

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: P308295

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-HRP-CA125-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: P308295
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-CA125-W2A-U-3000K
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" 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: 2908.0 lumens
Efficiency: N/A
Efficacy: 78.8 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

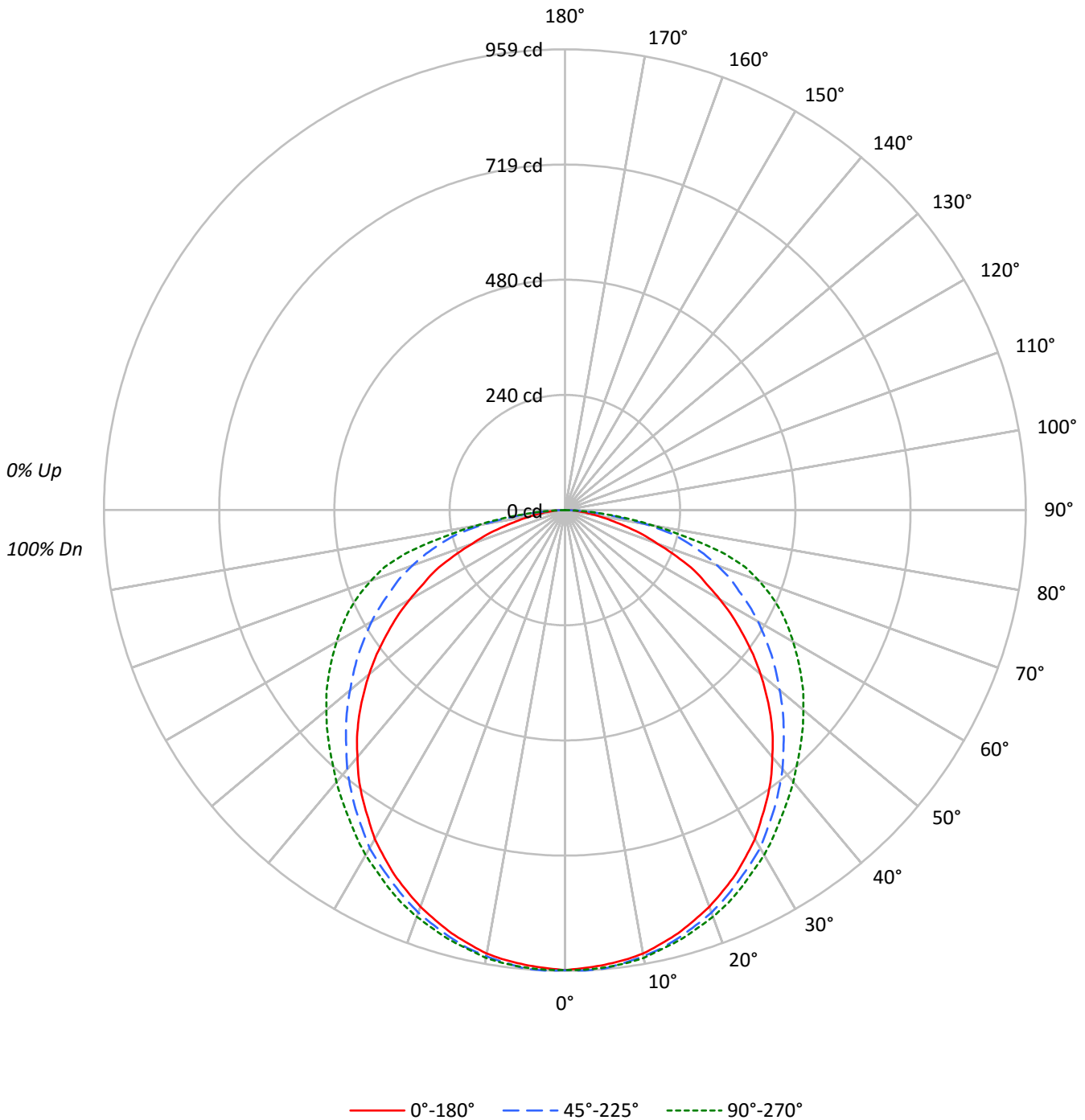
Input Watts (W): 36.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P308295

