

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: P308885

Luminaire Tested: **22FCZ2-20HE-UNV-L82765-S-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: P308885  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)  
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-S-CA125-W2A-U-5500K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH 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**

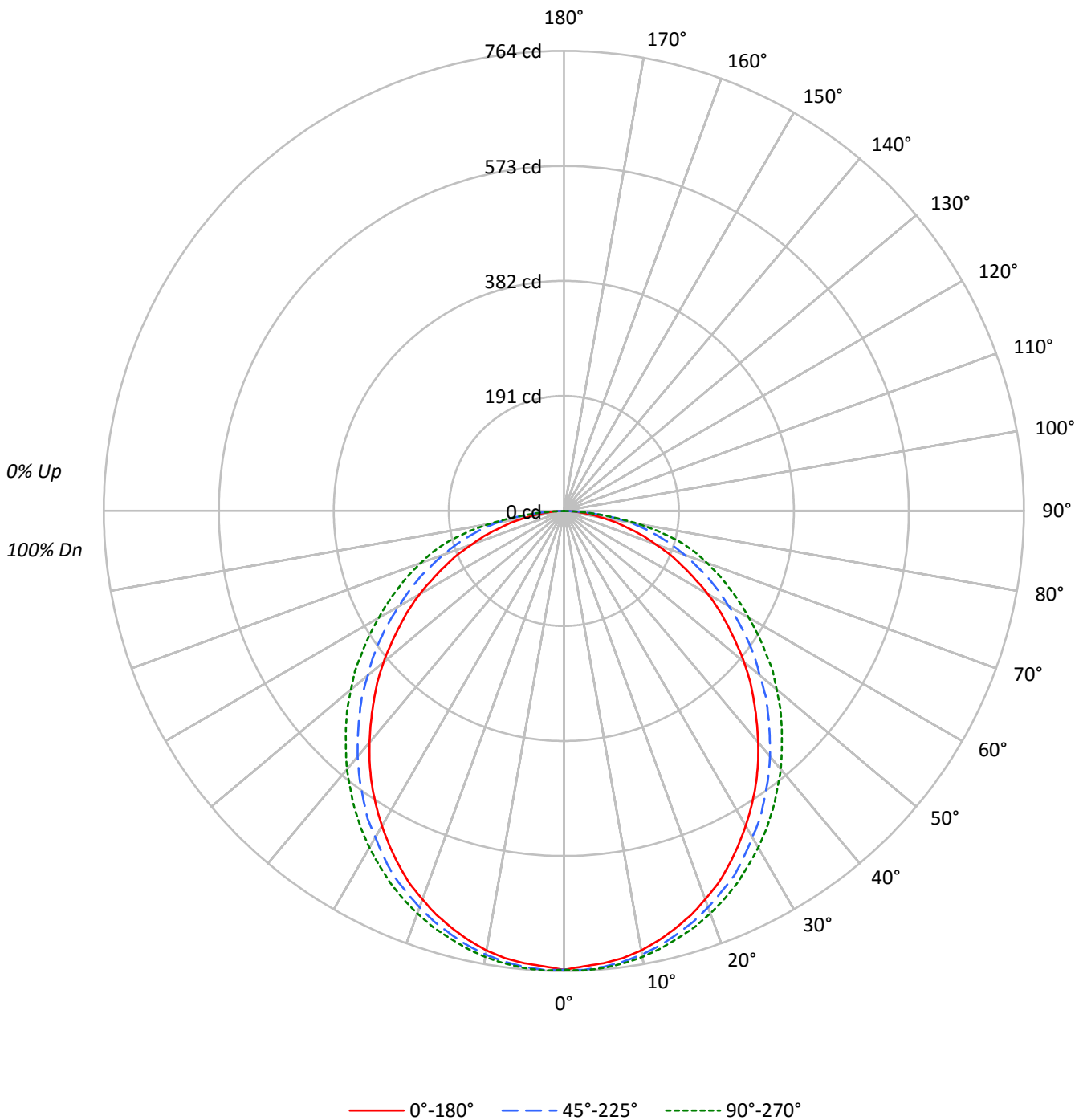
Lumens per Lamp: N/A  
Luminaire Lumens: 2126.0 lumens  
Efficiency: N/A  
Efficacy: 123.6 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 17.2  
Input Voltage (V): NR  
Input Current (A<sub>in</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	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	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	51	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	2050	2050	2050
5°	2036	2052	2058
10°	2025	2044	2055
15°	1998	2026	2045
20°	1966	2005	2037
25°	1926	1985	2023
30°	1877	1945	2007
35°	1825	1910	1988
40°	1763	1871	1969
45°	1699	1827	1948
50°	1636	1778	1931
55°	1559	1745	1917
60°	1490	1703	1911
65°	1389	1692	1933
70°	1280	1678	1990
75°	1155	1702	2094
80°	1000	1753	1968
85°	827	1470	1470



