

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: P277310

Luminaire Tested: **22CZ2-39HE-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277310  
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: 22CZ2-39HE-UNV-L92765-W2A1-U-6500K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3483.0 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

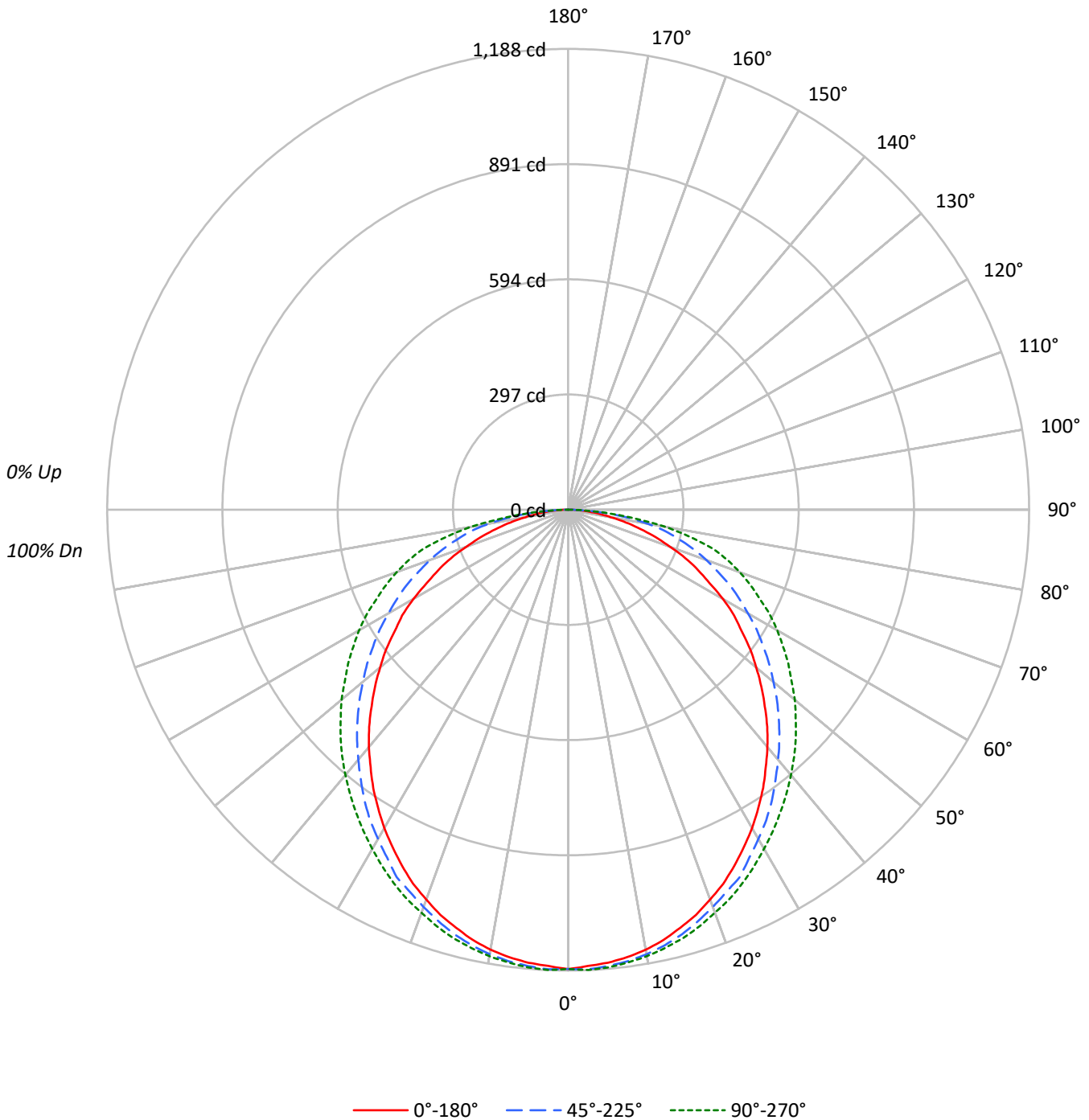
Input Watts (W): 31.527  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3187	3187	3187
5°	3167	3190	3199
10°	3147	3180	3194
15°	3108	3156	3185
20°	3063	3121	3166
25°	3007	3104	3155
30°	2945	3046	3137
35°	2877	3007	3130
40°	2806	2956	3137
45°	2726	2922	3157
50°	2647	2892	3193
55°	2557	2879	3248
60°	2481	2878	3348
65°	2357	2925	3470
70°	2198	2980	3695
75°	2014	3083	3991
80°	1753	3214	3932
85°	1535	2856	3122



