

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: P307712

Luminaire Tested: **14FCZ2-39-UNV-L82765-CA125-W2A-U-4000K**

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: P307712
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: 14FCZ2-39-UNV-L82765-CA125-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 4000K 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: 3697.0 lumens
Efficiency: N/A
Efficacy: 109.7 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

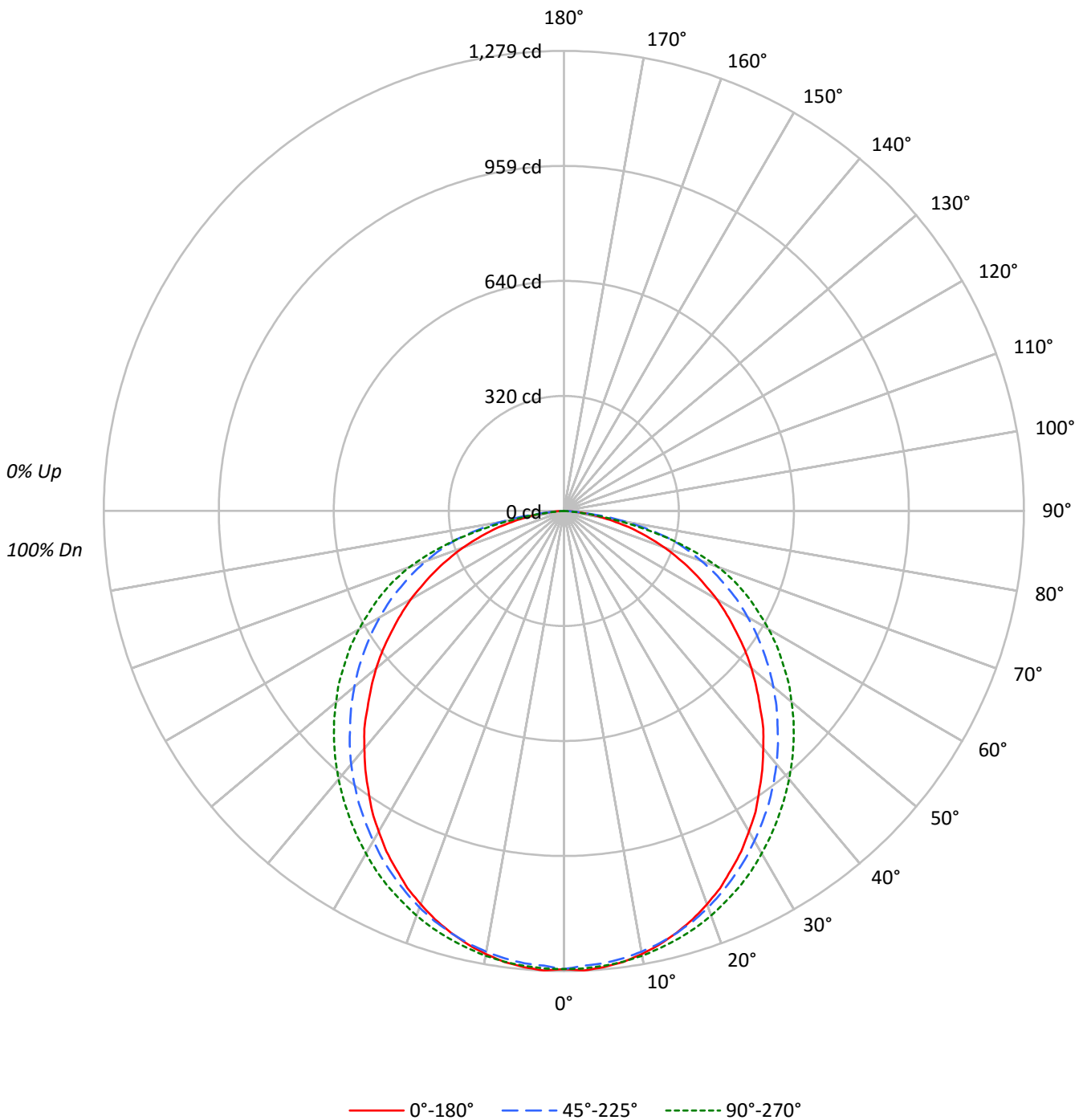
Input Watts (W): 33.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307712

