

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: P308524

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-RDP-CA125-W2A-U-5000K**

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: P308524
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: 22FCZ2-39HE-UNV-L82765-RDP-CA125-W2A-U-5000K
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: 2436.0 lumens
Efficiency: N/A
Efficacy: 73.4 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

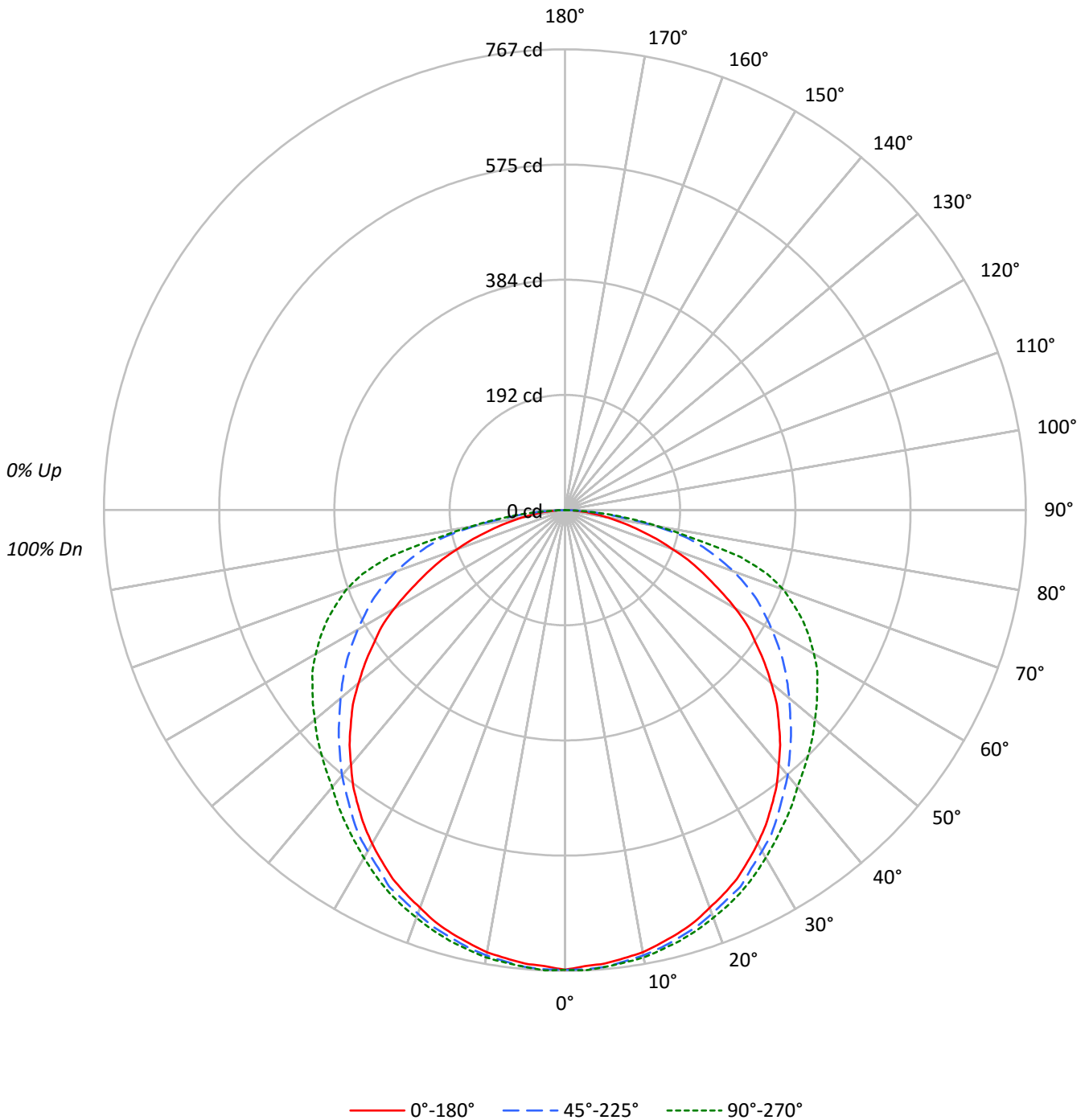
Input Watts (W): 33.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2059	2059	2059
5°	2048	2062	2062
10°	2042	2056	2066
15°	2032	2052	2067
20°	2017	2048	2068
25°	2011	2054	2075
30°	1993	2038	2077
35°	1972	2031	2090
40°	1945	2027	2115
45°	1917	2025	2182
50°	1876	2040	2273
55°	1825	2085	2404
60°	1765	2141	2575
65°	1643	2248	2784
70°	1508	2355	3046
75°	1323	2478	3149
80°	1139	2360	2472
85°	997	1717	1880



