

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: P277277

Luminaire Tested: **22CZ2-24HE-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277277  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-24HE-UNV-L92765-W2A1-U-3500K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1943.0 lumens  
Efficiency: N/A  
Efficacy: 110.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

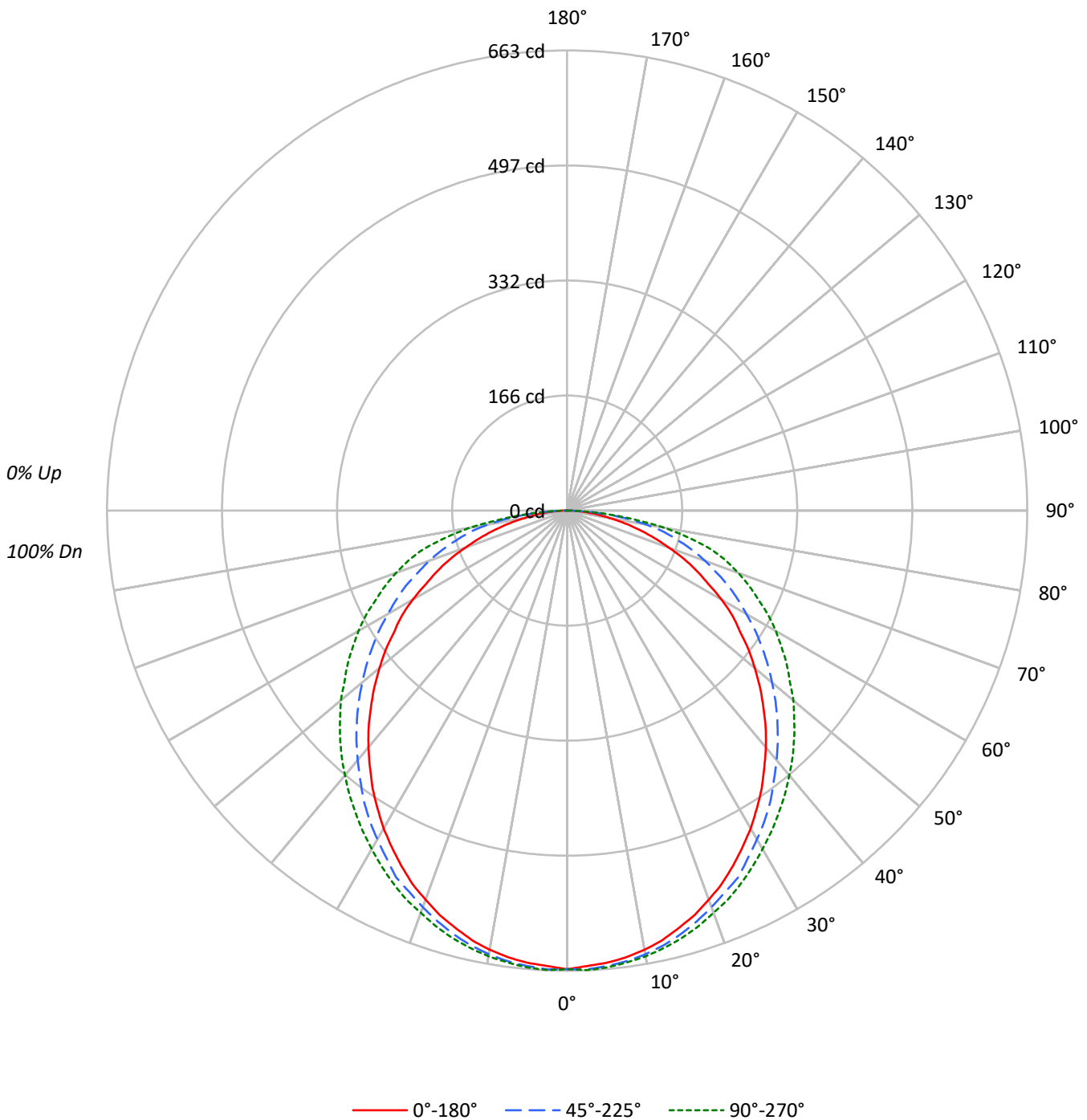
Input Watts (W): 17.577  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

