

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: P308527

Luminaire Tested: **22FCZ2-39HE-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: P308527
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-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: 2473.0 lumens
Efficiency: N/A
Efficacy: 73.2 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

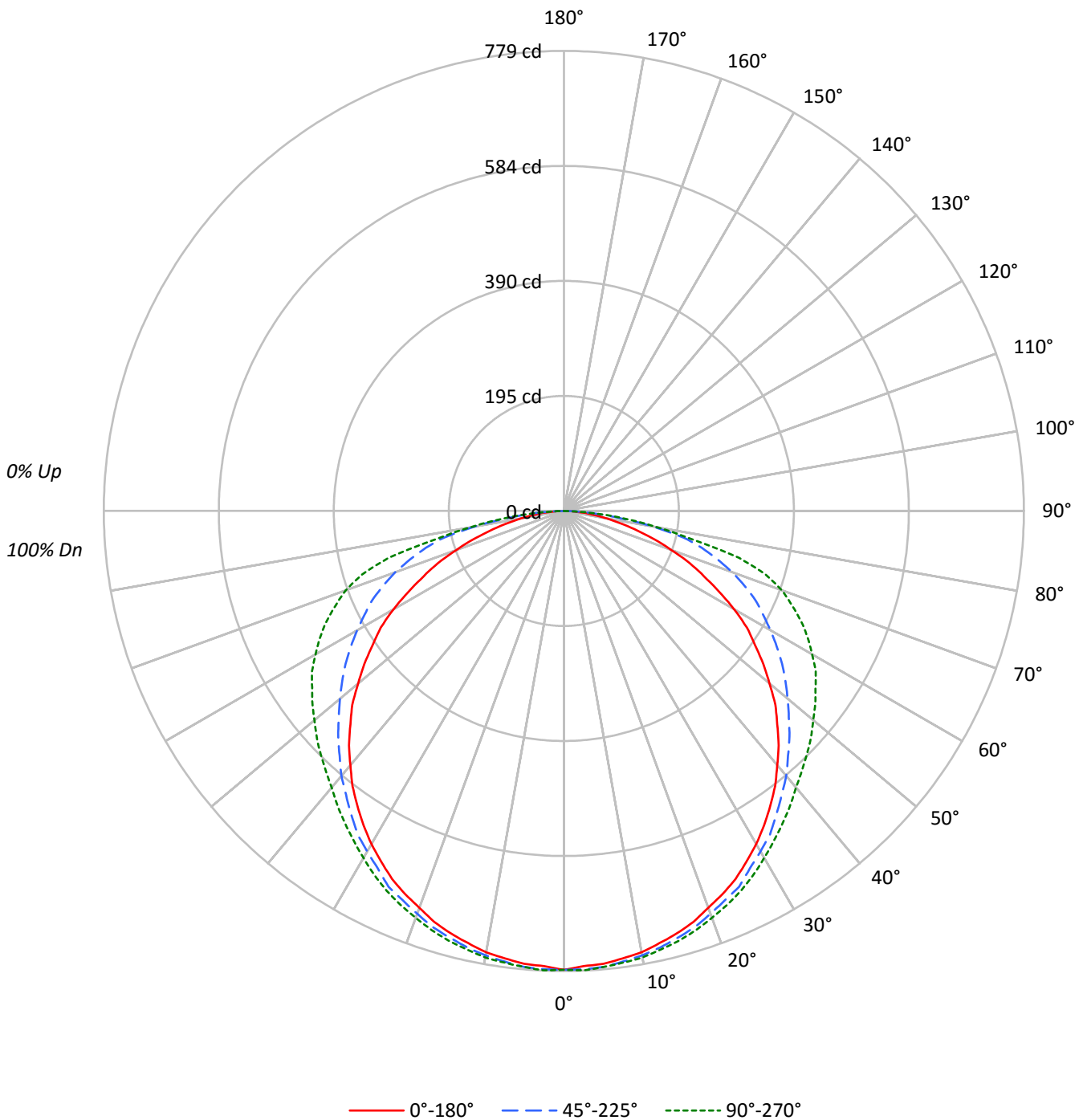
Input Watts (W): 33.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2090	2090	2090
5°	2079	2093	2093
10°	2073	2088	2098
15°	2063	2083	2098
20°	2048	2079	2100
25°	2042	2085	2107
30°	2024	2069	2109
35°	2002	2062	2122
40°	1975	2058	2147
45°	1945	2056	2216
50°	1904	2071	2308
55°	1852	2117	2441
60°	1792	2174	2614
65°	1668	2282	2826
70°	1532	2390	3092
75°	1343	2516	3197
80°	1156	2396	2509
85°	1010	1741	1911



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.5	3.0
10°-20°	211.0	8.5
20°-30°	321.9	13.0
30°-40°	393.0	15.9
40°-50°	420.2	17.0
50°-60°	405.6	16.4
60°-70°	349.2	14.1
70°-80°	236.3	9.6
80°-90°	62.3	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°	606.3	24.5
0°-40°	999.4	40.4
0°-60°	1825.2	73.8
0°-90°	2473.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2473.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	777	777	777	777	777	
5°	770	771	775	775	775	73
15°	740	742	748	751	753	209
25°	688	691	702	706	710	316
35°	609	615	628	640	646	381
45°	511	520	540	568	582	395
55°	395	408	451	497	520	354
65°	262	287	358	415	444	261
75°	129	171	242	291	308	139
85°	33	46	56	58	62	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	776.8	776.8	776.8	776.8	776.8
2.5°	771.4	773.2	776.8	776.8	778.6
5°	769.5	771.4	775.0	775.0	775.0
7.5°	764.1	765.9	769.5	771.4	771.4
10°	758.6	760.4	764.1	765.9	767.7
12.5°	749.5	751.3	756.8	760.4	760.4
15°	740.4	742.2	747.7	751.3	753.2
17.5°	729.5	733.2	738.6	742.2	744.1
20°	715.0	718.6	725.9	731.3	733.2
22.5°	702.2	705.9	713.1	718.6	722.2
25°	687.7	691.3	702.2	705.9	709.5
27.5°	669.5	673.1	682.2	689.5	694.9
30°	651.3	654.9	665.8	674.9	678.6
32.5°	631.3	636.7	649.5	656.7	662.2
35°	609.4	614.9	627.6	640.4	645.8
37.5°	587.6	593.1	605.8	622.2	629.5
40°	562.1	569.4	585.8	607.6	611.3
42.5°	538.5	547.6	562.1	587.6	596.7
45°	511.2	520.3	540.3	567.6	582.2
47.5°	485.7	494.8	516.7	549.4	567.6
50°	454.8	467.5	494.8	533.0	551.2
52.5°	425.7	436.6	473.0	514.8	536.7
55°	394.8	407.5	451.2	496.7	520.3
57.5°	367.5	378.4	427.5	478.5	505.7
60°	332.9	347.5	403.9	458.4	485.7
62.5°	296.5	318.4	380.2	436.6	465.7
65°	262.0	287.4	358.4	414.8	443.9
67.5°	231.0	258.3	331.1	391.1	418.4
70°	194.7	229.2	303.8	362.0	393.0
72.5°	161.9	200.1	272.9	331.1	358.4
75°	129.2	171.0	242.0	291.1	307.5
77.5°	100.1	140.1	207.4	221.9	223.8
80°	74.6	111.0	154.6	156.5	161.9
82.5°	50.9	78.2	100.1	109.2	111.0
85°	32.7	45.5	56.4	58.2	61.9
87.5°	14.6	16.4	20.0	18.2	18.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)