

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: P308595

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-RDP-CP250-W2A-U-4500K**

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: P308595  
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: 22FCZ2-44HE-UNV-L82765-RDP-CP250-W2A-U-4500K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 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**

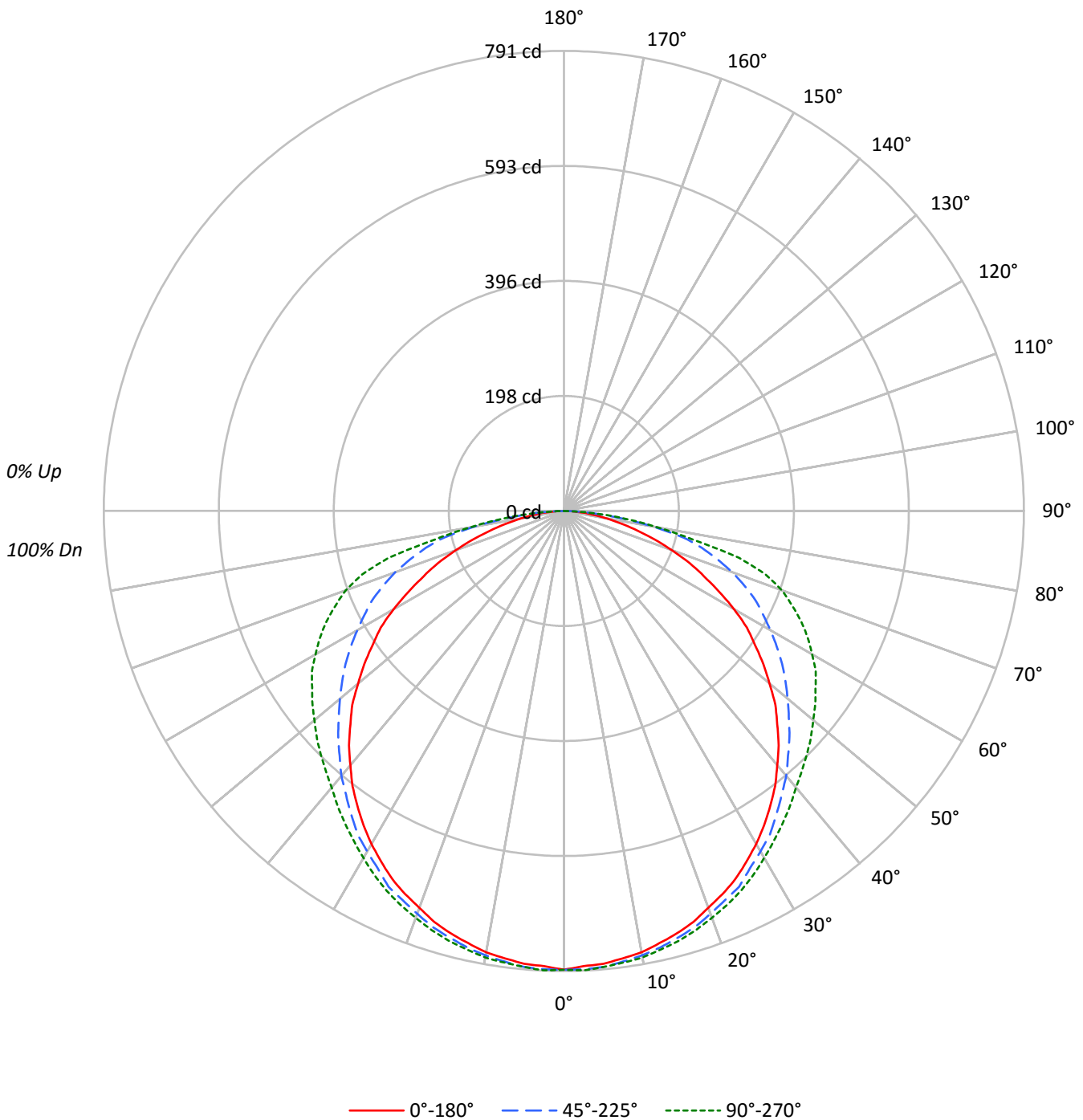
Lumens per Lamp: N/A  
Luminaire Lumens: 2511.0 lumens  
Efficiency: N/A  
Efficacy: 66.3 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 37.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
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: P308595

