

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: P277639

Luminaire Tested: **22CZ2-39HE-RDP-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277639  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-39HE-RDP-UNV-L92765-W2A1-U-3000K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2002.0 lumens  
Efficiency: N/A  
Efficacy: 67.1 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

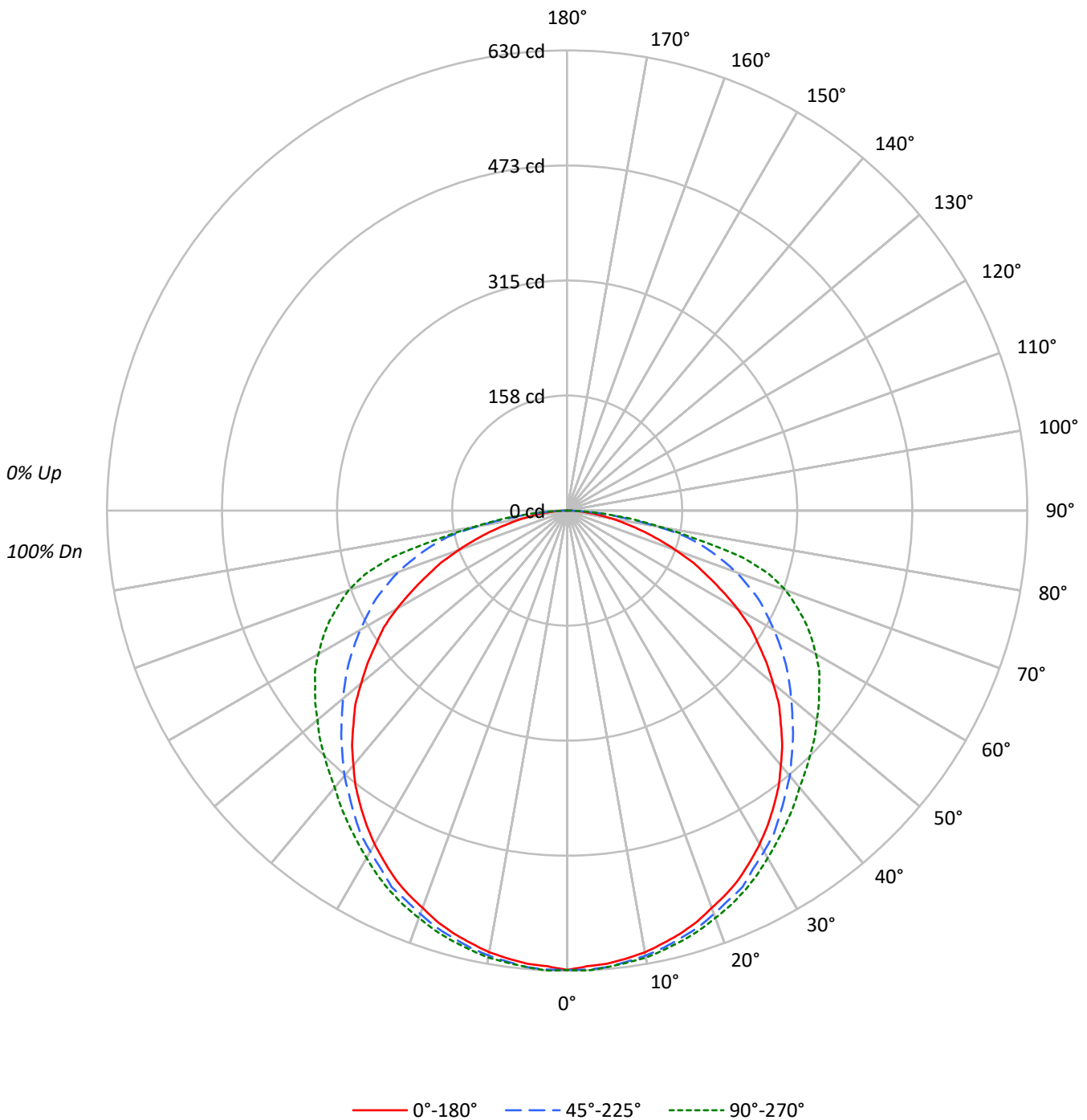
Input Watts (W): 29.853  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

