

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: P308706

Luminaire Tested: **22FCZ2-29HE-UNV-L82765-CA125-W2A-U-5700K**

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: P308706  
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-CA125-W2A-U-5700K  
Description: 2'X2' TROFFER LED MODULE, RIBBED 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**

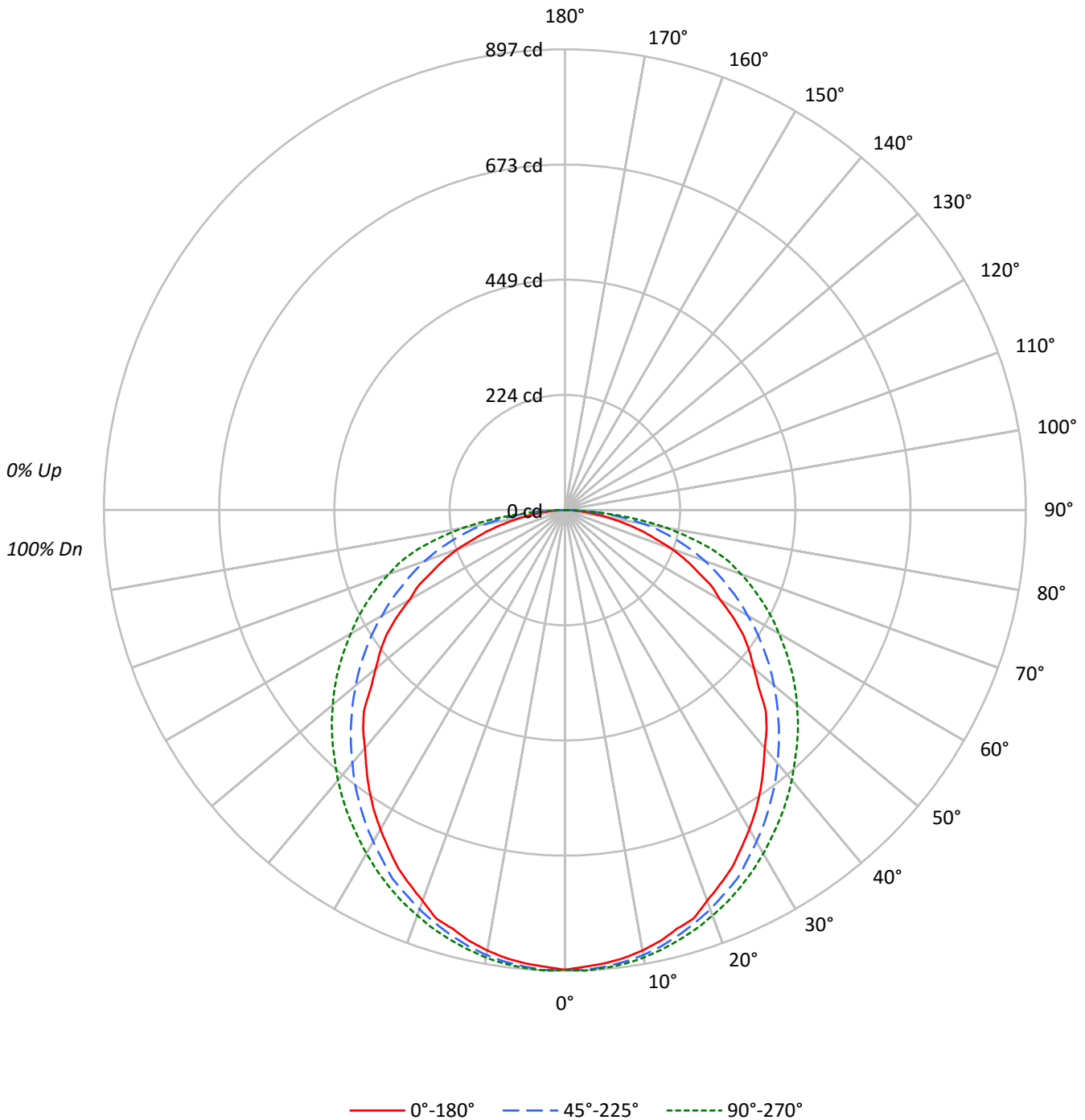
Lumens per Lamp: N/A  
Luminaire Lumens: 2667.0 lumens  
Efficiency: N/A  
Efficacy: 116.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 23  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	2408	2408	2408
5°	2393	2410	2417
10°	2379	2403	2417
15°	2350	2386	2411
20°	2318	2369	2405
25°	2282	2354	2403
30°	2229	2316	2400
35°	2181	2289	2403
40°	2125	2260	2412
45°	2103	2239	2434
50°	2009	2223	2469
55°	1988	2216	2521
60°	1876	2212	2590
65°	1820	2227	2707
70°	1747	2280	2873
75°	1593	2349	3092
80°	1365	2433	3126
85°	1102	2325	2680



