

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: P276172

Luminaire Tested: **24CZ2-50-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276172
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-L82765-W2A1-U-4500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4806.6 lumens
Efficiency: N/A
Efficacy: 118.8 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

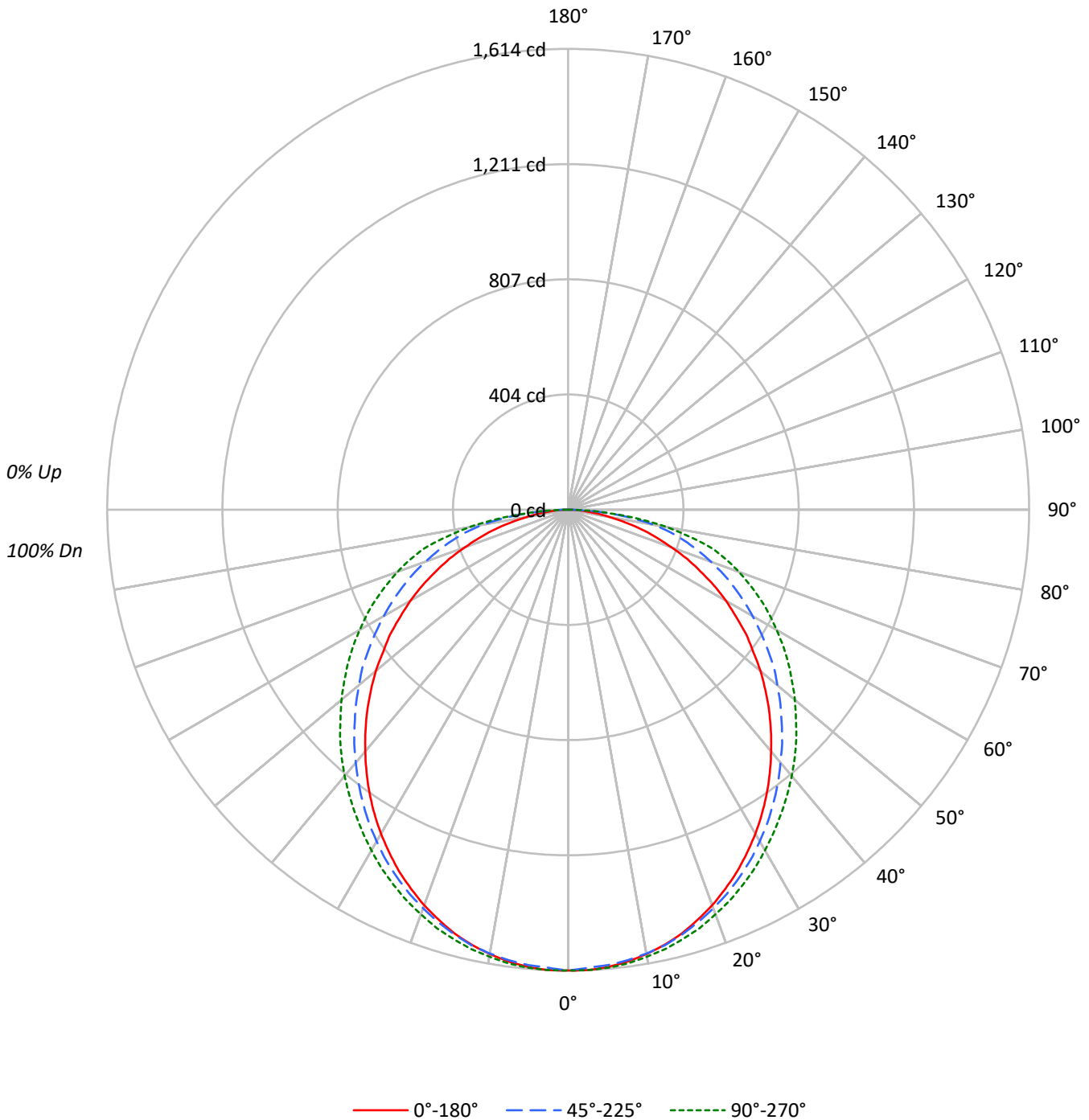
Input Watts (W): 40.455
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2171	2171	2171
5°	2171	2162	2175
10°	2159	2157	2172
15°	2141	2145	2168
20°	2111	2127	2159
25°	2077	2108	2151
30°	2036	2084	2141
35°	1992	2058	2134
40°	1941	2031	2139
45°	1893	2012	2149
50°	1840	2001	2169
55°	1784	1998	2209
60°	1714	2007	2266
65°	1624	2038	2365
70°	1508	2089	2499
75°	1376	2193	2711
80°	1131	2362	2710
85°	866	2180	2328



