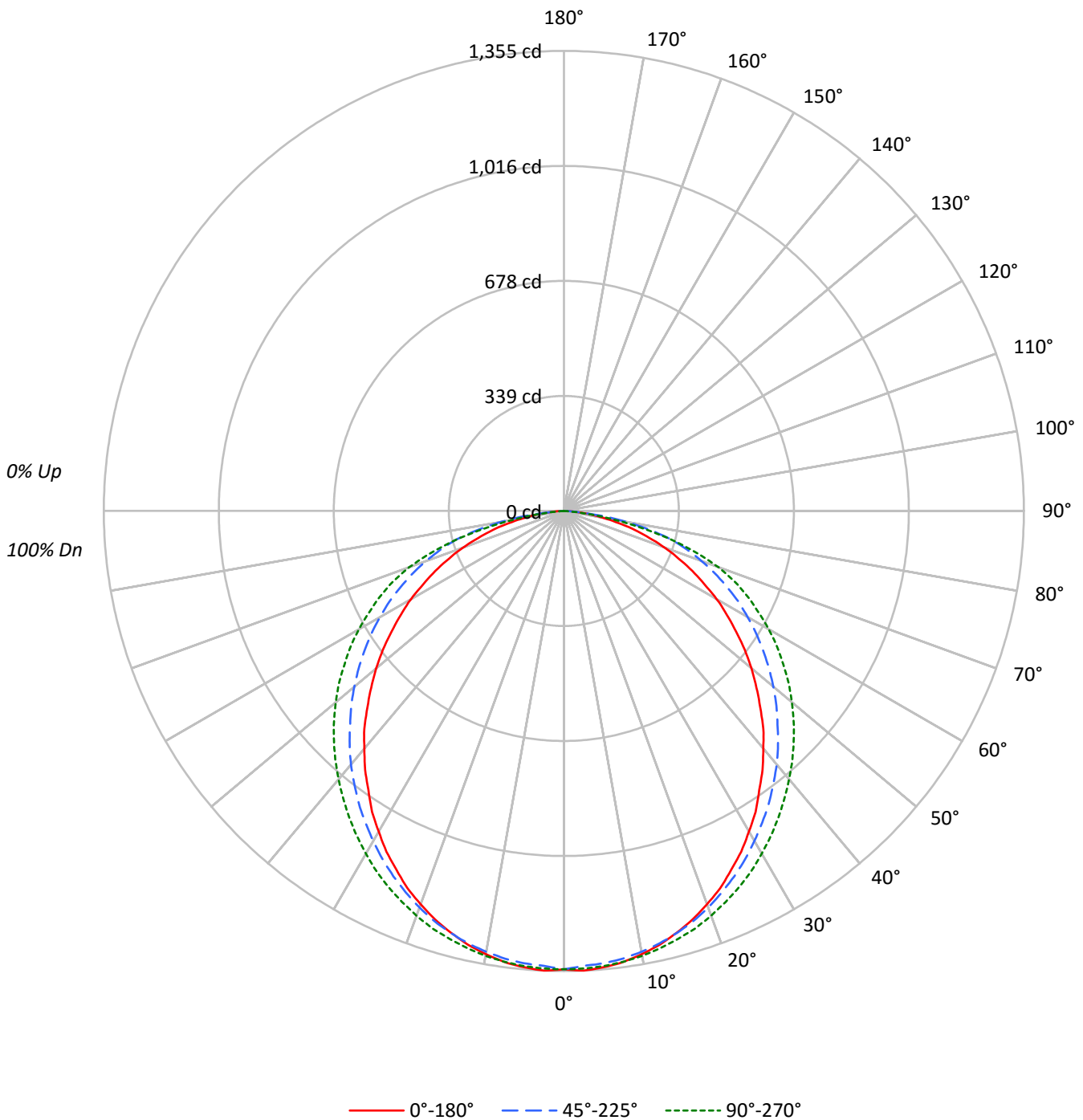
Input Watts (W): 39  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P307785

