

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: P307783

Luminaire Tested: **14FCZ2-44-UNV-L82765-CP250-W2A-U-3500K**

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: P307783
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-3500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.250" POLYCARB SHEET
Light Source: (168) 3500K 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: 3767.0 lumens
Efficiency: N/A
Efficacy: 97.8 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

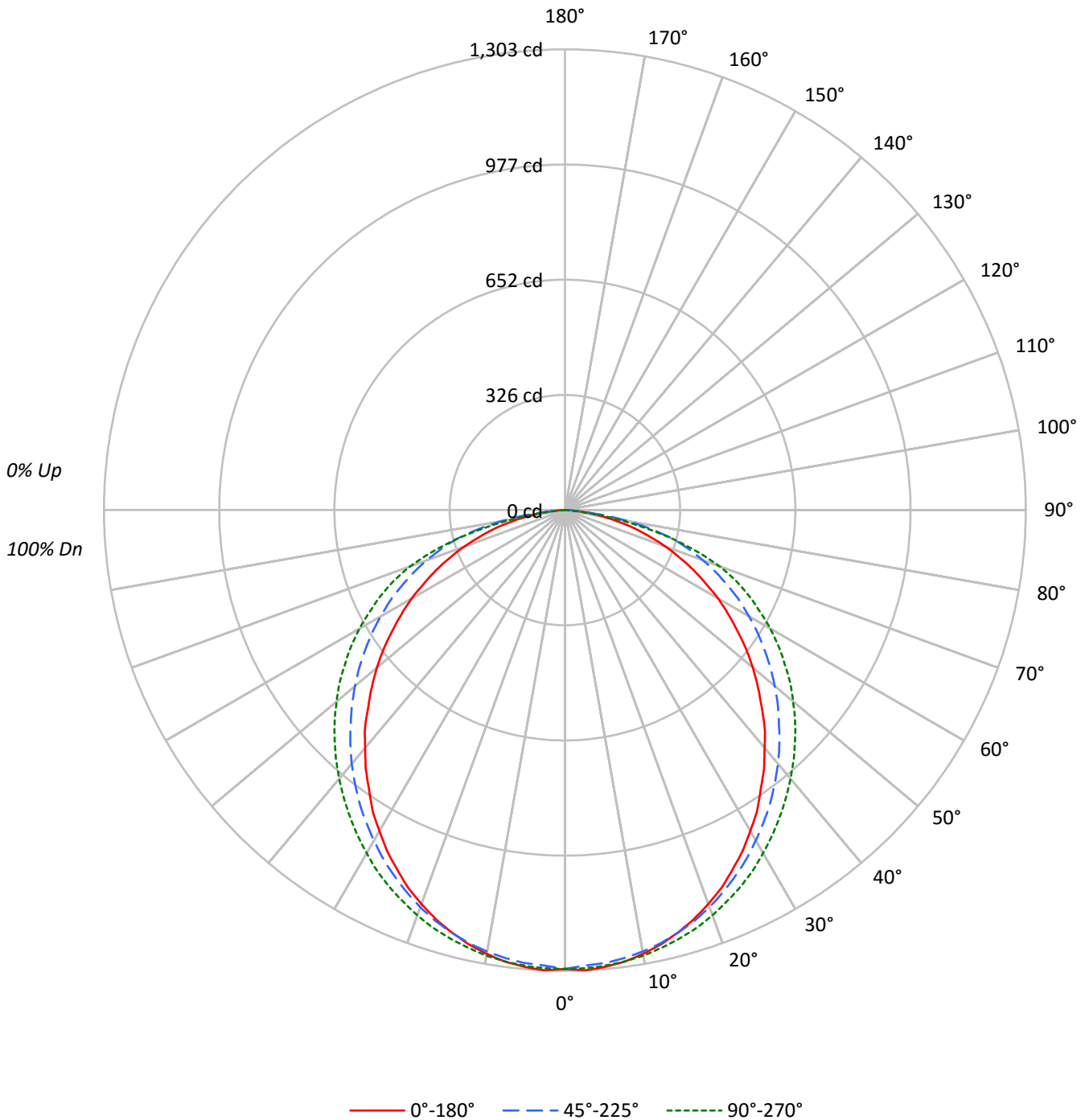
Input Watts (W): 38.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307783

