

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: P312476

Luminaire Tested: **22FCZ2-24HE-UNV-L83050-HRP-CP125-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: P312476  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-22)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 22FCZ2-24HE-UNV-L83050-HRP-CP125-W2A-U-3500K  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" POLYCARB 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**

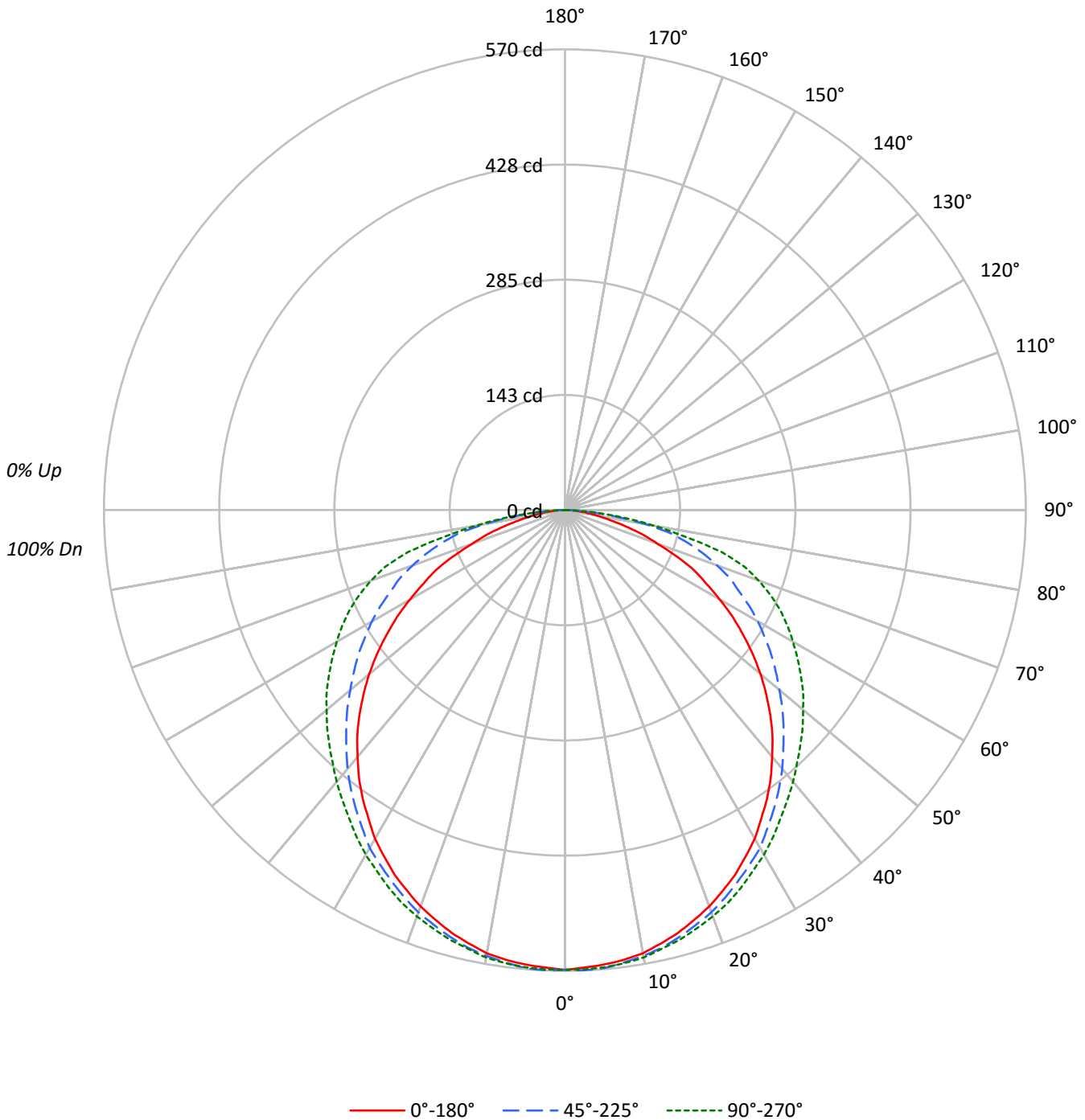
Lumens per Lamp: N/A  
Luminaire Lumens: 1727.0 lumens  
Efficiency: N/A  
Efficacy: 91.4 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 18.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	101	96	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	84	78	73	80	75	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1530	1530	1530
5°	1524	1536	1533
10°	1521	1530	1536
15°	1508	1524	1533
20°	1494	1516	1532
25°	1478	1504	1530
30°	1459	1500	1530
35°	1432	1482	1528
40°	1401	1469	1542
45°	1368	1455	1567
50°	1322	1450	1610
55°	1263	1462	1671
60°	1190	1483	1753
65°	1124	1512	1873
70°	960	1578	2006
75°	804	1643	2085
80°	659	1587	1739
85°	571	1176	1278



