

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: P308572

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-RDP-CA125-W2A-U-6500K**

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: P308572
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-CA125-W2A-U-6500K
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 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: 2774.0 lumens
Efficiency: N/A
Efficacy: 71.3 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

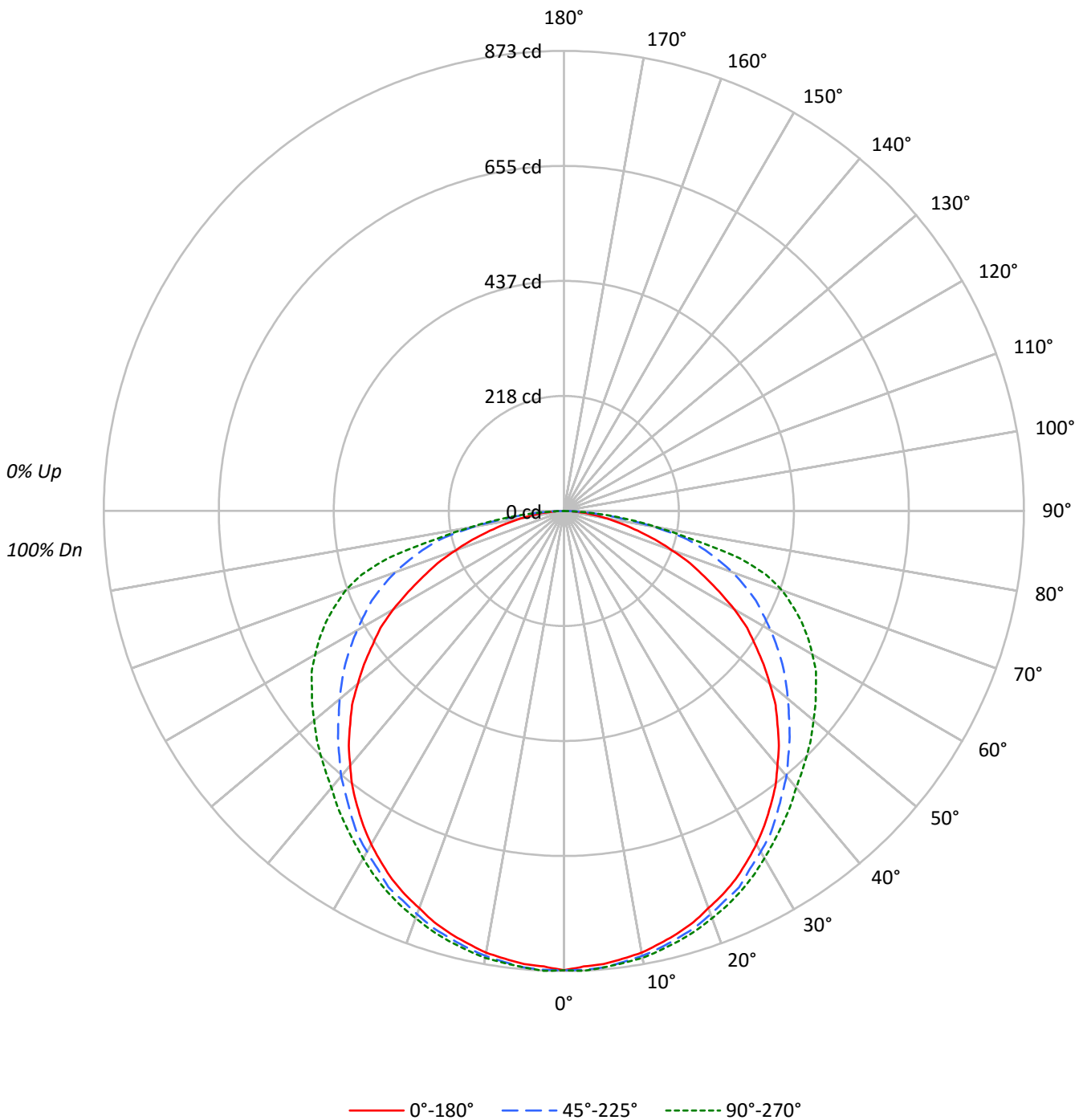
Input Watts (W): 38.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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°	2345	2345	2345
5°	2332	2348	2348
10°	2325	2342	2353
15°	2314	2337	2354
20°	2297	2332	2355
25°	2290	2339	2363
30°	2270	2321	2365
35°	2246	2313	2380
40°	2215	2308	2409
45°	2182	2307	2485
50°	2136	2324	2588
55°	2077	2374	2738
60°	2010	2438	2933
65°	1871	2560	3170
70°	1718	2681	3468
75°	1507	2822	3586
80°	1297	2689	2814
85°	1133	1954	2143



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.4	3.0
10°-20°	236.7	8.5
20°-30°	361.1	13.0
30°-40°	440.9	15.9
40°-50°	471.4	17.0
50°-60°	455.0	16.4
60°-70°	391.7	14.1
70°-80°	265.0	9.6
80°-90°	69.9	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°	680.1	24.5
0°-40°	1121.0	40.4
0°-60°	2047.4	73.8
0°-90°	2774.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2774.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	871	871	871	871	871	
5°	863	865	869	869	869	82
15°	830	833	839	843	845	234
25°	771	776	788	792	796	355
35°	684	690	704	718	724	428
45°	573	584	606	637	653	443
55°	443	457	506	557	584	397
65°	294	322	402	465	498	292
75°	145	192	271	326	345	155
85°	37	51	63	65	69	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	871.4	871.4	871.4	871.4	871.4
2.5°	865.2	867.3	871.4	871.4	873.4
5°	863.2	865.2	869.3	869.3	869.3
7.5°	857.1	859.1	863.2	865.2	865.2
10°	851.0	853.0	857.1	859.1	861.2
12.5°	840.8	842.8	848.9	853.0	853.0
15°	830.5	832.6	838.7	842.8	844.8
17.5°	818.3	822.4	828.5	832.6	834.6
20°	802.0	806.1	814.2	820.3	822.4
22.5°	787.7	791.8	799.9	806.1	810.1
25°	771.4	775.5	787.7	791.8	795.9
27.5°	751.0	755.0	765.2	773.4	779.5
30°	730.6	734.6	746.9	757.1	761.2
32.5°	708.1	714.2	728.5	736.7	742.8
35°	683.6	689.7	704.0	718.3	724.4
37.5°	659.1	665.3	679.5	697.9	706.1
40°	630.6	638.7	657.1	681.6	685.7
42.5°	604.0	614.2	630.6	659.1	669.3
45°	573.4	583.6	606.1	636.7	653.0
47.5°	544.9	555.1	579.5	616.3	636.7
50°	510.2	524.4	555.1	597.9	618.3
52.5°	477.5	489.8	530.6	577.5	602.0
55°	442.8	457.1	506.1	557.1	583.6
57.5°	412.2	424.5	479.6	536.7	567.3
60°	373.4	389.8	453.0	514.2	544.9
62.5°	332.6	357.1	426.5	489.8	522.4
65°	293.9	322.4	402.0	465.3	497.9
67.5°	259.2	289.8	371.4	438.7	469.4
70°	218.4	257.1	340.8	406.1	440.8
72.5°	181.6	224.5	306.1	371.4	402.0
75°	144.9	191.8	271.4	326.5	344.9
77.5°	112.2	157.1	232.6	249.0	251.0
80°	83.7	124.5	173.5	175.5	181.6
82.5°	57.1	87.7	112.2	122.4	124.5
85°	36.7	51.0	63.3	65.3	69.4
87.5°	16.3	18.4	22.4	20.4	20.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)