CATALOG NUMBER: 14FCZ2-44-UNV-L82765-CP250-W2A-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P307783

CATALOG NUMBER: 14FC22-44-UNV-L82765-CP250-W2A-U-3500K

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°	3492	3492	3492
5°	3503	3474	3494
10°	3482	3463	3496
15°	3444	3447	3494
20°	3394	3423	3493
25°	3330	3389	3489
30°	3257	3354	3482
35°	3170	3325	3480
40°	3086	3293	3485
45°	2992	3257	3503
50°	2905	3242	3527
55°	2794	3232	3559
60°	2694	3237	3608
65°	2557	3247	3664
70°	2399	3271	3661
75°	2175	3301	3309
80°	1784	2851	2356
85°	1321	1349	543



TEST NUMBER: P307783

CATALOG NUMBER: 14FCZ2-44-UNV-L82765-CP250-W2A-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.8	3.3
10°-20°	350.8	9.3
20°-30°	528.4	14.0
30°-40°	634.1	16.8
40°-50°	660.9	17.5
50°-60°	611.9	16.2
60°-70°	494.4	13.1
70°-80°	301.4	8.0
80°-90°	62.2	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°	1002.0	26.6
0°-40°	1636.2	43.4
0°-60°	2909.0	77.2
0°-90°	3767.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3767.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1298	1298	1298	1298	1298	
5°	1297	1294	1286	1295	1294	123
15°	1236	1237	1237	1254	1254	349
25°	1121	1128	1142	1170	1175	517
35°	965	980	1012	1049	1059	605
45°	786	810	856	904	921	608
55°	596	627	689	742	758	534
65°	402	441	510	561	575	397
75°	209	255	318	322	318	220
85°	43	64	44	24	18	53
90°	0	0	0	0	0	



TEST NUMBER: P307783

CATALOG NUMBER: 14FCZ2-44-UNV-L82765-CP250-W2A-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1297.7	1297.7	1297.7	1297.7	1297.7
2.5°	1302.8	1298.6	1289.3	1298.6	1296.9
5°	1296.9	1293.5	1286.0	1295.2	1293.5
7.5°	1288.5	1285.1	1278.4	1289.3	1287.7
10°	1274.2	1272.5	1267.5	1280.1	1279.3
12.5°	1257.4	1256.6	1254.1	1268.3	1267.5
15°	1236.4	1237.3	1237.3	1254.1	1254.1
17.5°	1212.9	1214.6	1217.9	1236.4	1238.9
20°	1185.2	1188.5	1195.3	1216.3	1219.6
22.5°	1156.6	1159.1	1169.2	1194.4	1197.8
25°	1121.4	1128.1	1141.5	1170.1	1175.1
27.5°	1087.8	1093.6	1112.1	1141.5	1149.9
30°	1048.3	1057.5	1079.4	1111.3	1120.5
32.5°	1010.5	1020.6	1045.8	1082.7	1091.1
35°	965.1	980.2	1012.2	1049.1	1059.2
37.5°	924.0	938.2	974.4	1014.7	1026.4
40°	878.6	896.2	937.4	980.2	992.0
42.5°	836.6	853.4	897.9	941.6	957.6
45°	786.2	809.7	855.9	903.8	920.6
47.5°	740.0	763.5	816.4	867.7	882.8
50°	693.8	719.0	774.4	827.4	842.5
52.5°	645.9	672.8	732.4	785.4	803.0
55°	595.5	626.6	688.8	742.5	758.5
57.5°	547.7	579.6	645.9	700.5	716.5
60°	500.6	533.4	601.4	653.5	670.3
62.5°	448.5	487.2	557.7	609.0	621.6
65°	401.5	441.0	509.9	561.1	575.4
67.5°	351.9	394.8	463.7	510.7	524.1
70°	304.9	349.4	415.8	459.5	465.3
72.5°	254.5	299.9	367.1	394.8	394.8
75°	209.2	255.3	317.5	322.5	318.3
77.5°	159.6	210.8	251.1	241.1	231.0
80°	115.1	165.5	184.0	165.5	152.0
82.5°	77.3	120.1	110.9	88.2	78.1
85°	42.8	63.8	43.7	24.4	17.6
87.5°	16.0	14.3	4.2	4.2	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)