

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: P308465

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-RDP-CA08-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: P308465  
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-CA08-W2A-U-2700K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.08" 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**

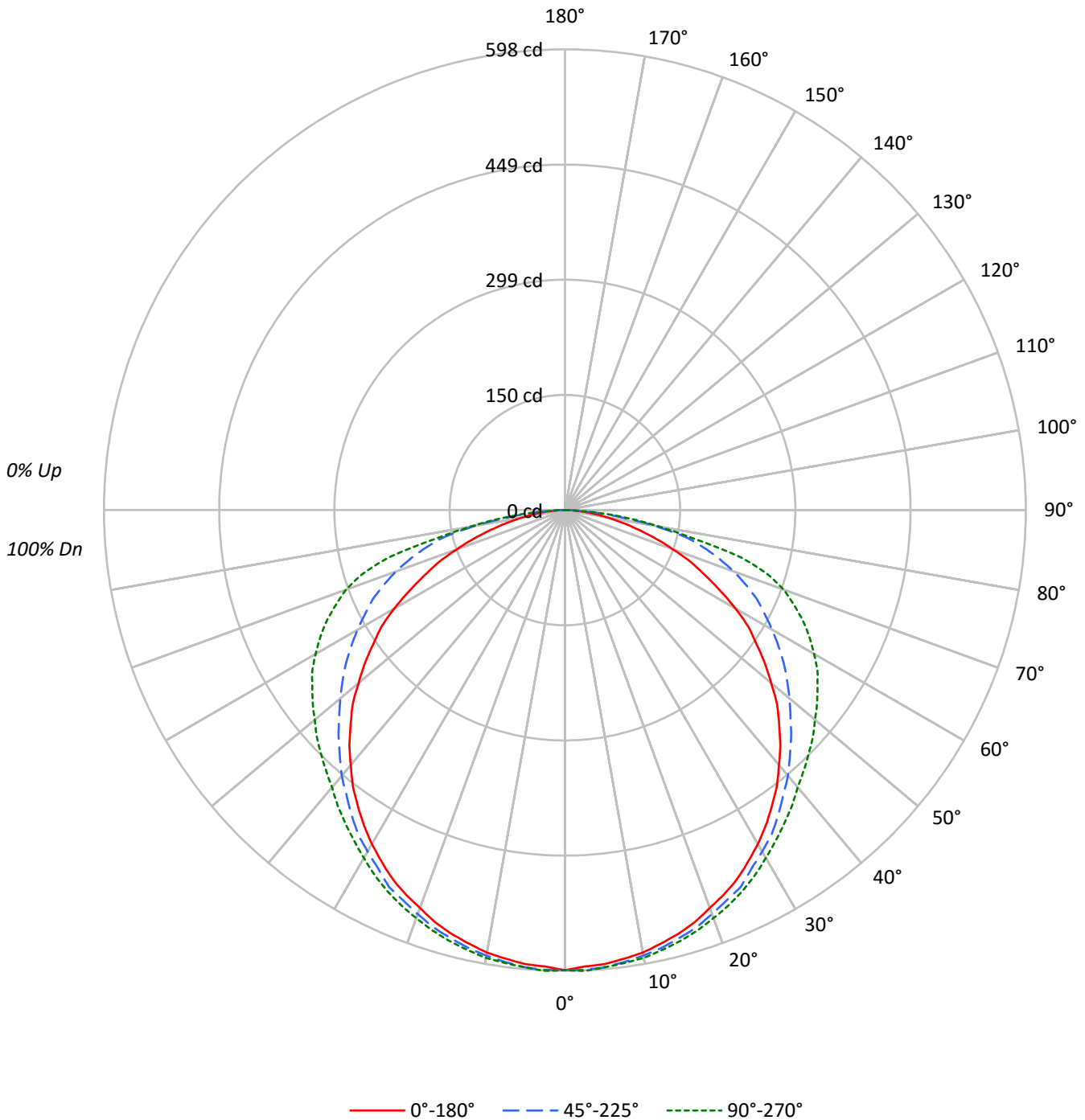
Lumens per Lamp: N/A  
Luminaire Lumens: 1901.0 lumens  
Efficiency: N/A  
Efficacy: 68.9 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 27.6  
Input Voltage (V): NR  
Input Current (A<sub>in</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: P308465

