

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: P312722

Luminaire Tested: **22FCZ2-44HE-UNV-L83050-RDP-CA125-W2A-U-4000K**

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: P312722
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-L83050-RDP-CA125-W2A-U-4000K
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.125" ACRYLIC SHEET
Light Source: (168) 4000K 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: 2787.0 lumens
Efficiency: N/A
Efficacy: 73.2 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

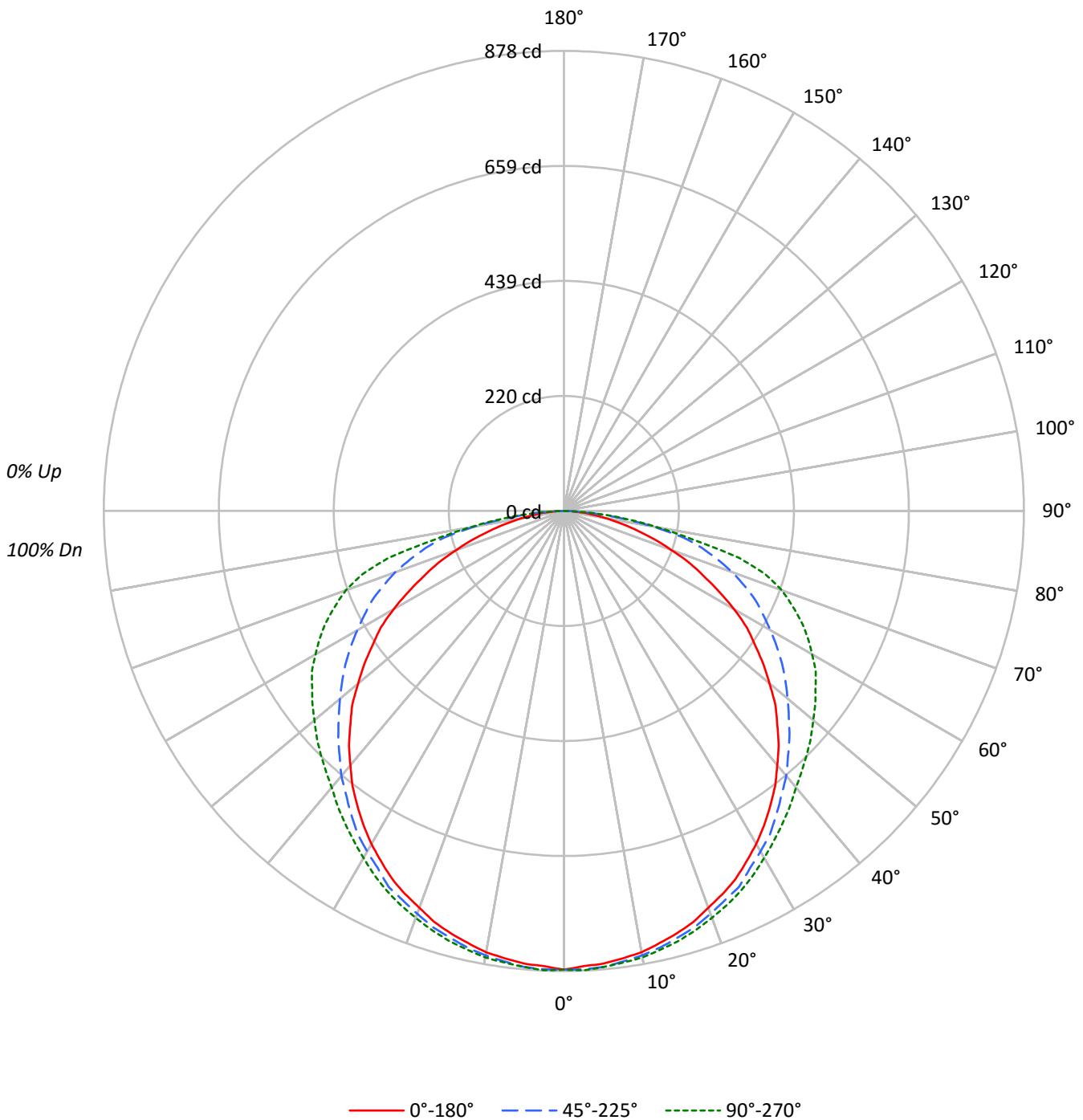
Input Watts (W): 38.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P312722

