

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: P308489

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-RDP-CP125-W2A-U-5500K**

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: P308489  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 22FCZ2-34HE-UNV-L82765-RDP-CP125-W2A-U-5500K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 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**

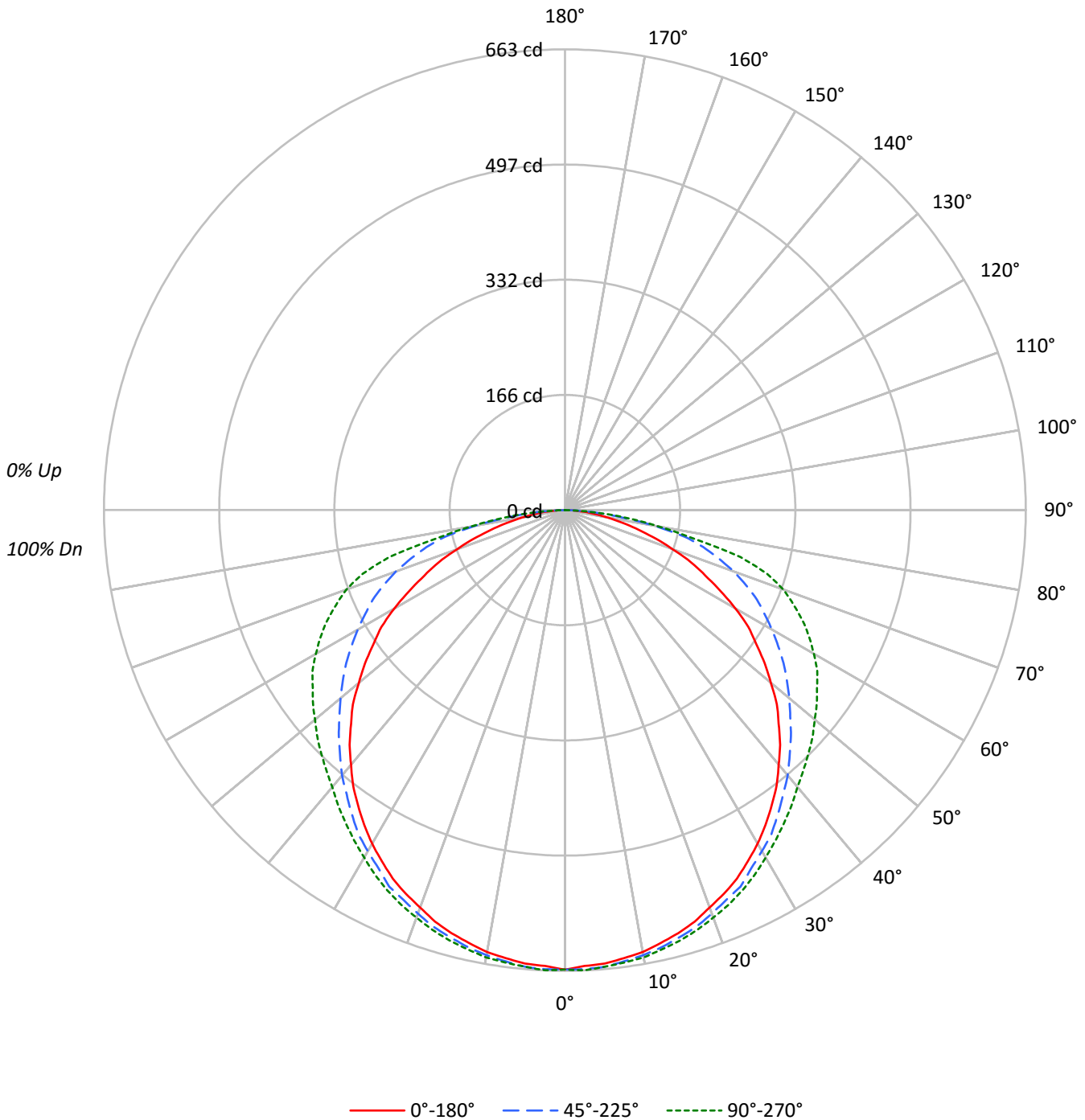
Lumens per Lamp: N/A  
Luminaire Lumens: 2105.0 lumens  
Efficiency: N/A  
Efficacy: 74.1 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 28.4  
Input Voltage (V): NR  
Input Current (A<sub>in</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	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

