

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: P276002

Luminaire Tested: **24CZ2-65HE-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276002
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: 24CZ2-65HE-UNV-L93050-W2A1-U-3000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4810.4 lumens
Efficiency: N/A
Efficacy: 96.1 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

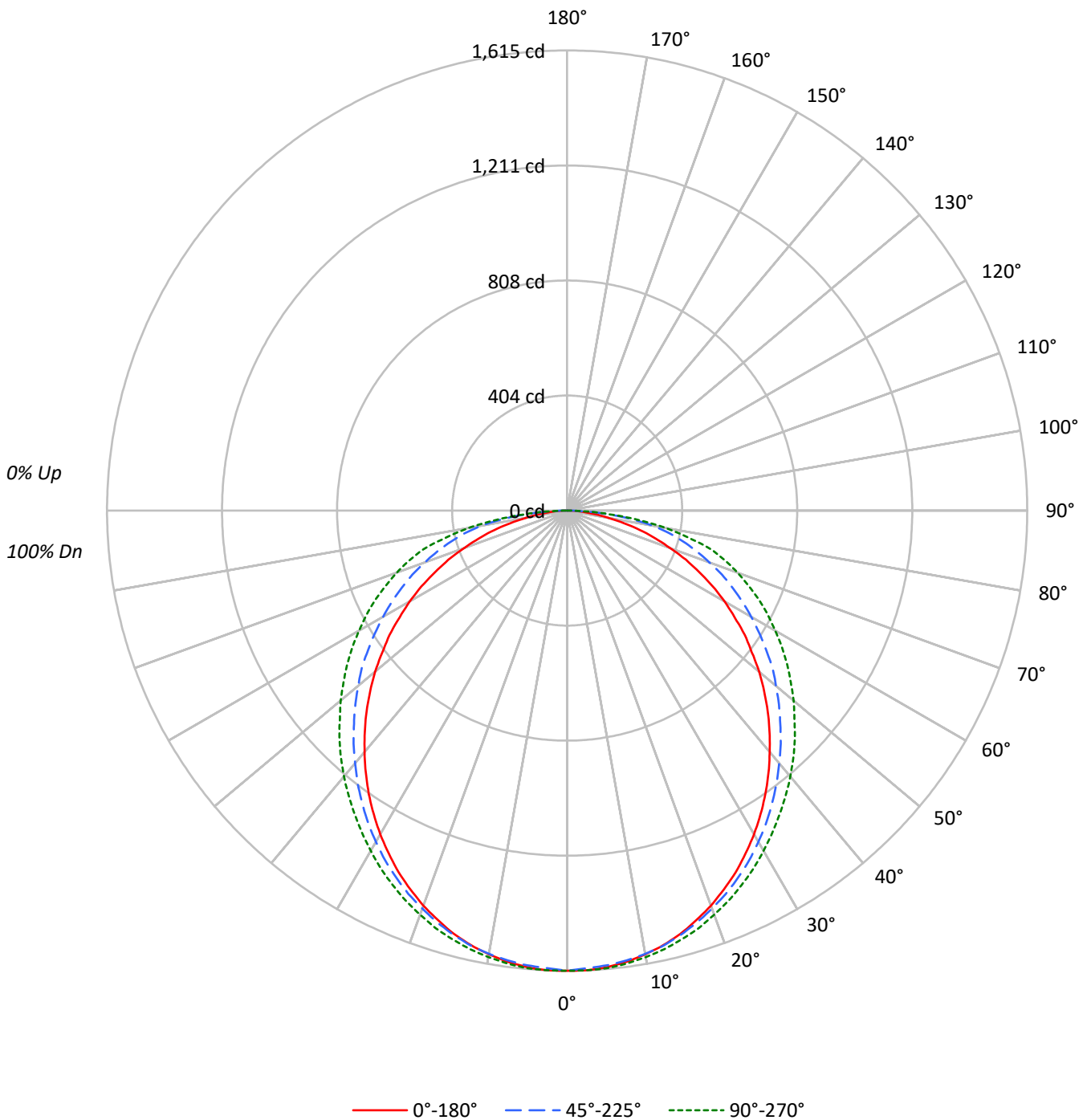
Input Watts (W): 50.043114
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2173	2173	2173
5°	2173	2164	2177
10°	2161	2158	2174
15°	2142	2147	2169
20°	2113	2129	2161
25°	2078	2109	2152
30°	2038	2085	2143
35°	1994	2060	2136
40°	1943	2033	2140
45°	1894	2013	2151
50°	1842	2003	2171
55°	1785	2000	2211
60°	1715	2009	2268
65°	1625	2039	2366
70°	1509	2090	2501
75°	1377	2195	2713
80°	1132	2363	2712
85°	868	2181	2330



