

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: P308836

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-CA125-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: P308836  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-33)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 22FCZ2-44HE-UNV-L82765-CA125-W2A-U-3500K  
Description: 2'X2' TROFFER LED MODULE, RIBBED LENS, 0.125" ACRYLIC SHEET  
Light Source: (168) 3000K 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**

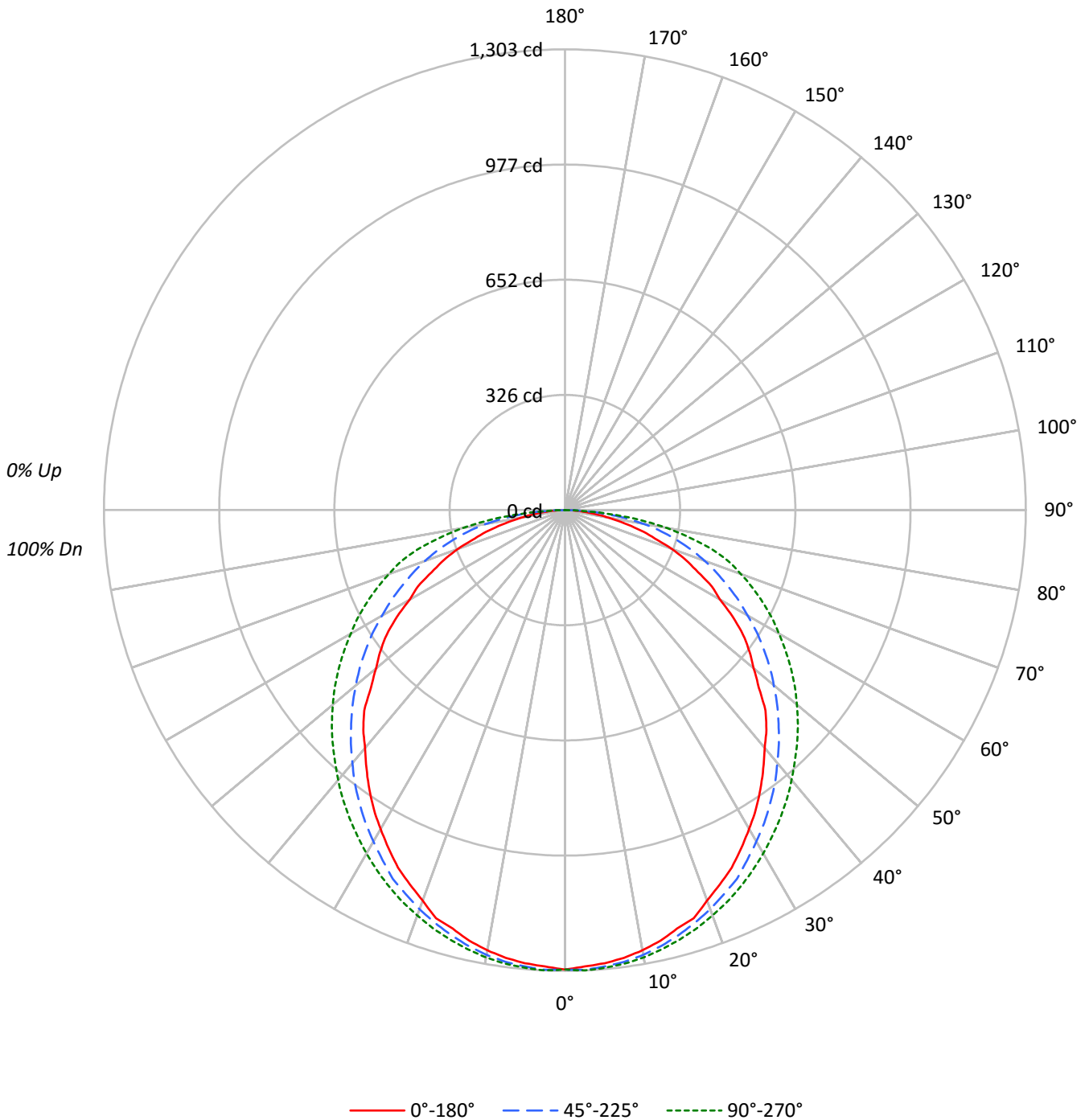
Lumens per Lamp: N/A  
Luminaire Lumens: 3873.0 lumens  
Efficiency: N/A  
Efficacy: 103.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 37.4  
Input Voltage (V): NR  
Input Current (A<sub>in</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	108	103	98	94	105	100	96	92	96	93	90	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	51	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3497	3497	3497
5°	3475	3500	3510
10°	3454	3490	3510
15°	3414	3465	3501
20°	3365	3440	3493
25°	3313	3418	3489
30°	3237	3364	3485
35°	3166	3325	3489
40°	3086	3282	3503
45°	3054	3252	3534
50°	2918	3228	3585
55°	2887	3218	3661
60°	2724	3212	3761
65°	2644	3234	3931
70°	2537	3311	4172
75°	2312	3411	4491
80°	1982	3533	4539
85°	1602	3378	3890



