

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: P312696

Luminaire Tested: **22FCZ2-39HE-UNV-L83050-RDP-CA125-W2A-U-3500K**

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: P312696  
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-L83050-RDP-CA125-W2A-U-3500K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.125" ACRYLIC SHEET  
Light Source: (168) 3500K 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**

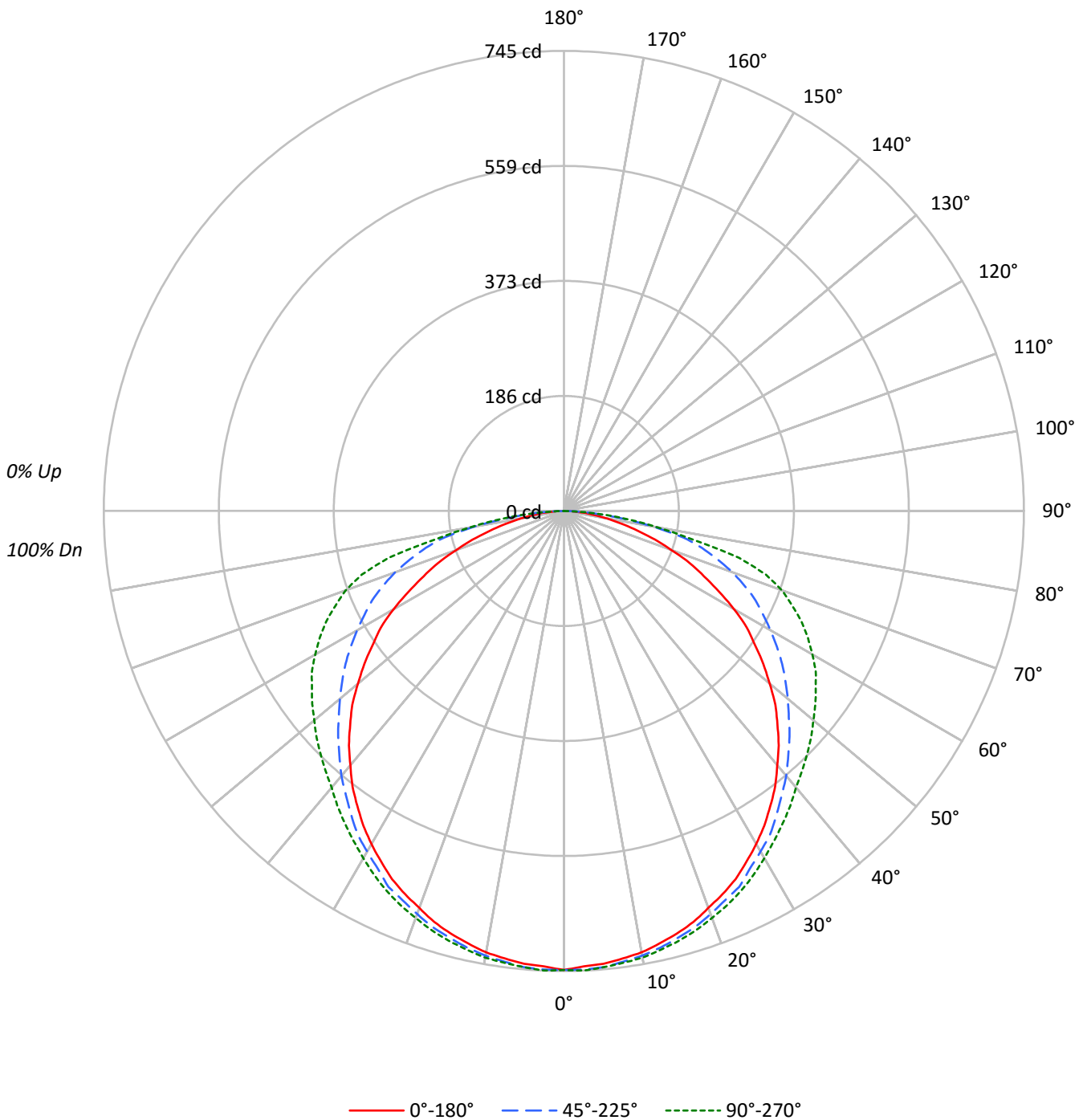
Lumens per Lamp: N/A  
Luminaire Lumens: 2366.0 lumens  
Efficiency: N/A  
Efficacy: 73.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 32.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	2000	2000	2000
5°	1989	2003	2003
10°	1983	1997	2007
15°	1974	1993	2008
20°	1959	1989	2009
25°	1953	1995	2015
30°	1936	1979	2017
35°	1916	1973	2030
40°	1889	1969	2054
45°	1861	1967	2120
50°	1822	1982	2208
55°	1772	2025	2335
60°	1714	2080	2501
65°	1596	2183	2704
70°	1465	2287	2958
75°	1285	2407	3058
80°	1106	2292	2400
85°	966	1667	1828



