

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: P276153

Luminaire Tested: **24CZ2-40-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276153
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-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3822.8 lumens
Efficiency: N/A
Efficacy: 124.2 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

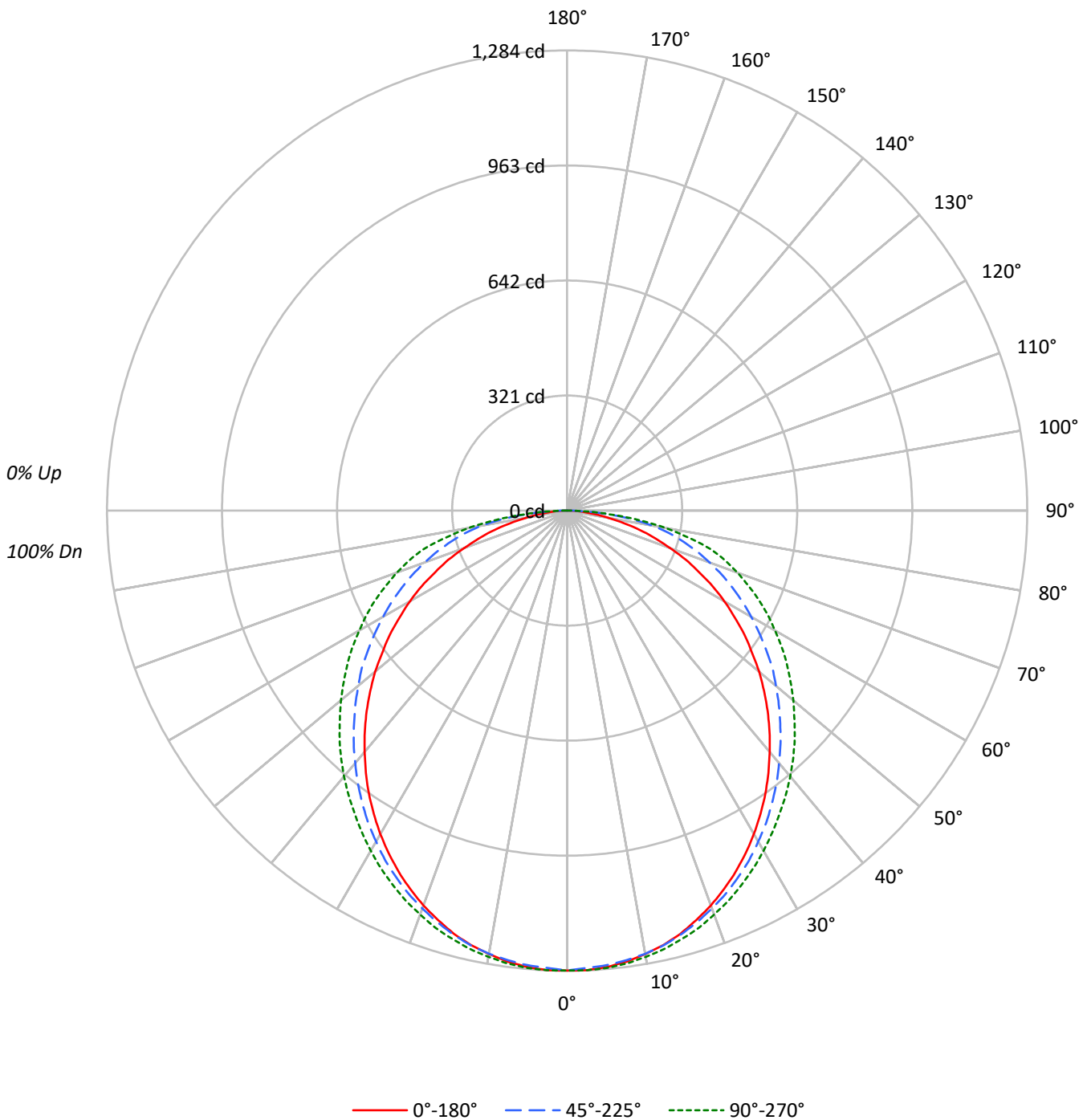
Input Watts (W): 30.783
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82					82			
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67					67			
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56					56			
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48					48			
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41					41			
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36					36			
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32					32			
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28					28			
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25					25			
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1727	1727	1727
5°	1727	1720	1730
10°	1717	1715	1727
15°	1702	1706	1724
20°	1679	1692	1717
25°	1652	1676	1710
30°	1620	1657	1703
35°	1584	1637	1697
40°	1544	1616	1701
45°	1505	1600	1709
50°	1464	1592	1725
55°	1418	1589	1757
60°	1363	1597	1802
65°	1292	1621	1881
70°	1199	1661	1987
75°	1094	1744	2155
80°	900	1878	2155
85°	690	1734	1851



