

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: P308846

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-CP125-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: P308846  
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-4000K  
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**

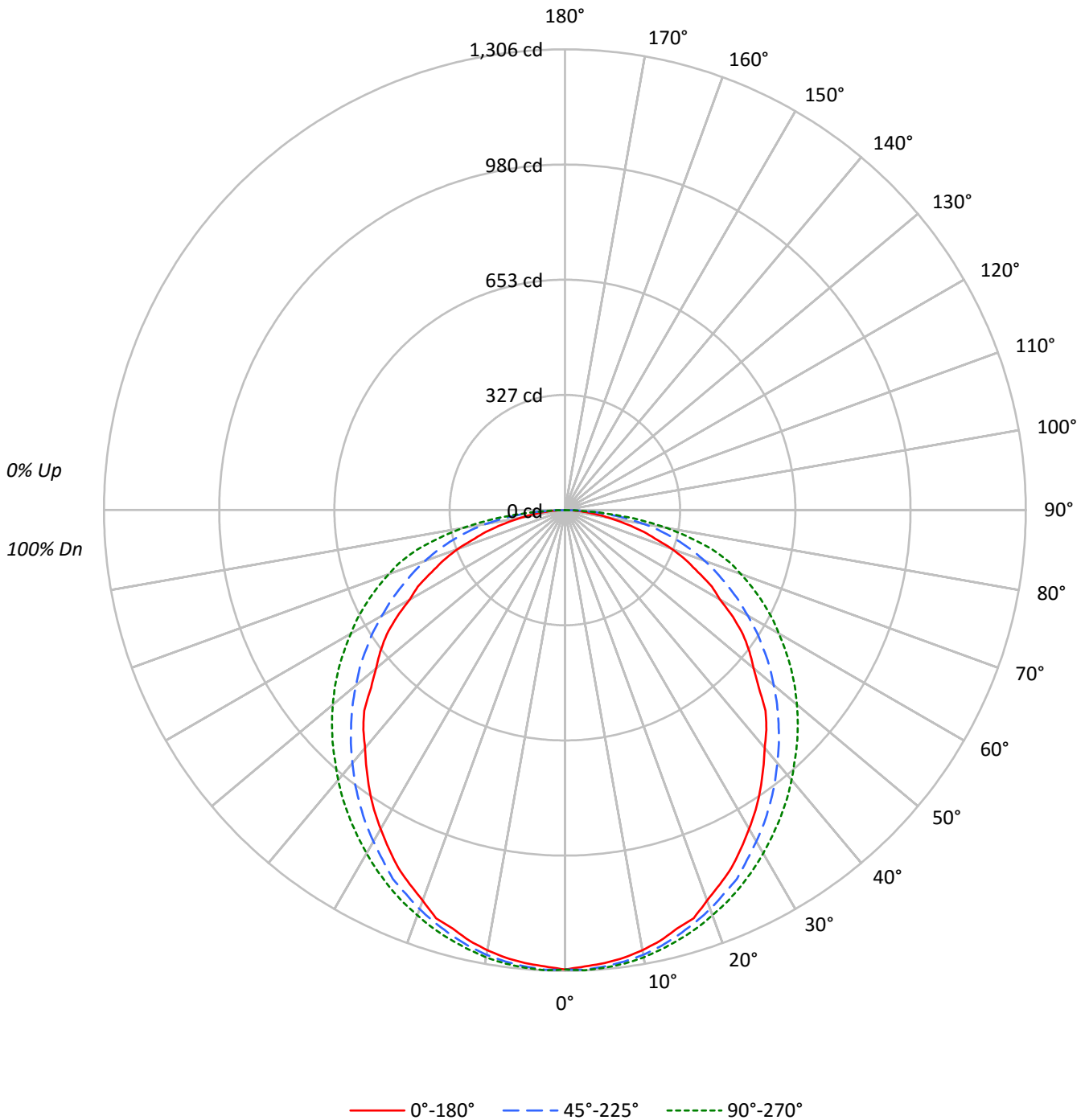
Lumens per Lamp: N/A  
Luminaire Lumens: 3881.0 lumens  
Efficiency: N/A  
Efficacy: 103.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 37.6  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	3504	3504	3504
5°	3482	3507	3517
10°	3462	3497	3517
15°	3421	3472	3509
20°	3373	3447	3500
25°	3320	3425	3497
30°	3244	3371	3492
35°	3173	3332	3496
40°	3093	3289	3510
45°	3061	3259	3542
50°	2924	3235	3593
55°	2893	3225	3669
60°	2729	3219	3769
65°	2649	3241	3938
70°	2543	3318	4179
75°	2318	3419	4500
80°	1987	3541	4548
85°	1606	3384	3900