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.3	3.0
10°-20°	201.9	8.5
20°-30°	308.0	13.0
30°-40°	376.0	15.9
40°-50°	402.0	17.0
50°-60°	388.1	16.4
60°-70°	334.1	14.1
70°-80°	226.0	9.6
80°-90°	59.6	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°	580.1	24.5
0°-40°	956.1	40.4
0°-60°	1746.3	73.8
0°-90°	2366.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2366.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	743	743	743	743	743	
5°	736	738	742	742	742	70
15°	708	710	715	719	721	200
25°	658	661	672	675	679	303
35°	583	588	600	613	618	365
45°	489	498	517	543	557	378
55°	378	390	432	475	498	338
65°	251	275	343	397	425	249
75°	124	164	232	278	294	133
85°	31	44	54	56	59	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	743.2	743.2	743.2	743.2	743.2
2.5°	738.0	739.7	743.2	743.2	744.9
5°	736.2	738.0	741.5	741.5	741.5
7.5°	731.0	732.8	736.2	738.0	738.0
10°	725.8	727.5	731.0	732.8	734.5
12.5°	717.1	718.8	724.1	727.5	727.5
15°	708.4	710.1	715.4	718.8	720.6
17.5°	697.9	701.4	706.7	710.1	711.9
20°	684.0	687.5	694.5	699.7	701.4
22.5°	671.8	675.3	682.3	687.5	691.0
25°	657.9	661.4	671.8	675.3	678.8
27.5°	640.5	644.0	652.7	659.7	664.9
30°	623.1	626.6	637.0	645.7	649.2
32.5°	604.0	609.2	621.4	628.3	633.5
35°	583.1	588.3	600.5	612.7	617.9
37.5°	562.2	567.4	579.6	595.3	602.2
40°	537.8	544.8	560.4	581.3	584.8
42.5°	515.2	523.9	537.8	562.2	570.9
45°	489.1	497.8	516.9	543.0	557.0
47.5°	464.7	473.4	494.3	525.6	543.0
50°	435.1	447.3	473.4	510.0	527.4
52.5°	407.3	417.7	452.5	492.6	513.5
55°	377.7	389.9	431.6	475.2	497.8
57.5°	351.6	362.0	409.0	457.8	483.9
60°	318.5	332.4	386.4	438.6	464.7
62.5°	283.7	304.6	363.8	417.7	445.6
65°	250.6	275.0	342.9	396.8	424.7
67.5°	221.0	247.2	316.8	374.2	400.3
70°	186.2	219.3	290.7	346.4	376.0
72.5°	154.9	191.5	261.1	316.8	342.9
75°	123.6	163.6	231.5	278.5	294.1
77.5°	95.7	134.0	198.4	212.3	214.1
80°	71.4	106.2	147.9	149.7	154.9
82.5°	48.7	74.8	95.7	104.4	106.2
85°	31.3	43.5	54.0	55.7	59.2
87.5°	13.9	15.7	19.1	17.4	17.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)