

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: P308470

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-RDP-CA08-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: P308470  
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-5000K  
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**

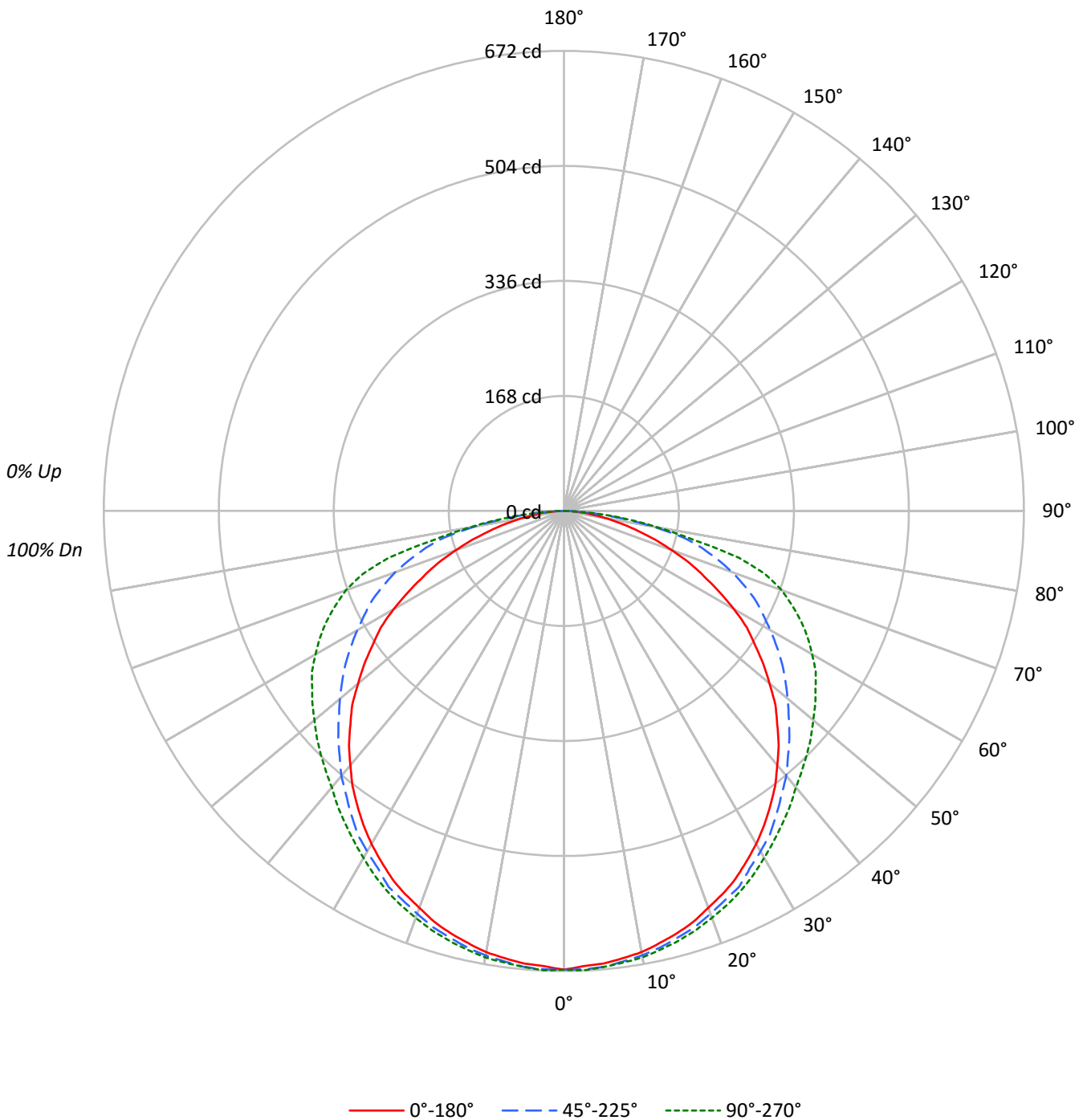
Lumens per Lamp: N/A  
Luminaire Lumens: 2133.0 lumens  
Efficiency: N/A  
Efficacy: 75.6 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 28.2  
Input Voltage (V): NR  
Input Current (A<sub>in</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: P308470