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

	0°	45°	90°
0°	1779	1779	1779
5°	1769	1782	1782
10°	1764	1777	1786
15°	1756	1773	1786
20°	1743	1769	1787
25°	1738	1775	1793
30°	1723	1761	1795
35°	1704	1755	1806
40°	1681	1751	1828
45°	1656	1750	1886
50°	1621	1763	1964
55°	1576	1802	2078
60°	1525	1850	2225
65°	1420	1943	2406
70°	1304	2035	2632
75°	1143	2142	2721
80°	984	2039	2135
85°	861	1482	1624



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.5	3.0
10°-20°	179.6	8.5
20°-30°	274.0	13.0
30°-40°	334.5	15.9
40°-50°	357.7	17.0
50°-60°	345.3	16.4
60°-70°	297.2	14.1
70°-80°	201.1	9.6
80°-90°	53.1	2.5
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°	516.1	24.5
0°-40°	850.7	40.4
0°-60°	1553.6	73.8
0°-90°	2105.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2105.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	661	661	661	661	661	
5°	655	657	660	660	660	62
15°	630	632	636	640	641	178
25°	585	588	598	601	604	269
35°	519	523	534	545	550	325
45°	435	443	460	483	496	336
55°	336	347	384	423	443	301
65°	223	245	305	353	378	222
75°	110	146	206	248	262	118
85°	28	39	48	50	53	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	661.2	661.2	661.2	661.2	661.2
2.5°	656.6	658.1	661.2	661.2	662.8
5°	655.0	656.6	659.7	659.7	659.7
7.5°	650.4	651.9	655.0	656.6	656.6
10°	645.7	647.3	650.4	651.9	653.5
12.5°	638.0	639.5	644.2	647.3	647.3
15°	630.2	631.8	636.4	639.5	641.1
17.5°	621.0	624.1	628.7	631.8	633.3
20°	608.6	611.7	617.9	622.5	624.1
22.5°	597.7	600.8	607.0	611.7	614.8
25°	585.3	588.4	597.7	600.8	603.9
27.5°	569.9	573.0	580.7	586.9	591.5
30°	554.4	557.5	566.8	574.5	577.6
32.5°	537.3	542.0	552.8	559.0	563.7
35°	518.8	523.4	534.2	545.1	549.7
37.5°	500.2	504.8	515.7	529.6	535.8
40°	478.5	484.7	498.6	517.2	520.3
42.5°	458.4	466.1	478.5	500.2	507.9
45°	435.1	442.9	459.9	483.1	495.5
47.5°	413.5	421.2	439.8	467.7	483.1
50°	387.1	398.0	421.2	453.7	469.2
52.5°	362.4	371.6	402.6	438.2	456.8
55°	336.0	346.9	384.0	422.7	442.9
57.5°	312.8	322.1	363.9	407.3	430.5
60°	283.4	295.8	343.8	390.2	413.5
62.5°	252.4	271.0	323.6	371.6	396.4
65°	223.0	244.7	305.1	353.1	377.8
67.5°	196.7	219.9	281.8	332.9	356.2
70°	165.7	195.1	258.6	308.2	334.5
72.5°	137.8	170.3	232.3	281.8	305.1
75°	109.9	145.6	206.0	247.8	261.7
77.5°	85.2	119.2	176.5	188.9	190.5
80°	63.5	94.5	131.6	133.2	137.8
82.5°	43.4	66.6	85.2	92.9	94.5
85°	27.9	38.7	48.0	49.6	52.6
87.5°	12.4	13.9	17.0	15.5	15.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)