

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: P276038

Luminaire Tested: **24CZ2-50-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276038
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: 24CZ2-50-UNV-L93050-W2A1-U-3500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4022.1 lumens
Efficiency: N/A
Efficacy: 99.4 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

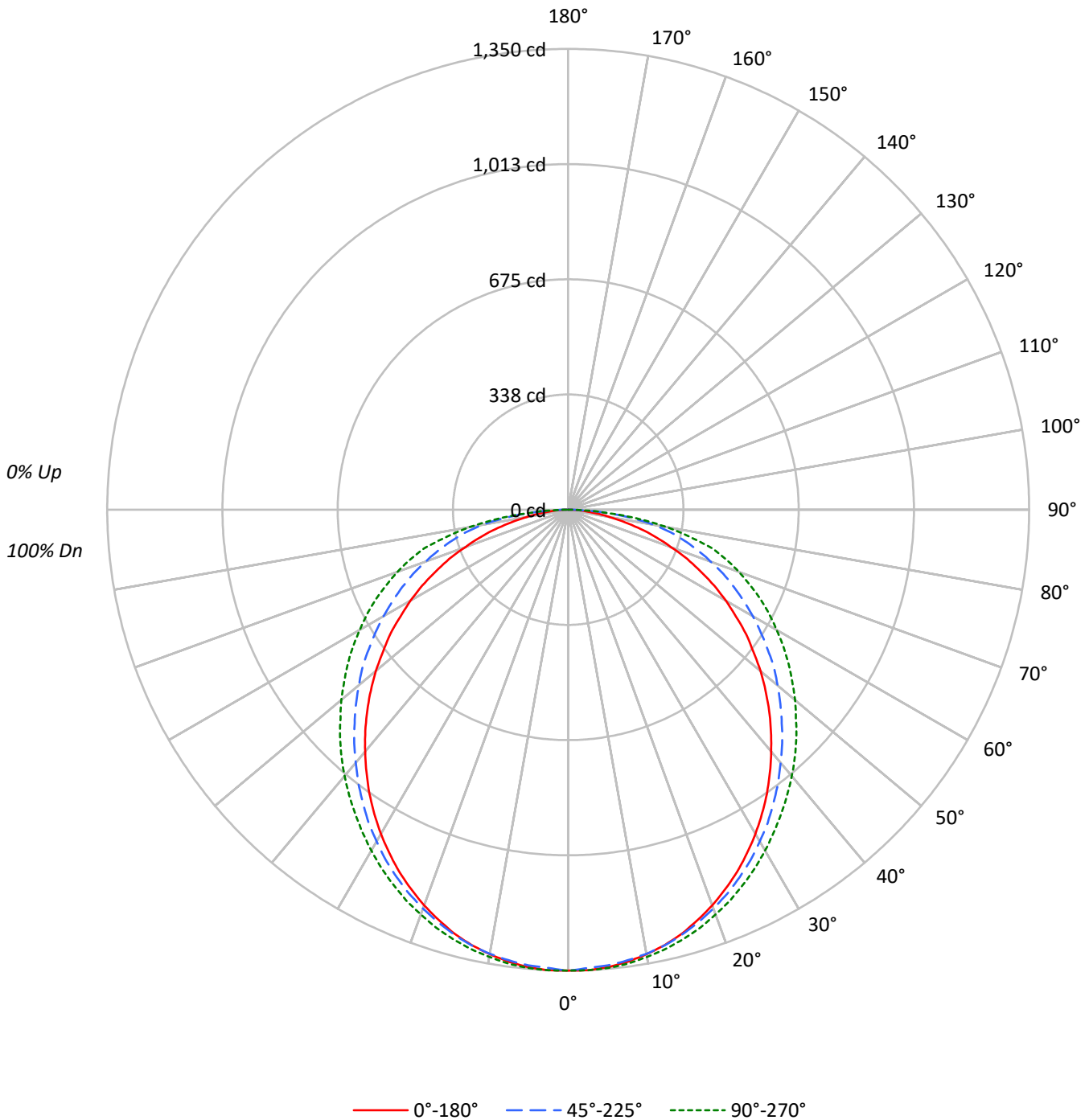
Input Watts (W): 40.465509
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1817	1817	1817
5°	1817	1809	1820
10°	1806	1805	1818
15°	1791	1795	1814
20°	1766	1780	1807
25°	1738	1764	1799
30°	1704	1743	1791
35°	1667	1722	1786
40°	1625	1700	1789
45°	1584	1683	1798
50°	1540	1675	1815
55°	1493	1672	1848
60°	1434	1680	1896
65°	1359	1705	1979
70°	1262	1748	2091
75°	1151	1835	2268
80°	947	1976	2267
85°	726	1823	1948



