

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: P312062

Luminaire Tested: **14FCZ2-29-UNV-L83050-RDP-CP250-W2A-U-4000K**

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: P312062  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 14FCZ2-29-UNV-L83050-RDP-CP250-W2A-U-4000K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" POLYCARB SHEET  
Light Source: (168) 4000K 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: 1752.0 lumens  
Efficiency: N/A  
Efficacy: 72.1 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

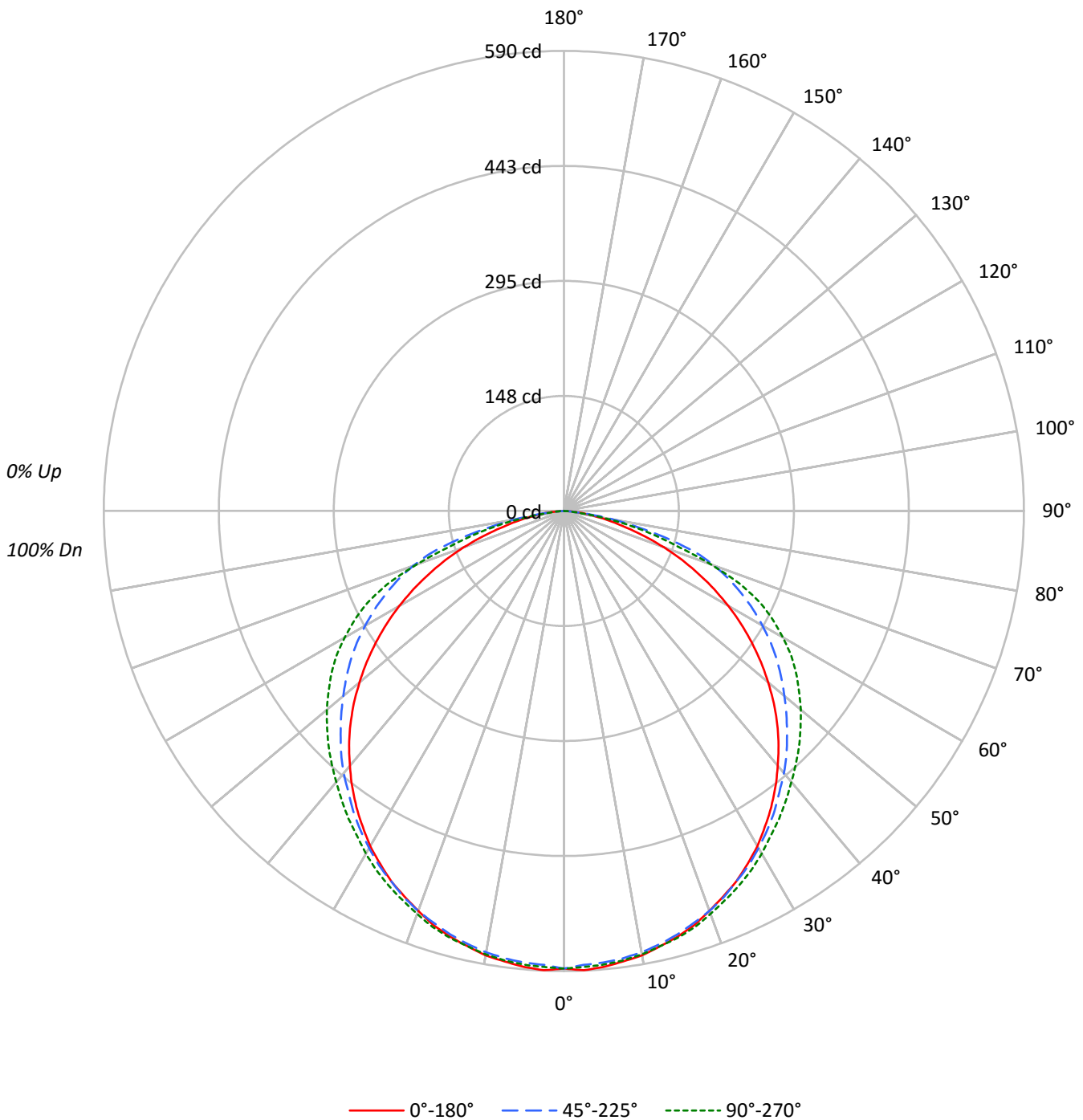
Input Watts (W): 24.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

