

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: P276577

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276577  
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: 24CZ2-40-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: 4194.7 lumens  
Efficiency: N/A  
Efficacy: 134.2 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

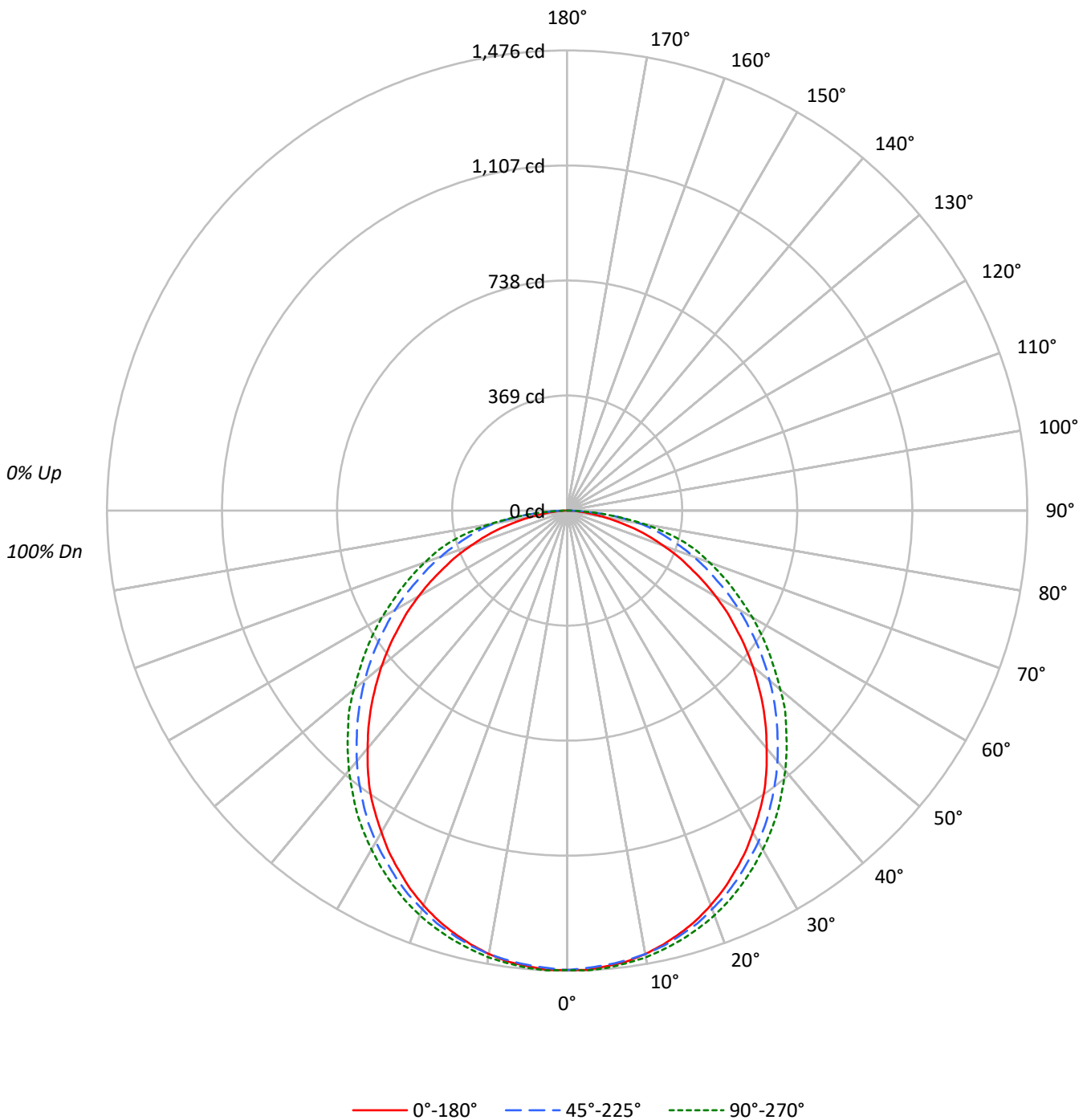
Input Watts (W): 31.248  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1983	1983	1983
5°	1981	1976	1989
10°	1973	1973	1988
15°	1954	1964	1984
20°	1929	1948	1978
25°	1893	1929	1966
30°	1851	1906	1950
35°	1810	1875	1935
40°	1748	1844	1912
45°	1691	1808	1891
50°	1626	1774	1869
55°	1553	1741	1850
60°	1481	1714	1847
65°	1387	1684	1858
70°	1284	1693	1908
75°	1150	1725	2015
80°	929	1827	1972
85°	699	1604	1564



