

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: P277640

Luminaire Tested: **22CZ2-39HE-RDP-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277640  
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-3500K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2102.0 lumens  
Efficiency: N/A  
Efficacy: 69.5 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

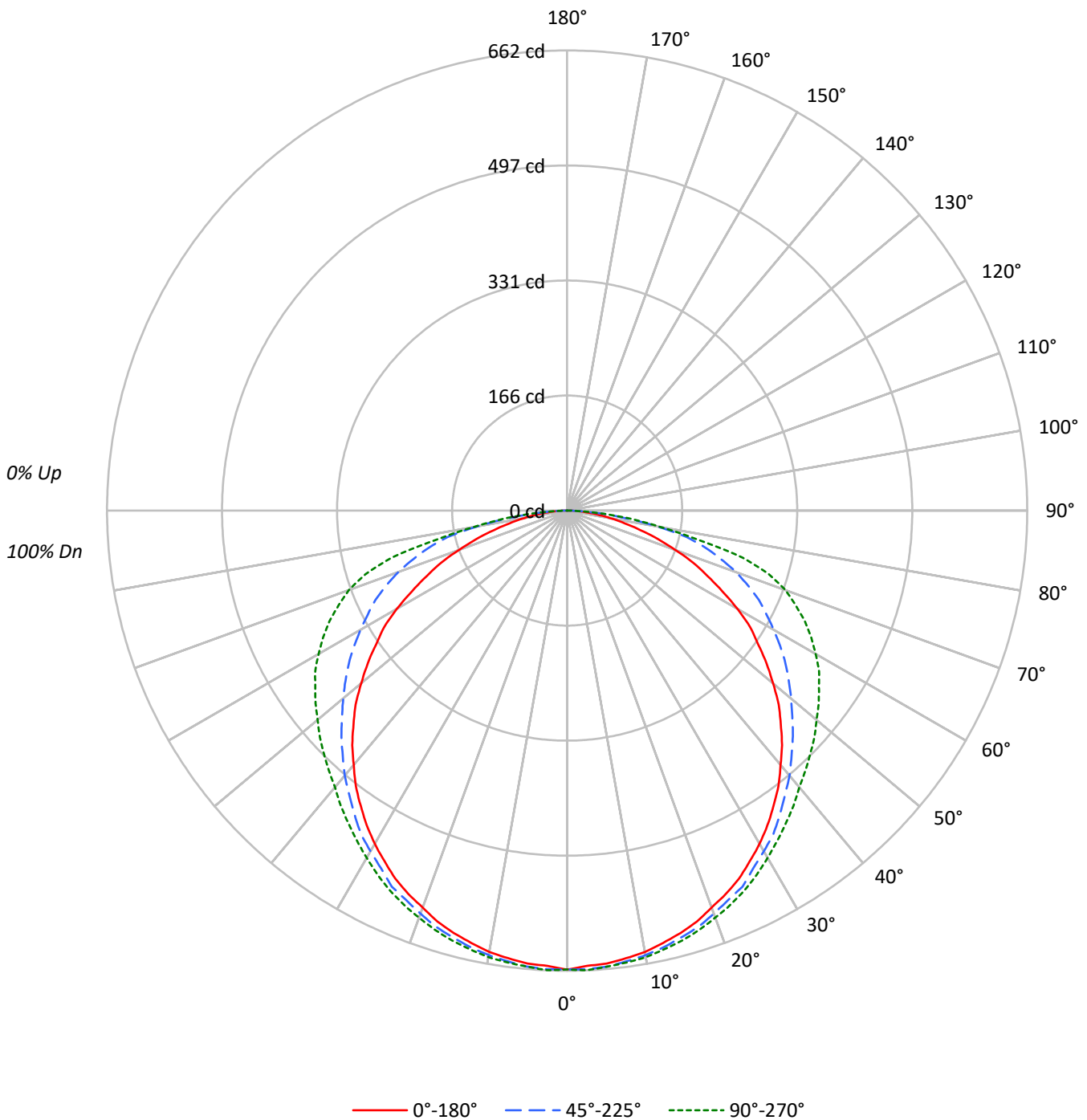
Input Watts (W): 30.225  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1777	1777	1777
5°	1767	1779	1779
10°	1762	1775	1783
15°	1753	1770	1784
20°	1740	1767	1785
25°	1735	1772	1791
30°	1720	1758	1792
35°	1702	1753	1803
40°	1678	1749	1825
45°	1654	1748	1883
50°	1618	1761	1961
55°	1574	1799	2075
60°	1523	1848	2222
65°	1418	1940	2402
70°	1302	2031	2628
75°	1142	2139	2717
80°	982	2036	2132
85°	858	1479	1624



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.5	3.0
10°-20°	179.3	8.5
20°-30°	273.6	13.0
30°-40°	334.1	15.9
40°-50°	357.2	17.0
50°-60°	344.8	16.4
60°-70°	296.8	14.1
70°-80°	200.8	9.6
80°-90°	53.0	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°	515.4	24.5
0°-40°	849.5	40.4
0°-60°	1551.4	73.8
0°-90°	2102.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2102.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	660	660	660	660	660	
5°	654	656	659	659	659	62
15°	629	631	636	639	640	178
25°	584	588	597	600	603	269
35°	518	523	534	544	549	324
45°	434	442	459	482	495	335
55°	336	346	384	422	442	301
65°	223	244	305	353	377	221
75°	110	145	206	247	261	118
85°	28	39	48	50	53	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	660.3	660.3	660.3	660.3	660.3
2.5°	655.6	657.2	660.3	660.3	661.8
5°	654.1	655.6	658.7	658.7	658.7
7.5°	649.5	651.0	654.1	655.6	655.6
10°	644.8	646.4	649.5	651.0	652.5
12.5°	637.1	638.6	643.3	646.4	646.4
15°	629.3	630.9	635.5	638.6	640.2
17.5°	620.1	623.2	627.8	630.9	632.4
20°	607.7	610.8	617.0	621.6	623.2
22.5°	596.9	600.0	606.2	610.8	613.9
25°	584.5	587.6	596.9	600.0	603.1
27.5°	569.0	572.1	579.9	586.1	590.7
30°	553.6	556.7	565.9	573.7	576.8
32.5°	536.6	541.2	552.0	558.2	562.9
35°	518.0	522.7	533.5	544.3	548.9
37.5°	499.5	504.1	514.9	528.8	535.0
40°	477.8	484.0	497.9	516.5	519.6
42.5°	457.7	465.4	477.8	499.5	507.2
45°	434.5	442.2	459.3	482.4	494.8
47.5°	412.9	420.6	439.2	467.0	482.4
50°	386.6	397.4	420.6	453.1	468.5
52.5°	361.8	371.1	402.0	437.6	456.2
55°	335.5	346.4	383.5	422.1	442.2
57.5°	312.4	321.6	363.4	406.7	429.9
60°	283.0	295.3	343.3	389.7	412.9
62.5°	252.0	270.6	323.2	371.1	395.9
65°	222.7	244.3	304.6	352.6	377.3
67.5°	196.4	219.6	281.4	332.5	355.7
70°	165.5	194.8	258.2	307.7	334.0
72.5°	137.6	170.1	231.9	281.4	304.6
75°	109.8	145.4	205.7	247.4	261.3
77.5°	85.0	119.1	176.3	188.6	190.2
80°	63.4	94.3	131.4	133.0	137.6
82.5°	43.3	66.5	85.0	92.8	94.3
85°	27.8	38.7	47.9	49.5	52.6
87.5°	12.4	13.9	17.0	15.5	15.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)