CATALOG NUMBER: 22FCZ2-44HE-UNV-L83050-RDP-CA125-W2A-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P312722

CATALOG NUMBER: 22FCZ2-44HE-UNV-L83050-RDP-CA125-W2A-U-4000K

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	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°	2356	2356	2356
5°	2343	2359	2359
10°	2336	2353	2364
15°	2325	2347	2365
20°	2307	2342	2366
25°	2301	2350	2374
30°	2281	2332	2376
35°	2256	2324	2391
40°	2225	2319	2420
45°	2192	2317	2497
50°	2146	2335	2601
55°	2087	2386	2751
60°	2019	2449	2946
65°	1880	2572	3186
70°	1726	2694	3484
75°	1514	2835	3603
80°	1303	2701	2828
85°	1139	1964	2152



TEST NUMBER: P312722

CATALOG NUMBER: 22FCZ2-44HE-UNV-L83050-RDP-CA125-W2A-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.8	3.0
10°-20°	237.8	8.5
20°-30°	362.8	13.0
30°-40°	442.9	15.9
40°-50°	473.6	17.0
50°-60°	457.1	16.4
60°-70°	393.5	14.1
70°-80°	266.2	9.6
80°-90°	70.3	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°	683.3	24.5
0°-40°	1126.3	40.4
0°-60°	2057.0	73.8
0°-90°	2787.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2787.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	875	875	875	875	875	
5°	867	869	873	873	873	82
15°	834	836	843	847	849	235
25°	775	779	791	796	800	357
35°	687	693	707	722	728	430
45°	576	586	609	640	656	445
55°	445	459	508	560	586	399
65°	295	324	404	468	500	294
75°	146	193	273	328	346	156
85°	37	51	64	66	70	42
90°	0	0	0	0	0	



TEST NUMBER: P312722

CATALOG NUMBER: 22FCZ2-44HE-UNV-L83050-RDP-CA125-W2A-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	875.4	875.4	875.4	875.4	875.4
2.5°	869.3	871.3	875.4	875.4	877.5
5°	867.2	869.3	873.4	873.4	873.4
7.5°	861.1	863.1	867.2	869.3	869.3
10°	854.9	857.0	861.1	863.1	865.2
12.5°	844.7	846.7	852.9	857.0	857.0
15°	834.4	836.5	842.6	846.7	848.8
17.5°	822.1	826.2	832.4	836.5	838.5
20°	805.7	809.8	818.0	824.2	826.2
22.5°	791.4	795.5	803.7	809.8	813.9
25°	775.0	779.1	791.4	795.5	799.6
27.5°	754.5	758.6	768.8	777.0	783.2
30°	734.0	738.1	750.4	760.6	764.7
32.5°	711.4	717.6	731.9	740.1	746.3
35°	686.8	693.0	707.3	721.7	727.8
37.5°	662.2	668.4	682.7	701.2	709.4
40°	633.5	641.7	660.2	684.8	688.9
42.5°	606.9	617.1	633.5	662.2	672.5
45°	576.1	586.4	608.9	639.7	656.1
47.5°	547.4	557.7	582.3	619.2	639.7
50°	512.6	526.9	557.7	600.7	621.2
52.5°	479.8	492.1	533.1	580.2	604.8
55°	444.9	459.2	508.5	559.7	586.4
57.5°	414.1	426.4	481.8	539.2	570.0
60°	375.2	391.6	455.1	516.7	547.4
62.5°	334.2	358.8	428.5	492.1	524.9
65°	295.2	323.9	403.9	467.5	500.3
67.5°	260.4	291.1	373.1	440.8	471.6
70°	219.4	258.3	342.4	408.0	442.8
72.5°	182.5	225.5	307.5	373.1	403.9
75°	145.6	192.7	272.7	328.0	346.5
77.5°	112.8	157.9	233.7	250.1	252.2
80°	84.1	125.1	174.3	176.3	182.5
82.5°	57.4	88.2	112.8	123.0	125.1
85°	36.9	51.3	63.6	65.6	69.7
87.5°	16.4	18.5	22.6	20.5	20.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)