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.5	3.3
10°-20°	398.6	9.5
20°-30°	599.2	14.3
30°-40°	713.8	17.0
40°-50°	730.5	17.4
50°-60°	657.7	15.7
60°-70°	516.5	12.3
70°-80°	335.2	8.0
80°-90°	103.7	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°	1137.4	27.1
0°-40°	1851.1	44.1
0°-60°	3239.3	77.2
0°-90°	4194.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4194.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1474	1474	1474	1474	1474	
5°	1467	1470	1463	1471	1472	139
15°	1403	1407	1410	1422	1424	396
25°	1275	1286	1299	1320	1324	587
35°	1102	1115	1142	1170	1178	687
45°	889	910	950	986	994	685
55°	662	692	742	781	789	594
65°	436	469	529	573	584	434
75°	221	264	332	377	388	234
85°	45	84	104	101	101	55
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1473.6	1473.6	1473.6	1473.6	1473.6
2.5°	1474.9	1474.9	1468.3	1474.9	1476.3
5°	1466.9	1469.6	1463.0	1470.9	1472.3
7.5°	1459.0	1459.0	1455.0	1463.0	1464.3
10°	1444.3	1445.6	1444.3	1453.6	1455.0
12.5°	1425.6	1428.3	1429.6	1439.0	1440.3
15°	1403.0	1407.0	1409.7	1421.6	1424.3
17.5°	1377.7	1381.7	1388.3	1401.7	1404.3
20°	1347.0	1352.4	1360.4	1377.7	1381.7
22.5°	1313.7	1319.1	1332.4	1348.4	1355.0
25°	1275.1	1285.7	1299.1	1320.4	1324.4
27.5°	1236.4	1245.8	1263.1	1285.7	1291.1
30°	1191.1	1205.8	1227.1	1249.8	1255.1
32.5°	1147.2	1161.8	1187.1	1211.1	1217.8
35°	1101.9	1115.2	1141.8	1169.8	1177.8
37.5°	1049.9	1067.2	1096.5	1124.5	1132.5
40°	995.3	1016.6	1049.9	1079.2	1088.6
42.5°	943.3	966.0	999.3	1031.3	1041.9
45°	888.7	910.0	950.0	986.0	994.0
47.5°	832.7	856.7	899.4	935.3	948.7
50°	776.8	802.1	847.4	884.7	892.7
52.5°	720.8	747.5	795.4	835.4	839.4
55°	662.2	691.5	742.1	780.8	788.8
57.5°	608.9	634.2	688.8	728.8	738.1
60°	550.3	578.3	636.9	674.2	686.2
62.5°	494.3	523.6	584.9	622.2	632.9
65°	435.7	469.0	529.0	572.9	583.6
67.5°	385.1	417.0	481.0	523.6	534.3
70°	326.4	362.4	430.4	474.3	485.0
72.5°	275.8	313.1	381.1	423.7	439.7
75°	221.2	263.8	331.8	377.1	387.7
77.5°	167.9	217.2	286.5	321.1	321.1
80°	119.9	171.9	235.8	251.8	254.5
82.5°	78.6	129.2	174.5	173.2	173.2
85°	45.3	83.9	103.9	101.3	101.3
87.5°	17.3	34.6	37.3	37.3	36.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)