

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: P308713

Luminaire Tested: **22FCZ2-29HE-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: P308713  
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-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**

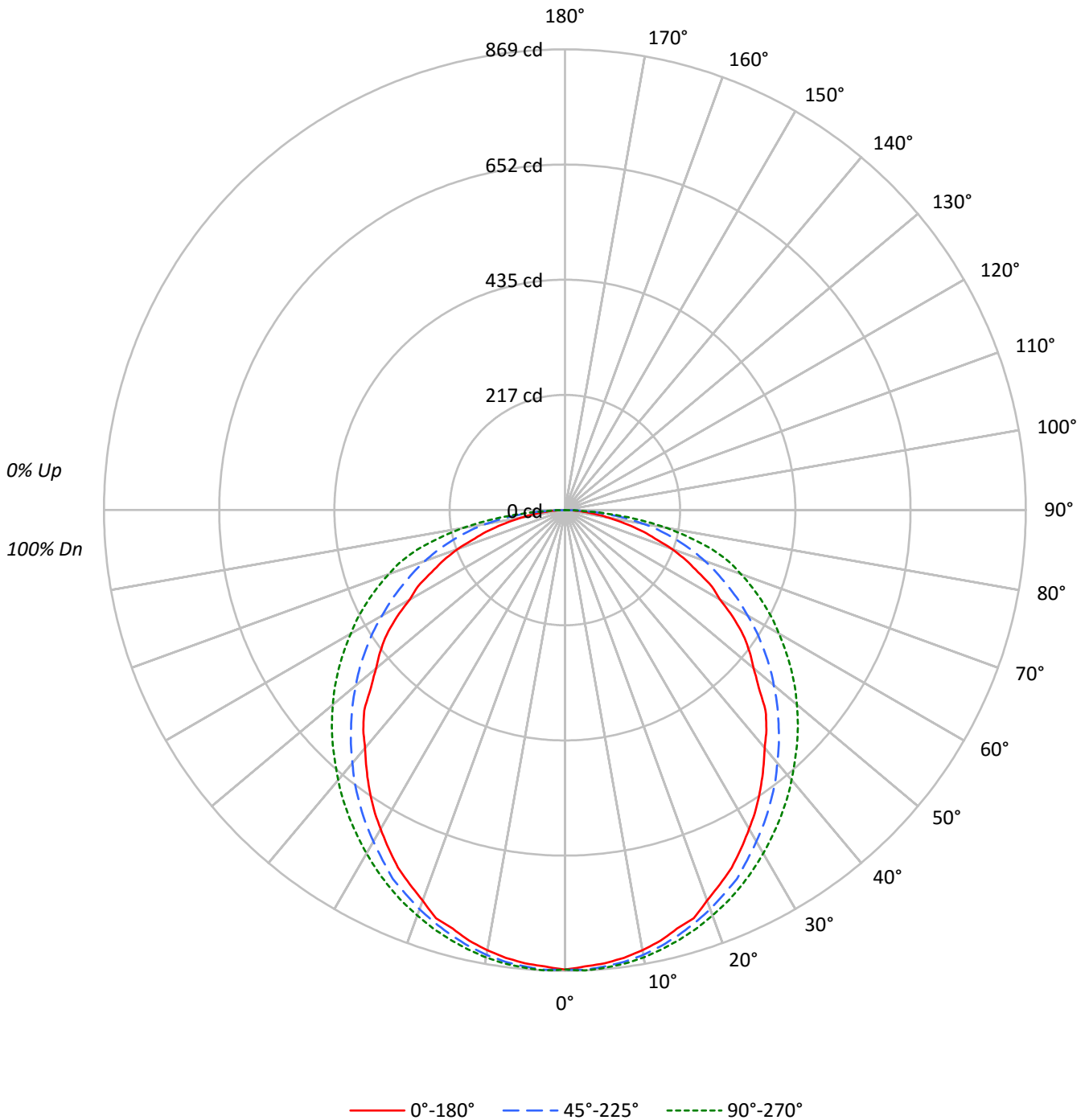
Lumens per Lamp: N/A  
Luminaire Lumens: 2583.0 lumens  
Efficiency: N/A  
Efficacy: 112.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 22.9  
Input Voltage (V): NR  
Input Current (A<sub>in</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



