

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: P308322

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-HRP-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: P308322  
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: 22FCZ2-44HE-UNV-L82765-HRP-CP250-W2A-U-3000K  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. 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**

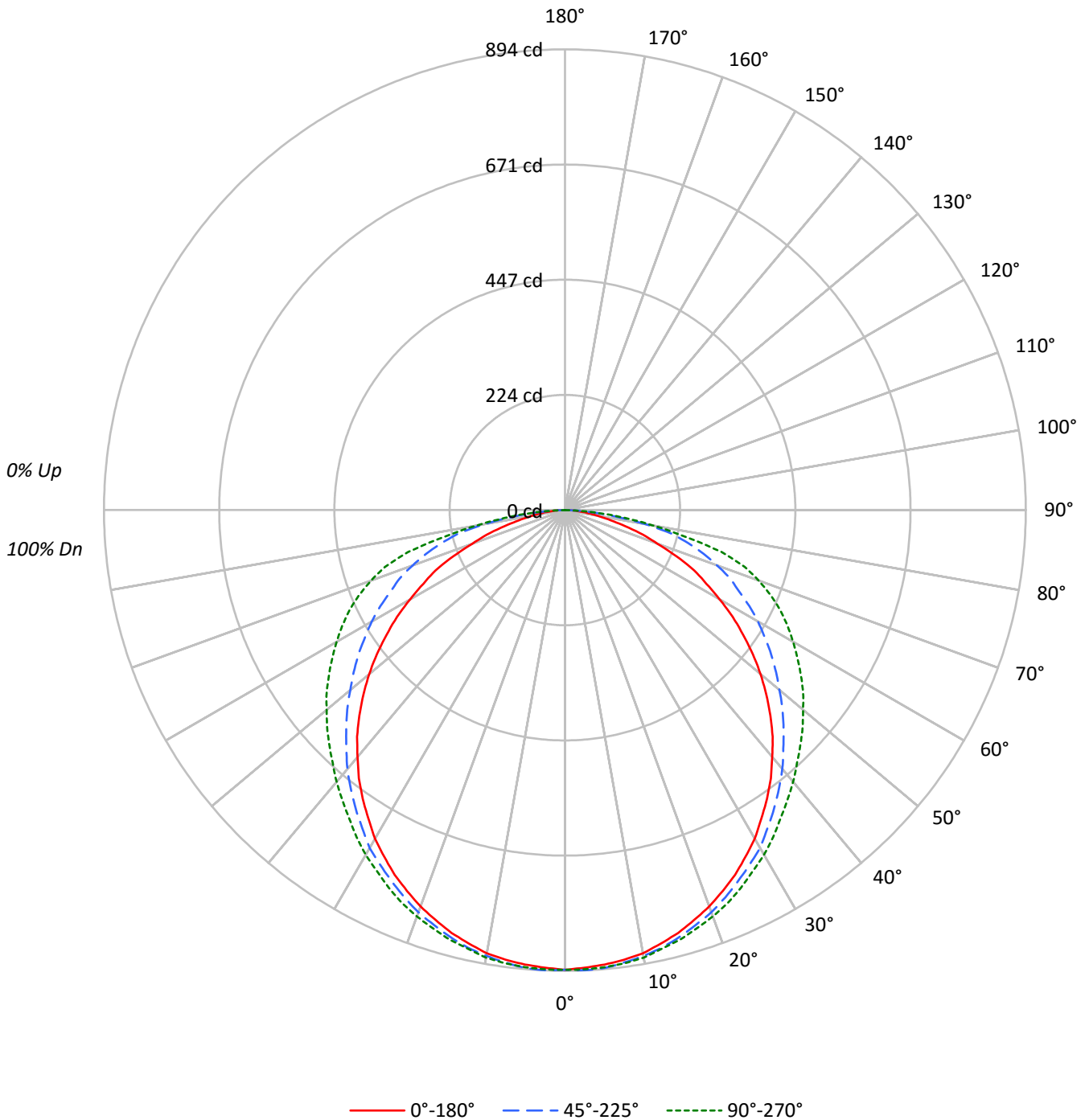
Lumens per Lamp: N/A  
Luminaire Lumens: 2709.0 lumens  
Efficiency: N/A  
Efficacy: 73.4 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 36.9  
Input Voltage (V): NR  
Input Current (A<sub>in</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: P308322

