

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: McGRAW-EDISON

Report Number: P159210

Luminaire Tested: **VTS-E04-LED-E1-T2**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159210
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33705)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: VTS-E04-LED-E1-T2
Description: VENTUS LED SITE LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 2
Light Source: (84) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

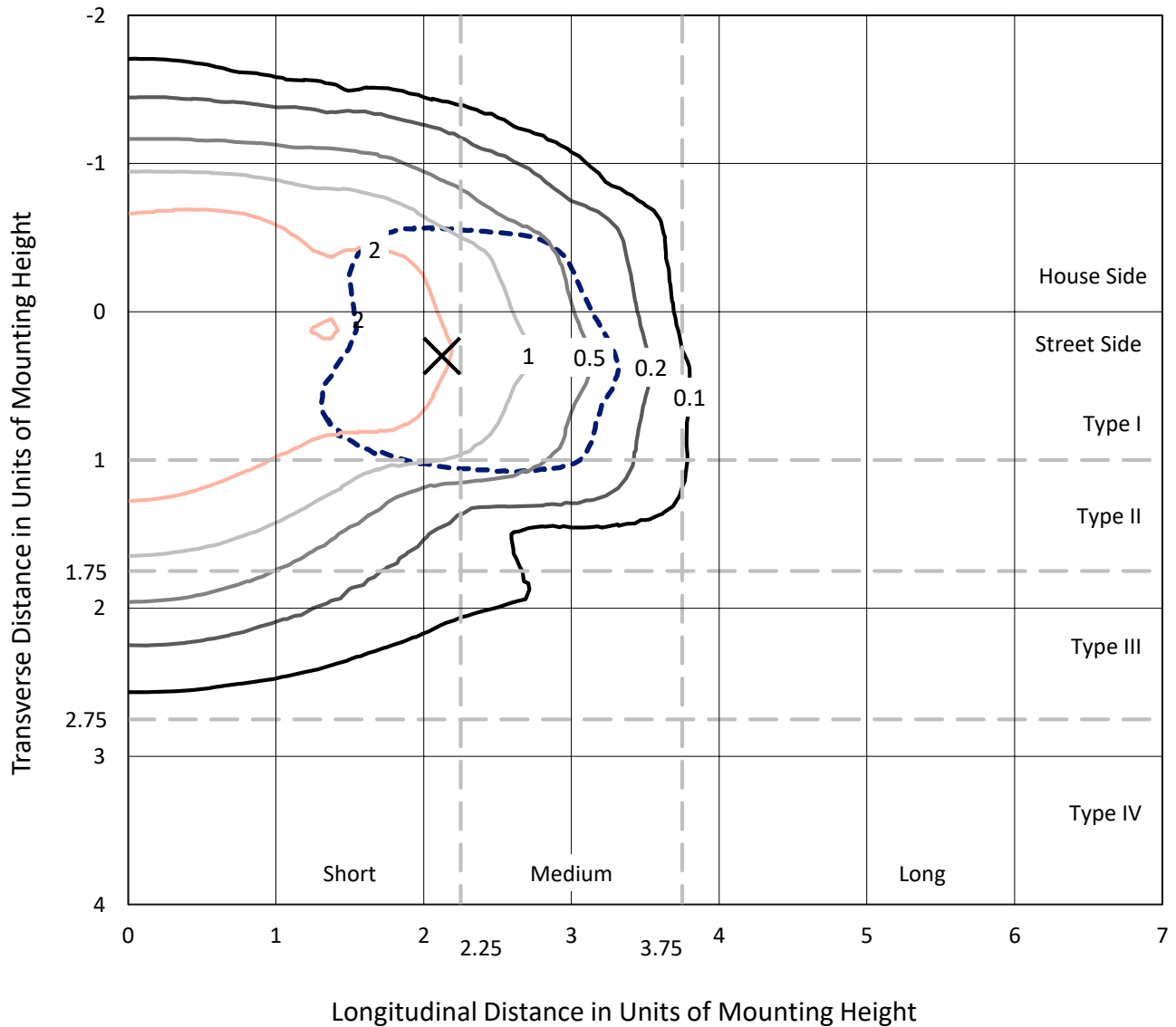
Lumens per Lamp: N/A
Luminaire Lumens: 12346.9 lumens
Efficiency: N/A
Efficacy: 127.0 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 97.2
Input Voltage (V): NR
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

