

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: P307343

Luminaire Tested: **14FCZ2-29-UNV-L82765-RDP-CA08-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: P307343
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-L82765-RDP-CA08-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" ACRYLIC 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: 1795.0 lumens
Efficiency: N/A
Efficacy: 74.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

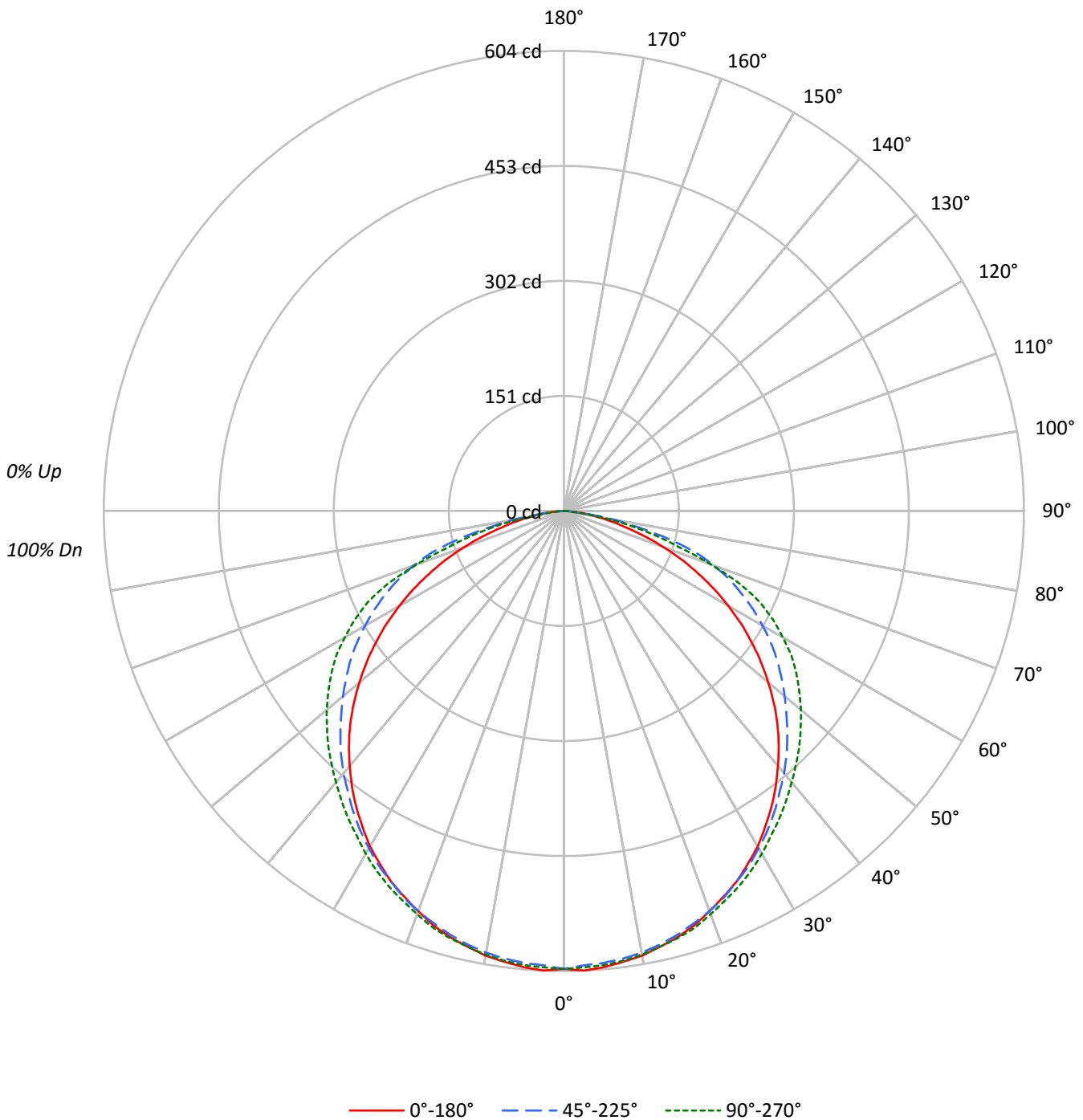
Input Watts (W): 24.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1618	1618	1618
5°	1624	1609	1616
10°	1620	1608	1616
15°	1612	1605	1616
20°	1601	1601	1613
25°	1594	1594	1614
30°	1581	1589	1615
35°	1561	1584	1621
40°	1536	1580	1635
45°	1509	1579	1664
50°	1467	1584	1701
55°	1414	1604	1749
60°	1342	1622	1787
65°	1240	1642	1812
70°	1102	1654	1621
75°	889	1486	1297
80°	694	1043	848
85°	475	303	216



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.9	3.2
10°-20°	163.3	9.1
20°-30°	248.6	13.8
30°-40°	302.8	16.9
40°-50°	321.2	17.9
50°-60°	303.2	16.9
60°-70°	244.8	13.6
70°-80°	132.8	7.4
80°-90°	21.5	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°	468.8	26.1
0°-40°	771.5	43.0
0°-60°	1395.9	77.8
0°-90°	1795.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1795.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	601	601	601	601	601	
5°	601	600	596	600	598	57
15°	579	577	576	580	580	163
25°	537	535	537	542	544	247
35°	475	478	482	492	493	297
45°	397	402	415	430	437	305
55°	301	314	342	364	373	269
65°	195	219	258	279	284	193
75°	86	125	143	129	125	93
85°	15	17	10	8	7	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	601.2	601.2	601.2	601.2	601.2
2.5°	604.0	601.2	597.0	601.2	599.8
5°	601.2	599.8	595.6	599.8	598.4
7.5°	597.0	597.0	592.8	595.6	595.6
10°	592.8	591.4	588.6	592.8	591.4
12.5°	585.8	584.4	583.0	587.2	585.8
15°	578.8	577.4	576.0	580.2	580.2
17.5°	570.4	569.0	567.6	573.2	573.2
20°	559.1	559.1	559.1	564.8	563.4
22.5°	547.9	547.9	549.3	554.9	553.5
25°	536.7	535.3	536.7	542.3	543.7
27.5°	522.7	524.1	525.5	531.1	532.5
30°	508.7	510.1	511.5	518.5	519.9
32.5°	491.9	494.7	497.5	505.9	505.9
35°	475.1	477.9	482.1	491.9	493.3
37.5°	456.8	459.7	465.3	476.5	479.3
40°	437.2	441.4	449.8	461.1	465.3
42.5°	417.6	423.2	433.0	445.6	451.2
45°	396.6	402.2	414.8	430.2	437.2
47.5°	374.2	381.2	396.6	416.2	421.8
50°	350.3	360.2	378.4	399.4	406.4
52.5°	326.5	337.7	360.2	382.6	389.6
55°	301.3	313.9	341.9	364.4	372.8
57.5°	276.1	290.1	322.3	346.1	354.5
60°	249.4	266.3	301.3	325.1	332.1
62.5°	222.8	242.4	280.3	304.1	309.7
65°	194.8	218.6	257.9	278.9	284.5
67.5°	168.2	196.2	235.4	250.8	250.8
70°	140.1	171.0	210.2	214.4	206.0
72.5°	112.1	147.1	182.2	166.8	159.8
75°	85.5	124.7	142.9	128.9	124.7
77.5°	64.5	100.9	100.9	92.5	89.7
80°	44.8	77.1	67.3	58.9	54.7
82.5°	29.4	43.4	35.0	28.0	23.8
85°	15.4	16.8	9.8	8.4	7.0
87.5°	5.6	2.8	1.4	2.8	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)