

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: METALUX

Report Number: P232290

Luminaire Tested: **ATW-SW4-22RDI-20-UNV-L840-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P232290  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1706-078-15-R2)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: ATW-SW4-22RDI-20-UNV-L840-CD1-U  
Description: METALUX 2X2 OVATION LED TROFFER  
CHICAGO RATED VERSION  
Light Source: (196) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2091.0 lumens  
Efficiency: N/A  
Efficacy: 105.1 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

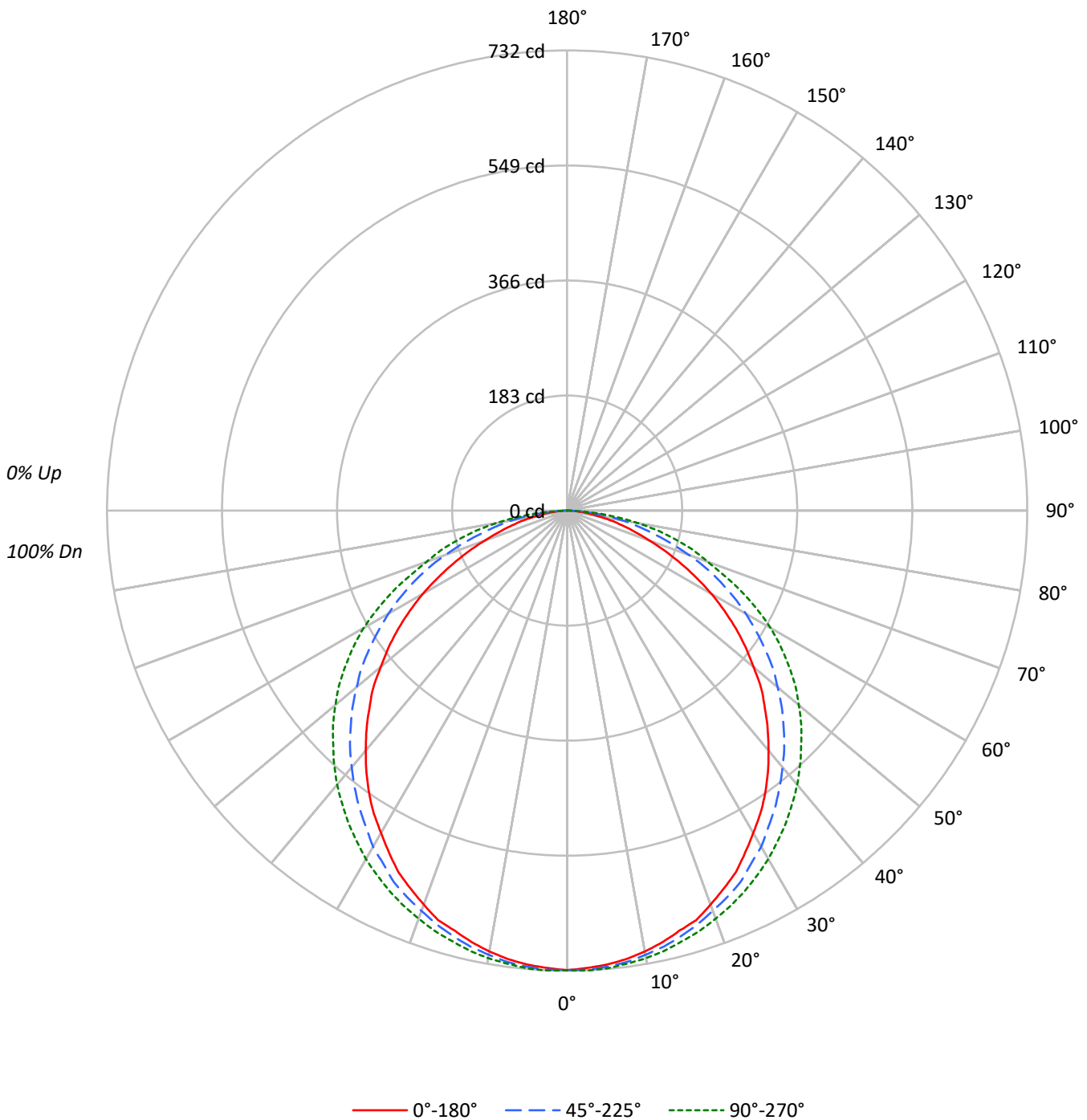
Input Watts (W): 19.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	78	96	88	82	77	85	80	75	82	77	73	79	75	72	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	73	61	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

