

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: P308843

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-CP125-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: P308843  
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-CP125-W2A-U-2700K  
Description: 2'X2' TROFFER LED MODULE, RIBBED LENS, 0.125" POLYCARB 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**

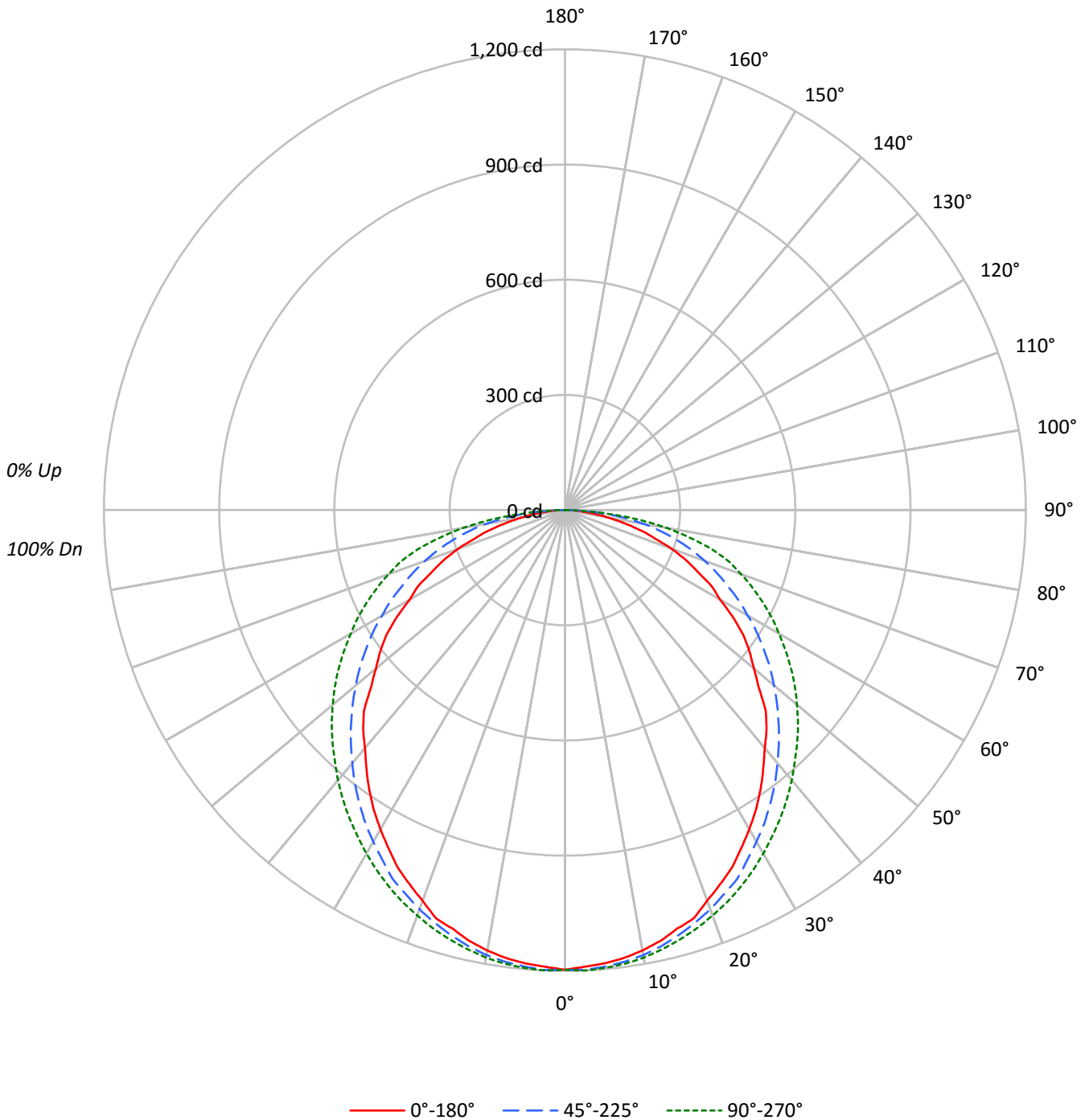
Lumens per Lamp: N/A  
Luminaire Lumens: 3568.0 lumens  
Efficiency: N/A  
Efficacy: 95.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 37.2  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	3221	3221	3221
5°	3201	3224	3234
10°	3182	3215	3234
15°	3145	3192	3226
20°	3101	3169	3218
25°	3052	3149	3215
30°	2982	3099	3210
35°	2917	3063	3214
40°	2843	3023	3227
45°	2814	2996	3256
50°	2688	2974	3303
55°	2660	2964	3373
60°	2509	2960	3465
65°	2436	2979	3621
70°	2338	3050	3843
75°	2130	3143	4137
80°	1826	3254	4181
85°	1476	3112	3585



