

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: P308837

Luminaire Tested: **22FCZ2-44HE-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: P308837  
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-4000K  
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**

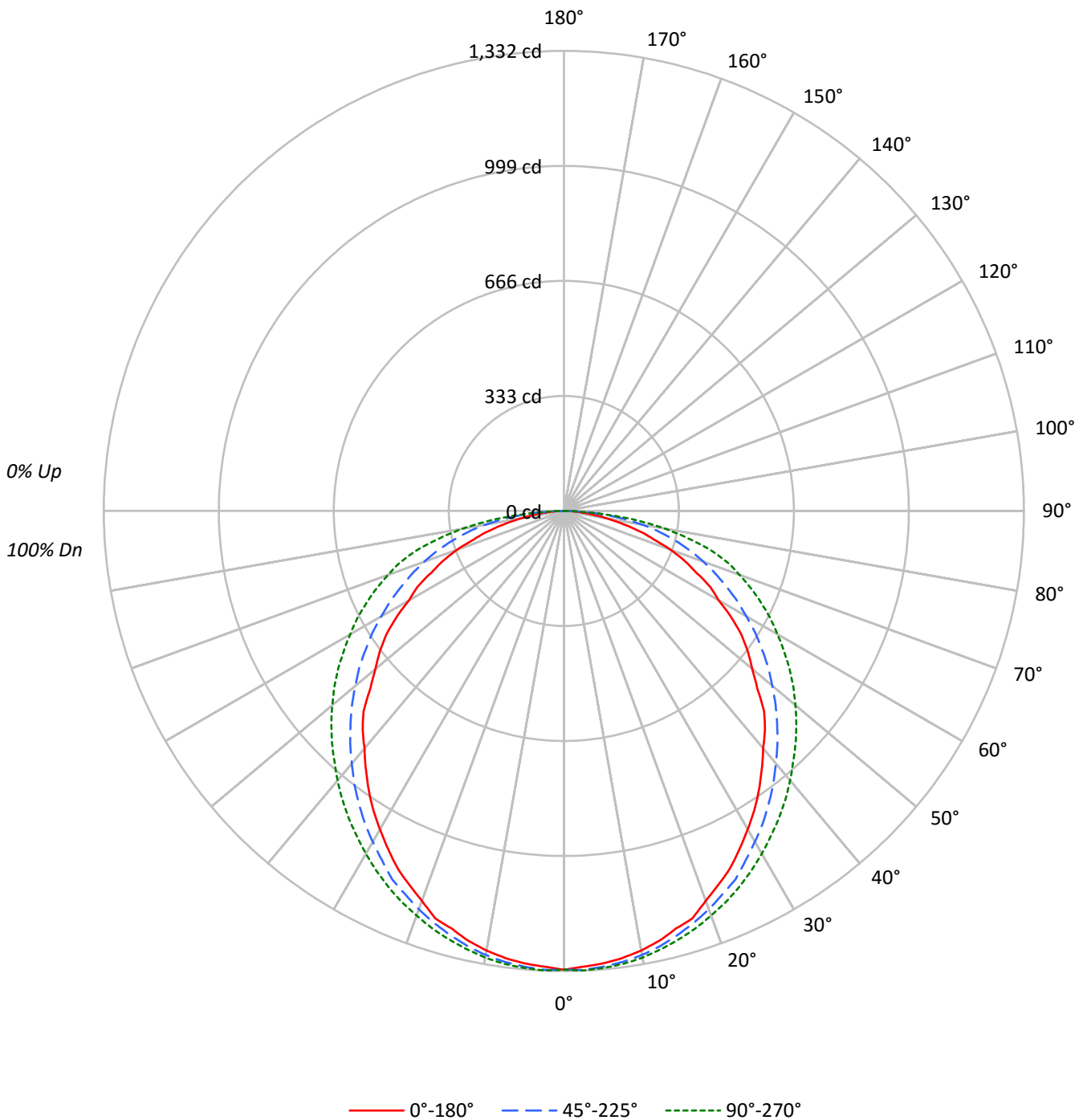
Lumens per Lamp: N/A  
Luminaire Lumens: 3958.0 lumens  
Efficiency: N/A  
Efficacy: 105.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 37.6  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	3573	3573	3573
5°	3551	3577	3587
10°	3530	3566	3587
15°	3489	3541	3578
20°	3439	3515	3570
25°	3386	3493	3566
30°	3308	3438	3561
35°	3236	3398	3566
40°	3154	3354	3580
45°	3122	3323	3612
50°	2982	3299	3664
55°	2951	3288	3742
60°	2784	3283	3844
65°	2702	3305	4017
70°	2593	3383	4263
75°	2363	3486	4589
80°	2025	3611	4638
85°	1636	3452	3977



