

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: P308160

Luminaire Tested: **22FCZ2-29HE-UNV-L82765-HRP-CA125-W2A-U-3000K**

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: P308160  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-22)  
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-HRP-CA125-W2A-U-3000K  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. 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**

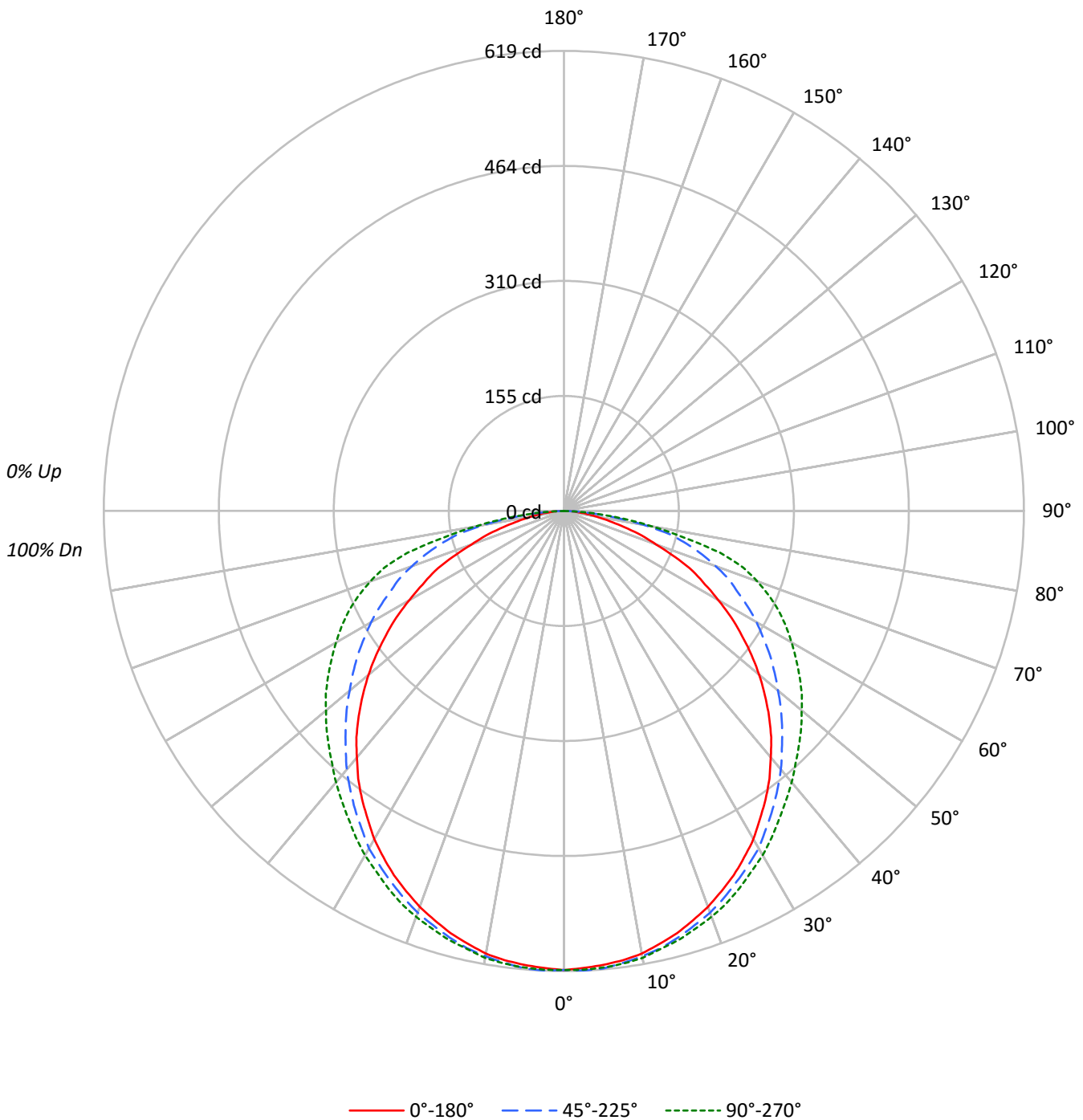
Lumens per Lamp: N/A  
Luminaire Lumens: 1876.0 lumens  
Efficiency: N/A  
Efficacy: 84.5 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 22.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	101	96	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	84	78	73	80	75	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	52	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	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
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	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

