

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: P276157

Luminaire Tested: **24CZ2-40-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276157  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-40-UNV-L82765-W2A1-U-5700K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3992.1 lumens  
Efficiency: N/A  
Efficacy: 127.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

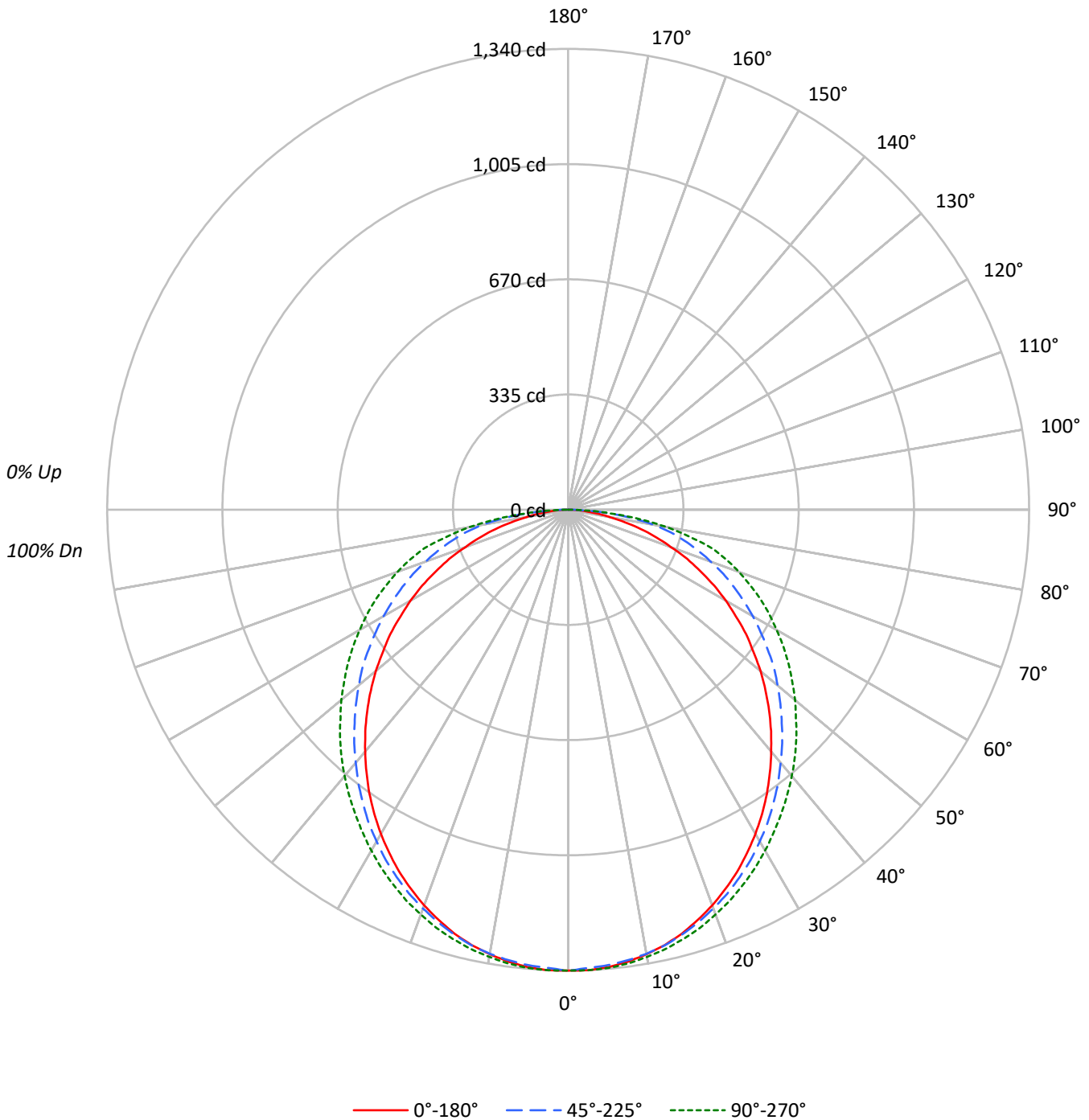
Input Watts (W): 31.248  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

