

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: P276568

Luminaire Tested: **24CZ2-35-S-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276568  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-35-S-UNV-L82765-W2A1-U-5700K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3685.7 lumens  
Efficiency: N/A  
Efficacy: 137.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

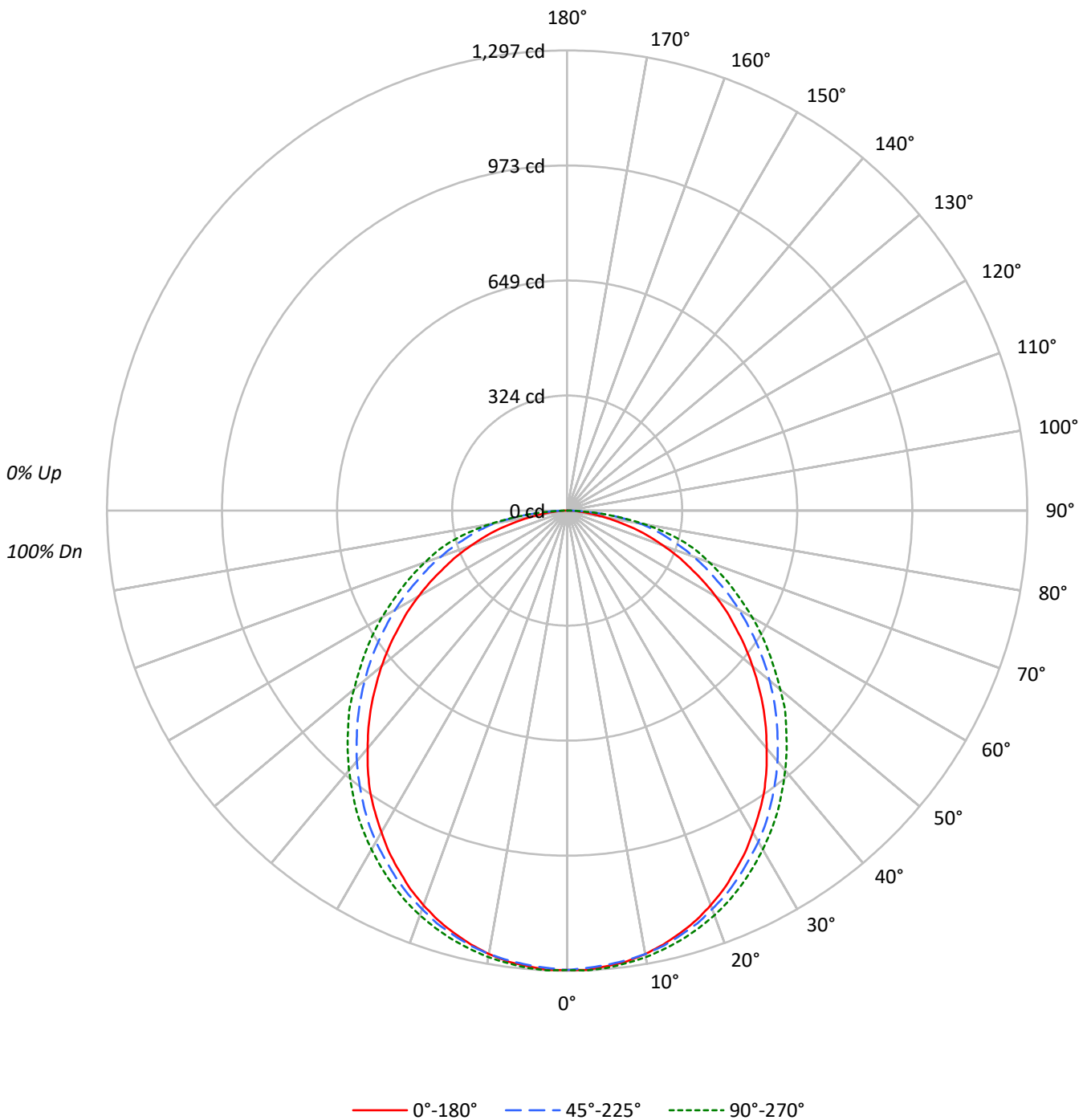
Input Watts (W): 26.784  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