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.9	3.1
10°-20°	154.2	8.9
20°-30°	233.7	13.5
30°-40°	282.1	16.3
40°-50°	296.5	17.2
50°-60°	278.9	16.2
60°-70°	232.6	13.5
70°-80°	154.1	8.9
80°-90°	41.1	2.4
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°	441.7	25.6
0°-40°	723.9	41.9
0°-60°	1299.3	75.2
0°-90°	1727.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1727.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	569	569	569	569	569	
5°	564	565	569	569	568	54
15°	541	544	547	549	550	153
25°	498	501	507	513	515	229
35°	436	440	451	461	465	272
45°	360	365	382	402	412	277
55°	269	281	312	343	356	241
65°	176	192	238	277	294	172
75°	77	108	158	191	200	84
85°	18	28	38	41	41	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	568.7	568.7	568.7	568.7	568.7
2.5°	566.5	567.6	569.8	569.8	568.7
5°	564.3	565.4	568.7	568.7	567.6
7.5°	561.1	562.1	564.3	566.5	565.4
10°	556.7	557.8	560.0	562.1	562.1
12.5°	549.1	550.2	554.5	555.6	555.6
15°	541.4	543.6	546.9	549.1	550.2
17.5°	531.6	533.8	538.2	542.5	542.5
20°	521.8	524.0	529.5	533.8	534.9
22.5°	509.9	513.1	518.6	524.0	526.2
25°	497.9	501.1	506.6	513.1	515.3
27.5°	483.7	487.0	494.6	502.2	503.3
30°	469.5	472.8	482.6	489.2	492.4
32.5°	452.1	456.5	466.3	476.1	479.3
35°	435.8	440.1	451.0	460.8	465.2
37.5°	418.3	422.7	434.7	446.7	452.1
40°	398.7	404.2	418.3	431.4	439.0
42.5°	380.2	385.7	399.8	417.3	424.9
45°	359.5	365.0	382.4	402.0	411.8
47.5°	337.7	344.3	365.0	388.9	398.7
50°	315.9	323.6	346.4	373.7	384.6
52.5°	293.1	302.9	329.0	358.4	371.5
55°	269.1	281.1	311.6	343.2	356.2
57.5°	246.2	257.1	293.1	326.8	341.0
60°	221.2	235.3	275.6	310.5	325.7
62.5°	197.2	212.4	257.1	294.1	310.5
65°	176.5	191.7	237.5	276.7	294.1
67.5°	149.3	170.0	221.2	258.2	275.6
70°	122.0	150.3	200.5	238.6	254.9
72.5°	101.3	128.6	179.8	217.9	233.1
75°	77.3	107.9	158.0	190.6	200.5
77.5°	57.7	89.3	135.1	151.4	152.5
80°	42.5	68.6	102.4	107.9	112.2
82.5°	29.4	47.9	66.5	73.0	75.2
85°	18.5	28.3	38.1	41.4	41.4
87.5°	9.8	10.9	13.1	13.1	13.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)