CATALOG NUMBER: 14FCZ2-44-UNV-L82765-CP250-W2A-U-4500K

### Luminous Intensity Polar Plot





TEST NUMBER: P307785

CATALOG NUMBER: 14FC22-44-UNV-L82765-CP250-W2A-U-4500K

**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°	3632	3632	3632
5°	3644	3613	3634
10°	3621	3602	3636
15°	3583	3585	3634
20°	3530	3560	3633
25°	3463	3525	3629
30°	3388	3488	3621
35°	3298	3458	3619
40°	3210	3425	3625
45°	3112	3388	3644
50°	3021	3372	3669
55°	2906	3361	3701
60°	2802	3366	3752
65°	2659	3377	3810
70°	2495	3402	3808
75°	2261	3433	3442
80°	1855	2965	2450
85°	1377	1402	565



TEST NUMBER: P307785

CATALOG NUMBER: 14FCZ2-44-UNV-L82765-CP250-W2A-U-4500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	127.7	3.3
10°-20°	364.9	9.3
20°-30°	549.6	14.0
30°-40°	659.5	16.8
40°-50°	687.4	17.5
50°-60°	636.4	16.2
60°-70°	514.2	13.1
70°-80°	313.5	8.0
80°-90°	64.7	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°	1042.2	26.6
0°-40°	1701.7	43.4
0°-60°	3025.6	77.2
0°-90°	3918.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3918.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1350	1350	1350	1350	1350	
5°	1349	1345	1338	1347	1345	128
15°	1286	1287	1287	1304	1304	363
25°	1166	1173	1187	1217	1222	538
35°	1004	1020	1053	1091	1102	629
45°	818	842	890	940	958	632
55°	619	652	716	772	789	555
65°	418	459	530	584	598	413
75°	218	266	330	336	331	228
85°	45	66	45	25	18	55
90°	0	0	0	0	0	



TEST NUMBER: P307785

CATALOG NUMBER: 14FCZ2-44-UNV-L82765-CP250-W2A-U-4500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1349.8	1349.8	1349.8	1349.8	1349.8
2.5°	1355.0	1350.6	1341.0	1350.6	1348.9
5°	1348.9	1345.4	1337.5	1347.1	1345.4
7.5°	1340.2	1336.7	1329.7	1341.0	1339.3
10°	1325.3	1323.6	1318.3	1331.4	1330.5
12.5°	1307.8	1307.0	1304.3	1319.2	1318.3
15°	1286.0	1286.9	1286.9	1304.3	1304.3
17.5°	1261.5	1263.3	1266.8	1286.0	1288.6
20°	1232.7	1236.2	1243.2	1265.0	1268.5
22.5°	1203.0	1205.6	1216.1	1242.3	1245.8
25°	1166.3	1173.3	1187.3	1217.0	1222.2
27.5°	1131.4	1137.5	1156.7	1187.3	1196.0
30°	1090.3	1099.9	1122.6	1155.8	1165.4
32.5°	1051.0	1061.5	1087.7	1126.1	1134.8
35°	1003.8	1019.5	1052.7	1091.2	1101.7
37.5°	961.0	975.8	1013.4	1055.3	1067.6
40°	913.8	932.2	975.0	1019.5	1031.8
42.5°	870.1	887.6	933.9	979.3	995.9
45°	817.7	842.2	890.2	940.0	957.5
47.5°	769.7	794.1	849.2	902.5	918.2
50°	721.6	747.8	805.5	860.5	876.3
52.5°	671.8	699.8	761.8	816.8	835.2
55°	619.4	651.7	716.4	772.3	788.9
57.5°	569.6	602.8	671.8	728.6	745.2
60°	520.7	554.8	625.5	679.7	697.2
62.5°	466.5	506.7	580.1	633.4	646.5
65°	417.6	458.7	530.3	583.6	598.4
67.5°	366.1	410.6	482.2	531.2	545.1
70°	317.1	363.4	432.4	477.9	484.0
72.5°	264.7	311.9	381.8	410.6	410.6
75°	217.5	265.6	330.2	335.5	331.1
77.5°	166.0	219.3	261.2	250.7	240.2
80°	119.7	172.1	191.3	172.1	158.1
82.5°	80.4	124.9	115.3	91.7	81.2
85°	44.6	66.4	45.4	25.3	18.3
87.5°	16.6	14.9	4.4	4.4	4.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)