

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: P308708

Luminaire Tested: **22FCZ2-29HE-UNV-L82765-CP125-W2A-U-2700K**

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: P308708  
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: 22FCZ2-29HE-UNV-L82765-CP125-W2A-U-2700K  
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**

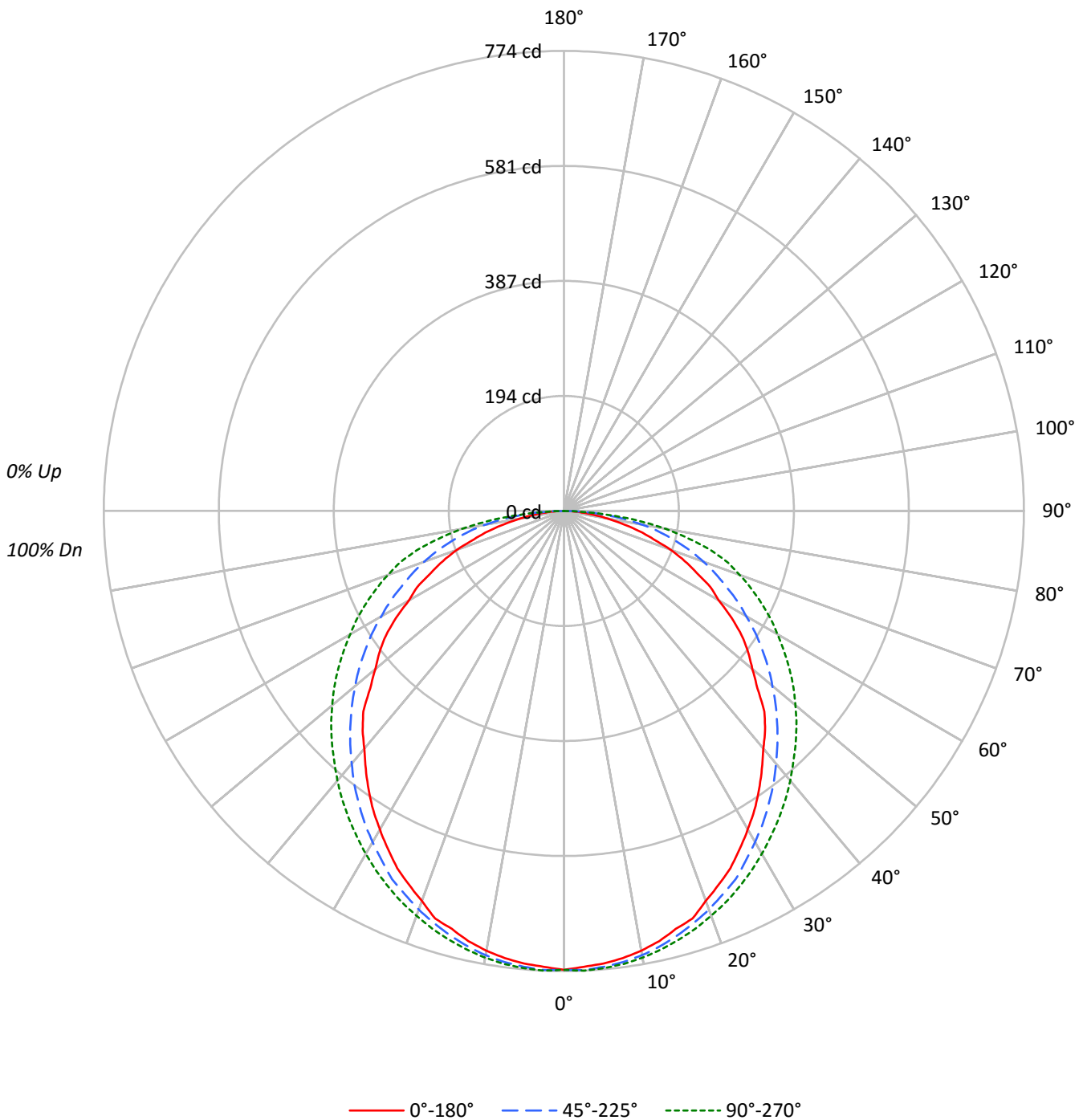
Lumens per Lamp: N/A  
Luminaire Lumens: 2301.0 lumens  
Efficiency: N/A  
Efficacy: 102.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 22.4  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	2077	2077	2077
5°	2065	2079	2085
10°	2052	2073	2085
15°	2028	2059	2080
20°	1999	2044	2075
25°	1969	2031	2073
30°	1923	1999	2070
35°	1881	1975	2073
40°	1834	1950	2081
45°	1815	1932	2100
50°	1734	1918	2130
55°	1715	1912	2175
60°	1618	1908	2235
65°	1571	1922	2335
70°	1507	1967	2478
75°	1375	2026	2668
80°	1178	2100	2696
85°	951	2007	2313