CATALOG NUMBER: 22FCZ2-44HE-UNV-L82765-HRP-CA125-W2A-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P308295

CATALOG NUMBER: 22FCZ2-44HE-UNV-L82765-HRP-CA125-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°	2577	2577	2577
5°	2567	2587	2582
10°	2561	2576	2587
15°	2540	2566	2581
20°	2516	2553	2579
25°	2489	2533	2576
30°	2457	2525	2577
35°	2411	2495	2573
40°	2359	2474	2597
45°	2304	2450	2639
50°	2227	2442	2711
55°	2126	2461	2814
60°	2004	2498	2952
65°	1892	2546	3154
70°	1617	2655	3378
75°	1354	2766	3509
80°	1108	2672	2927
85°	963	1982	2152



TEST NUMBER: P308295

CATALOG NUMBER: 22FCZ2-44HE-UNV-L82765-HRP-CA125-W2A-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.8	3.1
10°-20°	259.6	8.9
20°-30°	393.4	13.5
30°-40°	475.1	16.3
40°-50°	499.2	17.2
50°-60°	469.7	16.2
60°-70°	391.6	13.5
70°-80°	259.5	8.9
80°-90°	69.1	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°	743.8	25.6
0°-40°	1218.9	41.9
0°-60°	2187.7	75.2
0°-90°	2908.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2908.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	958	958	958	958	958	
5°	950	952	958	958	956	90
15°	912	915	921	925	926	257
25°	838	844	853	864	868	386
35°	734	741	760	776	783	459
45°	605	614	644	677	693	466
55°	453	473	525	578	600	405
65°	297	323	400	466	495	289
75°	130	182	266	321	338	141
85°	31	48	64	70	70	36
90°	0	0	0	0	0	



TEST NUMBER: P308295

CATALOG NUMBER: 22FC22-44HE-UNV-L82765-HRP-CA125-W2A-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	957.6	957.6	957.6	957.6	957.6
2.5°	953.9	955.7	959.4	959.4	957.6
5°	950.2	952.1	957.6	957.6	955.7
7.5°	944.7	946.6	950.2	953.9	952.1
10°	937.4	939.2	942.9	946.6	946.6
12.5°	924.6	926.4	933.7	935.6	935.6
15°	911.7	915.4	920.9	924.6	926.4
17.5°	895.2	898.9	906.2	913.5	913.5
20°	878.7	882.4	891.5	898.9	900.7
22.5°	858.5	864.0	873.2	882.4	886.0
25°	838.3	843.8	853.0	864.0	867.7
27.5°	814.5	820.0	832.8	845.7	847.5
30°	790.6	796.1	812.7	823.7	829.2
32.5°	761.3	768.6	785.1	801.6	807.1
35°	733.8	741.1	759.5	776.0	783.3
37.5°	704.4	711.8	731.9	752.1	761.3
40°	671.4	680.6	704.4	726.4	739.3
42.5°	640.2	649.4	673.2	702.6	715.4
45°	605.4	614.5	643.9	676.9	693.4
47.5°	568.7	579.7	614.5	654.9	671.4
50°	532.0	544.8	583.3	629.2	647.6
52.5°	493.5	510.0	554.0	603.5	625.5
55°	453.1	473.3	524.6	577.8	599.9
57.5°	414.6	432.9	493.5	550.3	574.2
60°	372.4	396.2	464.1	522.8	548.5
62.5°	332.0	357.7	432.9	495.3	522.8
65°	297.2	322.9	399.9	465.9	495.3
67.5°	251.3	286.2	372.4	434.8	464.1
70°	205.5	253.2	337.5	401.7	429.3
72.5°	170.6	216.5	302.7	366.9	392.6
75°	130.2	181.6	266.0	321.0	337.5
77.5°	97.2	150.4	227.5	255.0	256.8
80°	71.5	115.6	172.4	181.6	188.9
82.5°	49.5	80.7	111.9	122.9	126.6
85°	31.2	47.7	64.2	69.7	69.7
87.5°	16.5	18.3	22.0	22.0	22.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)