

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: P276081

Luminaire Tested: **24CZ2-50HE-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276081
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: 24CZ2-50HE-UNV-L82765-W2A1-U-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4746.1 lumens
Efficiency: N/A
Efficacy: 131.5 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

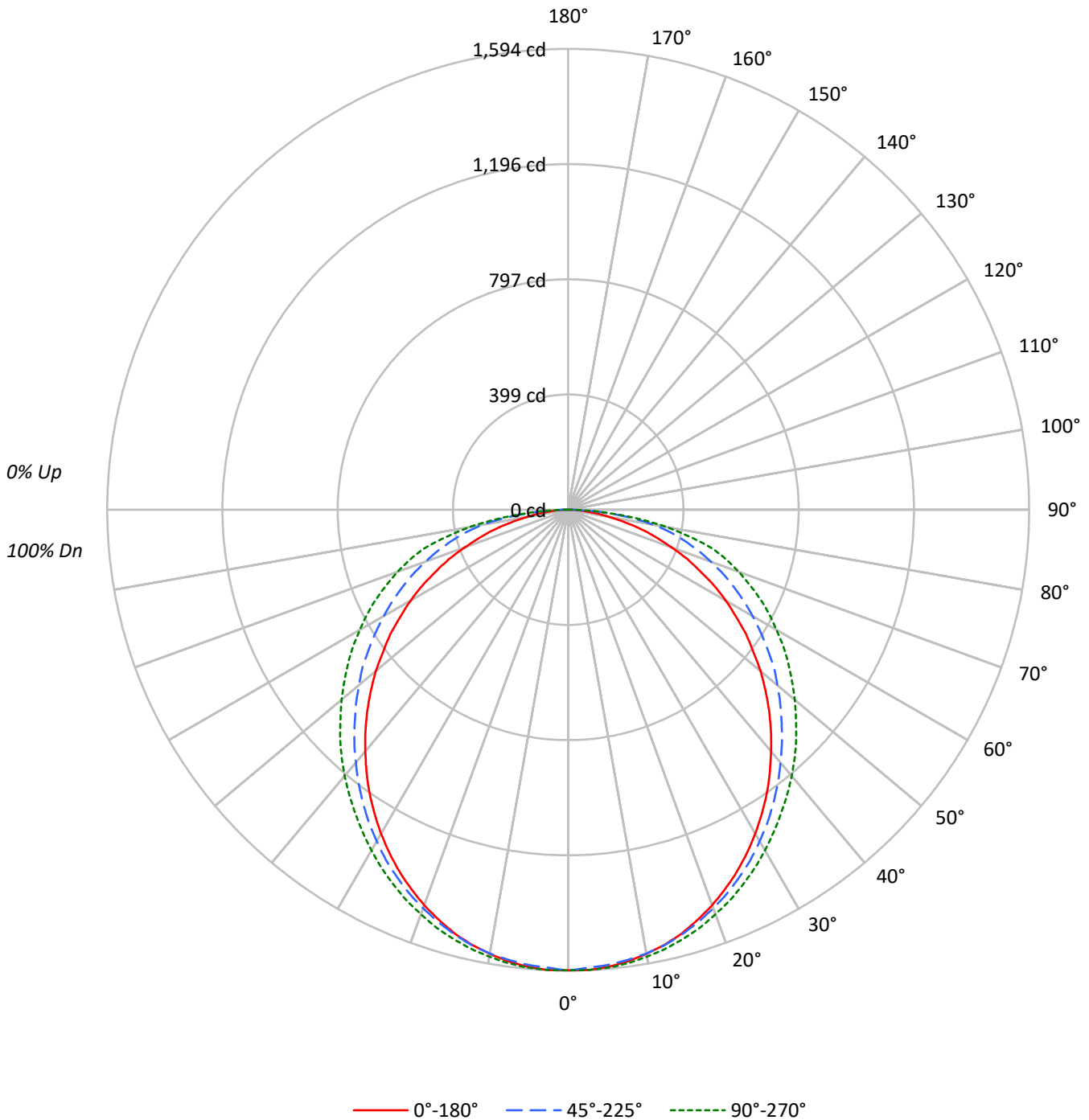
Input Watts (W): 36.084
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2144	2144	2144
5°	2144	2135	2148
10°	2132	2129	2145
15°	2114	2118	2140
20°	2084	2100	2132
25°	2051	2081	2123
30°	2011	2057	2114
35°	1967	2032	2107
40°	1917	2006	2112
45°	1869	1986	2122
50°	1817	1976	2142
55°	1761	1973	2181
60°	1692	1982	2238
65°	1604	2012	2335
70°	1489	2063	2468
75°	1359	2166	2676
80°	1117	2332	2676
85°	855	2152	2299



