

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: P308863

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-CP250-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: P308863  
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-CP250-W2A-U-3500K  
Description: 2'X2' TROFFER LED MODULE, RIBBED LENS, 0.250" 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**

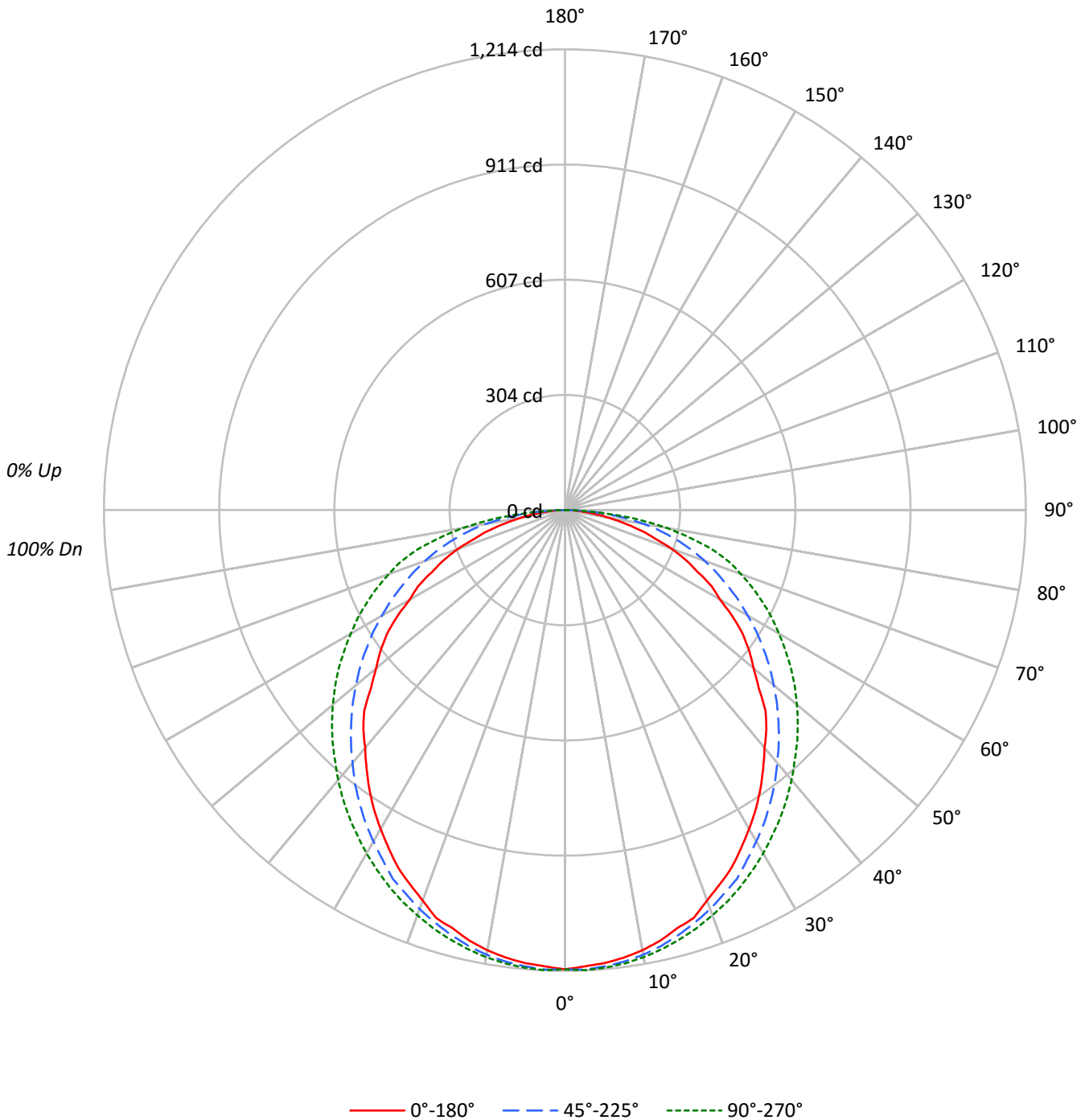
Lumens per Lamp: N/A  
Luminaire Lumens: 3607.0 lumens  
Efficiency: N/A  
Efficacy: 96.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 37.4  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	3257	3257	3257
5°	3236	3260	3269
10°	3217	3250	3269
15°	3179	3227	3261
20°	3134	3204	3253
25°	3086	3183	3250
30°	3015	3133	3245
35°	2949	3097	3250
40°	2875	3057	3263
45°	2845	3029	3291
50°	2717	3007	3339
55°	2689	2997	3410
60°	2537	2992	3503
65°	2462	3012	3661
70°	2364	3083	3884
75°	2154	3177	4182
80°	1846	3290	4228
85°	1491	3146	3625