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.3	3.2
10°-20°	323.1	9.1
20°-30°	486.3	13.6
30°-40°	583.7	16.4
40°-50°	610.1	17.1
50°-60°	568.6	15.9
60°-70°	466.3	13.1
70°-80°	314.2	8.8
80°-90°	102.3	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°	922.8	25.9
0°-40°	1506.5	42.2
0°-60°	2685.1	75.3
0°-90°	3568.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3568.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1197	1197	1197	1197	1197	
5°	1185	1189	1194	1195	1197	112
15°	1129	1136	1146	1156	1158	319
25°	1028	1035	1060	1076	1083	473
35°	888	900	932	965	978	555
45°	739	745	787	835	856	565
55°	567	577	632	692	719	502
65°	382	400	468	536	569	380
75°	205	227	302	371	398	215
85°	48	68	101	118	116	57
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1197.1	1197.1	1197.1	<i>1197.1</i>	1197.1
2.5°	<i>1190.3</i>	<i>1193.7</i>	<i>1198.8</i>	<i>1200.5</i>	<i>1200.5</i>
5°	1185.1	1188.6	1193.7	<i>1195.4</i>	1197.1
7.5°	1176.6	1180.0	1186.8	<i>1190.3</i>	1192.0
10°	1164.6	1168.1	1176.6	<i>1181.7</i>	1183.4
12.5°	1149.3	1152.7	1162.9	<i>1169.8</i>	1171.5
15°	1128.8	1135.6	1145.9	<i>1156.1</i>	1157.8
17.5°	1115.1	1113.4	1127.1	<i>1139.0</i>	1142.4
20°	1082.7	1091.2	1106.6	<i>1120.2</i>	1123.7
22.5°	1055.4	1062.2	1082.7	<i>1098.0</i>	1104.9
25°	1028.0	1034.9	1060.5	<i>1075.8</i>	1082.7
27.5°	993.9	1004.1	1028.0	<i>1050.2</i>	1058.8
30°	959.7	970.0	997.3	<i>1022.9</i>	1033.2
32.5°	925.6	937.5	966.6	<i>993.9</i>	1005.8
35°	888.0	900.0	932.4	<i>964.8</i>	978.5
37.5°	848.7	864.1	898.2	<i>934.1</i>	949.5
40°	809.4	824.8	860.7	<i>901.7</i>	918.7
42.5°	777.0	783.8	824.8	<i>869.2</i>	886.3
45°	739.4	744.6	787.2	<i>835.1</i>	855.6
47.5°	684.8	703.6	749.7	<i>802.6</i>	823.1
50°	642.1	662.6	710.4	<i>766.8</i>	789.0
52.5°	606.2	619.9	672.8	<i>729.2</i>	754.8
55°	567.0	577.2	631.8	<i>691.6</i>	718.9
57.5°	519.1	537.9	592.6	<i>654.0</i>	681.4
60°	466.2	490.1	549.9	<i>616.5</i>	643.8
62.5°	432.0	445.7	510.6	<i>577.2</i>	607.9
65°	382.5	399.6	467.9	<i>536.2</i>	568.7
67.5°	341.5	358.6	428.6	<i>496.9</i>	529.4
70°	297.1	314.2	387.6	<i>456.0</i>	488.4
72.5°	245.9	269.8	346.7	<i>415.0</i>	449.1
75°	204.9	227.1	302.3	<i>370.6</i>	397.9
77.5°	158.8	187.8	257.9	<i>314.2</i>	334.7
80°	117.8	146.9	210.0	<i>251.0</i>	269.8
82.5°	80.3	109.3	157.1	<i>187.8</i>	198.1
85°	47.8	68.3	100.8	<i>117.8</i>	116.1
87.5°	22.2	29.0	41.0	<i>41.0</i>	39.3
90°	0.0	0.0	0.0	<i>0.0</i>	0.0

(END OF REPORT)