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-RDP-CA08-W2A-U-5000K

### Luminous Intensity Polar Plot





TEST NUMBER: P308470

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-RDP-CA08-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	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°	1803	1803	1803
5°	1793	1806	1806
10°	1788	1801	1809
15°	1779	1797	1810
20°	1766	1793	1811
25°	1761	1798	1817
30°	1745	1785	1819
35°	1727	1778	1830
40°	1703	1775	1852
45°	1678	1773	1911
50°	1642	1787	1990
55°	1597	1825	2106
60°	1545	1875	2255
65°	1439	1968	2438
70°	1321	2061	2666
75°	1158	2170	2757
80°	996	2067	2165
85°	871	1501	1646



TEST NUMBER: P308470

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-RDP-CA08-W2A-U-5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.4	3.0
10°-20°	182.0	8.5
20°-30°	277.6	13.0
30°-40°	339.0	15.9
40°-50°	362.5	17.0
50°-60°	349.9	16.4
60°-70°	301.2	14.1
70°-80°	203.8	9.6
80°-90°	53.8	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°	523.0	24.5
0°-40°	862.0	40.4
0°-60°	1574.3	73.8
0°-90°	2133.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2133.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	670	670	670	670	670	
5°	664	665	668	668	668	63
15°	639	640	645	648	650	180
25°	593	596	606	609	612	273
35°	526	530	541	552	557	329
45°	441	449	466	490	502	340
55°	340	352	389	428	449	305
65°	226	248	309	358	383	225
75°	111	148	209	251	265	120
85°	28	39	49	50	53	32
90°	0	0	0	0	0	



TEST NUMBER: P308470

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-RDP-CA08-W2A-U-5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	670.0	670.0	670.0	670.0	670.0
2.5°	665.3	666.9	670.0	670.0	671.6
5°	663.7	665.3	668.4	668.4	668.4
7.5°	659.0	660.6	663.7	665.3	665.3
10°	654.3	655.9	659.0	660.6	662.2
12.5°	646.5	648.0	652.8	655.9	655.9
15°	638.6	640.2	644.9	648.0	649.6
17.5°	629.2	632.4	637.1	640.2	641.8
20°	616.7	619.8	626.1	630.8	632.4
22.5°	605.7	608.8	615.1	619.8	622.9
25°	593.1	596.3	605.7	608.8	612.0
27.5°	577.4	580.6	588.4	594.7	599.4
30°	561.7	564.9	574.3	582.1	585.3
32.5°	544.5	549.2	560.2	566.5	571.2
35°	525.7	530.4	541.3	552.3	557.0
37.5°	506.8	511.5	522.5	536.6	542.9
40°	484.9	491.1	505.3	524.1	527.2
42.5°	464.5	472.3	484.9	506.8	514.7
45°	440.9	448.8	466.0	489.6	502.1
47.5°	419.0	426.8	445.6	473.9	489.6
50°	392.3	403.3	426.8	459.8	475.4
52.5°	367.2	376.6	408.0	444.1	462.9
55°	340.5	351.5	389.1	428.4	448.8
57.5°	317.0	326.4	368.7	412.7	436.2
60°	287.1	299.7	348.3	395.4	419.0
62.5°	255.8	274.6	327.9	376.6	401.7
65°	226.0	247.9	309.1	357.8	382.9
67.5°	199.3	222.8	285.6	337.4	360.9
70°	167.9	197.7	262.0	312.3	338.9
72.5°	139.7	172.6	235.4	285.6	309.1
75°	111.4	147.5	208.7	251.1	265.2
77.5°	86.3	120.8	178.9	191.4	193.0
80°	64.3	95.7	133.4	134.9	139.7
82.5°	43.9	67.5	86.3	94.1	95.7
85°	28.2	39.2	48.6	50.2	53.3
87.5°	12.6	14.1	17.3	15.7	15.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)