

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: P275421

Luminaire Tested: **14CZ2-20-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275421  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-20-UNV-L93050-W2A1-U-4500K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1941.0 lumens  
Efficiency: N/A  
Efficacy: 121.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

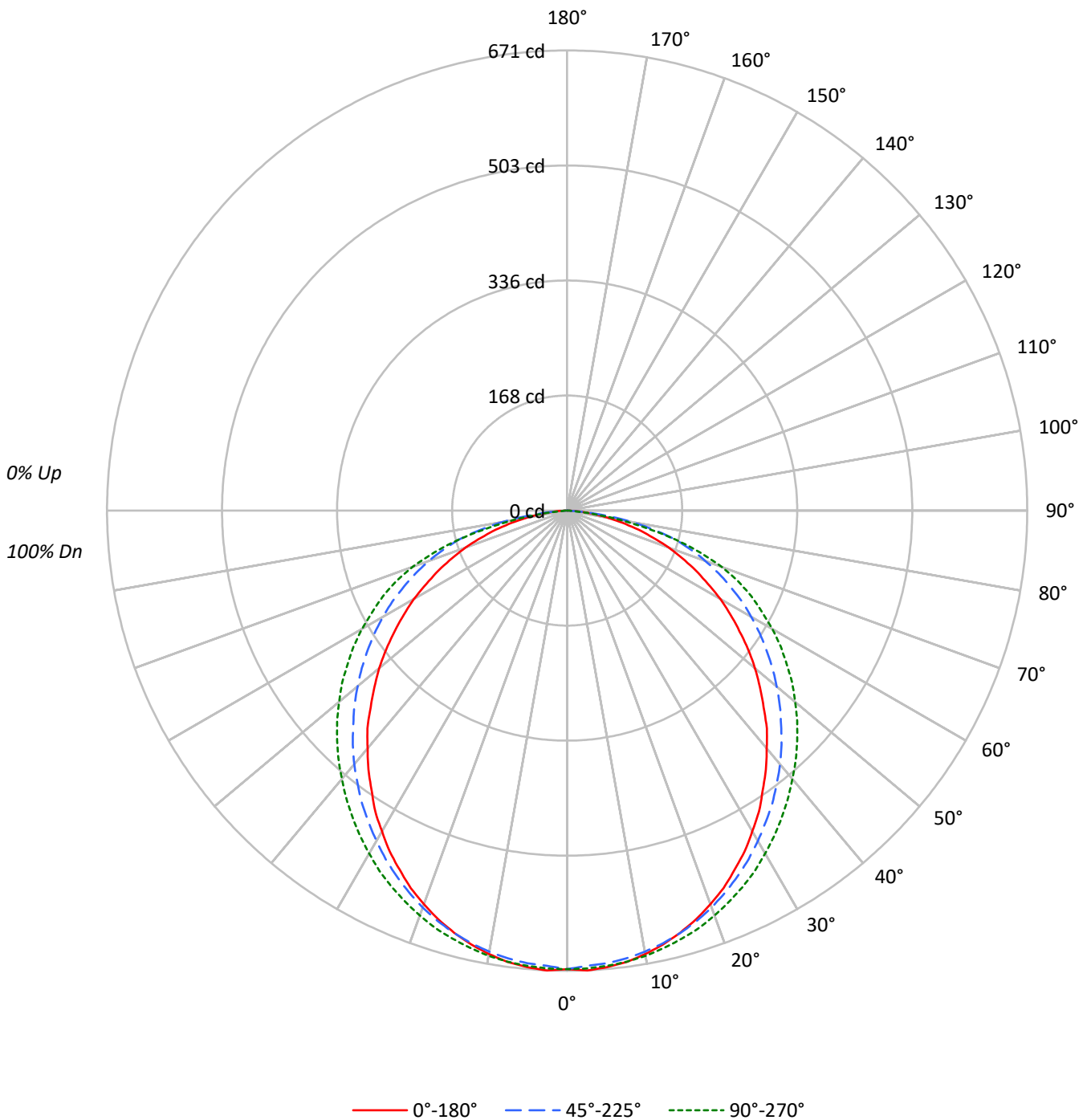
Input Watts (W): 15.996  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32					32			
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29					29			
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24					24			

