

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: P312876

Luminaire Tested: **22FCZ2-44HE-UNV-L83050-CP125-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: P312876  
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-L83050-CP125-W2A-U-3500K  
Description: 2'X2' TROFFER LED MODULE, RIBBED LENS, 0.125" POLYCARB SHEET  
Light Source: (168) 3500K 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**

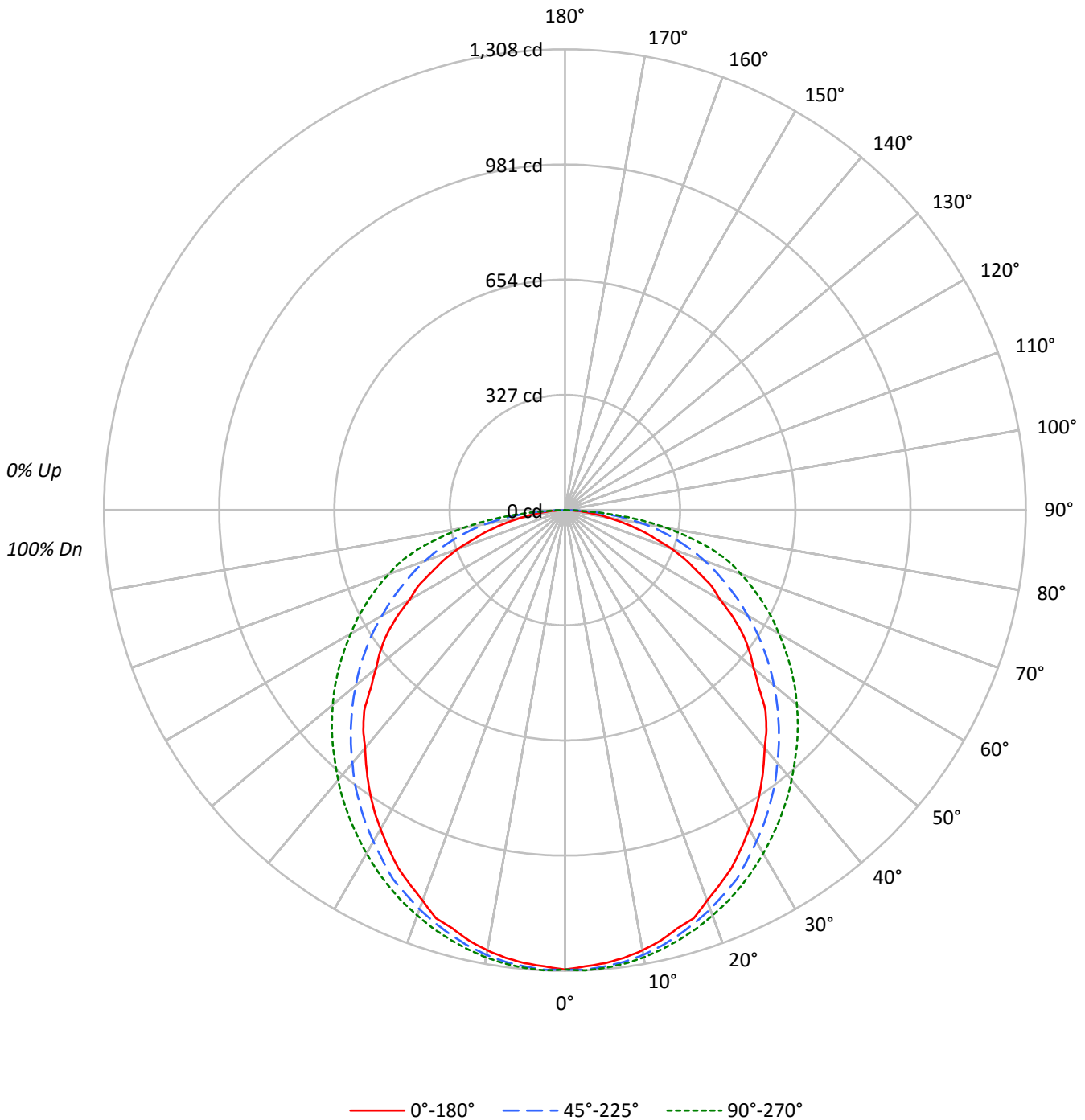
Lumens per Lamp: N/A  
Luminaire Lumens: 3888.0 lumens  
Efficiency: N/A  
Efficacy: 104.5 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 37.2  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	3510	3510	3510
5°	3488	3514	3524
10°	3468	3503	3524
15°	3427	3478	3515
20°	3379	3453	3506
25°	3326	3431	3503
30°	3250	3377	3498
35°	3179	3338	3503
40°	3098	3295	3517
45°	3066	3265	3548
50°	2929	3241	3599
55°	2898	3230	3675
60°	2734	3225	3775
65°	2654	3247	3946
70°	2548	3323	4187
75°	2322	3425	4508
80°	1990	3547	4556
85°	1609	3390	3906