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.5	3.2
10°-20°	326.7	9.1
20°-30°	491.7	13.6
30°-40°	590.1	16.4
40°-50°	616.8	17.1
50°-60°	574.8	15.9
60°-70°	471.4	13.1
70°-80°	317.7	8.8
80°-90°	103.5	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°	932.8	25.9
0°-40°	1522.9	42.2
0°-60°	2714.5	75.3
0°-90°	3607.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3607.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1210	1210	1210	1210	1210	
5°	1198	1202	1207	1208	1210	114
15°	1141	1148	1158	1169	1170	322
25°	1039	1046	1072	1088	1094	478
35°	898	910	943	975	989	561
45°	748	753	796	844	865	571
55°	573	584	639	699	727	508
65°	387	404	473	542	575	385
75°	207	230	306	375	402	218
85°	48	69	102	119	117	57
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1210.2	1210.2	1210.2	1210.2	1210.2
2.5°	1203.3	1206.7	1211.9	1213.6	1213.6
5°	1198.1	1201.5	1206.7	1208.5	1210.2
7.5°	1189.5	1192.9	1199.8	1203.3	1205.0
10°	1177.4	1180.8	1189.5	1194.6	1196.4
12.5°	1161.8	1165.3	1175.7	1182.6	1184.3
15°	1141.1	1148.0	1158.4	1168.7	1170.5
17.5°	1127.3	1125.6	1139.4	1151.5	1154.9
20°	1094.5	1103.1	1118.7	1132.5	1135.9
22.5°	1066.9	1073.8	1094.5	1110.1	1117.0
25°	1039.3	1046.2	1072.1	1087.6	1094.5
27.5°	1004.7	1015.1	1039.3	1061.7	1070.3
30°	970.2	980.6	1008.2	1034.1	1044.4
32.5°	935.7	947.8	977.1	1004.7	1016.8
35°	897.7	909.8	942.6	975.4	989.2
37.5°	858.0	873.5	908.1	944.3	959.9
40°	818.3	833.8	870.1	911.5	928.8
42.5°	785.5	792.4	833.8	878.7	896.0
45°	747.5	752.7	795.9	844.2	864.9
47.5°	692.3	711.3	757.9	811.4	832.1
50°	649.1	669.8	718.2	775.1	797.6
52.5°	612.9	626.7	680.2	737.2	763.1
55°	573.2	583.5	638.8	699.2	726.8
57.5°	524.8	543.8	599.0	661.2	688.8
60°	471.3	495.5	555.9	623.2	650.8
62.5°	436.8	450.6	516.2	583.5	614.6
65°	386.7	404.0	473.0	542.1	574.9
67.5°	345.3	362.5	433.3	502.4	535.2
70°	300.4	317.7	391.9	460.9	493.7
72.5°	248.6	272.8	350.5	419.5	454.0
75°	207.2	229.6	305.6	374.6	402.2
77.5°	160.6	189.9	260.7	317.7	338.4
80°	119.1	148.5	212.3	253.8	272.8
82.5°	81.1	110.5	158.8	189.9	200.3
85°	48.3	69.1	101.9	119.1	117.4
87.5°	22.4	29.3	41.4	41.4	39.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)