

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: P308075

Luminaire Tested: **22FCZ2-20HE-UNV-L82765-HRP-CA125-W2A-U-5500K**

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: P308075  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-22)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 22FCZ2-20HE-UNV-L82765-HRP-CA125-W2A-U-5500K  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" ACRYLIC 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**

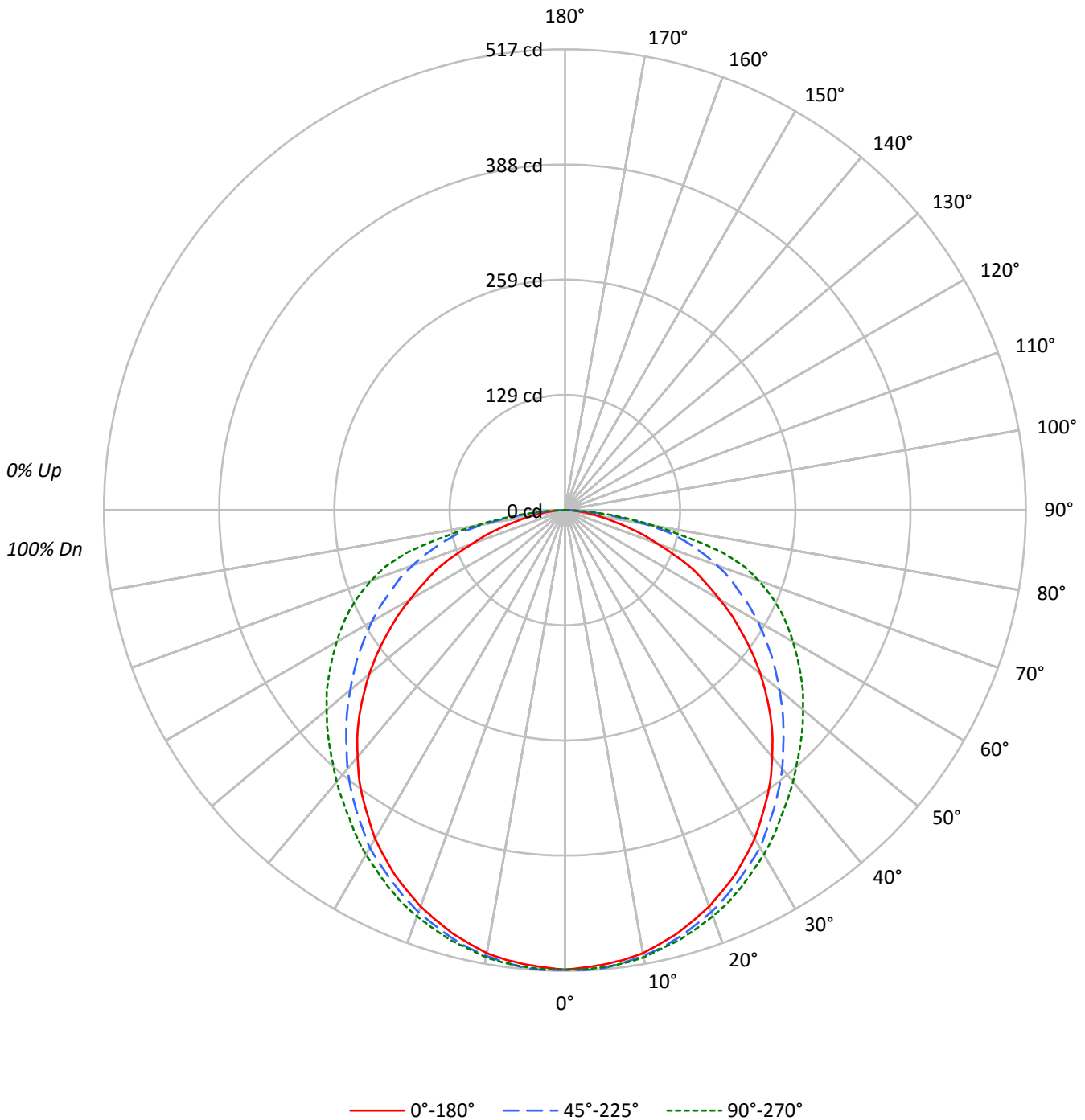
Lumens per Lamp: N/A  
Luminaire Lumens: 1566.0 lumens  
Efficiency: N/A  
Efficacy: 91.0 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 17.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	101	96	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	84	78	73	80	75	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	52	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	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
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	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

