

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: P275452

Luminaire Tested: **14CZ2-20-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275452  
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-L82765-W2A1-U-4500K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2111.0 lumens  
Efficiency: N/A  
Efficacy: 135.1 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

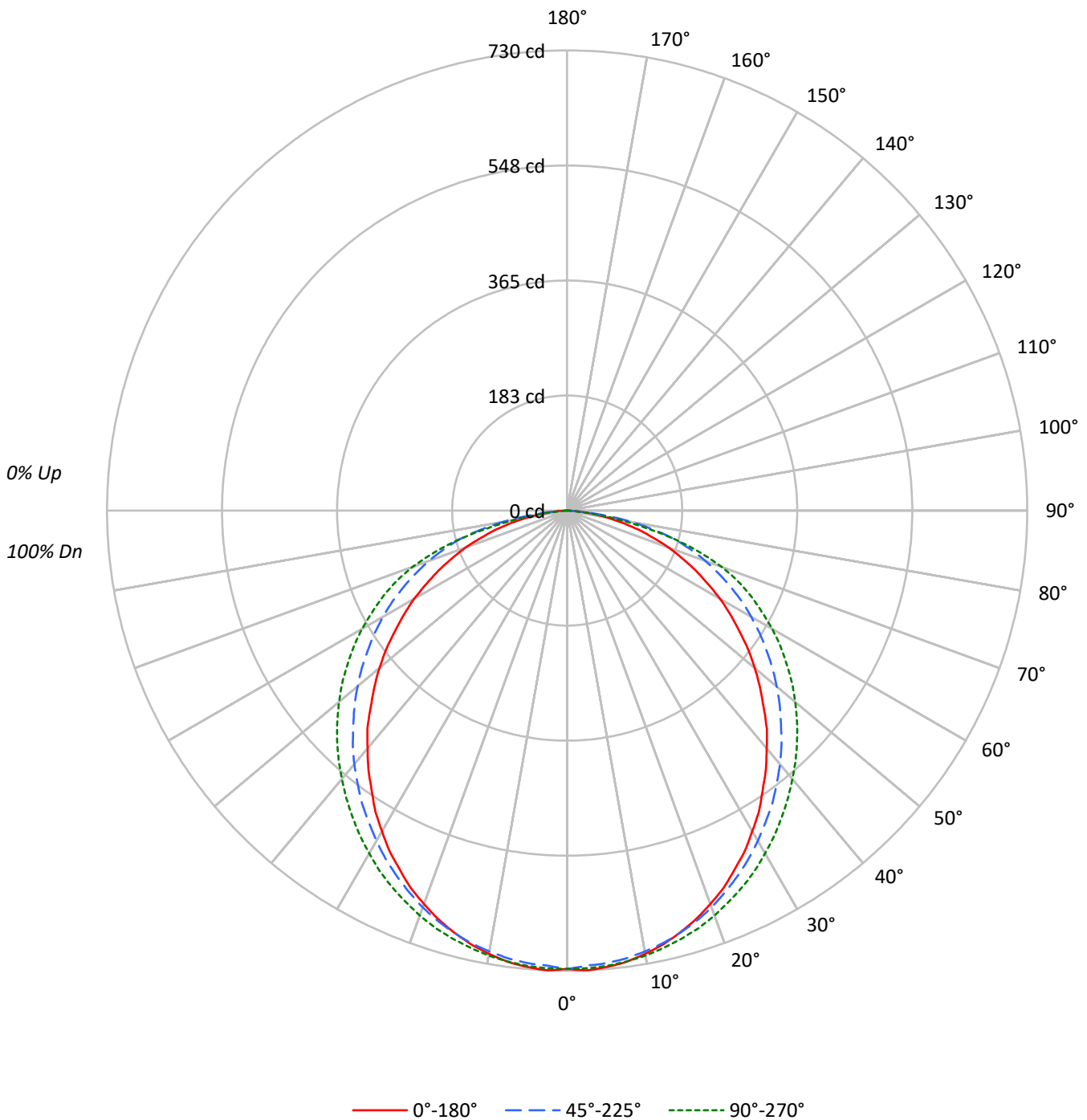
Input Watts (W): 15.624  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	1957	1957	1957
5°	1963	1947	1958
10°	1951	1941	1959
15°	1930	1932	1958
20°	1902	1918	1957
25°	1866	1899	1955
30°	1825	1880	1951
35°	1777	1863	1950
40°	1730	1845	1953
45°	1677	1826	1963
50°	1628	1817	1976
55°	1566	1811	1994
60°	1510	1814	2021
65°	1433	1819	2053
70°	1345	1833	2052
75°	1219	1850	1855
80°	1000	1598	1320
85°	741	756	306



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.8	3.3
10°-20°	196.6	9.3
20°-30°	296.1	14.0
30°-40°	355.4	16.8
40°-50°	370.4	17.5
50°-60°	342.9	16.2
60°-70°	277.0	13.1
70°-80°	168.9	8.0
80°-90°	34.9	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°	561.5	26.6
0°-40°	916.9	43.4
0°-60°	1630.2	77.2
0°-90°	2111.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2111.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	727	727	727	727	727	
5°	727	725	721	726	725	69
15°	693	693	693	703	703	195
25°	628	632	640	656	658	290
35°	541	549	567	588	594	339
45°	441	454	480	506	516	341
55°	334	351	386	416	425	299
65°	225	247	286	314	322	222
75°	117	143	178	181	178	123
85°	24	36	24	14	10	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	727.2	727.2	727.2	727.2	727.2
2.5°	730.1	727.7	722.5	727.7	726.8
5°	726.8	724.9	720.7	725.8	724.9
7.5°	722.1	720.2	716.4	722.5	721.6
10°	714.1	713.1	710.3	717.4	716.9
12.5°	704.7	704.2	702.8	710.8	710.3
15°	692.9	693.4	693.4	702.8	702.8
17.5°	679.7	680.6	682.5	692.9	694.3
20°	664.2	666.1	669.8	681.6	683.5
22.5°	648.2	649.6	655.2	669.3	671.2
25°	628.4	632.2	639.7	655.7	658.5
27.5°	609.6	612.9	623.2	639.7	644.4
30°	587.4	592.6	604.9	622.7	627.9
32.5°	566.3	571.9	586.0	606.7	611.5
35°	540.8	549.3	567.2	587.9	593.6
37.5°	517.8	525.8	546.0	568.6	575.2
40°	492.4	502.2	525.3	549.3	555.9
42.5°	468.8	478.2	503.2	527.7	536.6
45°	440.6	453.8	479.7	506.5	515.9
47.5°	414.7	427.9	457.5	486.2	494.7
50°	388.8	402.9	434.0	463.6	472.1
52.5°	362.0	377.0	410.5	440.1	450.0
55°	333.7	351.1	386.0	416.1	425.1
57.5°	306.9	324.8	362.0	392.6	401.5
60°	280.5	298.9	337.0	366.2	375.6
62.5°	251.4	273.0	312.6	341.3	348.3
65°	225.0	247.1	285.7	314.4	322.4
67.5°	197.2	221.2	259.8	286.2	293.7
70°	170.9	195.8	233.0	257.5	260.8
72.5°	142.6	168.0	205.7	221.2	221.2
75°	117.2	143.1	177.9	180.8	178.4
77.5°	89.4	118.1	140.7	135.1	129.4
80°	64.5	92.7	103.1	92.7	85.2
82.5°	43.3	67.3	62.1	49.4	43.8
85°	24.0	35.8	24.5	13.7	9.9
87.5°	8.9	8.0	2.4	2.4	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)