

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: P307342

Luminaire Tested: **14FCZ2-29-UNV-L82765-RDP-CA08-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: P307342
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-3500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" 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: 1756.0 lumens
Efficiency: N/A
Efficacy: 73.5 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

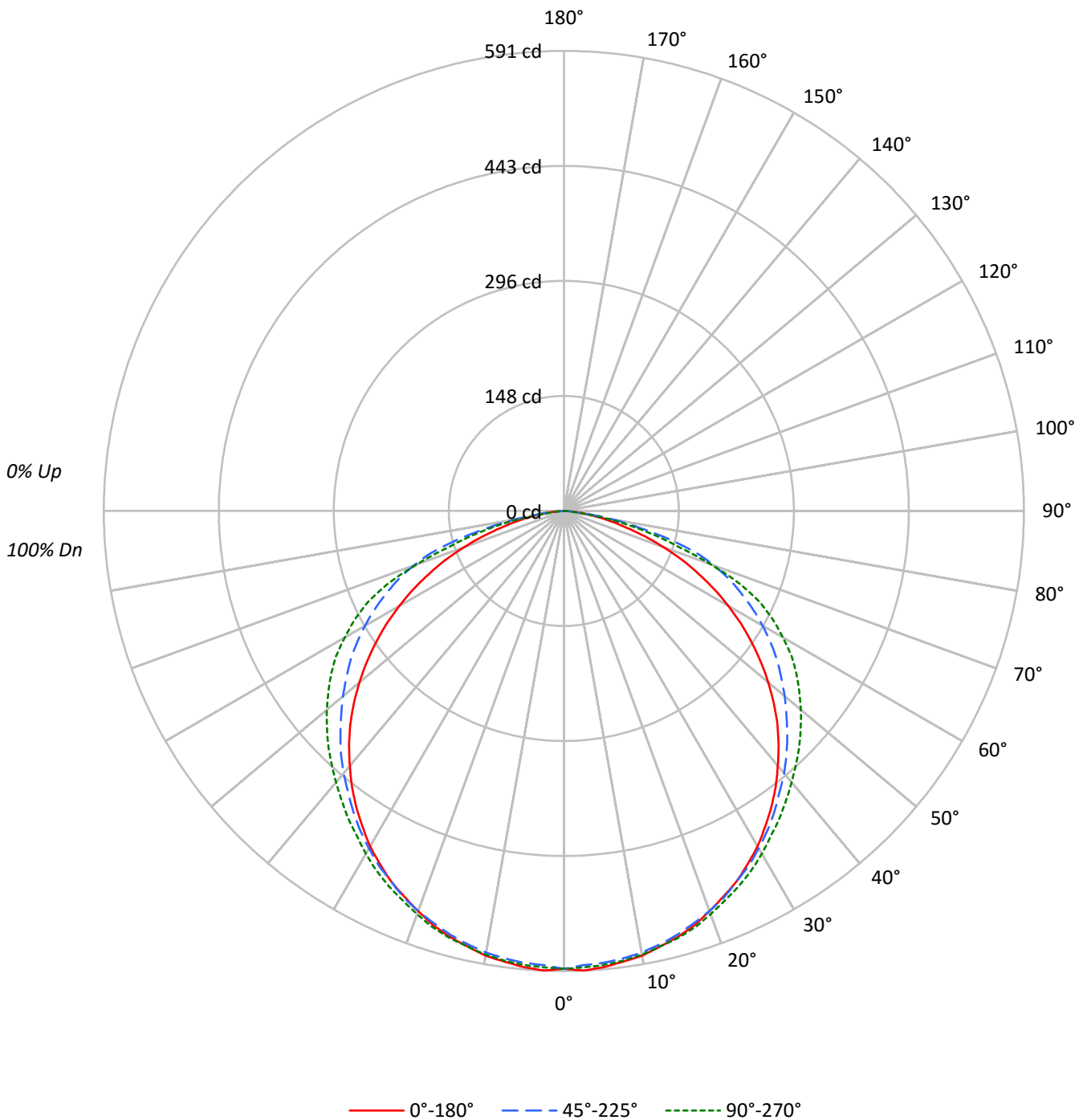
Input Watts (W): 23.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1583	1583	1583
5°	1589	1574	1581
10°	1585	1573	1581
15°	1577	1570	1581
20°	1566	1566	1578
25°	1559	1559	1579
30°	1546	1555	1580
35°	1527	1549	1585
40°	1502	1546	1599
45°	1477	1544	1628
50°	1435	1550	1665
55°	1383	1569	1711
60°	1313	1587	1749
65°	1214	1606	1772
70°	1079	1618	1585
75°	869	1454	1268
80°	680	1020	829
85°	466	296	213



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.7	3.2
10°-20°	159.7	9.1
20°-30°	243.2	13.8
30°-40°	296.2	16.9
40°-50°	314.3	17.9
50°-60°	296.6	16.9
60°-70°	239.5	13.6
70°-80°	129.9	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°	458.6	26.1
0°-40°	754.8	43.0
0°-60°	1365.6	77.8
0°-90°	1756.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1756.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	588	588	588	588	588	
5°	588	587	583	587	585	56
15°	566	565	564	568	568	160
25°	525	524	525	531	532	242
35°	465	468	472	481	483	291
45°	388	394	406	421	428	299
55°	295	307	334	356	365	263
65°	191	214	252	273	278	189
75°	84	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°	588.1	588.1	588.1	588.1	588.1
2.5°	590.9	588.1	584.0	588.1	586.8
5°	588.1	586.8	582.6	586.8	585.4
7.5°	584.0	584.0	579.9	582.6	582.6
10°	579.9	578.5	575.8	579.9	578.5
12.5°	573.0	571.7	570.3	574.4	573.0
15°	566.2	564.8	563.5	567.6	567.6
17.5°	558.0	556.6	555.2	560.7	560.7
20°	547.0	547.0	547.0	552.5	551.1
22.5°	536.0	536.0	537.4	542.9	541.5
25°	525.1	523.7	525.1	530.6	531.9
27.5°	511.4	512.7	514.1	519.6	521.0
30°	497.6	499.0	500.4	507.2	508.6
32.5°	481.2	483.9	486.7	494.9	494.9
35°	464.7	467.5	471.6	481.2	482.6
37.5°	446.9	449.7	455.1	466.1	468.9
40°	427.7	431.8	440.1	451.0	455.1
42.5°	408.5	414.0	423.6	436.0	441.4
45°	388.0	393.5	405.8	420.9	427.7
47.5°	366.0	372.9	388.0	407.2	412.7
50°	342.7	352.3	370.2	390.7	397.6
52.5°	319.4	330.4	352.3	374.3	381.1
55°	294.8	307.1	334.5	356.4	364.7
57.5°	270.1	283.8	315.3	338.6	346.8
60°	244.0	260.5	294.8	318.1	324.9
62.5°	218.0	237.2	274.2	297.5	303.0
65°	190.6	213.9	252.3	272.8	278.3
67.5°	164.5	191.9	230.3	245.4	245.4
70°	137.1	167.3	205.6	209.8	201.5
72.5°	109.7	143.9	178.2	163.1	156.3
75°	83.6	122.0	139.8	126.1	122.0
77.5°	63.1	98.7	98.7	90.5	87.7
80°	43.9	75.4	65.8	57.6	53.5
82.5°	28.8	42.5	34.3	27.4	23.3
85°	15.1	16.5	9.6	8.2	6.9
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)