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

	0°	45°	90°
0°	1778	1778	1778
5°	1767	1779	1785
10°	1756	1774	1782
15°	1734	1761	1777
20°	1708	1741	1766
25°	1678	1732	1760
30°	1643	1699	1750
35°	1605	1677	1746
40°	1565	1649	1750
45°	1521	1630	1761
50°	1477	1613	1781
55°	1426	1606	1812
60°	1384	1605	1868
65°	1315	1631	1936
70°	1226	1662	2061
75°	1123	1720	2227
80°	978	1793	2193
85°	855	1593	1741



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.5	3.2
10°-20°	178.0	9.2
20°-30°	267.2	13.7
30°-40°	319.2	16.4
40°-50°	331.9	17.1
50°-60°	307.7	15.8
60°-70°	252.4	13.0
70°-80°	170.6	8.8
80°-90°	53.6	2.8
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°	507.6	26.1
0°-40°	826.8	42.6
0°-60°	1466.4	75.5
0°-90°	1943.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1943.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	661	661	661	661	661	
5°	654	655	659	660	661	62
15°	622	625	632	636	638	176
25°	565	570	583	590	593	260
35°	489	495	511	526	532	305
45°	400	407	428	453	463	309
55°	304	314	342	373	386	273
65°	206	218	256	290	304	204
75°	108	126	165	199	214	115
85°	28	38	52	57	56	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	660.7	660.7	660.7	660.7	660.7
2.5°	656.8	658.7	661.6	662.6	662.6
5°	654.0	654.9	658.7	659.7	660.7
7.5°	649.2	651.1	654.9	655.9	656.8
10°	642.5	644.4	649.2	651.1	652.1
12.5°	633.9	635.8	641.5	644.4	645.4
15°	622.4	625.3	632.0	635.8	637.7
17.5°	610.9	613.8	620.5	626.2	628.1
20°	596.6	603.3	608.1	615.7	616.7
22.5°	582.3	586.1	594.7	602.3	606.2
25°	565.0	569.8	583.2	589.9	592.8
27.5°	546.9	553.6	564.1	574.6	578.4
30°	528.7	533.5	546.9	559.3	563.1
32.5°	508.6	515.3	529.7	542.1	547.8
35°	488.6	495.3	510.6	525.8	531.6
37.5°	466.6	474.2	489.5	507.7	515.3
40°	445.5	451.3	469.4	491.4	498.1
42.5°	423.5	430.2	449.4	473.3	480.9
45°	399.6	407.3	428.3	453.2	462.7
47.5°	376.7	384.3	407.3	432.2	443.6
50°	352.8	362.4	385.3	414.0	425.5
52.5°	329.8	338.5	364.3	393.9	404.4
55°	304.0	313.6	342.3	372.9	386.3
57.5°	283.0	289.7	321.2	352.8	366.2
60°	257.2	265.8	298.3	331.8	347.1
62.5°	229.5	243.8	277.3	311.7	327.0
65°	206.5	218.0	256.2	289.7	304.0
67.5°	182.6	195.0	232.3	267.7	284.0
70°	155.8	172.1	211.3	246.7	262.0
72.5°	131.9	149.1	189.3	223.7	240.0
75°	108.0	126.2	165.4	198.9	214.2
77.5°	85.1	105.2	143.4	169.2	178.8
80°	63.1	82.2	115.7	133.9	141.5
82.5°	44.0	60.2	85.1	94.7	96.6
85°	27.7	38.2	51.6	57.4	56.4
87.5°	12.4	15.3	19.1	21.0	20.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)