TEST NUMBER: P308713

CATALOG NUMBER: 22FCZ2-29HE-UNV-L82765-CP125-W2A-U-5000K

### Luminous Intensity Polar Plot





TEST NUMBER: P308713

CATALOG NUMBER: 22FCZ2-29HE-UNV-L82765-CP125-W2A-U-5000K

**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°	2332	2332	2332
5°	2318	2334	2341
10°	2304	2328	2341
15°	2277	2311	2335
20°	2245	2294	2330
25°	2210	2279	2327
30°	2159	2243	2324
35°	2112	2217	2327
40°	2059	2189	2336
45°	2037	2169	2357
50°	1946	2153	2391
55°	1925	2146	2442
60°	1816	2143	2509
65°	1763	2157	2621
70°	1692	2208	2782
75°	1543	2275	2994
80°	1322	2357	3027
85°	1068	2251	2597



TEST NUMBER: P308713

CATALOG NUMBER: 22FCZ2-29HE-UNV-L82765-CP125-W2A-U-5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.0	3.2
10°-20°	233.9	9.1
20°-30°	352.1	13.6
30°-40°	422.6	16.4
40°-50°	441.7	17.1
50°-60°	411.6	15.9
60°-70°	337.6	13.1
70°-80°	227.5	8.8
80°-90°	74.1	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°	668.0	25.9
0°-40°	1090.6	42.2
0°-60°	1943.9	75.3
0°-90°	2583.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2583.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	867	867	867	867	867	
5°	858	860	864	865	867	81
15°	817	822	830	837	838	231
25°	744	749	768	779	784	342
35°	643	652	675	698	708	402
45°	535	539	570	604	619	409
55°	410	418	457	501	520	364
65°	277	289	339	388	412	275
75°	148	164	219	268	288	156
85°	35	50	73	85	84	41
90°	0	0	0	0	0	



TEST NUMBER: P308713

CATALOG NUMBER: 22FCZ2-29HE-UNV-L82765-CP125-W2A-U-5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	866.6	866.6	866.6	866.6	866.6
2.5°	861.7	864.1	867.9	869.1	869.1
5°	858.0	860.4	864.1	865.4	866.6
7.5°	851.8	854.3	859.2	861.7	862.9
10°	843.1	845.6	851.8	855.5	856.7
12.5°	832.0	834.5	841.9	846.8	848.1
15°	817.2	822.1	829.5	836.9	838.2
17.5°	807.3	806.0	815.9	824.6	827.1
20°	783.8	790.0	801.1	811.0	813.5
22.5°	764.0	769.0	783.8	794.9	799.9
25°	744.2	749.2	767.7	778.8	783.8
27.5°	719.5	726.9	744.2	760.3	766.5
30°	694.8	702.2	722.0	740.5	747.9
32.5°	670.1	678.7	699.7	719.5	728.2
35°	642.9	651.5	675.0	698.5	708.4
37.5°	614.4	625.5	650.3	676.2	687.4
40°	586.0	597.1	623.1	652.7	665.1
42.5°	562.5	567.4	597.1	629.3	641.6
45°	535.3	539.0	569.9	604.5	619.4
47.5°	495.7	509.3	542.7	581.0	595.9
50°	464.8	479.7	514.3	555.1	571.2
52.5°	438.9	448.8	487.1	527.9	546.4
55°	410.4	417.9	457.4	500.7	520.5
57.5°	375.8	389.4	429.0	473.5	493.3
60°	337.5	354.8	398.1	446.3	466.1
62.5°	312.8	322.7	369.6	417.9	440.1
65°	276.9	289.3	338.7	388.2	411.7
67.5°	247.3	259.6	310.3	359.8	383.2
70°	215.1	227.5	280.6	330.1	353.6
72.5°	178.0	195.3	251.0	300.4	325.1
75°	148.4	164.4	218.8	268.3	288.0
77.5°	115.0	136.0	186.7	227.5	242.3
80°	85.3	106.3	152.1	181.7	195.3
82.5°	58.1	79.1	113.7	136.0	143.4
85°	34.6	49.5	72.9	85.3	84.1
87.5°	16.1	21.0	29.7	29.7	28.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)