

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: P308789

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-CA125-W2A-U-2700K**

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: P308789
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-33)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 22FCZ2-39HE-UNV-L82765-CA125-W2A-U-2700K
Description: 2'X2' TROFFER LED MODULE, RIBBED 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: 3244.0 lumens
Efficiency: N/A
Efficacy: 100.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

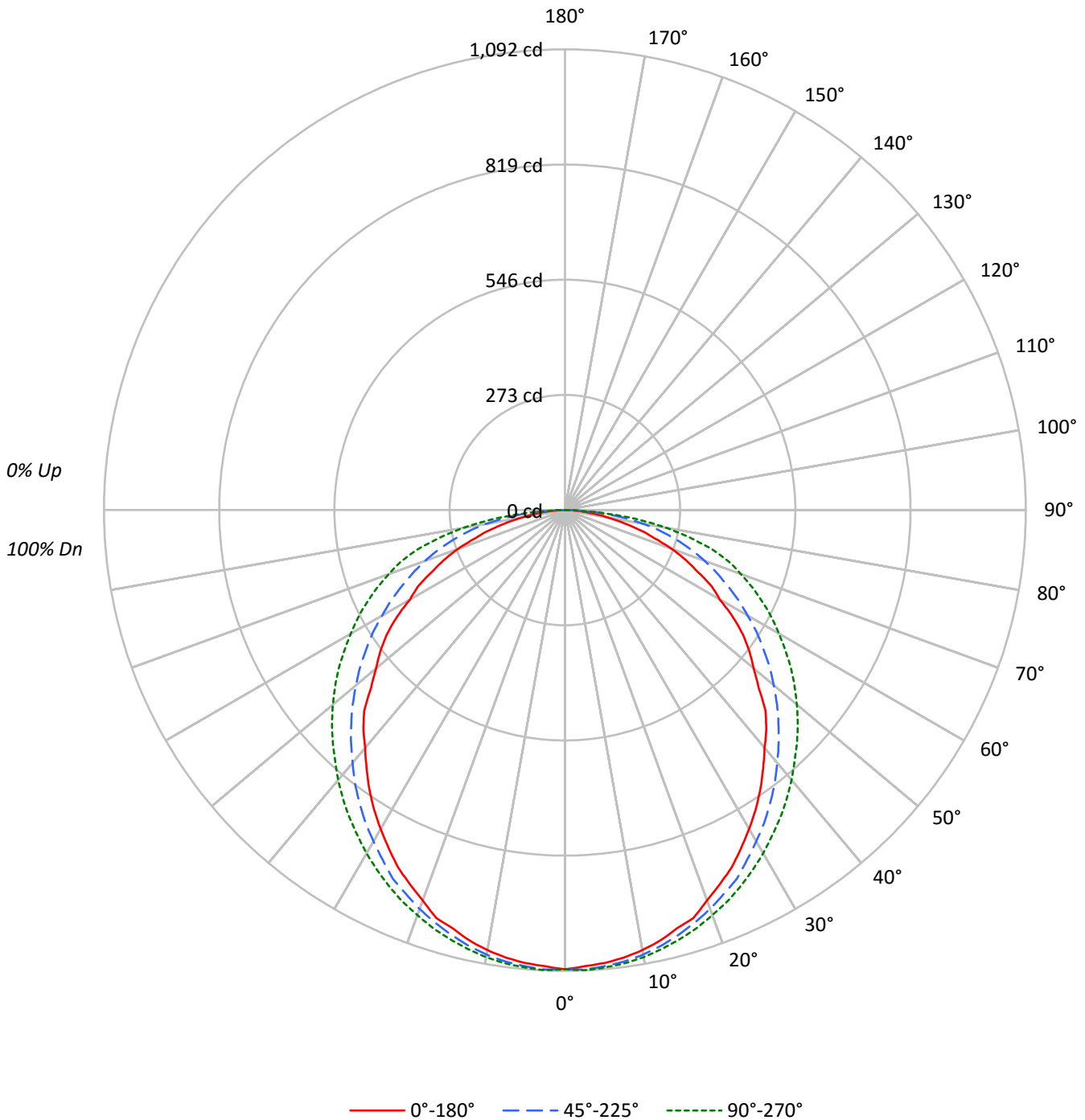
Input Watts (W): 32.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P308789