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.7	3.2
10°-20°	364.6	9.1
20°-30°	548.7	13.6
30°-40°	657.6	16.3
40°-50°	685.2	17.0
50°-60°	637.5	15.9
60°-70°	525.1	13.1
70°-80°	357.6	8.9
80°-90°	118.1	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°	1041.0	25.9
0°-40°	1698.6	42.2
0°-60°	3021.4	75.1
0°-90°	4022.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4022.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1350	1350	1350	1350	1350	
5°	1345	1345	1340	1346	1348	128
15°	1286	1287	1289	1301	1302	362
25°	1170	1176	1188	1208	1212	539
35°	1015	1027	1048	1077	1087	634
45°	832	850	885	929	945	642
55°	636	658	713	769	788	567
65°	427	463	536	599	622	424
75°	222	271	353	416	436	234
85°	47	91	118	126	126	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1350.4	1350.4	1350.4	1350.4	1350.4
2.5°	1350.4	1350.4	1343.7	1350.4	1350.4
5°	1345.0	1345.0	1339.7	1346.4	1347.7
7.5°	1335.6	1337.0	1331.6	1339.7	1341.0
10°	1322.2	1323.6	1320.9	1328.9	1330.3
12.5°	1306.1	1307.5	1307.5	1316.8	1318.2
15°	1286.0	1287.3	1288.7	1300.7	1302.1
17.5°	1260.5	1264.5	1267.2	1281.9	1284.6
20°	1233.6	1237.7	1243.0	1259.1	1261.8
22.5°	1202.7	1208.1	1217.5	1235.0	1239.0
25°	1170.5	1175.9	1188.0	1208.1	1212.1
27.5°	1134.3	1142.3	1157.1	1178.6	1184.0
30°	1096.7	1104.8	1122.2	1145.0	1153.1
32.5°	1056.4	1067.2	1087.3	1112.8	1120.9
35°	1014.8	1026.9	1048.4	1076.6	1087.3
37.5°	970.5	983.9	1009.5	1040.3	1053.7
40°	924.9	941.0	967.8	1004.1	1018.8
42.5°	879.2	894.0	927.6	966.5	982.6
45°	832.3	849.7	884.6	928.9	945.0
47.5°	783.9	801.4	843.0	890.0	904.7
50°	735.6	753.1	800.0	849.7	867.2
52.5°	683.3	706.1	759.8	809.4	826.9
55°	636.3	657.8	712.8	769.2	788.0
57.5°	582.6	608.1	668.5	727.6	747.7
60°	532.9	559.8	624.2	684.6	704.7
62.5°	481.9	511.4	579.9	641.6	664.5
65°	426.9	463.1	535.6	598.7	621.5
67.5°	377.2	414.8	491.3	555.7	575.9
70°	320.8	366.5	444.3	508.8	531.6
72.5°	272.5	318.1	400.0	463.1	485.9
75°	221.5	271.2	353.0	416.1	436.3
77.5°	170.5	225.5	307.4	355.7	362.4
80°	122.2	179.9	255.0	283.2	292.6
82.5°	85.9	138.3	187.9	206.7	212.1
85°	47.0	91.3	118.1	126.2	126.2
87.5°	20.1	38.9	47.0	48.3	49.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)