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-RDP-CA08-W2A-U-2700K

### Luminous Intensity Polar Plot





TEST NUMBER: P308465

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-RDP-CA08-W2A-U-2700K

**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°	1607	1607	1607
5°	1598	1609	1609
10°	1594	1605	1612
15°	1586	1601	1613
20°	1574	1598	1614
25°	1570	1603	1619
30°	1556	1590	1621
35°	1539	1585	1631
40°	1518	1582	1651
45°	1496	1580	1703
50°	1464	1593	1774
55°	1424	1627	1877
60°	1377	1671	2010
65°	1282	1754	2173
70°	1177	1837	2377
75°	1032	1934	2457
80°	888	1843	1929
85°	778	1340	1467



TEST NUMBER: P308465

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-RDP-CA08-W2A-U-2700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.5	3.0
10°-20°	162.2	8.5
20°-30°	247.4	13.0
30°-40°	302.1	15.9
40°-50°	323.0	17.0
50°-60°	311.8	16.4
60°-70°	268.4	14.1
70°-80°	181.6	9.6
80°-90°	47.9	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°	466.1	24.5
0°-40°	768.2	40.4
0°-60°	1403.1	73.8
0°-90°	1901.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1901.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	597	597	597	597	597	
5°	592	593	596	596	596	56
15°	569	571	575	578	579	161
25°	529	531	540	543	545	243
35°	468	473	482	492	496	293
45°	393	400	415	436	448	303
55°	304	313	347	382	400	272
65°	201	221	276	319	341	200
75°	99	132	186	224	236	107
85°	25	35	43	45	48	28
90°	0	0	0	0	0	



TEST NUMBER: P308465

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-RDP-CA08-W2A-U-2700K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	597.1	597.1	597.1	597.1	597.1
2.5°	592.9	594.3	597.1	597.1	598.5
5°	591.5	592.9	595.7	595.7	595.7
7.5°	587.3	588.7	591.5	592.9	592.9
10°	583.2	584.6	587.3	588.7	590.1
12.5°	576.2	577.6	581.8	584.6	584.6
15°	569.2	570.6	574.8	577.6	579.0
17.5°	560.8	563.6	567.8	570.6	572.0
20°	549.6	552.4	558.0	562.2	563.6
22.5°	539.8	542.6	548.2	552.4	555.2
25°	528.6	531.4	539.8	542.6	545.4
27.5°	514.6	517.4	524.4	530.0	534.2
30°	500.6	503.4	511.8	518.8	521.6
32.5°	485.3	489.5	499.2	504.8	509.0
35°	468.5	472.7	482.5	492.3	496.4
37.5°	451.7	455.9	465.7	478.3	483.9
40°	432.1	437.7	450.3	467.1	469.9
42.5°	413.9	420.9	432.1	451.7	458.7
45°	393.0	400.0	415.3	436.3	447.5
47.5°	373.4	380.4	397.2	422.3	436.3
50°	349.6	359.4	380.4	409.7	423.7
52.5°	327.2	335.6	363.6	395.8	412.5
55°	303.5	313.3	346.8	381.8	400.0
57.5°	282.5	290.9	328.6	367.8	388.8
60°	255.9	267.1	310.5	352.4	373.4
62.5°	227.9	244.7	292.3	335.6	358.0
65°	201.4	221.0	275.5	318.8	341.2
67.5°	177.6	198.6	254.5	300.7	321.6
70°	149.6	176.2	233.5	278.3	302.1
72.5°	124.5	153.8	209.8	254.5	275.5
75°	99.3	131.5	186.0	223.8	236.3
77.5°	76.9	107.7	159.4	170.6	172.0
80°	57.3	85.3	118.9	120.3	124.5
82.5°	39.2	60.1	76.9	83.9	85.3
85°	25.2	35.0	43.4	44.8	47.5
87.5°	11.2	12.6	15.4	14.0	14.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)