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.4	3.2
10°-20°	352.1	9.1
20°-30°	530.0	13.6
30°-40°	636.1	16.4
40°-50°	664.8	17.1
50°-60°	619.6	15.9
60°-70°	508.1	13.1
70°-80°	342.4	8.8
80°-90°	111.5	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°	1005.5	25.9
0°-40°	1641.6	42.2
0°-60°	2925.9	75.3
0°-90°	3888.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3888.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1304	1304	1304	1304	1304	
5°	1291	1295	1301	1303	1304	123
15°	1230	1238	1249	1260	1262	348
25°	1120	1128	1156	1172	1180	515
35°	968	981	1016	1051	1066	605
45°	806	811	858	910	932	616
55°	618	629	688	754	783	547
65°	417	435	510	584	620	415
75°	223	248	329	404	434	235
85°	52	74	110	128	126	62
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1304.5	1304.5	1304.5	1304.5	1304.5
2.5°	1297.0	1300.7	1306.3	1308.2	1308.2
5°	1291.4	1295.2	1300.7	1302.6	1304.5
7.5°	1282.1	1285.8	1293.3	1297.0	1298.9
10°	1269.1	1272.8	1282.1	1287.7	1289.6
12.5°	1252.4	1256.1	1267.2	1274.7	1276.5
15°	1230.0	1237.5	1248.6	1259.8	1261.7
17.5°	1215.1	1213.3	1228.2	1241.2	1244.9
20°	1179.8	1189.1	1205.8	1220.7	1224.4
22.5°	1150.0	1157.4	1179.8	1196.5	1204.0
25°	1120.2	1127.7	1155.6	1172.3	1179.8
27.5°	1083.0	1094.2	1120.2	1144.4	1153.7
30°	1045.8	1057.0	1086.7	1114.7	1125.8
32.5°	1008.6	1021.6	1053.2	1083.0	1096.0
35°	967.6	980.7	1016.0	1051.4	1066.3
37.5°	924.8	941.6	978.8	1017.9	1034.6
40°	882.0	898.8	937.9	982.5	1001.1
42.5°	846.7	854.1	898.8	947.2	965.8
45°	805.7	811.3	857.9	910.0	932.3
47.5°	746.2	766.7	816.9	874.6	896.9
50°	699.7	722.0	774.1	835.5	859.7
52.5°	660.6	675.5	733.2	794.6	822.5
55°	617.8	629.0	688.5	753.6	783.4
57.5°	565.7	586.2	645.7	712.7	742.5
60°	508.0	534.1	599.2	671.8	701.5
62.5°	470.8	485.7	556.4	629.0	662.5
65°	416.8	435.4	509.9	584.3	619.7
67.5°	372.2	390.8	467.1	541.5	576.9
70°	323.8	342.4	422.4	496.8	532.2
72.5°	268.0	294.0	377.8	452.2	489.4
75°	223.3	247.5	329.4	403.8	433.6
77.5°	173.1	204.7	281.0	342.4	364.7
80°	128.4	160.0	228.9	273.5	294.0
82.5°	87.5	119.1	171.2	204.7	215.9
85°	52.1	74.4	109.8	128.4	126.5
87.5°	24.2	31.6	44.7	44.7	42.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)