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.0	3.2
10°-20°	350.8	9.1
20°-30°	527.9	13.6
30°-40°	633.6	16.4
40°-50°	662.2	17.1
50°-60°	617.2	15.9
60°-70°	506.2	13.1
70°-80°	341.1	8.8
80°-90°	111.1	2.9
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°	1001.6	25.9
0°-40°	1635.2	42.2
0°-60°	2914.6	75.3
0°-90°	3873.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3873.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1299	1299	1299	1299	1299	
5°	1286	1290	1296	1298	1299	122
15°	1225	1233	1244	1255	1257	346
25°	1116	1123	1151	1168	1175	513
35°	964	977	1012	1047	1062	603
45°	803	808	854	906	929	613
55°	615	626	686	751	780	545
65°	415	434	508	582	617	413
75°	222	246	328	402	432	234
85°	52	74	109	128	126	62
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1299.4	1299.4	1299.4	1299.4	1299.4
2.5°	1292.0	1295.7	1301.3	1303.1	1303.1
5°	1286.4	1290.2	1295.7	1297.6	1299.4
7.5°	1277.2	1280.9	1288.3	1292.0	1293.9
10°	1264.2	1267.9	1277.2	1282.7	1284.6
12.5°	1247.5	1251.2	1262.4	1269.8	1271.6
15°	1225.3	1232.7	1243.8	1254.9	1256.8
17.5°	1210.4	1208.6	1223.4	1236.4	1240.1
20°	1175.2	1184.5	1201.2	1216.0	1219.7
22.5°	1145.6	1153.0	1175.2	1191.9	1199.3
25°	1115.9	1123.3	1151.1	1167.8	1175.2
27.5°	1078.8	1090.0	1115.9	1140.0	1149.3
30°	1041.8	1052.9	1082.5	1110.3	1121.5
32.5°	1004.7	1017.7	1049.2	1078.8	1091.8
35°	963.9	976.9	1012.1	1047.3	1062.2
37.5°	921.3	938.0	975.0	1014.0	1030.6
40°	878.6	895.3	934.3	978.7	997.3
42.5°	843.4	850.8	895.3	943.5	962.1
45°	802.6	808.2	854.5	906.4	928.7
47.5°	743.3	763.7	813.8	871.2	893.5
50°	697.0	719.2	771.1	832.3	856.4
52.5°	658.1	672.9	730.3	791.5	819.3
55°	615.4	626.5	685.9	750.7	780.4
57.5°	563.5	583.9	643.2	710.0	739.6
60°	506.1	532.0	596.9	669.2	698.8
62.5°	469.0	483.8	554.2	626.5	659.9
65°	415.2	433.8	507.9	582.1	617.3
67.5°	370.7	389.3	465.3	539.4	574.6
70°	322.5	341.1	420.8	494.9	530.2
72.5°	266.9	292.9	376.3	450.4	487.5
75°	222.4	246.5	328.1	402.2	431.9
77.5°	172.4	203.9	279.9	341.1	363.3
80°	127.9	159.4	228.0	272.5	292.9
82.5°	87.1	118.6	170.5	203.9	215.0
85°	51.9	74.1	109.4	127.9	126.0
87.5°	24.1	31.5	44.5	44.5	42.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)