

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: P307754

Luminaire Tested: **14FCZ2-44-UNV-L82765-CA125-W2A-U-2700K**

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: P307754
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-CA125-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 2700K 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

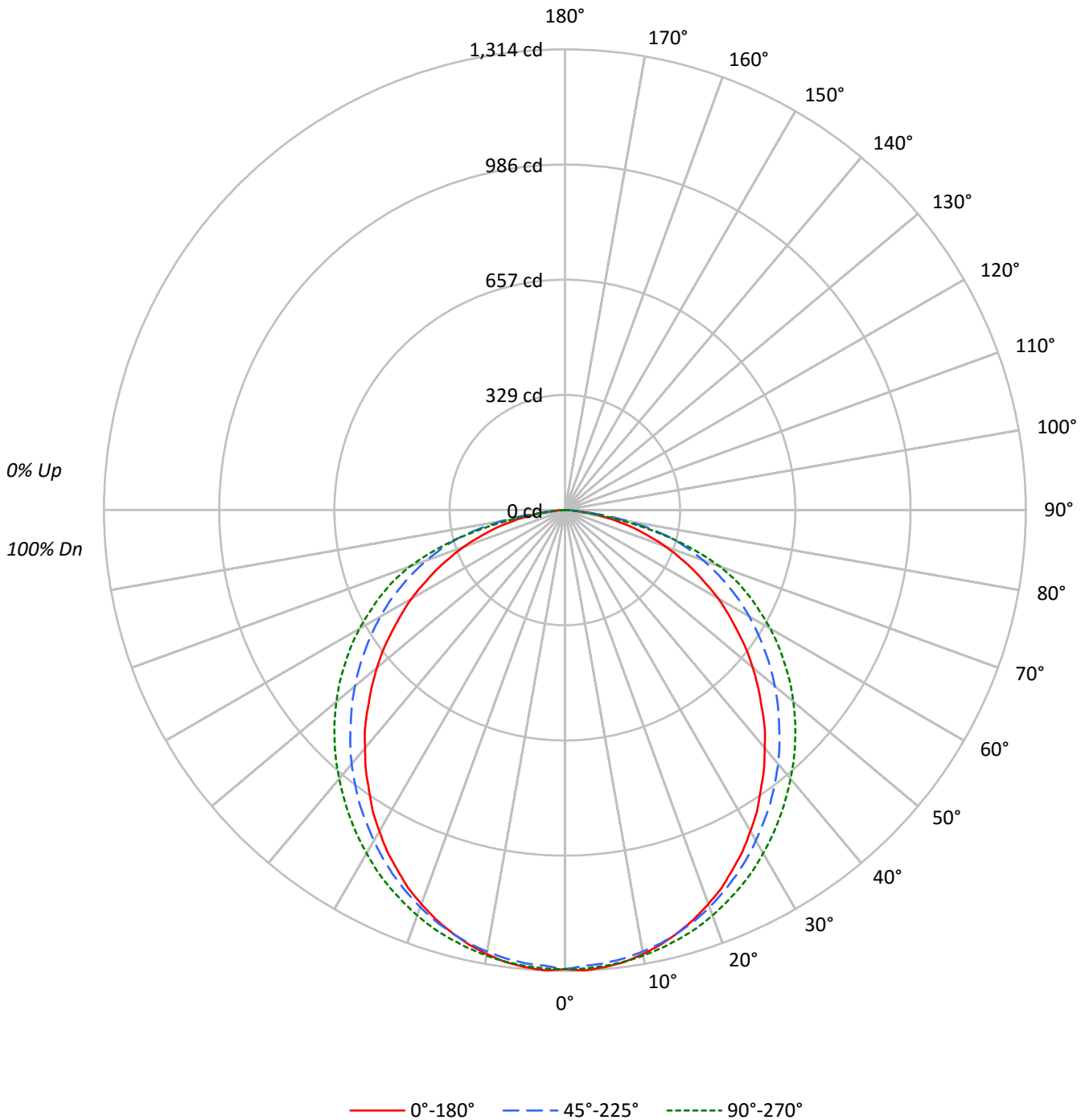
Lumens per Lamp: N/A
Luminaire Lumens: 3800.0 lumens
Efficiency: N/A
Efficacy: 99.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 38.3
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