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

	0°	45°	90°
0°	1692	1692	1692
5°	1683	1695	1695
10°	1678	1690	1698
15°	1670	1686	1699
20°	1657	1683	1700
25°	1653	1688	1705
30°	1638	1675	1707
35°	1621	1669	1717
40°	1599	1666	1738
45°	1575	1665	1794
50°	1541	1677	1868
55°	1499	1713	1976
60°	1450	1759	2116
65°	1351	1847	2288
70°	1240	1935	2503
75°	1088	2037	2588
80°	936	1940	2032
85°	818	1411	1547



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.5	3.0
10°-20°	170.8	8.5
20°-30°	260.6	13.0
30°-40°	318.2	15.9
40°-50°	340.2	17.0
50°-60°	328.4	16.4
60°-70°	282.7	14.1
70°-80°	191.2	9.6
80°-90°	50.5	2.5
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°	490.9	24.5
0°-40°	809.0	40.4
0°-60°	1477.6	73.8
0°-90°	2002.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2002.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	629	629	629	629	629	
5°	623	624	627	627	627	59
15°	599	601	605	608	610	169
25°	557	560	568	571	574	256
35°	493	498	508	518	523	309
45°	414	421	437	460	471	319
55°	320	330	365	402	421	286
65°	212	233	290	336	359	211
75°	105	138	196	236	249	112
85°	26	37	46	47	50	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	628.9	628.9	628.9	628.9	628.9
2.5°	624.4	625.9	628.9	628.9	630.3
5°	623.0	624.4	627.4	627.4	627.4
7.5°	618.6	620.0	623.0	624.4	624.4
10°	614.1	615.6	618.6	620.0	621.5
12.5°	606.8	608.2	612.7	615.6	615.6
15°	599.4	600.9	605.3	608.2	609.7
17.5°	590.6	593.5	597.9	600.9	602.4
20°	578.8	581.7	587.6	592.0	593.5
22.5°	568.5	571.4	577.3	581.7	584.7
25°	556.7	559.6	568.5	571.4	574.4
27.5°	542.0	544.9	552.3	558.2	562.6
30°	527.2	530.2	539.0	546.4	549.3
32.5°	511.0	515.5	525.8	531.7	536.1
35°	493.4	497.8	508.1	518.4	522.8
37.5°	475.7	480.1	490.4	503.7	509.6
40°	455.1	461.0	474.2	491.9	494.8
42.5°	435.9	443.3	455.1	475.7	483.1
45°	413.8	421.2	437.4	459.5	471.3
47.5°	393.2	400.6	418.3	444.8	459.5
50°	368.2	378.5	400.6	431.5	446.2
52.5°	344.6	353.5	382.9	416.8	434.5
55°	319.6	329.9	365.2	402.1	421.2
57.5°	297.5	306.3	346.1	387.3	409.4
60°	269.5	281.3	326.9	371.1	393.2
62.5°	240.1	257.7	307.8	353.5	377.0
65°	212.1	232.7	290.1	335.8	359.4
67.5°	187.0	209.1	268.0	316.6	338.7
70°	157.6	185.6	245.9	293.1	318.1
72.5°	131.1	162.0	220.9	268.0	290.1
75°	104.6	138.4	195.9	235.6	248.9
77.5°	81.0	113.4	167.9	179.7	181.1
80°	60.4	89.8	125.2	126.7	131.1
82.5°	41.2	63.3	81.0	88.4	89.8
85°	26.5	36.8	45.7	47.1	50.1
87.5°	11.8	13.3	16.2	14.7	14.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)