

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: P308024

Luminaire Tested: **14FCZ2-44-UNV-L82765-S-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: P308024  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)  
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-S-CA125-W2A-U-2700K  
Description: 1'X4' TROFFER LED MODULE,SMOOTH 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**

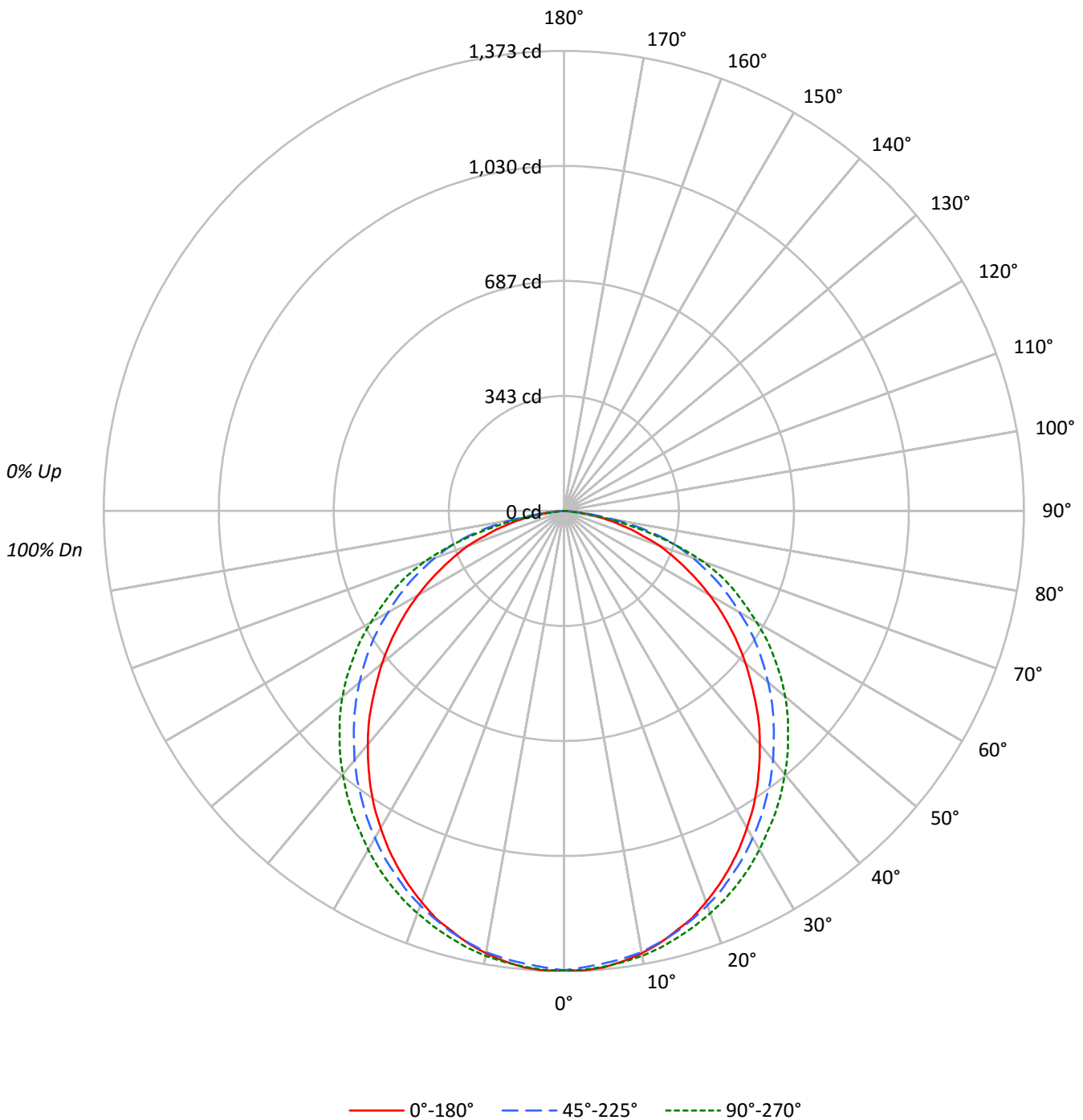
Lumens per Lamp: N/A  
Luminaire Lumens: 3840.0 lumens  
Efficiency: N/A  
Efficacy: 100.3 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 38.3  
Input Voltage (V): NR  
Input Current (A<sub>in</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	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	3689	3689	3689
5°	3693	3662	3687
10°	3663	3652	3683
15°	3612	3623	3670
20°	3555	3588	3658
25°	3482	3545	3646
30°	3396	3502	3627
35°	3302	3453	3615
40°	3197	3411	3605
45°	3080	3369	3601
50°	2965	3332	3611
55°	2840	3305	3600
60°	2705	3258	3576
65°	2546	3249	3577
70°	2397	3220	3475
75°	2078	3147	2969
80°	1681	2537	1977
85°	1118	883	587