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.7	3.2
10°-20°	430.3	9.1
20°-30°	647.5	13.6
30°-40°	775.9	16.3
40°-50°	808.6	17.0
50°-60°	752.3	15.9
60°-70°	619.6	13.1
70°-80°	422.0	8.9
80°-90°	139.3	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°	1228.4	25.9
0°-40°	2004.3	42.2
0°-60°	3565.2	75.1
0°-90°	4746.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4746.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1594	1594	1594	1594	1594	
5°	1587	1587	1581	1589	1590	151
15°	1517	1519	1521	1535	1536	427
25°	1381	1388	1402	1426	1430	636
35°	1198	1212	1237	1270	1283	749
45°	982	1003	1044	1096	1115	757
55°	751	776	841	908	930	669
65°	504	546	632	706	733	500
75°	261	320	417	491	515	276
85°	55	108	139	149	149	69
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1593.5	1593.5	1593.5	1593.5	1593.5
2.5°	1593.5	1593.5	1585.6	1593.5	1593.5
5°	1587.1	1587.1	1580.8	1588.7	1590.3
7.5°	1576.1	1577.6	1571.3	1580.8	1582.4
10°	1560.2	1561.8	1558.6	1568.1	1569.7
12.5°	1541.2	1542.8	1542.8	1553.9	1555.5
15°	1517.4	1519.0	1520.6	1534.9	1536.5
17.5°	1487.4	1492.1	1495.3	1512.7	1515.9
20°	1455.7	1460.4	1466.8	1485.8	1488.9
22.5°	1419.2	1425.6	1436.7	1457.3	1462.0
25°	1381.2	1387.6	1401.8	1425.6	1430.3
27.5°	1338.5	1348.0	1365.4	1390.7	1397.1
30°	1294.1	1303.6	1324.2	1351.1	1360.6
32.5°	1246.6	1259.3	1283.0	1313.1	1322.6
35°	1197.5	1211.7	1237.1	1270.3	1283.0
37.5°	1145.2	1161.1	1191.2	1227.6	1243.4
40°	1091.4	1110.4	1142.0	1184.8	1202.2
42.5°	1037.5	1054.9	1094.5	1140.5	1159.5
45°	982.1	1002.7	1043.8	1096.1	1115.1
47.5°	925.0	945.6	994.7	1050.2	1067.6
50°	868.0	888.6	944.1	1002.7	1023.2
52.5°	806.2	833.2	896.5	955.1	975.7
55°	750.8	776.1	841.1	907.6	929.8
57.5°	687.4	717.5	788.8	858.5	882.3
60°	628.8	660.5	736.5	807.8	831.6
62.5°	568.6	603.5	684.3	757.1	784.1
65°	503.7	546.5	632.0	706.5	733.4
67.5°	445.1	489.4	579.7	655.8	679.5
70°	378.6	432.4	524.3	600.3	627.3
72.5°	321.5	375.4	472.0	546.5	573.4
75°	261.4	320.0	416.6	491.0	514.8
77.5°	201.2	266.1	362.7	419.8	427.7
80°	144.1	212.3	301.0	334.2	345.3
82.5°	101.4	163.1	221.8	243.9	250.3
85°	55.4	107.7	139.4	148.9	148.9
87.5°	23.8	45.9	55.4	57.0	58.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)