

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: P275902

Luminaire Tested: **24CZ2-40HE-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275902  
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: 24CZ2-40HE-UNV-L83050-W2A1-U-3000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3641.0 lumens  
Efficiency: N/A  
Efficacy: 129.2 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

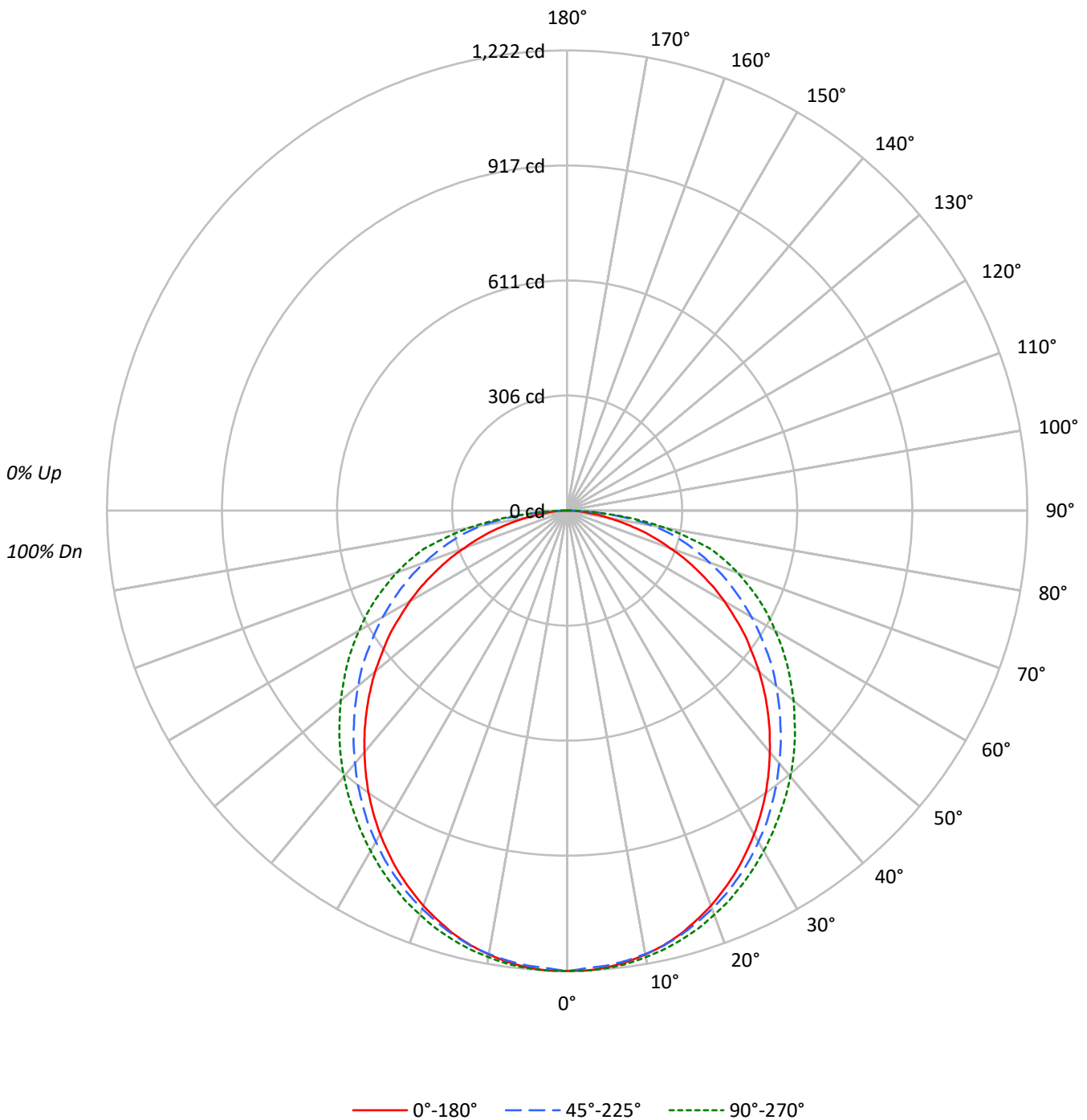
Input Watts (W): 28.179  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1645	1645	1645
5°	1645	1638	1648
10°	1635	1634	1645
15°	1622	1625	1642
20°	1599	1611	1636
25°	1573	1597	1629
30°	1542	1578	1622
35°	1509	1559	1617
40°	1470	1539	1620
45°	1434	1524	1628
50°	1394	1516	1643
55°	1351	1514	1673
60°	1298	1521	1717
65°	1230	1543	1791
70°	1142	1582	1893
75°	1042	1661	2053
80°	857	1789	2053
85°	656	1650	1763



