

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: P308310

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-HRP-CP125-W2A-U-5700K**

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: P308310
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-CP125-W2A-U-5700K
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" 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: 3149.0 lumens
Efficiency: N/A
Efficacy: 82.4 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

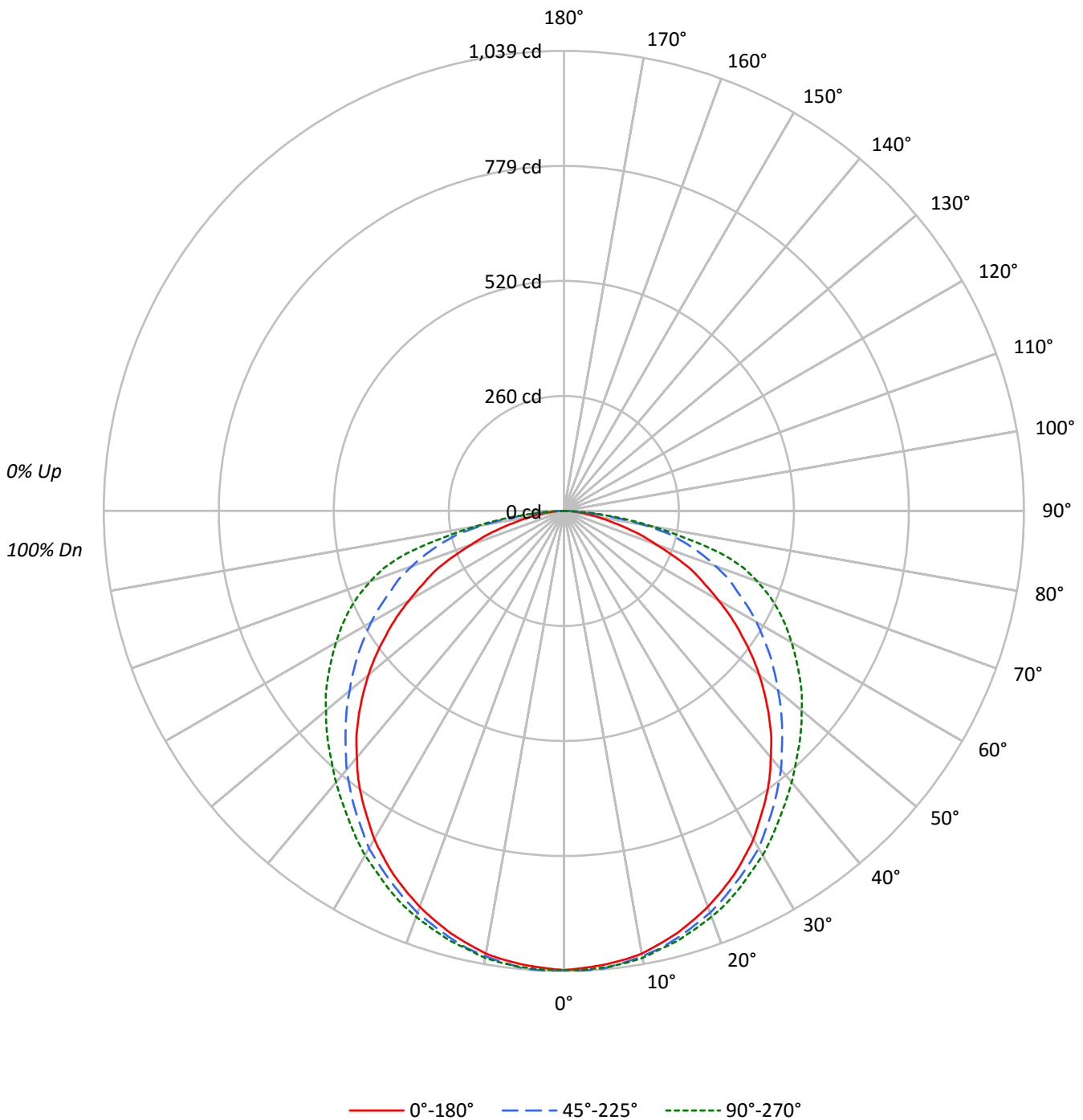
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P308310