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.7	3.2
10°-20°	436.1	9.1
20°-30°	656.2	13.6
30°-40°	786.4	16.3
40°-50°	819.5	17.0
50°-60°	762.5	15.9
60°-70°	628.0	13.1
70°-80°	427.7	8.9
80°-90°	141.2	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°	1245.1	25.9
0°-40°	2031.5	42.2
0°-60°	3613.5	75.1
0°-90°	4810.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4810.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1615	1615	1615	1615	1615	
5°	1609	1609	1602	1610	1612	153
15°	1538	1540	1541	1556	1557	433
25°	1400	1406	1421	1445	1450	644
35°	1214	1228	1254	1288	1300	759
45°	995	1016	1058	1111	1130	768
55°	761	787	852	920	942	678
65°	510	554	641	716	743	507
75°	265	324	422	498	522	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°	1615.1	1615.1	1615.1	1615.1	1615.1
2.5°	1615.1	1615.1	1607.1	1615.1	1615.1
5°	1608.7	1608.7	1602.2	1610.3	1611.9
7.5°	1597.4	1599.0	1592.6	1602.2	1603.8
10°	1581.4	1583.0	1579.8	1589.4	1591.0
12.5°	1562.1	1563.7	1563.7	1574.9	1576.6
15°	1538.0	1539.6	1541.2	1555.7	1557.3
17.5°	1507.5	1512.3	1515.5	1533.2	1536.4
20°	1475.4	1480.2	1486.6	1505.9	1509.1
22.5°	1438.5	1444.9	1456.1	1477.0	1481.8
25°	1400.0	1406.4	1420.8	1444.9	1449.7
27.5°	1356.6	1366.2	1383.9	1409.6	1416.0
30°	1311.7	1321.3	1342.2	1369.4	1379.1
32.5°	1263.5	1276.3	1300.4	1330.9	1340.5
35°	1213.7	1228.2	1253.9	1287.6	1300.4
37.5°	1160.7	1176.8	1207.3	1244.2	1260.3
40°	1106.2	1125.4	1157.5	1200.9	1218.5
42.5°	1051.6	1069.2	1109.4	1155.9	1175.2
45°	995.4	1016.2	1058.0	1111.0	1130.2
47.5°	937.6	958.5	1008.2	1064.4	1082.1
50°	879.8	900.7	956.8	1016.2	1037.1
52.5°	817.2	844.5	908.7	968.1	989.0
55°	761.0	786.7	852.5	919.9	942.4
57.5°	696.8	727.3	799.5	870.2	894.2
60°	637.4	669.5	746.5	818.8	842.9
62.5°	576.4	611.7	693.6	767.4	794.7
65°	510.5	553.9	640.6	716.0	743.3
67.5°	451.1	496.1	587.6	664.7	688.7
70°	383.7	438.3	531.4	608.5	635.8
72.5°	325.9	380.5	478.4	553.9	581.2
75°	264.9	324.3	422.2	497.7	521.8
77.5°	203.9	269.7	367.6	425.4	433.5
80°	146.1	215.1	305.0	338.7	350.0
82.5°	102.7	165.4	224.8	247.2	253.7
85°	56.2	109.2	141.3	150.9	150.9
87.5°	24.1	46.6	56.2	57.8	59.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)