REPORT NUMBER: P159210
 CATALOG NUMBER: VTS-E04-LED-E1-T2

Iso-Footcandle Lines of Horizontal Illumination

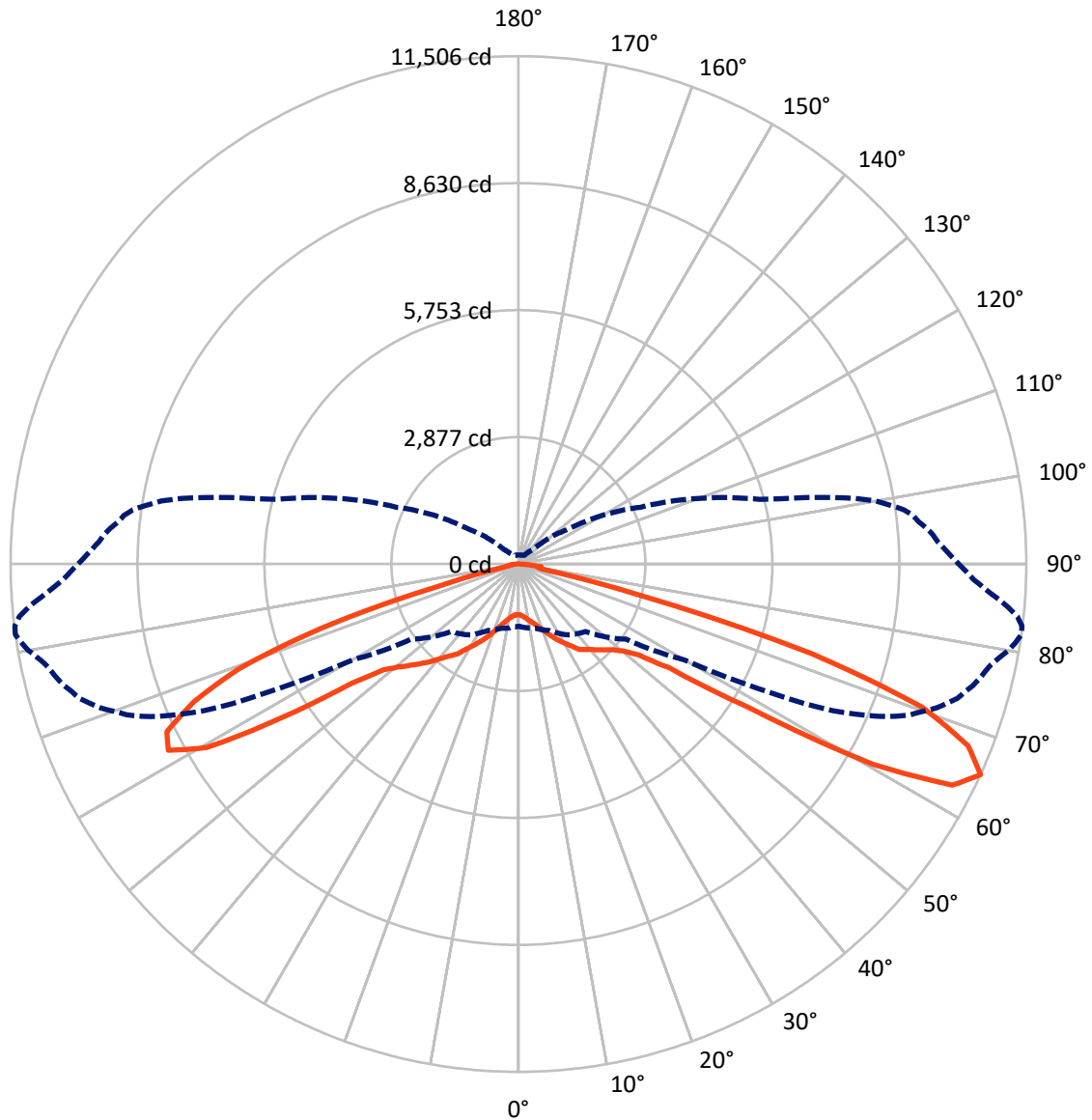
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.7 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P159210
CATALOG NUMBER: VTS-E04-LED-E1-T2

Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P159210

CATALOG NUMBER: VTS-E04-LED-E1-T2

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4597.1	0.0	4597.1
	% Fixture	37.2	0.0	37.2
Street Side	Lumens	7749.7	0.0	7749.7
	% Fixture	62.8	0.0	62.8
Total	Lumens	12346.9	0.0	12346.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.3	0.9
10°-20°	408.7	3.3
20°-30°	809.7	6.6
30°-40°	1388.0	11.2
40°-50°	2085.2	16.9
50°-60°	2897.0	23.5
60°-70°	3305.0	26.8
70°-80°	1138.5	9.2
80°-90°	198.4	1.6
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°-90°	12346.9	100.0
0°-180°	12346.9	100.0

Coefficient of Utilization



REPORT NUMBER: P159210

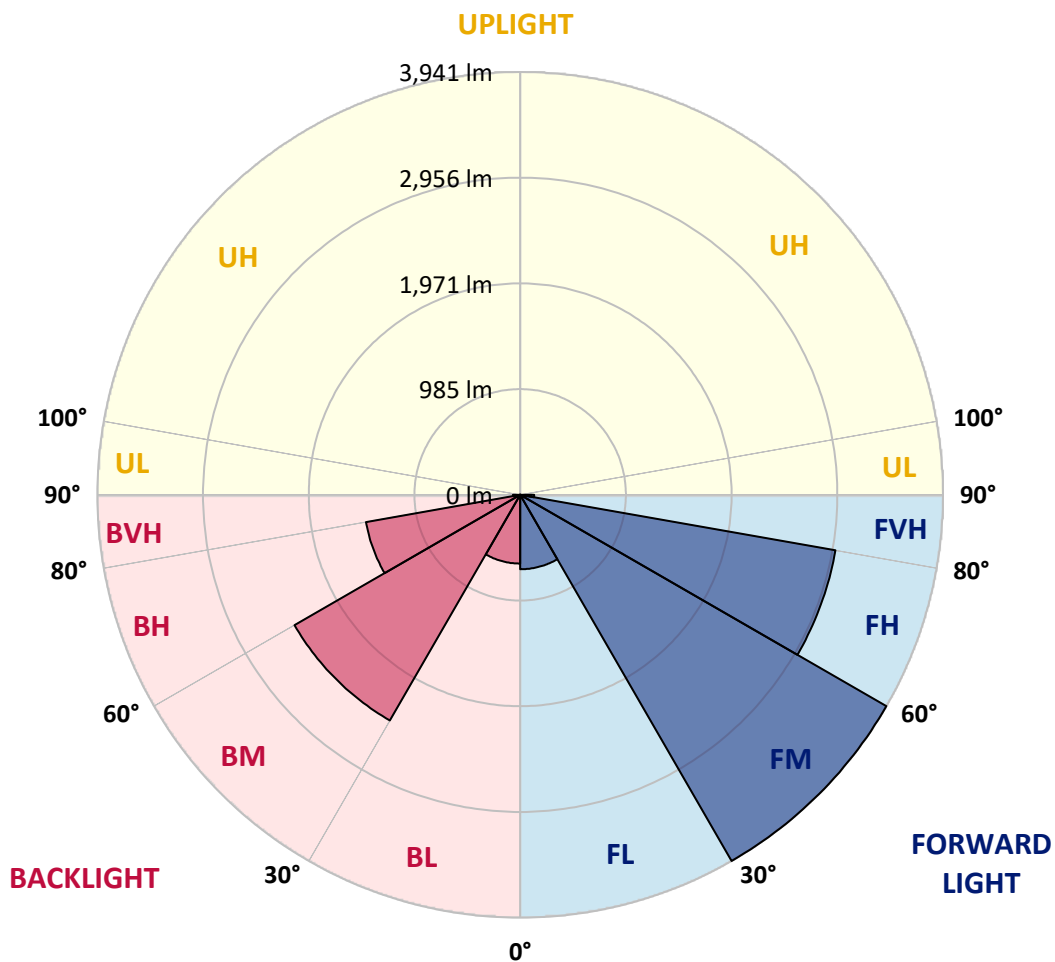
CATALOG NUMBER: VTS-E04-LED-E1-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	693.6	5.6			
FM	(30°-60°)	3941.4	31.9			
FH	(60°-80°)	2984.1	24.2			G2/5000
FVH	(80°-90°)	130.6	1.1			G2/225
BL	(0°-30°)	641.0	5.2	B2/1000		
BM	(30°-60°)	2428.8	19.7	B2/2500		
BH	(60°-80°)	1459.5	11.8	B3/2500		G3/2500
BVH	(80°-90°)	67.8	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