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.7	3.2
10°-20°	358.5	9.1
20°-30°	539.5	13.6
30°-40°	647.5	16.4
40°-50°	676.8	17.1
50°-60°	630.7	15.9
60°-70°	517.3	13.1
70°-80°	348.6	8.8
80°-90°	113.5	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°	1023.6	25.9
0°-40°	1671.1	42.2
0°-60°	2978.6	75.3
0°-90°	3958.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3958.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1328	1328	1328	1328	1328	
5°	1315	1318	1324	1326	1328	125
15°	1252	1260	1271	1282	1284	354
25°	1140	1148	1176	1193	1201	524
35°	985	998	1034	1070	1086	616
45°	820	826	873	926	949	627
55°	629	640	701	767	798	557
65°	424	443	519	595	631	422
75°	227	252	335	411	441	239
85°	53	76	112	131	129	63
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1327.9	1327.9	1327.9	1327.9	1327.9
2.5°	1320.4	1324.2	1329.8	1331.7	1331.7
5°	1314.7	1318.5	1324.2	1326.0	1327.9
7.5°	1305.2	1309.0	1316.6	1320.4	1322.3
10°	1291.9	1295.7	1305.2	1310.9	1312.8
12.5°	1274.9	1278.7	1290.1	1297.6	1299.5
15°	1252.2	1259.7	1271.1	1282.5	1284.4
17.5°	1237.0	1235.1	1250.3	1263.5	1267.3
20°	1201.0	1210.5	1227.5	1242.7	1246.5
22.5°	1170.7	1178.3	1201.0	1218.1	1225.6
25°	1140.4	1148.0	1176.4	1193.4	1201.0
27.5°	1102.5	1113.9	1140.4	1165.0	1174.5
30°	1064.6	1076.0	1106.3	1134.7	1146.1
32.5°	1026.7	1040.0	1072.2	1102.5	1115.8
35°	985.1	998.3	1034.3	1070.3	1085.5
37.5°	941.5	958.5	996.4	1036.2	1053.3
40°	897.9	915.0	954.8	1000.2	1019.2
42.5°	861.9	869.5	915.0	964.2	983.2
45°	820.3	825.9	873.3	926.3	949.1
47.5°	759.6	780.5	831.6	890.3	913.1
50°	712.3	735.0	788.1	850.6	875.2
52.5°	672.5	687.7	746.4	808.9	837.3
55°	628.9	640.3	700.9	767.2	797.5
57.5°	575.9	596.7	657.3	725.5	755.8
60°	517.2	543.7	610.0	683.9	714.2
62.5°	479.3	494.4	566.4	640.3	674.4
65°	424.3	443.3	519.1	594.8	630.8
67.5°	378.9	397.8	475.5	551.3	587.2
70°	329.6	348.6	430.0	505.8	541.8
72.5°	272.8	299.3	384.6	460.3	498.2
75°	227.3	251.9	335.3	411.1	441.4
77.5°	176.2	208.4	286.0	348.6	371.3
80°	130.7	162.9	233.0	278.5	299.3
82.5°	89.0	121.2	174.3	208.4	219.7
85°	53.0	75.8	111.8	130.7	128.8
87.5°	24.6	32.2	45.5	45.5	43.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)