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.0	3.4
10°-20°	205.0	9.6
20°-30°	306.8	14.4
30°-40°	363.3	17.1
40°-50°	370.2	17.4
50°-60°	331.8	15.6
60°-70°	259.8	12.2
70°-80°	167.5	7.9
80°-90°	49.5	2.3
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°	583.8	27.5
0°-40°	947.1	44.5
0°-60°	1649.2	77.6
0°-90°	2126.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2126.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	762	762	762	762	762	
5°	754	756	760	761	762	72
15°	717	721	727	733	734	202
25°	649	655	669	678	682	299
35°	556	562	581	599	605	347
45°	446	456	480	505	512	345
55°	332	343	372	398	409	298
65°	218	231	266	292	304	217
75°	111	128	164	191	201	119
85°	27	37	48	48	48	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	761.8	761.8	761.8	761.8	761.8
2.5°	756.9	758.8	762.8	763.8	763.8
5°	753.9	755.9	759.8	760.8	761.8
7.5°	748.9	749.9	754.9	756.9	757.8
10°	741.0	743.0	747.9	750.9	751.9
12.5°	730.1	733.0	739.0	743.0	744.0
15°	717.2	721.1	727.1	733.0	734.0
17.5°	703.3	707.3	715.2	722.1	724.1
20°	686.4	691.4	700.3	708.2	711.2
22.5°	669.6	673.5	684.4	694.4	697.3
25°	648.7	654.7	668.6	677.5	681.5
27.5°	626.9	633.9	647.7	659.6	663.6
30°	604.1	611.0	625.9	640.8	645.8
32.5°	580.3	588.2	606.1	621.0	625.9
35°	555.5	562.4	581.3	599.1	605.1
37.5°	529.7	535.6	557.5	576.3	582.3
40°	501.9	509.9	532.7	554.5	560.4
42.5°	474.1	483.1	505.9	529.7	535.6
45°	446.4	456.3	480.1	504.9	511.8
47.5°	419.6	427.5	454.3	478.1	488.0
50°	390.8	398.8	424.6	451.3	461.3
52.5°	361.1	372.0	399.8	425.5	437.4
55°	332.3	343.2	372.0	397.8	408.7
57.5°	305.5	314.4	344.2	371.0	381.9
60°	276.8	284.7	316.4	345.2	355.1
62.5°	246.0	257.9	290.6	317.4	329.3
65°	218.2	231.1	265.8	291.6	303.5
67.5°	192.4	204.3	238.1	265.8	278.7
70°	162.7	178.5	213.3	241.0	252.9
72.5°	138.9	152.8	188.5	216.2	229.1
75°	111.1	128.0	163.7	191.4	201.4
77.5°	88.3	105.1	138.9	160.7	165.7
80°	64.5	81.3	113.1	124.0	127.0
82.5°	43.6	59.5	81.3	84.3	85.3
85°	26.8	36.7	47.6	47.6	47.6
87.5°	12.9	14.9	16.9	15.9	15.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)