

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: P312685

Luminaire Tested: **22FCZ2-34HE-UNV-L83050-RDP-CP250-W2A-U-3000K**

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: P312685  
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: 22FCZ2-34HE-UNV-L83050-RDP-CP250-W2A-U-3000K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.250" POLYCARB 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**

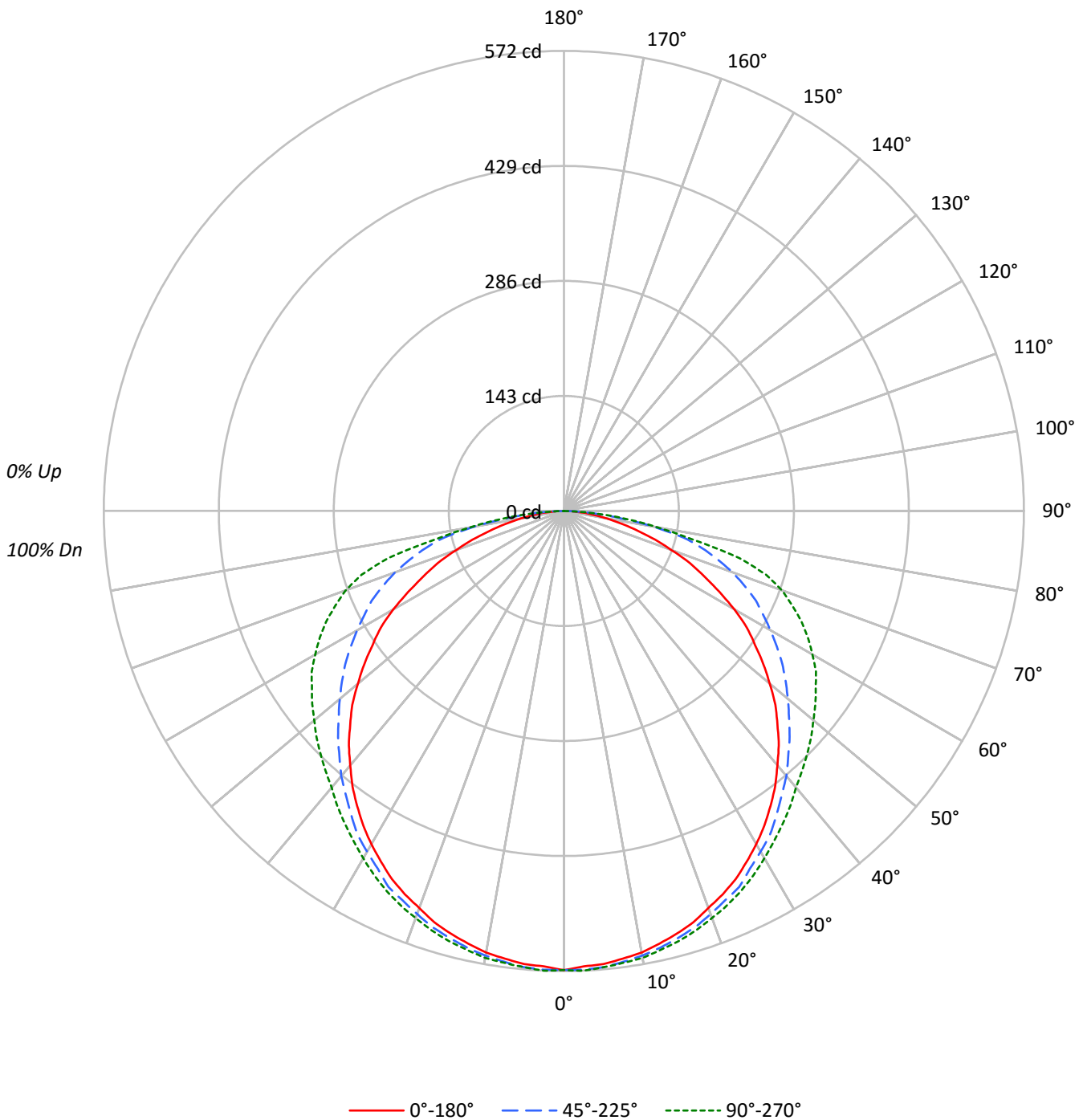
Lumens per Lamp: N/A  
Luminaire Lumens: 1817.0 lumens  
Efficiency: N/A  
Efficacy: 66.1 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 27.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	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°	1536	1536	1536
5°	1527	1538	1538
10°	1523	1534	1541
15°	1516	1531	1542
20°	1504	1527	1543
25°	1500	1532	1548
30°	1487	1520	1549
35°	1471	1515	1559
40°	1451	1512	1578
45°	1429	1511	1628
50°	1399	1522	1696
55°	1361	1555	1794
60°	1316	1597	1921
65°	1226	1677	2076
70°	1125	1756	2271
75°	987	1849	2349
80°	849	1760	1844
85°	744	1278	1402