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.2	3.2
10°-20°	351.5	9.1
20°-30°	529.0	13.6
30°-40°	634.9	16.4
40°-50°	663.6	17.1
50°-60°	618.4	15.9
60°-70°	507.2	13.1
70°-80°	341.8	8.8
80°-90°	111.3	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°	1003.7	25.9
0°-40°	1638.6	42.2
0°-60°	2920.7	75.3
0°-90°	3881.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3881.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1302	1302	1302	1302	1302	
5°	1289	1293	1298	1300	1302	122
15°	1228	1235	1246	1258	1259	347
25°	1118	1126	1154	1170	1178	514
35°	966	979	1014	1050	1064	604
45°	804	810	856	908	931	614
55°	617	628	687	752	782	546
65°	416	435	509	583	618	414
75°	223	247	329	403	433	234
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°	1302.1	1302.1	1302.1	1302.1	1302.1
2.5°	1294.7	1298.4	1304.0	1305.8	1305.8
5°	1289.1	1292.8	1298.4	1300.3	1302.1
7.5°	1279.8	1283.5	1291.0	1294.7	1296.5
10°	1266.8	1270.5	1279.8	1285.4	1287.2
12.5°	1250.1	1253.8	1265.0	1272.4	1274.2
15°	1227.8	1235.2	1246.4	1257.5	1259.4
17.5°	1212.9	1211.1	1226.0	1239.0	1242.7
20°	1177.7	1186.9	1203.7	1218.5	1222.2
22.5°	1147.9	1155.4	1177.7	1194.4	1201.8
25°	1118.2	1125.6	1153.5	1170.2	1177.7
27.5°	1081.1	1092.2	1118.2	1142.4	1151.7
30°	1043.9	1055.1	1084.8	1112.6	1123.8
32.5°	1006.8	1019.8	1051.3	1081.1	1094.1
35°	965.9	978.9	1014.2	1049.5	1064.3
37.5°	923.2	939.9	977.0	1016.1	1032.8
40°	880.5	897.2	936.2	980.8	999.3
42.5°	845.2	852.6	897.2	945.5	964.0
45°	804.3	809.9	856.3	908.3	930.6
47.5°	744.9	765.3	815.4	873.0	895.3
50°	698.4	720.7	772.7	834.0	858.2
52.5°	659.4	674.3	731.9	793.2	821.0
55°	616.7	627.8	687.3	752.3	782.0
57.5°	564.7	585.1	644.6	711.4	741.1
60°	507.1	533.1	598.1	670.6	700.3
62.5°	469.9	484.8	555.4	627.8	661.3
65°	416.1	434.7	509.0	583.3	618.5
67.5°	371.5	390.1	466.2	540.5	575.8
70°	323.2	341.8	421.7	496.0	531.2
72.5°	267.5	293.5	377.1	451.4	488.5
75°	222.9	247.0	328.8	403.1	432.8
77.5°	172.7	204.3	280.5	341.8	364.1
80°	128.2	159.7	228.5	273.1	293.5
82.5°	87.3	118.9	170.9	204.3	215.5
85°	52.0	74.3	109.6	128.2	126.3
87.5°	24.1	31.6	44.6	44.6	42.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)