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

	0°	45°	90°
0°	1388	1388	1388
5°	1382	1393	1390
10°	1379	1388	1393
15°	1368	1382	1390
20°	1355	1375	1389
25°	1341	1364	1387
30°	1323	1360	1387
35°	1298	1344	1386
40°	1270	1332	1398
45°	1241	1319	1421
50°	1199	1315	1460
55°	1145	1325	1515
60°	1079	1345	1590
65°	1019	1372	1698
70°	870	1430	1819
75°	729	1489	1890
80°	597	1440	1578
85°	519	1068	1158



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.9	3.1
10°-20°	139.8	8.9
20°-30°	211.9	13.5
30°-40°	255.8	16.3
40°-50°	268.8	17.2
50°-60°	252.9	16.2
60°-70°	210.9	13.5
70°-80°	139.7	8.9
80°-90°	37.3	2.4
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°	400.5	25.6
0°-40°	656.4	41.9
0°-60°	1178.1	75.2
0°-90°	1566.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1566.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	516	516	516	516	516	
5°	512	513	516	516	515	49
15°	491	493	496	498	499	138
25°	452	454	459	465	467	208
35°	395	399	409	418	422	247
45°	326	331	347	364	373	251
55°	244	255	282	311	323	218
65°	160	174	215	251	267	156
75°	70	98	143	173	182	76
85°	17	26	35	38	38	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	515.7	515.7	515.7	515.7	515.7
2.5°	513.7	514.7	516.7	516.7	515.7
5°	511.7	512.7	515.7	515.7	514.7
7.5°	508.8	509.7	511.7	513.7	512.7
10°	504.8	505.8	507.8	509.7	509.7
12.5°	497.9	498.9	502.8	503.8	503.8
15°	491.0	492.9	495.9	497.9	498.9
17.5°	482.1	484.1	488.0	492.0	492.0
20°	473.2	475.2	480.1	484.1	485.0
22.5°	462.3	465.3	470.2	475.2	477.1
25°	451.5	454.4	459.4	465.3	467.3
27.5°	438.6	441.6	448.5	455.4	456.4
30°	425.8	428.7	437.6	443.6	446.5
32.5°	410.0	413.9	422.8	431.7	434.7
35°	395.1	399.1	409.0	417.9	421.8
37.5°	379.3	383.3	394.2	405.0	410.0
40°	361.6	366.5	379.3	391.2	398.1
42.5°	344.8	349.7	362.5	378.4	385.3
45°	326.0	330.9	346.7	364.5	373.4
47.5°	306.2	312.2	330.9	352.7	361.6
50°	286.5	293.4	314.1	338.8	348.7
52.5°	265.7	274.6	298.3	325.0	336.9
55°	244.0	254.9	282.5	311.2	323.0
57.5°	223.3	233.1	265.7	296.4	309.2
60°	200.5	213.4	249.9	281.5	295.4
62.5°	178.8	192.6	233.1	266.7	281.5
65°	160.0	173.9	215.4	250.9	266.7
67.5°	135.3	154.1	200.5	234.1	249.9
70°	110.6	136.3	181.8	216.3	231.2
72.5°	91.9	116.6	163.0	197.6	211.4
75°	70.1	97.8	143.2	172.9	181.8
77.5°	52.4	81.0	122.5	137.3	138.3
80°	38.5	62.2	92.9	97.8	101.8
82.5°	26.7	43.5	60.3	66.2	68.2
85°	16.8	25.7	34.6	37.5	37.5
87.5°	8.9	9.9	11.9	11.9	11.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)