CATALOG NUMBER: 22FCZ2-44HE-UNV-L82765-HRP-CP125-W2A-U-5700K

Luminous Intensity Polar Plot





TEST NUMBER: P308310

CATALOG NUMBER: 22FCZ2-44HE-UNV-L82765-HRP-CP125-W2A-U-5700K

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°	2790	2790	2790
5°	2780	2801	2796
10°	2774	2790	2801
15°	2751	2778	2795
20°	2725	2765	2793
25°	2695	2743	2790
30°	2660	2734	2790
35°	2610	2702	2786
40°	2554	2680	2812
45°	2495	2653	2858
50°	2412	2645	2936
55°	2302	2665	3048
60°	2171	2705	3197
65°	2049	2757	3415
70°	1751	2876	3657
75°	1466	2994	3800
80°	1201	2893	3171
85°	1044	2146	2331



TEST NUMBER: P308310

CATALOG NUMBER: 22FCZ2-44HE-UNV-L82765-HRP-CP125-W2A-U-5700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.3	3.1
10°-20°	281.1	8.9
20°-30°	426.0	13.5
30°-40°	514.4	16.3
40°-50°	540.6	17.2
50°-60°	508.6	16.2
60°-70°	424.1	13.5
70°-80°	281.0	8.9
80°-90°	74.9	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°	805.4	25.6
0°-40°	1319.9	41.9
0°-60°	2369.0	75.2
0°-90°	3149.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3149.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1037	1037	1037	1037	1037	
5°	1029	1031	1037	1037	1035	98
15°	987	991	997	1001	1003	278
25°	908	914	924	936	940	418
35°	795	802	822	840	848	497
45°	656	666	697	733	751	505
55°	491	512	568	626	650	439
65°	322	350	433	505	536	313
75°	141	197	288	348	366	153
85°	34	52	70	76	76	39
90°	0	0	0	0	0	



TEST NUMBER: P308310

CATALOG NUMBER: 22FCZ2-44HE-UNV-L82765-HRP-CP125-W2A-U-5700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1036.9	1036.9	1036.9	1036.9	1036.9
2.5°	1033.0	1034.9	1038.9	1038.9	1036.9
5°	1029.0	1031.0	1036.9	1036.9	1034.9
7.5°	1023.0	1025.0	1029.0	1033.0	1031.0
10°	1015.1	1017.1	1021.0	1025.0	1025.0
12.5°	1001.2	1003.2	1011.1	1013.1	1013.1
15°	987.3	991.2	997.2	1001.2	1003.2
17.5°	969.4	973.4	981.3	989.3	989.3
20°	951.5	955.5	965.4	973.4	975.4
22.5°	929.7	935.6	945.6	955.5	959.5
25°	907.8	913.8	923.7	935.6	939.6
27.5°	882.0	887.9	901.9	915.8	917.7
30°	856.2	862.1	880.0	891.9	897.9
32.5°	824.4	832.3	850.2	868.1	874.0
35°	794.6	802.5	822.4	840.3	848.2
37.5°	762.8	770.7	792.6	814.4	824.4
40°	727.0	737.0	762.8	786.6	800.5
42.5°	693.3	703.2	729.0	760.8	774.7
45°	655.5	665.5	697.2	733.0	750.9
47.5°	615.8	627.7	665.5	709.2	727.0
50°	576.1	590.0	631.7	681.4	701.2
52.5°	534.4	552.2	599.9	653.5	677.4
55°	490.7	512.5	568.1	625.7	649.6
57.5°	448.9	468.8	534.4	595.9	621.8
60°	403.3	429.1	502.6	566.1	594.0
62.5°	359.5	387.4	468.8	536.3	566.1
65°	321.8	349.6	433.0	504.6	536.3
67.5°	272.1	309.9	403.3	470.8	502.6
70°	222.5	274.1	365.5	435.0	464.8
72.5°	184.7	234.4	327.8	397.3	425.1
75°	141.0	196.7	288.0	347.6	365.5
77.5°	105.3	162.9	246.3	276.1	278.1
80°	77.5	125.1	186.7	196.7	204.6
82.5°	53.6	87.4	121.2	133.1	137.1
85°	33.8	51.6	69.5	75.5	75.5
87.5°	17.9	19.9	23.8	23.8	23.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)