

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: P276298

Luminaire Tested: **24CZ2-45-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276298
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: 24CZ2-45-UNV-L92765-W2A1-U-4500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3884.3 lumens
Efficiency: N/A
Efficacy: 109.1 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

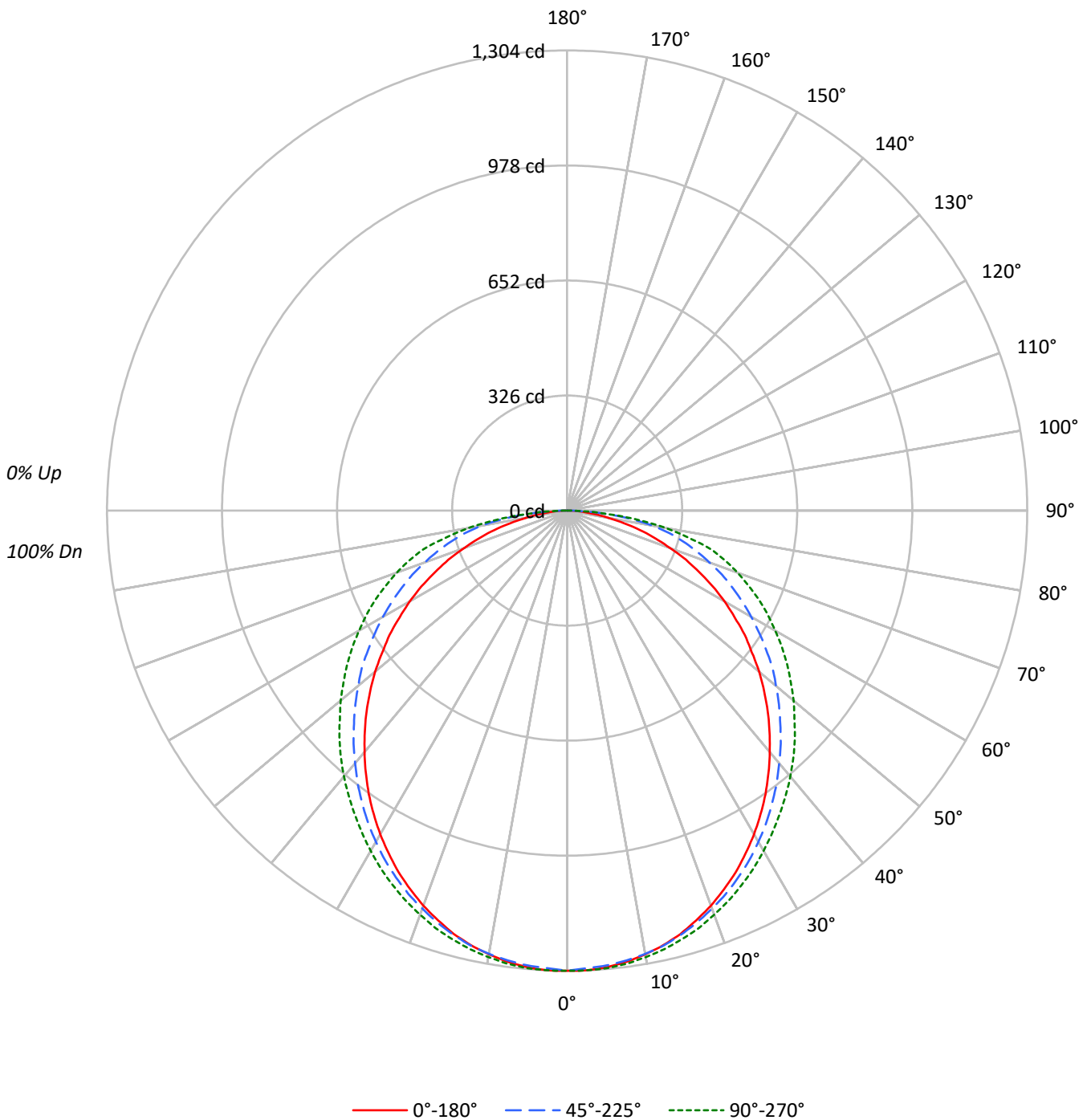
Input Watts (W): 35.619
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1755	1755	1755
5°	1754	1747	1758
10°	1745	1743	1755
15°	1730	1734	1752
20°	1706	1719	1745
25°	1678	1703	1738
30°	1645	1684	1730
35°	1610	1663	1725
40°	1569	1642	1728
45°	1529	1626	1737
50°	1487	1617	1753
55°	1441	1615	1785
60°	1385	1622	1831
65°	1312	1647	1911
70°	1219	1688	2020
75°	1112	1772	2190
80°	914	1908	2190
85°	701	1761	1882



