

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: P308623

Luminaire Tested: **22FCZ2-20HE-UNV-L82765-CP125-W2A-U-5000K**

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: P308623  
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: 22FCZ2-20HE-UNV-L82765-CP125-W2A-U-5000K  
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**

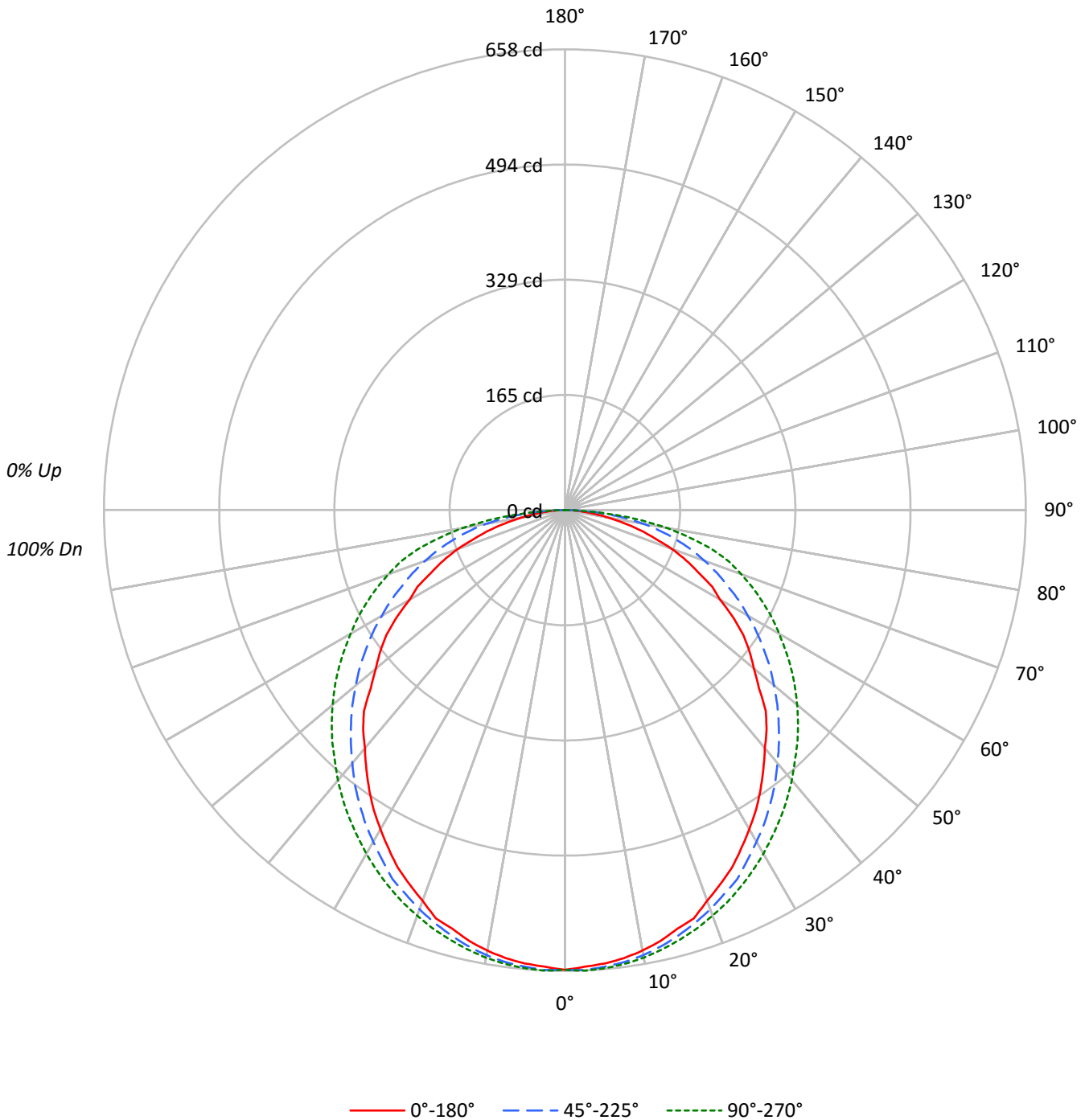
Lumens per Lamp: N/A  
Luminaire Lumens: 1957.0 lumens  
Efficiency: N/A  
Efficacy: 114.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 17.1  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	1767	1767	1767
5°	1756	1769	1774
10°	1746	1764	1774
15°	1725	1751	1769
20°	1700	1738	1765
25°	1674	1727	1763
30°	1636	1700	1761
35°	1600	1680	1763
40°	1560	1658	1770
45°	1544	1643	1786
50°	1474	1631	1811
55°	1459	1626	1850
60°	1376	1623	1900
65°	1336	1634	1986
70°	1282	1673	2108
75°	1169	1724	2269
80°	1001	1785	2294
85°	809	1707	1967



