

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: P308519

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-RDP-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: P308519
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-2700K
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: 2171.0 lumens
Efficiency: N/A
Efficacy: 67.0 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

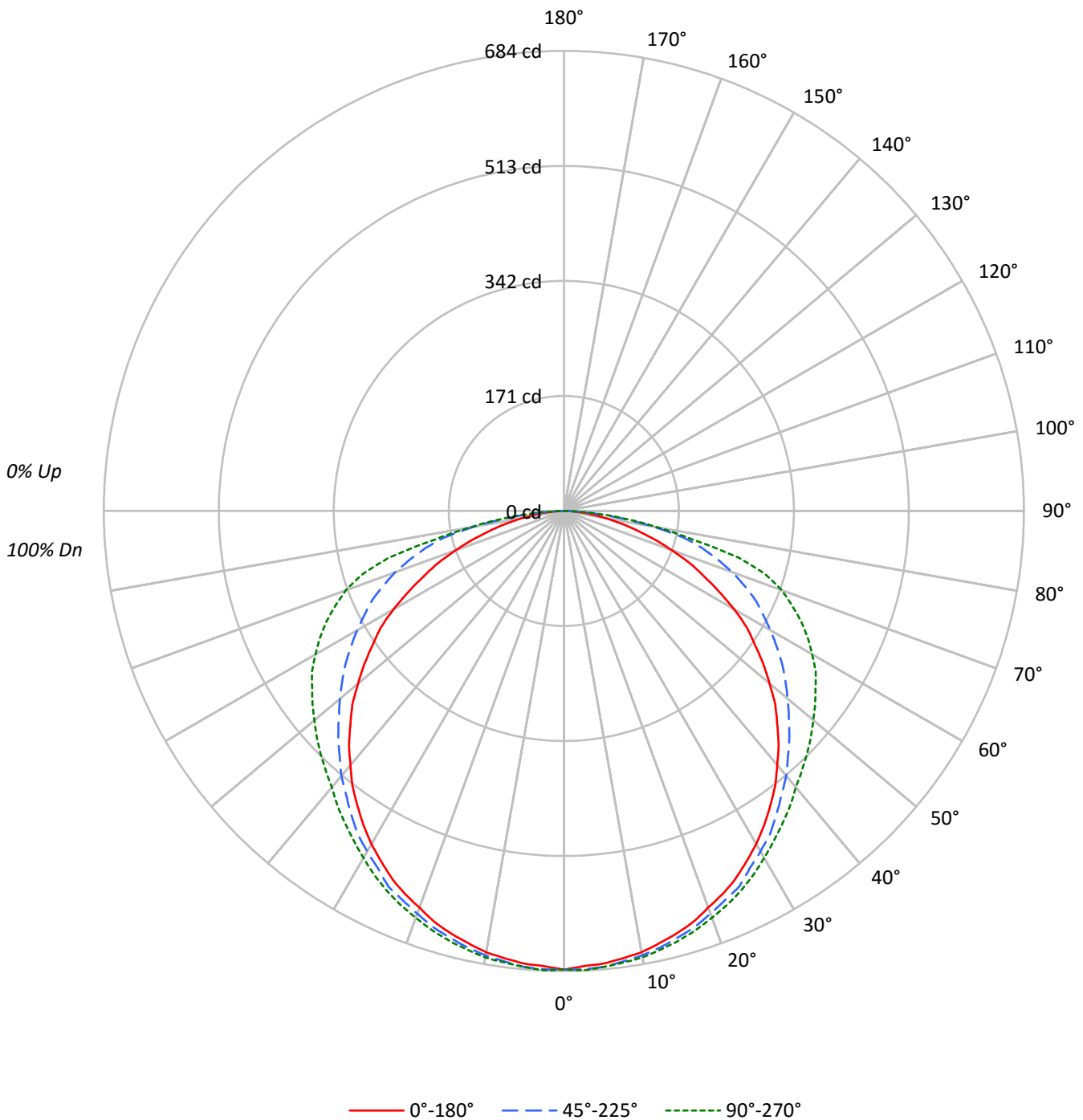
Input Watts (W): 32.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1835	1835	1835
5°	1825	1838	1838
10°	1820	1833	1842
15°	1811	1829	1842
20°	1797	1825	1843
25°	1792	1830	1849
30°	1777	1816	1851
35°	1758	1810	1863
40°	1734	1807	1885
45°	1708	1805	1945
50°	1672	1819	2026
55°	1626	1858	2143
60°	1573	1908	2295
65°	1465	2003	2481
70°	1345	2098	2714
75°	1179	2208	2806
80°	1015	2104	2202
85°	886	1528	1677



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.5	3.0
10°-20°	185.2	8.5
20°-30°	282.6	13.0
30°-40°	345.0	15.9
40°-50°	368.9	17.0
50°-60°	356.1	16.4
60°-70°	306.5	14.1
70°-80°	207.4	9.6
80°-90°	54.7	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°	532.3	24.5
0°-40°	877.3	40.4
0°-60°	1602.3	73.8
0°-90°	2171.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2171.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	682	682	682	682	682	
5°	676	677	680	680	680	64
15°	650	652	656	660	661	183
25°	604	607	616	620	623	278
35°	535	540	551	562	567	335
45°	449	457	474	498	511	346
55°	347	358	396	436	457	311
65°	230	252	315	364	390	229
75°	113	150	212	256	270	122
85°	29	40	50	51	54	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	681.9	681.9	681.9	681.9	681.9
2.5°	677.2	678.8	681.9	681.9	683.5
5°	675.6	677.2	680.4	680.4	680.4
7.5°	670.8	672.4	675.6	677.2	677.2
10°	666.0	667.6	670.8	672.4	674.0
12.5°	658.0	659.6	664.4	667.6	667.6
15°	650.0	651.6	656.4	659.6	661.2
17.5°	640.4	643.6	648.4	651.6	653.2
20°	627.6	630.8	637.2	642.0	643.6
22.5°	616.5	619.7	626.1	630.8	634.0
25°	603.7	606.9	616.5	619.7	622.9
27.5°	587.7	590.9	598.9	605.3	610.1
30°	571.8	574.9	584.5	592.5	595.7
32.5°	554.2	559.0	570.2	576.5	581.3
35°	535.0	539.8	551.0	562.2	567.0
37.5°	515.9	520.6	531.8	546.2	552.6
40°	493.5	499.9	514.3	533.4	536.6
42.5°	472.7	480.7	493.5	515.9	523.8
45°	448.8	456.8	474.3	498.3	511.1
47.5°	426.4	434.4	453.6	482.3	498.3
50°	399.3	410.4	434.4	467.9	483.9
52.5°	373.7	383.3	415.2	452.0	471.1
55°	346.6	357.7	396.1	436.0	456.8
57.5°	322.6	332.2	375.3	420.0	444.0
60°	292.3	305.0	354.5	402.5	426.4
62.5°	260.3	279.5	333.8	383.3	408.8
65°	230.0	252.3	314.6	364.1	389.7
67.5°	202.8	226.8	290.7	343.4	367.3
70°	170.9	201.2	266.7	317.8	345.0
72.5°	142.1	175.7	239.6	290.7	314.6
75°	113.4	150.1	212.4	255.5	269.9
77.5°	87.8	123.0	182.1	194.8	196.4
80°	65.5	97.4	135.8	137.3	142.1
82.5°	44.7	68.7	87.8	95.8	97.4
85°	28.7	39.9	49.5	51.1	54.3
87.5°	12.8	14.4	17.6	16.0	16.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)