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	115.6	3.2
10°-20°	330.1	9.1
20°-30°	496.7	13.6
30°-40°	595.3	16.3
40°-50°	620.3	17.0
50°-60°	577.1	15.9
60°-70°	475.3	13.1
70°-80°	323.7	8.9
80°-90°	106.9	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°	942.4	25.9
0°-40°	1537.6	42.2
0°-60°	2735.1	75.1
0°-90°	3641.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3641.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1222	1222	1222	1222	1222	
5°	1218	1218	1213	1219	1220	116
15°	1164	1165	1167	1178	1179	328
25°	1060	1064	1075	1094	1097	488
35°	919	930	949	975	984	574
45°	753	769	801	841	856	581
55°	576	595	645	696	713	513
65°	386	419	485	542	563	384
75°	200	246	320	377	395	211
85°	42	83	107	114	114	53
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1222.5	1222.5	1222.5	1222.5	1222.5
2.5°	1222.5	1222.5	1216.4	1222.5	1222.5
5°	1217.6	1217.6	1212.7	1218.8	1220.0
7.5°	1209.1	1210.3	1205.4	1212.7	1213.9
10°	1196.9	1198.1	1195.7	1203.0	1204.2
12.5°	1182.4	1183.6	1183.6	1192.1	1193.3
15°	1164.1	1165.3	1166.6	1177.5	1178.7
17.5°	1141.0	1144.7	1147.1	1160.5	1162.9
20°	1116.7	1120.4	1125.2	1139.8	1142.3
22.5°	1088.8	1093.6	1102.2	1117.9	1121.6
25°	1059.6	1064.5	1075.4	1093.6	1097.3
27.5°	1026.8	1034.1	1047.5	1066.9	1071.8
30°	992.8	1000.1	1015.9	1036.5	1043.8
32.5°	956.3	966.1	984.3	1007.4	1014.7
35°	918.7	929.6	949.0	974.6	984.3
37.5°	878.6	890.7	913.8	941.8	953.9
40°	837.2	851.8	876.1	908.9	922.3
42.5°	795.9	809.3	839.7	874.9	889.5
45°	753.4	769.2	800.8	840.9	855.5
47.5°	709.7	725.5	763.1	805.7	819.0
50°	665.9	681.7	724.2	769.2	785.0
52.5°	618.5	639.2	687.8	732.7	748.5
55°	576.0	595.4	645.3	696.3	713.3
57.5°	527.4	550.5	605.2	658.6	676.8
60°	482.4	506.7	565.1	619.7	638.0
62.5°	436.2	463.0	525.0	580.8	601.5
65°	386.4	419.2	484.8	542.0	562.6
67.5°	341.5	375.5	444.7	503.1	521.3
70°	290.4	331.7	402.2	460.5	481.2
72.5°	246.7	288.0	362.1	419.2	439.9
75°	200.5	245.5	319.6	376.7	394.9
77.5°	154.3	204.1	278.3	322.0	328.1
80°	110.6	162.8	230.9	256.4	264.9
82.5°	77.8	125.2	170.1	187.1	192.0
85°	42.5	82.6	106.9	114.2	114.2
87.5°	18.2	35.2	42.5	43.7	45.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)