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-CA125-W2A-U-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P308789

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-CA125-W2A-U-2700K

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	93	90	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	60	53	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	51	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
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	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2929	2929	2929
5°	2911	2932	2940
10°	2893	2923	2940
15°	2859	2902	2933
20°	2819	2881	2926
25°	2775	2863	2923
30°	2711	2817	2919
35°	2652	2785	2923
40°	2585	2749	2934
45°	2559	2724	2960
50°	2444	2704	3003
55°	2419	2695	3067
60°	2281	2690	3150
65°	2215	2709	3292
70°	2126	2773	3494
75°	1937	2857	3762
80°	1660	2960	3801
85°	1343	2828	3260



TEST NUMBER: P308789

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-CA125-W2A-U-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.0	3.2
10°-20°	293.8	9.1
20°-30°	442.2	13.6
30°-40°	530.7	16.4
40°-50°	554.7	17.1
50°-60°	516.9	15.9
60°-70°	424.0	13.1
70°-80°	285.7	8.8
80°-90°	93.1	2.9
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°	839.0	25.9
0°-40°	1369.7	42.2
0°-60°	2441.3	75.3
0°-90°	3244.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3244.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1088	1088	1088	1088	1088	
5°	1078	1081	1085	1087	1088	102
15°	1026	1032	1042	1051	1053	290
25°	935	941	964	978	984	430
35°	807	818	848	877	890	505
45°	672	677	716	759	778	514
55°	516	525	574	629	654	457
65°	348	363	425	488	517	346
75°	186	206	275	337	362	196
85°	44	62	92	107	106	52
90°	0	0	0	0	0	



TEST NUMBER: P308789

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-CA125-W2A-U-2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1088.4	1088.4	1088.4	1088.4	1088.4
2.5°	1082.2	1085.3	1089.9	1091.5	1091.5
5°	1077.5	1080.6	1085.3	1086.8	1088.4
7.5°	1069.8	1072.9	1079.1	1082.2	1083.7
10°	1058.9	1062.0	1069.8	1074.4	1076.0
12.5°	1044.9	1048.0	1057.3	1063.5	1065.1
15°	1026.3	1032.5	1041.8	1051.1	1052.7
17.5°	1013.9	1012.3	1024.7	1035.6	1038.7
20°	984.4	992.1	1006.1	1018.5	1021.6
22.5°	959.5	965.7	984.4	998.3	1004.5
25°	934.7	940.9	964.2	978.2	984.4
27.5°	903.6	912.9	934.7	954.9	962.6
30°	872.6	881.9	906.7	930.0	939.3
32.5°	841.5	852.4	878.8	903.6	914.5
35°	807.4	818.2	847.7	877.2	889.7
37.5°	771.7	785.6	816.7	849.3	863.3
40°	735.9	749.9	782.5	819.8	835.3
42.5°	706.4	712.7	749.9	790.3	805.8
45°	672.3	676.9	715.8	759.2	777.9
47.5°	622.6	639.7	681.6	729.7	748.4
50°	583.8	602.4	645.9	697.1	717.3
52.5°	551.2	563.6	611.7	663.0	686.3
55°	515.5	524.8	574.5	628.8	653.7
57.5°	472.0	489.1	538.8	594.7	619.5
60°	423.9	445.6	499.9	560.5	585.3
62.5°	392.8	405.2	464.2	524.8	552.7
65°	347.8	363.3	425.4	487.5	517.0
67.5°	310.5	326.1	389.7	451.8	481.3
70°	270.2	285.7	352.4	414.6	444.1
72.5°	223.6	245.3	315.2	377.3	408.3
75°	186.3	206.5	274.8	336.9	361.8
77.5°	144.4	170.8	234.4	285.7	304.3
80°	107.1	133.5	191.0	228.2	245.3
82.5°	73.0	99.4	142.8	170.8	180.1
85°	43.5	62.1	91.6	107.1	105.6
87.5°	20.2	26.4	37.3	37.3	35.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)