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.1	3.2
10°-20°	208.4	9.1
20°-30°	313.6	13.6
30°-40°	376.4	16.4
40°-50°	393.4	17.1
50°-60°	366.7	15.9
60°-70°	300.7	13.1
70°-80°	202.6	8.8
80°-90°	66.0	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°	595.1	25.9
0°-40°	971.5	42.2
0°-60°	1731.6	75.3
0°-90°	2301.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2301.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	772	772	772	772	772	
5°	764	766	770	771	772	73
15°	728	732	739	746	747	206
25°	663	667	684	694	698	305
35°	573	580	601	622	631	358
45°	477	480	508	538	552	364
55°	366	372	408	446	464	324
65°	247	258	302	346	367	245
75°	132	146	195	239	257	139
85°	31	44	65	76	75	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	772.0	772.0	772.0	772.0	772.0
2.5°	767.6	769.8	773.1	774.2	774.2
5°	764.3	766.5	769.8	770.9	772.0
7.5°	758.8	761.0	765.4	767.6	768.7
10°	751.1	753.3	758.8	762.1	763.2
12.5°	741.2	743.4	750.0	754.4	755.5
15°	728.0	732.4	739.0	745.6	746.7
17.5°	719.1	718.0	726.9	734.6	736.8
20°	698.2	703.7	713.6	722.4	724.6
22.5°	680.6	685.0	698.2	708.1	712.5
25°	663.0	667.4	683.9	693.8	698.2
27.5°	641.0	647.6	663.0	677.3	682.8
30°	618.9	625.5	643.2	659.7	666.3
32.5°	596.9	604.6	623.3	641.0	648.7
35°	572.7	580.4	601.3	622.2	631.0
37.5°	547.3	557.3	579.3	602.4	612.3
40°	522.0	531.9	555.1	581.5	592.5
42.5°	501.1	505.5	531.9	560.6	571.6
45°	476.9	480.2	507.7	538.5	551.7
47.5°	441.6	453.7	483.5	517.6	530.8
50°	414.1	427.3	458.1	494.5	508.8
52.5°	391.0	399.8	433.9	470.3	486.8
55°	365.6	372.2	407.5	446.0	463.6
57.5°	334.8	346.9	382.1	421.8	439.4
60°	300.7	316.1	354.6	397.6	415.2
62.5°	278.6	287.4	329.3	372.2	392.1
65°	246.7	257.7	301.8	345.8	366.7
67.5°	220.3	231.3	276.4	320.5	341.4
70°	191.6	202.6	250.0	294.0	315.0
72.5°	158.6	174.0	223.6	267.6	289.6
75°	132.2	146.5	194.9	239.0	256.6
77.5°	102.4	121.1	166.3	202.6	215.9
80°	76.0	94.7	135.5	161.9	174.0
82.5°	51.8	70.5	101.3	121.1	127.7
85°	30.8	44.1	65.0	76.0	74.9
87.5°	14.3	18.7	26.4	26.4	25.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)