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

	0°	45°	90°
0°	1579	1579	1579
5°	1585	1570	1578
10°	1581	1570	1577
15°	1574	1566	1578
20°	1563	1563	1575
25°	1556	1556	1576
30°	1543	1551	1577
35°	1523	1546	1582
40°	1499	1542	1595
45°	1473	1541	1624
50°	1432	1546	1661
55°	1380	1566	1707
60°	1311	1583	1745
65°	1210	1603	1768
70°	1076	1614	1582
75°	867	1450	1265
80°	679	1018	826
85°	463	296	210



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.5	3.2
10°-20°	159.3	9.1
20°-30°	242.6	13.8
30°-40°	295.5	16.9
40°-50°	313.5	17.9
50°-60°	295.9	16.9
60°-70°	238.9	13.6
70°-80°	129.6	7.4
80°-90°	21.0	1.2
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°	457.5	26.1
0°-40°	753.1	43.0
0°-60°	1362.5	77.8
0°-90°	1752.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1752.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	587	587	587	587	587	
5°	587	585	581	585	584	56
15°	565	564	562	566	566	159
25°	524	522	524	529	531	241
35°	464	466	470	480	482	290
45°	387	393	405	420	427	298
55°	294	306	334	356	364	263
65°	190	213	252	272	278	188
75°	83	122	140	126	122	91
85°	15	16	10	8	7	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	586.8	586.8	586.8	586.8	586.8
2.5°	589.5	586.8	582.7	586.8	585.4
5°	586.8	585.4	581.3	585.4	584.1
7.5°	582.7	582.7	578.6	581.3	581.3
10°	578.6	577.2	574.5	578.6	577.2
12.5°	571.7	570.4	569.0	573.1	571.7
15°	564.9	563.5	562.2	566.3	566.3
17.5°	556.7	555.3	554.0	559.4	559.4
20°	545.8	545.8	545.8	551.2	549.9
22.5°	534.8	534.8	536.2	541.7	540.3
25°	523.9	522.5	523.9	529.3	530.7
27.5°	510.2	511.6	512.9	518.4	519.8
30°	496.5	497.9	499.2	506.1	507.5
32.5°	480.1	482.8	485.6	493.8	493.8
35°	463.7	466.4	470.5	480.1	481.5
37.5°	445.9	448.6	454.1	465.1	467.8
40°	426.8	430.9	439.1	450.0	454.1
42.5°	407.6	413.1	422.7	435.0	440.4
45°	387.1	392.6	404.9	419.9	426.8
47.5°	365.2	372.0	387.1	406.2	411.7
50°	342.0	351.5	369.3	389.8	396.7
52.5°	318.7	329.6	351.5	373.4	380.3
55°	294.1	306.4	333.7	355.6	363.8
57.5°	269.5	283.1	314.6	337.8	346.1
60°	243.5	259.9	294.1	317.3	324.2
62.5°	217.5	236.6	273.6	296.8	302.3
65°	190.1	213.4	251.7	272.2	277.7
67.5°	164.1	191.5	229.8	244.8	244.8
70°	136.8	166.9	205.2	209.3	201.1
72.5°	109.4	143.6	177.8	162.8	155.9
75°	83.4	121.7	139.5	125.8	121.7
77.5°	62.9	98.5	98.5	90.3	87.5
80°	43.8	75.2	65.7	57.4	53.3
82.5°	28.7	42.4	34.2	27.4	23.3
85°	15.0	16.4	9.6	8.2	6.8
87.5°	5.5	2.7	1.4	2.7	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)