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CA125-W2A-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P307712

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CA125-W2A-U-4000K

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°	3427	3427	3427
5°	3438	3409	3429
10°	3417	3399	3431
15°	3381	3383	3429
20°	3331	3359	3428
25°	3268	3326	3424
30°	3197	3292	3417
35°	3112	3263	3415
40°	3029	3232	3420
45°	2936	3197	3438
50°	2851	3182	3461
55°	2742	3172	3492
60°	2644	3176	3540
65°	2509	3186	3596
70°	2354	3211	3593
75°	2135	3240	3248
80°	1750	2797	2312
85°	1297	1325	534



TEST NUMBER: P307712

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CA125-W2A-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.5	3.3
10°-20°	344.3	9.3
20°-30°	518.6	14.0
30°-40°	622.3	16.8
40°-50°	648.7	17.5
50°-60°	600.5	16.2
60°-70°	485.2	13.1
70°-80°	295.8	8.0
80°-90°	61.1	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°	983.4	26.6
0°-40°	1605.8	43.4
0°-60°	2854.9	77.2
0°-90°	3697.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3697.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1274	1274	1274	1274	1274	
5°	1273	1270	1262	1271	1270	121
15°	1214	1214	1214	1231	1231	342
25°	1100	1107	1120	1148	1153	507
35°	947	962	993	1030	1040	593
45°	772	795	840	887	904	596
55°	584	615	676	729	744	524
65°	394	433	500	551	565	390
75°	205	251	312	317	312	216
85°	42	63	43	24	17	52
90°	0	0	0	0	0	



TEST NUMBER: P307712

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CA125-W2A-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1273.6	1273.6	1273.6	1273.6	1273.6
2.5°	1278.6	1274.5	1265.4	1274.5	1272.8
5°	1272.8	1269.5	1262.1	1271.2	1269.5
7.5°	1264.6	1261.3	1254.7	1265.4	1263.7
10°	1250.5	1248.9	1244.0	1256.3	1255.5
12.5°	1234.1	1233.2	1230.8	1244.8	1244.0
15°	1213.5	1214.3	1214.3	1230.8	1230.8
17.5°	1190.4	1192.0	1195.3	1213.5	1215.9
20°	1163.2	1166.5	1173.1	1193.7	1197.0
22.5°	1135.1	1137.6	1147.5	1172.2	1175.5
25°	1100.5	1107.1	1120.3	1148.3	1153.3
27.5°	1067.5	1073.3	1091.4	1120.3	1128.5
30°	1028.8	1037.9	1059.3	1090.6	1099.7
32.5°	991.7	1001.6	1026.3	1062.6	1070.8
35°	947.2	962.0	993.3	1029.6	1039.5
37.5°	906.8	920.8	956.3	995.8	1007.4
40°	862.3	879.6	920.0	962.0	973.6
42.5°	821.1	837.5	881.2	924.1	939.8
45°	771.6	794.7	840.0	887.0	903.5
47.5°	726.3	749.3	801.3	851.6	866.4
50°	680.9	705.6	760.1	812.0	826.8
52.5°	633.9	660.3	718.8	770.8	788.1
55°	584.5	615.0	676.0	728.7	744.4
57.5°	537.5	568.8	633.9	687.5	703.2
60°	491.3	523.5	590.2	641.3	657.8
62.5°	440.2	478.1	547.4	597.7	610.0
65°	394.0	432.8	500.4	550.7	564.7
67.5°	345.4	387.4	455.0	501.2	514.4
70°	299.2	342.9	408.1	450.9	456.7
72.5°	249.8	294.3	360.2	387.4	387.4
75°	205.3	250.6	311.6	316.6	312.4
77.5°	156.6	206.9	246.5	236.6	226.7
80°	112.9	162.4	180.5	162.4	149.2
82.5°	75.8	117.9	108.8	86.6	76.7
85°	42.0	62.7	42.9	23.9	17.3
87.5°	15.7	14.0	4.1	4.1	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)