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

	0°	45°	90°
0°	1742	1742	1742
5°	1741	1736	1747
10°	1734	1734	1747
15°	1717	1725	1743
20°	1695	1711	1738
25°	1663	1695	1728
30°	1626	1675	1713
35°	1590	1648	1700
40°	1536	1620	1680
45°	1486	1588	1662
50°	1429	1559	1642
55°	1365	1530	1626
60°	1301	1506	1622
65°	1219	1480	1633
70°	1128	1487	1676
75°	1010	1515	1771
80°	817	1605	1733
85°	614	1409	1374



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.6	3.3
10°-20°	350.3	9.5
20°-30°	526.5	14.3
30°-40°	627.2	17.0
40°-50°	641.9	17.4
50°-60°	577.9	15.7
60°-70°	453.8	12.3
70°-80°	294.5	8.0
80°-90°	91.1	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°	999.4	27.1
0°-40°	1626.5	44.1
0°-60°	2846.3	77.2
0°-90°	3685.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3685.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1295	1295	1295	1295	1295	
5°	1289	1291	1286	1292	1294	122
15°	1233	1236	1239	1249	1252	348
25°	1120	1130	1142	1160	1164	516
35°	968	980	1003	1028	1035	604
45°	781	800	835	866	873	602
55°	582	608	652	686	693	522
65°	383	412	465	503	513	381
75°	194	232	292	331	341	206
85°	40	74	91	89	89	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1294.8	1294.8	1294.8	1294.8	1294.8
2.5°	1296.0	1296.0	1290.1	1296.0	1297.2
5°	1289.0	1291.3	1285.5	1292.5	1293.7
7.5°	1281.9	1281.9	1278.4	1285.5	1286.6
10°	1269.1	1270.2	1269.1	1277.3	1278.4
12.5°	1252.7	1255.0	1256.2	1264.4	1265.6
15°	1232.8	1236.3	1238.6	1249.2	1251.5
17.5°	1210.5	1214.0	1219.9	1231.6	1233.9
20°	1183.6	1188.3	1195.3	1210.5	1214.0
22.5°	1154.3	1159.0	1170.7	1184.8	1190.6
25°	1120.4	1129.7	1141.5	1160.2	1163.7
27.5°	1086.4	1094.6	1109.8	1129.7	1134.4
30°	1046.6	1059.5	1078.2	1098.1	1102.8
32.5°	1008.0	1020.9	1043.1	1064.2	1070.0
35°	968.2	979.9	1003.3	1027.9	1034.9
37.5°	922.5	937.8	963.5	988.1	995.1
40°	874.5	893.3	922.5	948.3	956.5
42.5°	828.9	848.8	878.0	906.1	915.5
45°	780.9	799.6	834.7	866.3	873.4
47.5°	731.7	752.8	790.2	821.8	833.6
50°	682.5	704.8	744.6	777.4	784.4
52.5°	633.4	656.8	698.9	734.0	737.6
55°	581.9	607.6	652.1	686.0	693.1
57.5°	535.0	557.3	605.3	640.4	648.6
60°	483.5	508.1	559.6	592.4	602.9
62.5°	434.3	460.1	513.9	546.7	556.1
65°	382.8	412.1	464.8	503.4	512.8
67.5°	338.3	366.4	422.6	460.1	469.5
70°	286.8	318.4	378.1	416.8	426.1
72.5°	242.3	275.1	334.8	372.3	386.3
75°	194.3	231.8	291.5	331.3	340.7
77.5°	147.5	190.8	251.7	282.1	282.1
80°	105.4	151.0	207.2	221.3	223.6
82.5°	69.1	113.6	153.4	152.2	152.2
85°	39.8	73.8	91.3	89.0	89.0
87.5°	15.2	30.4	32.8	32.8	31.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)