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.3	3.2
10°-20°	352.1	9.1
20°-30°	529.9	13.6
30°-40°	635.0	16.3
40°-50°	661.8	17.0
50°-60°	615.7	15.9
60°-70°	507.1	13.1
70°-80°	345.3	8.9
80°-90°	114.0	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°	1005.4	25.9
0°-40°	1640.4	42.2
0°-60°	2917.8	75.1
0°-90°	3884.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3884.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1304	1304	1304	1304	1304	
5°	1299	1299	1294	1300	1302	123
15°	1242	1243	1244	1256	1258	350
25°	1130	1136	1147	1167	1171	520
35°	980	992	1012	1040	1050	613
45°	804	821	854	897	913	620
55°	614	635	688	743	761	548
65°	412	447	517	578	600	409
75°	214	262	341	402	421	226
85°	45	88	114	122	122	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1304.1	1304.1	1304.1	1304.1	1304.1
2.5°	1304.1	1304.1	1297.7	1304.1	1304.1
5°	1298.9	1298.9	1293.8	1300.2	1301.5
7.5°	1289.9	1291.2	1286.0	1293.8	1295.1
10°	1276.9	1278.2	1275.6	1283.4	1284.7
12.5°	1261.4	1262.6	1262.6	1271.7	1273.0
15°	1241.9	1243.2	1244.5	1256.2	1257.5
17.5°	1217.3	1221.2	1223.8	1238.0	1240.6
20°	1191.3	1195.2	1200.4	1216.0	1218.6
22.5°	1161.5	1166.7	1175.8	1192.6	1196.5
25°	1130.4	1135.6	1147.3	1166.7	1170.6
27.5°	1095.4	1103.2	1117.5	1138.2	1143.4
30°	1059.1	1066.9	1083.8	1105.8	1113.6
32.5°	1020.2	1030.6	1050.0	1074.7	1082.5
35°	980.0	991.7	1012.5	1039.7	1050.0
37.5°	937.3	950.2	974.9	1004.7	1017.6
40°	893.2	908.7	934.7	969.7	983.9
42.5°	849.1	863.4	895.8	933.4	948.9
45°	803.7	820.6	854.3	897.1	912.6
47.5°	757.1	773.9	814.1	859.5	873.7
50°	710.4	727.3	772.6	820.6	837.4
52.5°	659.8	681.9	733.7	781.7	798.6
55°	614.5	635.2	688.4	742.8	761.0
57.5°	562.6	587.2	645.6	702.6	722.1
60°	514.7	540.6	602.8	661.1	680.6
62.5°	465.4	493.9	560.0	619.7	641.7
65°	412.2	447.2	517.2	578.2	600.2
67.5°	364.3	400.6	474.5	536.7	556.1
70°	309.8	353.9	429.1	491.3	513.4
72.5°	263.2	307.2	386.3	447.2	469.3
75°	213.9	261.9	340.9	401.9	421.3
77.5°	164.6	217.8	296.9	343.5	350.0
80°	118.0	173.7	246.3	273.5	282.6
82.5°	83.0	133.5	181.5	199.6	204.8
85°	45.4	88.2	114.1	121.9	121.9
87.5°	19.4	37.6	45.4	46.7	48.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)