

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: P308772

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-CP250-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: P308772  
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: 22FCZ2-34HE-UNV-L82765-CP250-W2A-U-3000K  
Description: 2'X2' TROFFER LED MODULE, RIBBED LENS, 0.250" 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**

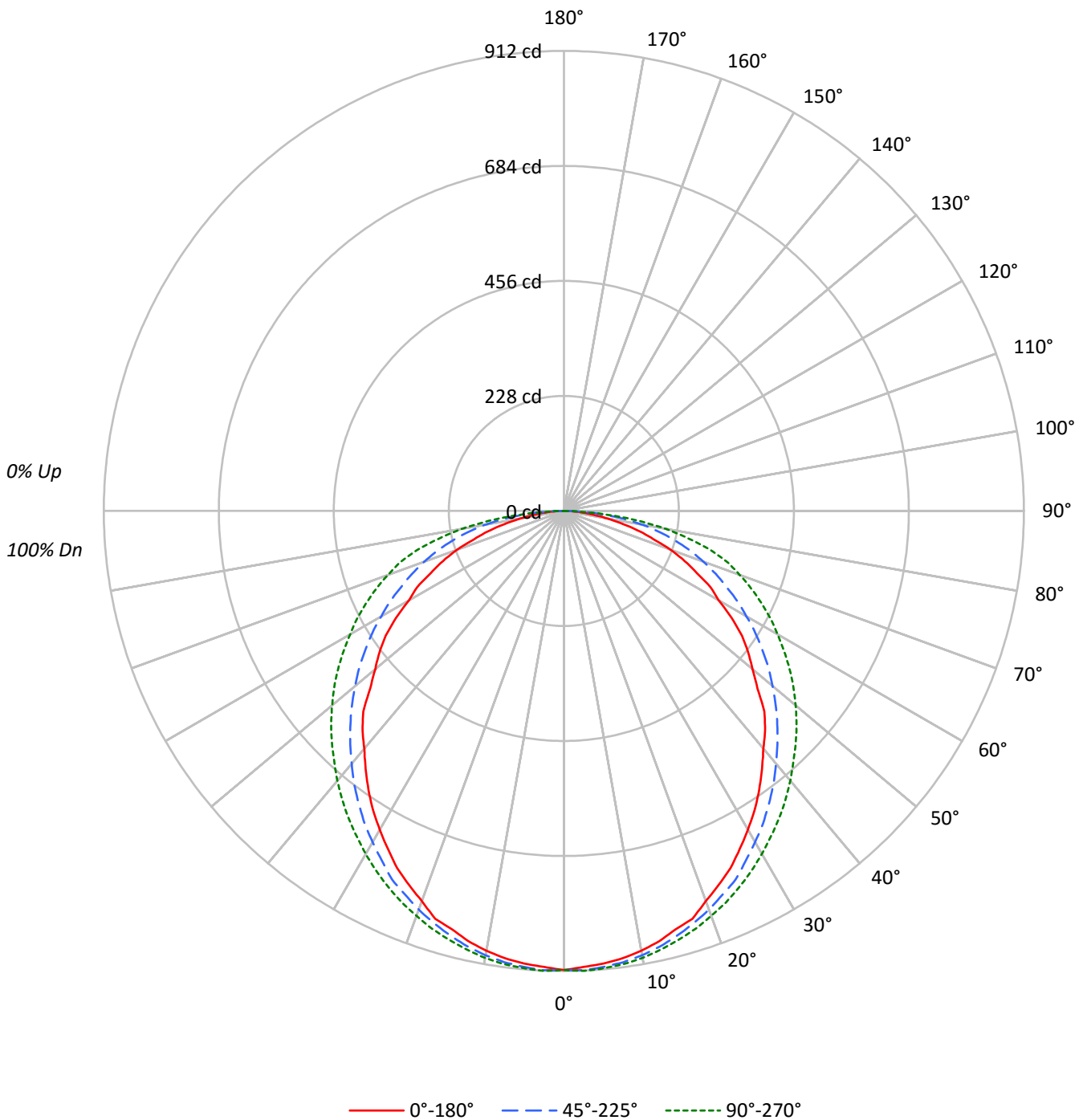
Lumens per Lamp: N/A  
Luminaire Lumens: 2712.0 lumens  
Efficiency: N/A  
Efficacy: 99.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 27.4  
Input Voltage (V): NR  
Input Current (A<sub>in</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