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.4	3.2
10°-20°	346.6	9.1
20°-30°	521.5	13.6
30°-40°	625.0	16.3
40°-50°	651.3	17.0
50°-60°	605.9	15.9
60°-70°	499.1	13.1
70°-80°	339.9	8.9
80°-90°	112.2	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°	989.4	25.9
0°-40°	1614.4	42.2
0°-60°	2871.6	75.1
0°-90°	3822.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3822.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1284	1284	1284	1284	1284	
5°	1278	1278	1273	1280	1281	121
15°	1222	1224	1225	1236	1238	344
25°	1112	1118	1129	1148	1152	512
35°	964	976	996	1023	1033	603
45°	791	808	841	883	898	610
55°	605	625	678	731	749	539
65°	406	440	509	569	591	403
75°	210	258	336	396	415	222
85°	45	87	112	120	120	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1283.5	1283.5	1283.5	1283.5	1283.5
2.5°	1283.5	1283.5	1277.1	1283.5	1283.5
5°	1278.4	1278.4	1273.3	1279.7	1280.9
7.5°	1269.5	1270.7	1265.6	1273.3	1274.6
10°	1256.7	1258.0	1255.4	1263.1	1264.3
12.5°	1241.4	1242.7	1242.7	1251.6	1252.9
15°	1222.2	1223.5	1224.8	1236.3	1237.6
17.5°	1198.0	1201.8	1204.4	1218.4	1221.0
20°	1172.5	1176.3	1181.4	1196.7	1199.3
22.5°	1143.1	1148.2	1157.2	1173.8	1177.6
25°	1112.5	1117.6	1129.1	1148.2	1152.1
27.5°	1078.1	1085.7	1099.8	1120.2	1125.3
30°	1042.4	1050.0	1066.6	1088.3	1095.9
32.5°	1004.1	1014.3	1033.4	1057.7	1065.3
35°	964.5	976.0	996.4	1023.2	1033.4
37.5°	922.4	935.2	959.4	988.8	1001.5
40°	879.0	894.4	919.9	954.3	968.4
42.5°	835.7	849.7	881.6	918.6	933.9
45°	791.0	807.6	840.8	882.9	898.2
47.5°	745.1	761.7	801.2	845.9	859.9
50°	699.2	715.7	760.4	807.6	824.2
52.5°	649.4	671.1	722.1	769.3	785.9
55°	604.7	625.2	677.5	731.1	748.9
57.5°	553.7	578.0	635.4	691.5	710.6
60°	506.5	532.0	593.3	650.7	669.8
62.5°	458.0	486.1	551.2	609.8	631.5
65°	405.7	440.2	509.1	569.0	590.7
67.5°	358.5	394.2	467.0	528.2	547.3
70°	304.9	348.3	422.3	483.5	505.2
72.5°	259.0	302.4	380.2	440.2	461.9
75°	210.5	257.7	335.5	395.5	414.6
77.5°	162.0	214.3	292.2	338.1	344.5
80°	116.1	171.0	242.4	269.2	278.1
82.5°	81.7	131.4	178.6	196.5	201.6
85°	44.7	86.8	112.3	119.9	119.9
87.5°	19.1	37.0	44.7	45.9	47.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)