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

	0°	45°	90°
0°	1662	1662	1662
5°	1656	1669	1666
10°	1652	1662	1668
15°	1639	1655	1665
20°	1623	1647	1664
25°	1606	1634	1662
30°	1585	1629	1662
35°	1555	1609	1660
40°	1521	1596	1675
45°	1486	1581	1702
50°	1437	1575	1749
55°	1371	1588	1816
60°	1293	1611	1904
65°	1221	1643	2034
70°	1042	1713	2179
75°	873	1784	2263
80°	716	1723	1889
85°	621	1278	1389



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.5	3.1
10°-20°	167.5	8.9
20°-30°	253.8	13.5
30°-40°	306.5	16.3
40°-50°	322.0	17.2
50°-60°	303.0	16.2
60°-70°	252.6	13.5
70°-80°	167.4	8.9
80°-90°	44.6	2.4
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°	479.8	25.6
0°-40°	786.3	41.9
0°-60°	1411.3	75.2
0°-90°	1876.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1876.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	618	618	618	618	618	
5°	613	614	618	618	617	58
15°	588	590	594	596	598	166
25°	541	544	550	557	560	249
35°	473	478	490	501	505	296
45°	390	396	415	437	447	301
55°	292	305	338	373	387	261
65°	192	208	258	301	320	187
75°	84	117	172	207	218	91
85°	20	31	41	45	45	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	617.7	617.7	617.7	617.7	617.7
2.5°	615.4	616.6	618.9	618.9	617.7
5°	613.0	614.2	617.7	617.7	616.6
7.5°	609.5	610.6	613.0	615.4	614.2
10°	604.7	605.9	608.3	610.6	610.6
12.5°	596.4	597.6	602.4	603.5	603.5
15°	588.2	590.5	594.1	596.4	597.6
17.5°	577.5	579.9	584.6	589.3	589.3
20°	566.9	569.2	575.1	579.9	581.1
22.5°	553.8	557.4	563.3	569.2	571.6
25°	540.8	544.4	550.3	557.4	559.8
27.5°	525.4	529.0	537.3	545.6	546.7
30°	510.1	513.6	524.3	531.4	534.9
32.5°	491.1	495.9	506.5	517.2	520.7
35°	473.4	478.1	489.9	500.6	505.3
37.5°	454.4	459.2	472.2	485.2	491.1
40°	433.1	439.0	454.4	468.6	476.9
42.5°	413.0	418.9	434.3	453.3	461.5
45°	390.5	396.4	415.4	436.7	447.3
47.5°	366.9	374.0	396.4	422.5	433.1
50°	343.2	351.5	376.3	405.9	417.7
52.5°	318.3	329.0	357.4	389.3	403.5
55°	292.3	305.3	338.5	372.8	387.0
57.5°	267.5	279.3	318.3	355.0	370.4
60°	240.2	255.6	299.4	337.3	353.8
62.5°	214.2	230.8	279.3	319.5	337.3
65°	191.7	208.3	258.0	300.6	319.5
67.5°	162.1	184.6	240.2	280.5	299.4
70°	132.5	163.3	217.7	259.2	276.9
72.5°	110.1	139.6	195.3	236.7	253.3
75°	84.0	117.2	171.6	207.1	217.7
77.5°	62.7	97.0	146.7	164.5	165.7
80°	46.2	74.6	111.2	117.2	121.9
82.5°	32.0	52.1	72.2	79.3	81.7
85°	20.1	30.8	41.4	45.0	45.0
87.5°	10.7	11.8	14.2	14.2	14.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)