TEST NUMBER: P308772

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-CP250-W2A-U-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P308772

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-CP250-W2A-U-3000K

**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°	2449	2449	2449
5°	2433	2451	2458
10°	2419	2444	2458
15°	2390	2427	2452
20°	2357	2409	2446
25°	2320	2393	2443
30°	2267	2355	2440
35°	2217	2328	2443
40°	2161	2298	2453
45°	2139	2277	2475
50°	2043	2261	2511
55°	2022	2253	2564
60°	1907	2250	2633
65°	1852	2265	2752
70°	1777	2318	2921
75°	1620	2388	3144
80°	1389	2475	3178
85°	1121	2365	2726



TEST NUMBER: P308772

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-CP250-W2A-U-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.1	3.2
10°-20°	245.6	9.1
20°-30°	369.7	13.6
30°-40°	443.7	16.4
40°-50°	463.7	17.1
50°-60°	432.2	15.9
60°-70°	354.4	13.1
70°-80°	238.8	8.8
80°-90°	77.8	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°	701.4	25.9
0°-40°	1145.0	42.2
0°-60°	2040.9	75.3
0°-90°	2712.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2712.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	910	910	910	910	910	
5°	901	903	907	909	910	86
15°	858	863	871	879	880	242
25°	781	787	806	818	823	359
35°	675	684	709	733	744	422
45°	562	566	598	635	650	429
55°	431	439	480	526	546	382
65°	291	304	356	408	432	289
75°	156	173	230	282	302	164
85°	36	52	77	90	88	43
90°	0	0	0	0	0	



TEST NUMBER: P308772

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-CP250-W2A-U-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	909.9	909.9	909.9	909.9	909.9
2.5°	904.7	907.3	911.2	912.5	912.5
5°	900.8	903.4	907.3	908.6	909.9
7.5°	894.3	896.9	902.1	904.7	906.0
10°	885.2	887.8	894.3	898.2	899.5
12.5°	873.6	876.2	883.9	889.1	890.4
15°	858.0	863.2	871.0	878.7	880.0
17.5°	847.6	846.3	856.7	865.8	868.4
20°	822.9	829.4	841.1	851.5	854.1
22.5°	802.2	807.4	822.9	834.6	839.8
25°	781.4	786.6	806.1	817.7	822.9
27.5°	755.4	763.2	781.4	798.3	804.8
30°	729.5	737.3	758.0	777.5	785.3
32.5°	703.5	712.6	734.7	755.4	764.5
35°	675.0	684.0	708.7	733.4	743.8
37.5°	645.1	656.8	682.7	710.0	721.7
40°	615.3	626.9	654.2	685.3	698.3
42.5°	590.6	595.8	626.9	660.7	673.7
45°	562.0	565.9	598.4	634.7	650.3
47.5°	520.5	534.8	569.8	610.1	625.6
50°	488.0	503.6	540.0	582.8	599.7
52.5°	460.8	471.2	511.4	554.2	573.7
55°	430.9	438.7	480.3	525.7	546.5
57.5°	394.6	408.9	450.4	497.1	517.9
60°	354.4	372.5	418.0	468.6	489.3
62.5°	328.4	338.8	388.1	438.7	462.1
65°	290.8	303.7	355.7	407.6	432.2
67.5°	259.6	272.6	325.8	377.7	402.4
70°	225.9	238.8	294.6	346.6	371.2
72.5°	186.9	205.1	263.5	315.4	341.4
75°	155.8	172.6	229.7	281.7	302.4
77.5°	120.7	142.8	196.0	238.8	254.4
80°	89.6	111.6	159.7	190.8	205.1
82.5°	61.0	83.1	119.4	142.8	150.6
85°	36.3	51.9	76.6	89.6	88.3
87.5°	16.9	22.1	31.2	31.2	29.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)