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

	0°	45°	90°
0°	1799	1799	1799
5°	1805	1790	1800
10°	1794	1785	1801
15°	1775	1776	1800
20°	1749	1764	1800
25°	1716	1746	1798
30°	1678	1728	1794
35°	1634	1713	1793
40°	1590	1697	1795
45°	1542	1678	1805
50°	1497	1670	1817
55°	1440	1665	1833
60°	1389	1668	1859
65°	1317	1673	1888
70°	1236	1685	1887
75°	1121	1701	1705
80°	919	1469	1213
85°	682	695	281



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.3	3.3
10°-20°	180.8	9.3
20°-30°	272.3	14.0
30°-40°	326.7	16.8
40°-50°	340.6	17.5
50°-60°	315.3	16.2
60°-70°	254.7	13.1
70°-80°	155.3	8.0
80°-90°	32.1	1.7
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°	516.3	26.6
0°-40°	843.1	43.4
0°-60°	1498.9	77.2
0°-90°	1941.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1941.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	669	669	669	669	669	
5°	668	666	663	667	666	63
15°	637	638	638	646	646	180
25°	578	581	588	603	606	266
35°	497	505	522	541	546	312
45°	405	417	441	466	474	313
55°	307	323	355	383	391	275
65°	207	227	263	289	296	205
75°	108	132	164	166	164	113
85°	22	33	22	13	9	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	668.7	668.7	668.7	668.7	668.7
2.5°	671.3	669.1	664.4	669.1	668.2
5°	668.2	666.5	662.6	667.4	666.5
7.5°	663.9	662.2	658.7	664.4	663.5
10°	656.6	655.7	653.1	659.6	659.2
12.5°	647.9	647.5	646.2	653.5	653.1
15°	637.1	637.5	637.5	646.2	646.2
17.5°	625.0	625.8	627.6	637.1	638.4
20°	610.7	612.4	615.9	626.7	628.4
22.5°	596.0	597.3	602.5	615.4	617.2
25°	577.8	581.3	588.2	602.9	605.5
27.5°	560.5	563.5	573.0	588.2	592.5
30°	540.1	544.9	556.2	572.6	577.4
32.5°	520.7	525.9	538.8	557.9	562.2
35°	497.3	505.1	521.5	540.6	545.8
37.5°	476.1	483.4	502.1	522.8	528.9
40°	452.7	461.8	483.0	505.1	511.1
42.5°	431.1	439.7	462.7	485.2	493.4
45°	405.1	417.2	441.0	465.7	474.4
47.5°	381.3	393.4	420.7	447.1	454.9
50°	357.5	370.5	399.0	426.3	434.1
52.5°	332.8	346.7	377.4	404.7	413.8
55°	306.9	322.9	354.9	382.6	390.8
57.5°	282.2	298.6	332.8	361.0	369.2
60°	258.0	274.8	309.9	336.7	345.4
62.5°	231.1	251.0	287.4	313.8	320.3
65°	206.9	227.2	262.7	289.1	296.5
67.5°	181.3	203.4	238.9	263.1	270.1
70°	157.1	180.0	214.2	236.7	239.8
72.5°	131.1	154.5	189.1	203.4	203.4
75°	107.8	131.6	163.6	166.2	164.0
77.5°	82.2	108.6	129.4	124.2	119.0
80°	59.3	85.3	94.8	85.3	78.3
82.5°	39.8	61.9	57.1	45.4	40.3
85°	22.1	32.9	22.5	12.6	9.1
87.5°	8.2	7.4	2.2	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)