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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°	3523	3523	3523
5°	3534	3504	3525
10°	3512	3494	3526
15°	3475	3477	3524
20°	3424	3453	3523
25°	3359	3419	3520
30°	3286	3383	3512
35°	3198	3354	3510
40°	3113	3322	3515
45°	3018	3286	3534
50°	2930	3270	3558
55°	2819	3260	3590
60°	2718	3265	3639
65°	2579	3275	3696
70°	2420	3300	3693
75°	2194	3330	3339
80°	1799	2876	2377
85°	1334	1362	550



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.9	3.3
10°-20°	353.9	9.3
20°-30°	533.1	14.0
30°-40°	639.7	16.8
40°-50°	666.7	17.5
50°-60°	617.2	16.2
60°-70°	498.7	13.1
70°-80°	304.1	8.0
80°-90°	62.8	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°	1010.8	26.6
0°-40°	1650.5	43.4
0°-60°	2934.5	77.2
0°-90°	3800.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3800.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1309	1309	1309	1309	1309	
5°	1308	1305	1297	1307	1305	124
15°	1247	1248	1248	1265	1265	352
25°	1131	1138	1152	1180	1185	521
35°	974	989	1021	1058	1068	610
45°	793	817	863	912	929	613
55°	601	632	695	749	765	538
65°	405	445	514	566	580	400
75°	211	258	320	325	321	222
85°	43	64	44	25	18	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1309.1	1309.1	1309.1	1309.1	1309.1
2.5°	1314.2	1310.0	1300.6	1310.0	1308.3
5°	1308.3	1304.9	1297.2	1306.6	1304.9
7.5°	1299.8	1296.4	1289.6	1300.6	1298.9
10°	1285.4	1283.7	1278.6	1291.3	1290.5
12.5°	1268.4	1267.6	1265.1	1279.5	1278.6
15°	1247.3	1248.1	1248.1	1265.1	1265.1
17.5°	1223.5	1225.2	1228.6	1247.3	1249.8
20°	1195.6	1199.0	1205.7	1226.9	1230.3
22.5°	1166.8	1169.3	1179.5	1204.9	1208.3
25°	1131.2	1138.0	1151.5	1180.3	1185.4
27.5°	1097.3	1103.2	1121.9	1151.5	1160.0
30°	1057.5	1066.8	1088.8	1121.0	1130.3
32.5°	1019.3	1029.5	1054.9	1092.2	1100.7
35°	973.6	988.8	1021.0	1058.3	1068.5
37.5°	932.1	946.5	982.9	1023.6	1035.4
40°	886.3	904.1	945.6	988.8	1000.7
42.5°	843.9	860.9	905.8	949.8	965.9
45°	793.1	816.8	863.4	911.7	928.7
47.5°	746.5	770.2	823.6	875.3	890.5
50°	699.9	725.3	781.2	834.6	849.9
52.5°	651.6	678.7	738.9	792.2	810.0
55°	600.8	632.1	694.8	749.0	765.1
57.5°	552.5	584.7	651.6	706.7	722.8
60°	505.0	538.0	606.7	659.2	676.2
62.5°	452.5	491.4	562.6	614.3	627.0
65°	405.0	444.8	514.3	566.0	580.4
67.5°	355.0	398.2	467.7	515.2	528.7
70°	307.6	352.5	419.4	463.5	469.4
72.5°	256.7	302.5	370.3	398.2	398.2
75°	211.0	257.6	320.3	325.4	321.1
77.5°	161.0	212.7	253.3	243.2	233.0
80°	116.1	166.9	185.6	166.9	153.4
82.5°	78.0	121.2	111.8	89.0	78.8
85°	43.2	64.4	44.1	24.6	17.8
87.5°	16.1	14.4	4.2	4.2	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)