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

	0°	45°	90°
0°	1967	1967	1967
5°	1958	1967	1975
10°	1946	1961	1976
15°	1927	1953	1975
20°	1910	1940	1979
25°	1885	1936	1984
30°	1840	1918	1989
35°	1804	1894	1993
40°	1751	1873	2000
45°	1694	1854	2004
50°	1620	1829	2014
55°	1539	1803	2019
60°	1428	1766	2014
65°	1272	1715	1957
70°	1094	1619	1866
75°	938	1473	1868
80°	756	1378	1760
85°	556	1071	1423



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.2	3.3
10°-20°	197.9	9.5
20°-30°	299.9	14.3
30°-40°	361.2	17.3
40°-50°	375.3	17.9
50°-60°	341.0	16.3
60°-70°	258.5	12.4
70°-80°	148.1	7.1
80°-90°	40.0	1.9
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°	566.9	27.1
0°-40°	928.1	44.4
0°-60°	1644.5	78.6
0°-90°	2091.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2091.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	731	731	731	731	731	
5°	725	726	728	730	731	69
15°	692	695	701	707	709	195
25°	635	637	652	663	668	292
35°	549	559	577	598	607	343
45°	445	457	487	516	526	343
55°	328	346	384	418	430	293
65°	200	225	269	297	307	199
75°	90	112	142	169	180	97
85°	18	25	35	43	46	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	731.0	731.0	731.0	731.0	731.0
2.5°	728.3	729.0	731.0	732.3	732.3
5°	725.0	725.7	728.3	729.7	731.0
7.5°	719.6	721.0	724.3	726.3	727.0
10°	712.3	714.3	717.6	721.0	723.0
12.5°	702.9	704.9	710.3	715.0	717.0
15°	691.6	694.9	700.9	706.9	708.9
17.5°	682.9	683.6	690.2	698.3	700.9
20°	666.9	670.9	677.5	686.9	690.9
22.5°	650.8	656.2	665.5	676.2	680.2
25°	634.8	636.8	652.2	662.8	668.2
27.5°	613.4	621.4	633.4	648.8	654.2
30°	592.0	600.0	617.4	632.8	640.1
32.5°	572.0	578.0	596.0	616.1	623.4
35°	549.3	559.3	576.6	598.0	606.7
37.5°	524.5	534.6	555.3	578.7	588.0
40°	498.5	509.2	533.2	559.9	569.3
42.5°	472.4	483.1	511.2	536.6	548.6
45°	445.0	457.0	487.1	515.8	526.5
47.5°	419.0	431.0	463.1	492.5	505.2
50°	386.9	404.3	437.0	467.7	481.1
52.5°	358.1	376.2	412.9	443.7	457.7
55°	328.1	345.5	384.2	417.6	430.3
57.5°	296.7	318.1	356.1	389.6	402.9
60°	265.3	286.7	328.1	359.5	374.2
62.5°	232.5	257.9	299.3	330.8	341.4
65°	199.8	225.2	269.3	296.7	307.4
67.5°	169.1	197.1	239.2	261.9	270.6
70°	139.0	168.4	205.8	226.5	237.2
72.5°	113.6	140.3	173.7	197.1	211.1
75°	90.2	112.3	141.7	169.1	179.7
77.5°	69.5	86.9	114.9	139.0	148.3
80°	48.8	62.1	88.9	108.9	113.6
82.5°	32.7	42.1	61.5	75.5	78.8
85°	18.0	24.7	34.7	43.4	46.1
87.5°	8.0	9.4	12.7	14.7	14.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)