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.4	3.4
10°-20°	368.3	9.6
20°-30°	552.5	14.4
30°-40°	659.1	17.2
40°-50°	681.4	17.7
50°-60°	622.1	16.2
60°-70°	489.6	12.7
70°-80°	285.0	7.4
80°-90°	52.5	1.4
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°	1050.3	27.4
0°-40°	1709.4	44.5
0°-60°	3012.9	78.5
0°-90°	3840.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3840.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1371	1371	1371	1371	1371	
5°	1367	1363	1356	1367	1365	130
15°	1297	1298	1300	1318	1318	366
25°	1173	1178	1194	1222	1228	540
35°	1005	1019	1051	1091	1100	628
45°	809	836	885	935	946	625
55°	605	638	704	756	767	541
65°	400	442	510	550	562	397
75°	200	248	303	297	286	212
85°	36	51	29	23	19	47
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1370.8	1370.8	1370.8	1370.8	1370.8
2.5°	1372.7	1368.9	1363.2	1372.7	1370.8
5°	1367.0	1363.2	1355.6	1367.0	1365.1
7.5°	1355.6	1351.8	1348.0	1359.4	1357.5
10°	1340.4	1338.4	1336.5	1349.9	1348.0
12.5°	1321.3	1321.3	1319.4	1334.6	1334.6
15°	1296.6	1298.5	1300.4	1317.5	1317.5
17.5°	1273.7	1271.8	1277.5	1296.6	1298.5
20°	1241.4	1245.2	1252.8	1275.6	1277.5
22.5°	1209.0	1212.8	1226.1	1249.0	1254.7
25°	1172.8	1178.5	1193.8	1222.3	1228.0
27.5°	1134.7	1142.3	1163.3	1193.8	1199.5
30°	1092.8	1104.3	1127.1	1161.4	1167.1
32.5°	1051.0	1062.4	1090.9	1125.2	1132.8
35°	1005.3	1018.6	1051.0	1090.9	1100.5
37.5°	957.7	974.8	1012.9	1052.9	1064.3
40°	910.1	929.1	971.0	1012.9	1026.2
42.5°	862.5	881.5	927.2	974.8	988.1
45°	809.2	835.8	885.3	934.8	946.2
47.5°	757.8	786.3	841.5	891.0	906.3
50°	708.3	736.8	795.8	847.2	862.5
52.5°	656.8	687.3	750.1	803.5	816.8
55°	605.4	637.8	704.4	755.9	767.3
57.5°	554.0	588.3	656.8	706.4	719.7
60°	502.6	538.8	605.4	654.9	664.5
62.5°	451.2	489.3	557.8	601.6	611.2
65°	399.8	441.7	510.2	550.2	561.7
67.5°	350.3	392.2	458.8	496.9	506.4
70°	304.6	342.7	409.3	437.9	441.7
72.5°	247.5	295.1	359.8	375.1	365.6
75°	199.9	247.5	302.7	297.0	285.6
77.5°	152.3	199.9	236.1	217.0	201.8
80°	108.5	156.1	163.7	135.2	127.6
82.5°	70.4	108.5	91.4	70.4	57.1
85°	36.2	51.4	28.6	22.8	19.0
87.5°	11.4	7.6	3.8	3.8	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)