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.0	3.0
10°-20°	155.0	8.5
20°-30°	236.5	13.0
30°-40°	288.8	15.9
40°-50°	308.8	17.0
50°-60°	298.0	16.4
60°-70°	256.6	14.1
70°-80°	173.6	9.6
80°-90°	45.8	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°	445.5	24.5
0°-40°	734.3	40.4
0°-60°	1341.0	73.8
0°-90°	1817.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1817.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	571	571	571	571	571	
5°	565	567	569	569	569	54
15°	544	545	549	552	553	153
25°	505	508	516	519	521	233
35°	448	452	461	470	474	280
45°	376	382	397	417	428	290
55°	290	299	332	365	382	260
65°	192	211	263	305	326	191
75°	95	126	178	214	226	102
85°	24	33	41	43	45	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	570.8	570.8	570.8	570.8	570.8
2.5°	566.7	568.1	570.8	570.8	572.1
5°	565.4	566.7	569.4	569.4	569.4
7.5°	561.4	562.7	565.4	566.7	566.7
10°	557.4	558.7	561.4	562.7	564.1
12.5°	550.7	552.0	556.0	558.7	558.7
15°	544.0	545.4	549.4	552.0	553.4
17.5°	536.0	538.7	542.7	545.4	546.7
20°	525.3	528.0	533.3	537.3	538.7
22.5°	515.9	518.6	524.0	528.0	530.7
25°	505.3	507.9	515.9	518.6	521.3
27.5°	491.9	494.6	501.2	506.6	510.6
30°	478.5	481.2	489.2	495.9	498.6
32.5°	463.8	467.8	477.2	482.5	486.5
35°	447.8	451.8	461.1	470.5	474.5
37.5°	431.7	435.7	445.1	457.1	462.5
40°	413.0	418.4	430.4	446.4	449.1
42.5°	395.6	402.3	413.0	431.7	438.4
45°	375.6	382.3	397.0	417.0	427.7
47.5°	356.9	363.6	379.6	403.7	417.0
50°	334.2	343.5	363.6	391.6	405.0
52.5°	312.8	320.8	347.5	378.3	394.3
55°	290.1	299.4	331.5	364.9	382.3
57.5°	270.0	278.0	314.1	351.5	371.6
60°	244.6	255.3	296.7	336.8	356.9
62.5°	217.9	233.9	279.4	320.8	342.2
65°	192.5	211.2	263.3	304.8	326.1
67.5°	169.8	189.8	243.3	287.4	307.4
70°	143.0	168.4	223.2	266.0	288.7
72.5°	119.0	147.0	200.5	243.3	263.3
75°	94.9	125.6	177.8	213.9	225.9
77.5°	73.5	102.9	152.4	163.1	164.4
80°	54.8	81.5	113.6	115.0	119.0
82.5°	37.4	57.5	73.5	80.2	81.5
85°	24.1	33.4	41.4	42.8	45.4
87.5°	10.7	12.0	14.7	13.4	13.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)