CATALOG NUMBER: 22FCZ2-44HE-UNV-L82765-HRP-CP250-W2A-U-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P308322

CATALOG NUMBER: 22FCZ2-44HE-UNV-L82765-HRP-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	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°	2400	2400	2400
5°	2391	2410	2405
10°	2386	2400	2410
15°	2366	2390	2404
20°	2344	2378	2403
25°	2319	2359	2400
30°	2289	2352	2400
35°	2246	2324	2397
40°	2197	2305	2419
45°	2146	2283	2458
50°	2075	2275	2525
55°	1980	2293	2622
60°	1867	2327	2750
65°	1762	2372	2938
70°	1506	2474	3146
75°	1261	2576	3269
80°	1032	2489	2727
85°	898	1846	2004



TEST NUMBER: P308322

CATALOG NUMBER: 22FCZ2-44HE-UNV-L82765-HRP-CP250-W2A-U-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.5	3.1
10°-20°	241.8	8.9
20°-30°	366.5	13.5
30°-40°	442.6	16.3
40°-50°	465.0	17.2
50°-60°	437.5	16.2
60°-70°	364.8	13.5
70°-80°	241.7	8.9
80°-90°	64.4	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°	692.9	25.6
0°-40°	1135.5	41.9
0°-60°	2038.0	75.2
0°-90°	2709.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2709.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	892	892	892	892	892	
5°	885	887	892	892	890	84
15°	849	853	858	861	863	239
25°	781	786	795	805	808	360
35°	684	690	708	723	730	427
45°	564	572	600	631	646	434
55°	422	441	489	538	559	378
65°	277	301	372	434	461	269
75°	121	169	248	299	314	132
85°	29	44	60	65	65	34
90°	0	0	0	0	0	



TEST NUMBER: P308322

CATALOG NUMBER: 22FCZ2-44HE-UNV-L82765-HRP-CP250-W2A-U-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	892.0	892.0	892.0	892.0	892.0
2.5°	888.6	890.3	893.8	893.8	892.0
5°	885.2	886.9	892.0	892.0	890.3
7.5°	880.1	881.8	885.2	888.6	886.9
10°	873.2	875.0	878.4	881.8	881.8
12.5°	861.3	863.0	869.8	871.5	871.5
15°	849.3	852.7	857.9	861.3	863.0
17.5°	833.9	837.4	844.2	851.0	851.0
20°	818.6	822.0	830.5	837.4	839.1
22.5°	799.8	804.9	813.4	822.0	825.4
25°	781.0	786.1	794.6	804.9	808.3
27.5°	758.7	763.9	775.8	787.8	789.5
30°	736.5	741.7	757.0	767.3	772.4
32.5°	709.2	716.0	731.4	746.8	751.9
35°	683.6	690.4	707.5	722.9	729.7
37.5°	656.2	663.1	681.8	700.6	709.2
40°	625.5	634.0	656.2	676.7	688.7
42.5°	596.4	604.9	627.2	654.5	666.5
45°	563.9	572.5	599.8	630.6	646.0
47.5°	529.8	540.0	572.5	610.1	625.5
50°	495.6	507.5	543.4	586.2	603.2
52.5°	459.7	475.1	516.1	562.2	582.7
55°	422.1	440.9	488.7	538.3	558.8
57.5°	386.2	403.3	459.7	512.7	534.9
60°	346.9	369.1	432.4	487.0	511.0
62.5°	309.3	333.2	403.3	461.4	487.0
65°	276.8	300.8	372.5	434.1	461.4
67.5°	234.1	266.6	346.9	405.0	432.4
70°	191.4	235.8	314.4	374.2	399.9
72.5°	158.9	201.6	282.0	341.8	365.7
75°	121.3	169.2	247.8	299.1	314.4
77.5°	90.6	140.1	211.9	237.5	239.2
80°	66.6	107.7	160.6	169.2	176.0
82.5°	46.1	75.2	104.2	114.5	117.9
85°	29.1	44.4	59.8	64.9	64.9
87.5°	15.4	17.1	20.5	20.5	20.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)