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.7	3.2
10°-20°	241.5	9.1
20°-30°	363.5	13.6
30°-40°	436.3	16.4
40°-50°	456.0	17.1
50°-60°	425.0	15.9
60°-70°	348.6	13.1
70°-80°	234.9	8.8
80°-90°	76.5	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°	689.7	25.9
0°-40°	1126.1	42.2
0°-60°	2007.1	75.3
0°-90°	2667.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2667.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	895	895	895	895	895	
5°	886	888	892	894	895	84
15°	844	849	856	864	865	238
25°	768	774	793	804	809	353
35°	664	673	697	721	731	415
45°	553	556	588	624	640	422
55°	424	431	472	517	537	375
65°	286	299	350	401	425	284
75°	153	170	226	277	297	161
85°	36	51	75	88	87	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	894.8	894.8	894.8	894.8	894.8
2.5°	889.7	892.2	896.1	897.4	897.4
5°	885.9	888.4	892.2	893.5	894.8
7.5°	879.5	882.0	887.1	889.7	891.0
10°	870.5	873.1	879.5	883.3	884.6
12.5°	859.1	861.6	869.3	874.4	875.7
15°	843.7	848.8	856.5	864.2	865.4
17.5°	833.5	832.3	842.5	851.4	854.0
20°	809.3	815.7	827.1	837.4	839.9
22.5°	788.9	794.0	809.3	820.8	825.9
25°	768.4	773.5	792.7	804.2	809.3
27.5°	742.9	750.6	768.4	785.0	791.4
30°	717.4	725.0	745.5	764.6	772.3
32.5°	691.8	700.8	722.5	742.9	751.8
35°	663.8	672.7	696.9	721.2	731.4
37.5°	634.4	645.9	671.4	698.2	709.7
40°	605.0	616.5	643.3	674.0	686.7
42.5°	580.8	585.9	616.5	649.7	662.5
45°	552.7	556.5	588.4	624.2	639.5
47.5°	511.9	525.9	560.4	599.9	615.3
50°	480.0	495.3	531.0	573.1	589.7
52.5°	453.1	463.4	502.9	545.1	564.2
55°	423.8	431.4	472.3	517.0	537.4
57.5°	388.0	402.1	442.9	488.9	509.3
60°	348.5	366.3	411.0	460.8	481.2
62.5°	322.9	333.2	381.7	431.4	454.4
65°	285.9	298.7	349.8	400.8	425.1
67.5°	255.3	268.1	320.4	371.5	395.7
70°	222.1	234.9	289.8	340.8	365.1
72.5°	183.8	201.7	259.1	310.2	335.7
75°	153.2	169.8	225.9	277.0	297.4
77.5°	118.7	140.4	192.7	234.9	250.2
80°	88.1	109.8	157.0	187.6	201.7
82.5°	60.0	81.7	117.4	140.4	148.1
85°	35.7	51.1	75.3	88.1	86.8
87.5°	16.6	21.7	30.6	30.6	29.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)