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.1	3.2
10°-20°	177.2	9.1
20°-30°	266.8	13.6
30°-40°	320.2	16.4
40°-50°	334.6	17.1
50°-60°	311.8	15.9
60°-70°	255.8	13.1
70°-80°	172.3	8.8
80°-90°	56.1	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°	506.1	25.9
0°-40°	826.3	42.2
0°-60°	1472.7	75.3
0°-90°	1957.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1957.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	657	657	657	657	657	
5°	650	652	655	656	657	62
15°	619	623	628	634	635	175
25°	564	568	582	590	594	259
35°	487	494	511	529	537	305
45°	406	408	432	458	469	310
55°	311	317	347	379	394	276
65°	210	219	257	294	312	209
75°	112	125	166	203	218	118
85°	26	38	55	65	64	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	656.6	656.6	656.6	656.6	656.6
2.5°	652.8	654.7	657.5	658.5	658.5
5°	650.0	651.9	654.7	655.7	656.6
7.5°	645.4	647.2	651.0	652.8	653.8
10°	638.8	640.7	645.4	648.2	649.1
12.5°	630.4	632.2	637.9	641.6	642.5
15°	619.1	622.9	628.5	634.1	635.0
17.5°	611.6	610.7	618.2	624.7	626.6
20°	593.8	598.5	606.9	614.4	616.3
22.5°	578.8	582.6	593.8	602.3	606.0
25°	563.9	567.6	581.7	590.1	593.8
27.5°	545.1	550.7	563.9	576.0	580.7
30°	526.4	532.0	547.0	561.1	566.7
32.5°	507.7	514.2	530.1	545.1	551.7
35°	487.1	493.6	511.4	529.2	536.7
37.5°	465.5	473.9	492.7	512.3	520.8
40°	444.0	452.4	472.1	494.6	503.9
42.5°	426.2	429.9	452.4	476.8	486.1
45°	405.6	408.4	431.8	458.0	469.3
47.5°	375.6	385.9	411.2	440.2	451.5
50°	352.2	363.4	389.6	420.6	432.7
52.5°	332.5	340.0	369.0	399.9	414.0
55°	311.0	316.6	346.6	379.3	394.3
57.5°	284.7	295.0	325.0	358.7	373.7
60°	255.7	268.8	301.6	338.1	353.1
62.5°	237.0	244.5	280.1	316.6	333.4
65°	209.8	219.2	256.6	294.1	311.9
67.5°	187.3	196.7	235.1	272.6	290.4
70°	163.0	172.3	212.6	250.1	267.9
72.5°	134.9	148.0	190.1	227.6	246.3
75°	112.4	124.6	165.8	203.3	218.2
77.5°	87.1	103.0	141.4	172.3	183.6
80°	64.6	80.6	115.2	137.7	148.0
82.5°	44.0	59.9	86.2	103.0	108.7
85°	26.2	37.5	55.3	64.6	63.7
87.5°	12.2	15.9	22.5	22.5	21.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)