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.4	3.0
10°-20°	207.8	8.5
20°-30°	317.1	13.0
30°-40°	387.1	15.9
40°-50°	413.9	17.0
50°-60°	399.5	16.4
60°-70°	344.0	14.1
70°-80°	232.7	9.6
80°-90°	61.4	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°	597.3	24.5
0°-40°	984.4	40.4
0°-60°	1797.9	73.8
0°-90°	2436.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2436.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	765	765	765	765	765	
5°	758	760	763	763	763	72
15°	729	731	736	740	742	206
25°	677	681	692	695	699	312
35°	600	606	618	631	636	376
45°	504	512	532	559	573	389
55°	389	401	444	489	512	348
65°	258	283	353	409	437	257
75°	127	168	238	287	303	137
85°	32	45	56	57	61	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	765.2	765.2	765.2	765.2	765.2
2.5°	759.8	761.6	765.2	765.2	767.0
5°	758.0	759.8	763.4	763.4	763.4
7.5°	752.6	754.4	758.0	759.8	759.8
10°	747.3	749.1	752.6	754.4	756.2
12.5°	738.3	740.1	745.5	749.1	749.1
15°	729.3	731.1	736.5	740.1	741.9
17.5°	718.6	722.2	727.6	731.1	732.9
20°	704.3	707.8	715.0	720.4	722.2
22.5°	691.7	695.3	702.5	707.8	711.4
25°	677.4	681.0	691.7	695.3	698.9
27.5°	659.5	663.0	672.0	679.2	684.5
30°	641.5	645.1	655.9	664.8	668.4
32.5°	621.8	627.2	639.7	646.9	652.3
35°	600.3	605.7	618.2	630.8	636.2
37.5°	578.8	584.2	596.7	612.9	620.0
40°	553.7	560.9	577.0	598.5	602.1
42.5°	530.4	539.4	553.7	578.8	587.8
45°	503.6	512.5	532.2	559.1	573.4
47.5°	478.5	487.4	508.9	541.2	559.1
50°	448.0	460.5	487.4	525.1	543.0
52.5°	419.3	430.1	465.9	507.1	528.6
55°	388.9	401.4	444.4	489.2	512.5
57.5°	362.0	372.7	421.1	471.3	498.2
60°	327.9	342.3	397.8	451.6	478.5
62.5°	292.1	313.6	374.5	430.1	458.8
65°	258.1	283.1	353.0	408.6	437.3
67.5°	227.6	254.5	326.1	385.3	412.2
70°	191.7	225.8	299.3	356.6	387.1
72.5°	159.5	197.1	268.8	326.1	353.0
75°	127.2	168.4	238.3	286.7	302.9
77.5°	98.6	138.0	204.3	218.6	220.4
80°	73.5	109.3	152.3	154.1	159.5
82.5°	50.2	77.1	98.6	107.5	109.3
85°	32.3	44.8	55.6	57.3	60.9
87.5°	14.3	16.1	19.7	17.9	17.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)