CATALOG NUMBER: 22FCZ2-44HE-UNV-L82765-RDP-CP250-W2A-U-4500K

### Luminous Intensity Polar Plot





TEST NUMBER: P308595

CATALOG NUMBER: 22FCZ2-44HE-UNV-L82765-RDP-CP250-W2A-U-4500K

**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°	2122	2122	2122
5°	2111	2126	2126
10°	2105	2120	2130
15°	2094	2115	2130
20°	2079	2111	2132
25°	2073	2117	2139
30°	2055	2101	2141
35°	2033	2094	2154
40°	2005	2089	2180
45°	1975	2088	2250
50°	1933	2103	2343
55°	1880	2149	2479
60°	1819	2207	2654
65°	1694	2317	2870
70°	1555	2427	3139
75°	1364	2555	3246
80°	1173	2433	2548
85°	1025	1769	1939



TEST NUMBER: P308595

CATALOG NUMBER: 22FCZ2-44HE-UNV-L82765-RDP-CP250-W2A-U-4500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.6	3.0
10°-20°	214.2	8.5
20°-30°	326.8	13.0
30°-40°	399.1	15.9
40°-50°	426.7	17.0
50°-60°	411.9	16.4
60°-70°	354.5	14.1
70°-80°	239.9	9.6
80°-90°	63.3	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°	615.7	24.5
0°-40°	1014.7	40.4
0°-60°	1853.3	73.8
0°-90°	2511.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2511.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	789	789	789	789	789	
5°	781	783	787	787	787	74
15°	752	754	759	763	765	212
25°	698	702	713	717	720	321
35°	619	624	637	650	656	387
45°	519	528	549	576	591	401
55°	401	414	458	504	528	359
65°	266	292	364	421	451	265
75°	131	174	246	296	312	141
85°	33	46	57	59	63	37
90°	0	0	0	0	0	



TEST NUMBER: P308595

CATALOG NUMBER: 22FCZ2-44HE-UNV-L82765-RDP-CP250-W2A-U-4500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	788.7	788.7	788.7	788.7	788.7
2.5°	783.2	785.1	788.7	788.7	790.6
5°	781.4	783.2	786.9	786.9	786.9
7.5°	775.8	777.7	781.4	783.2	783.2
10°	770.3	772.1	775.8	777.7	779.5
12.5°	761.0	762.9	768.4	772.1	772.1
15°	751.8	753.7	759.2	762.9	764.7
17.5°	740.7	744.4	750.0	753.7	755.5
20°	725.9	729.6	737.0	742.6	744.4
22.5°	713.0	716.7	724.1	729.6	733.3
25°	698.2	701.9	713.0	716.7	720.4
27.5°	679.8	683.5	692.7	700.1	705.6
30°	661.3	665.0	676.1	685.3	689.0
32.5°	641.0	646.5	659.4	666.8	672.4
35°	618.8	624.3	637.3	650.2	655.8
37.5°	596.6	602.2	615.1	631.7	639.1
40°	570.8	578.2	594.8	617.0	620.7
42.5°	546.8	556.0	570.8	596.6	605.9
45°	519.1	528.3	548.6	576.3	591.1
47.5°	493.2	502.4	524.6	557.9	576.3
50°	461.8	474.7	502.4	541.2	559.7
52.5°	432.2	443.3	480.3	522.8	544.9
55°	400.8	413.8	458.1	504.3	528.3
57.5°	373.1	384.2	434.1	485.8	513.5
60°	338.0	352.8	410.1	465.5	493.2
62.5°	301.1	323.3	386.1	443.3	472.9
65°	266.0	291.9	363.9	421.2	450.7
67.5°	234.6	262.3	336.2	397.1	424.9
70°	197.6	232.7	308.5	367.6	399.0
72.5°	164.4	203.2	277.1	336.2	363.9
75°	131.2	173.6	245.7	295.5	312.2
77.5°	101.6	142.2	210.6	225.4	227.2
80°	75.7	112.7	157.0	158.9	164.4
82.5°	51.7	79.4	101.6	110.8	112.7
85°	33.2	46.2	57.3	59.1	62.8
87.5°	14.8	16.6	20.3	18.5	18.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)