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.6	3.2
10°-20°	435.7	9.1
20°-30°	655.7	13.6
30°-40°	785.8	16.3
40°-50°	818.9	17.0
50°-60°	761.9	15.9
60°-70°	627.5	13.1
70°-80°	427.4	8.9
80°-90°	141.1	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°	1244.1	25.9
0°-40°	2029.9	42.2
0°-60°	3610.7	75.1
0°-90°	4806.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4806.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1614	1614	1614	1614	1614	
5°	1607	1607	1601	1609	1611	153
15°	1537	1538	1540	1554	1556	433
25°	1399	1405	1420	1444	1449	644
35°	1213	1227	1253	1287	1299	758
45°	995	1015	1057	1110	1129	767
55°	760	786	852	919	942	678
65°	510	553	640	716	743	506
75°	265	324	422	497	521	279
85°	56	109	141	151	151	70
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1613.8	1613.8	1613.8	1613.8	1613.8
2.5°	1613.8	1613.8	1605.8	1613.8	1613.8
5°	1607.4	1607.4	1601.0	1609.0	1610.6
7.5°	1596.2	1597.8	1591.3	1601.0	1602.6
10°	1580.1	1581.7	1578.5	1588.1	1589.7
12.5°	1560.9	1562.5	1562.5	1573.7	1575.3
15°	1536.8	1538.4	1540.0	1554.5	1556.1
17.5°	1506.3	1511.1	1514.3	1532.0	1535.2
20°	1474.2	1479.1	1485.5	1504.7	1507.9
22.5°	1437.3	1443.8	1455.0	1475.8	1480.7
25°	1398.8	1405.3	1419.7	1443.8	1448.6
27.5°	1355.5	1365.2	1382.8	1408.5	1414.9
30°	1310.6	1320.2	1341.1	1368.4	1378.0
32.5°	1262.5	1275.3	1299.4	1329.9	1339.5
35°	1212.8	1227.2	1252.9	1286.6	1299.4
37.5°	1159.8	1175.9	1206.3	1243.2	1259.3
40°	1105.3	1124.5	1156.6	1199.9	1217.6
42.5°	1050.7	1068.4	1108.5	1155.0	1174.3
45°	994.6	1015.4	1057.2	1110.1	1129.3
47.5°	936.8	957.7	1007.4	1063.6	1081.2
50°	879.1	899.9	956.1	1015.4	1036.3
52.5°	816.5	843.8	908.0	967.3	988.2
55°	760.4	786.0	851.8	919.2	941.7
57.5°	696.2	726.7	798.9	869.5	893.5
60°	636.9	668.9	745.9	818.1	842.2
62.5°	575.9	611.2	693.0	766.8	794.1
65°	510.1	553.4	640.1	715.5	742.7
67.5°	450.8	495.7	587.1	664.1	688.2
70°	383.4	437.9	531.0	608.0	635.3
72.5°	325.6	380.2	478.0	553.4	580.7
75°	264.7	324.0	421.9	497.3	521.4
77.5°	203.7	269.5	367.4	425.1	433.1
80°	146.0	215.0	304.8	338.5	349.7
82.5°	102.7	165.2	224.6	247.0	253.5
85°	56.1	109.1	141.2	150.8	150.8
87.5°	24.1	46.5	56.1	57.8	59.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)