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.0	3.2
10°-20°	319.0	9.2
20°-30°	478.9	13.7
30°-40°	572.2	16.4
40°-50°	595.0	17.1
50°-60°	551.5	15.8
60°-70°	452.4	13.0
70°-80°	305.8	8.8
80°-90°	96.1	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°	909.9	26.1
0°-40°	1482.2	42.6
0°-60°	2628.7	75.5
0°-90°	3483.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3483.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1184	1184	1184	1184	1184	
5°	1172	1174	1181	1183	1184	111
15°	1116	1121	1133	1140	1143	315
25°	1013	1022	1046	1058	1063	466
35°	876	888	915	943	953	547
45°	716	730	768	812	830	553
55°	545	562	614	668	692	490
65°	370	391	459	519	545	366
75°	194	226	296	356	384	205
85°	50	69	92	103	101	56
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1184.3	1184.3	1184.3	1184.3	1184.3
2.5°	1177.4	1180.9	1186.0	1187.7	1187.7
5°	1172.3	1174.0	1180.9	1182.6	1184.3
7.5°	1163.7	1167.1	1174.0	1175.7	1177.4
10°	1151.7	1155.1	1163.7	1167.1	1168.9
12.5°	1136.3	1139.7	1150.0	1155.1	1156.9
15°	1115.7	1120.9	1132.9	1139.7	1143.2
17.5°	1095.2	1100.3	1112.3	1122.6	1126.0
20°	1069.5	1081.5	1090.0	1103.7	1105.4
22.5°	1043.7	1050.6	1066.0	1079.7	1086.6
25°	1012.9	1021.5	1045.5	1057.5	1062.6
27.5°	980.3	992.3	1011.2	1030.0	1036.9
30°	947.8	956.3	980.3	1002.6	1009.5
32.5°	911.8	923.8	949.5	971.8	982.0
35°	875.8	887.8	915.2	942.6	952.9
37.5°	836.4	850.1	877.5	910.1	923.8
40°	798.7	808.9	841.5	880.9	892.9
42.5°	759.2	771.2	805.5	848.4	862.1
45°	716.4	730.1	767.8	812.4	829.5
47.5°	675.3	689.0	730.1	774.7	795.2
50°	632.4	649.6	690.7	742.1	762.7
52.5°	591.3	606.7	653.0	706.1	725.0
55°	545.0	562.1	613.6	668.4	692.4
57.5°	507.3	519.3	575.9	632.4	656.4
60°	461.0	476.5	534.7	594.7	622.1
62.5°	411.3	437.0	497.0	558.7	586.1
65°	370.2	390.8	459.3	519.3	545.0
67.5°	327.3	349.6	416.5	479.9	509.0
70°	279.4	308.5	378.8	442.2	469.6
72.5°	236.5	267.4	339.3	401.0	430.2
75°	193.7	226.2	296.5	356.5	383.9
77.5°	152.5	188.5	257.1	303.4	320.5
80°	113.1	147.4	207.4	239.9	253.7
82.5°	78.8	108.0	152.5	169.7	173.1
85°	49.7	68.6	92.5	102.8	101.1
87.5°	22.3	27.4	34.3	37.7	36.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)