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

	0°	45°	90°
0°	1803	1803	1803
5°	1803	1796	1807
10°	1793	1791	1804
15°	1778	1782	1800
20°	1753	1767	1793
25°	1725	1750	1786
30°	1691	1730	1778
35°	1655	1709	1773
40°	1612	1687	1776
45°	1572	1671	1785
50°	1528	1662	1802
55°	1481	1660	1835
60°	1423	1667	1882
65°	1349	1692	1964
70°	1253	1735	2076
75°	1143	1822	2251
80°	939	1961	2251
85°	719	1809	1933



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.8	3.2
10°-20°	361.9	9.1
20°-30°	544.6	13.6
30°-40°	652.6	16.3
40°-50°	680.1	17.0
50°-60°	632.8	15.9
60°-70°	521.2	13.1
70°-80°	354.9	8.9
80°-90°	117.2	2.9
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°	1033.3	25.9
0°-40°	1685.9	42.2
0°-60°	2998.8	75.1
0°-90°	3992.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3992.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1340	1340	1340	1340	1340	
5°	1335	1335	1330	1336	1338	127
15°	1276	1278	1279	1291	1292	360
25°	1162	1167	1179	1199	1203	535
35°	1007	1019	1041	1068	1079	630
45°	826	843	878	922	938	637
55°	632	653	708	763	782	563
65°	424	460	532	594	617	421
75°	220	269	350	413	433	232
85°	47	91	117	125	125	58
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1340.3	1340.3	1340.3	1340.3	1340.3
2.5°	1340.3	1340.3	1333.7	1340.3	1340.3
5°	1335.0	1335.0	1329.7	1336.3	1337.7
7.5°	1325.7	1327.0	1321.7	1329.7	1331.0
10°	1312.4	1313.7	1311.0	1319.0	1320.4
12.5°	1296.4	1297.7	1297.7	1307.0	1308.4
15°	1276.4	1277.7	1279.1	1291.0	1292.4
17.5°	1251.1	1255.1	1257.7	1272.4	1275.1
20°	1224.4	1228.4	1233.8	1249.7	1252.4
22.5°	1193.8	1199.1	1208.4	1225.8	1229.8
25°	1161.8	1167.1	1179.1	1199.1	1203.1
27.5°	1125.8	1133.8	1148.5	1169.8	1175.1
30°	1088.5	1096.5	1113.8	1136.5	1144.5
32.5°	1048.6	1059.2	1079.2	1104.5	1112.5
35°	1007.3	1019.2	1040.6	1068.5	1079.2
37.5°	963.3	976.6	1001.9	1032.6	1045.9
40°	918.0	934.0	960.6	996.6	1011.3
42.5°	872.7	887.3	920.7	959.3	975.3
45°	826.1	843.4	878.0	922.0	938.0
47.5°	778.1	795.4	836.7	883.3	898.0
50°	730.1	747.4	794.1	843.4	860.7
52.5°	678.2	700.8	754.1	803.4	820.7
55°	631.5	652.8	707.5	763.4	782.1
57.5°	578.2	603.6	663.5	722.1	742.1
60°	528.9	555.6	619.5	679.5	699.5
62.5°	478.3	507.6	575.6	636.9	659.5
65°	423.7	459.7	531.6	594.2	616.9
67.5°	374.4	411.7	487.6	551.6	571.6
70°	318.4	363.7	441.0	505.0	527.6
72.5°	270.5	315.8	397.0	459.7	482.3
75°	219.8	269.1	350.4	413.0	433.0
77.5°	169.2	223.8	305.1	353.1	359.7
80°	121.2	178.5	253.1	281.1	290.5
82.5°	85.3	137.2	186.5	205.2	210.5
85°	46.6	90.6	117.2	125.2	125.2
87.5°	20.0	38.6	46.6	48.0	49.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)