REPORT NUMBER: P159210

CATALOG NUMBER: VTS-E04-LED-E1-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8
2.5°	1211.2	1212.0	1211.2	1208.8	1208.0	1200.8	1192.8	1188.8	1188.0	1184.8	1185.6
5°	1286.4	1284.0	1280.8	1276.8	1272.8	1260.8	1247.2	1240.0	1237.6	1235.2	1232.0
7.5°	1353.6	1355.2	1353.6	1348.0	1337.6	1322.4	1304.8	1293.6	1292.8	1290.4	1288.0
10°	1440.0	1444.0	1434.4	1424.8	1410.4	1387.2	1367.2	1352.8	1350.4	1347.2	1345.6
12.5°	1533.6	1534.4	1531.2	1509.6	1485.6	1453.6	1424.8	1410.4	1407.2	1403.2	1401.6
15°	1633.6	1634.4	1616.8	1596.0	1559.2	1520.8	1480.8	1464.8	1460.8	1461.6	1455.2
17.5°	1712.8	1714.4	1697.6	1671.2	1627.2	1581.6	1538.4	1525.6	1523.2	1524.0	1520.8
20°	1747.2	1749.6	1739.2	1719.2	1677.6	1637.6	1606.4	1598.4	1597.6	1596.0	1602.4
22.5°	1745.6	1746.4	1742.4	1734.4	1709.6	1686.4	1682.4	1687.2	1686.4	1688.0	1693.6
25°	1731.2	1733.6	1732.8	1736.0	1732.0	1740.8	1759.2	1776.0	1778.4	1781.6	1792.0
27.5°	1768.0	1772.8	1767.2	1770.4	1776.8	1806.4	1844.0	1869.6	1874.4	1883.2	1892.0
30°	1912.0	1905.6	1898.4	1890.4	1894.4	1912.8	1955.2	1977.6	1980.0	1986.4	1998.4
32.5°	2125.6	2118.4	2112.0	2099.2	2096.0	2088.0	2102.4	2108.0	2107.2	2113.6	2116.8
35°	2366.4	2367.2	2365.6	2375.2	2383.2	2342.4	2292.0	2278.4	2284.0	2276.8	2278.4
37.5°	2572.0	2574.4	2616.8	2669.6	2684.8	2659.2	2548.8	2494.4	2476.0	2473.6	2455.2
40°	2800.0	2800.0	2864.0	2928.8	2971.2	3003.2	2872.0	2776.0	2736.8	2725.6	2680.0
42.5°	3050.4	3037.6	3096.0	3167.2	3245.6	3318.4	3250.4	3142.4	3086.4	3066.4	2986.4
45°	3256.0	3248.0	3276.8	3343.2	3470.4	3612.8	3622.4	3567.2	3533.6	3492.0	3418.4
47.5°	3382.4	3378.4	3395.2	3467.2	3626.4	3856.8	3985.6	4013.6	3993.6	3961.6	3890.4
50°	3432.0	3426.4	3438.4	3518.4	3696.8	4000.8	4285.6	4417.6	4427.2	4434.4	4412.0
52.5°	3414.4	3407.2	3432.0	3499.2	3684.8	4051.2	4520.0	4773.6	4816.0	4852.0	4925.6
55°	3245.6	3234.4	3301.6	3428.0	3632.8	4032.8	4691.2	5116.0	5205.6	5301.6	5464.8
57.5°	2987.2	2977.6	3074.4	3248.0	3540.8	3982.4	4806.4	5548.8	5750.4	5923.2	6386.4
60°	2738.4	2730.4	2787.2	2955.2	3242.4	3736.8	4664.0	5694.4	6032.8	6405.6	7251.2
62.5°	2293.6	2272.0	2348.0	2489.6	2671.2	3091.2	4042.4	5370.4	5892.0	6440.0	7586.4
65°	1409.6	1440.8	1506.4	1663.2	1960.8	2160.8	2968.8	4344.8	5032.8	5720.0	7207.2
67.5°	895.2	904.0	952.8	1061.6	1292.0	1492.8	1799.2	2726.4	3256.8	3932.8	5658.4
70°	767.2	772.8	814.4	928.0	1087.2	1334.4	1361.6	1424.0	1614.4	2044.8	3326.4
72.5°	604.8	614.4	647.2	745.6	937.6	1203.2	1680.8	1125.6	1087.2	1123.2	1623.2
75°	360.0	371.2	398.4	452.0	602.4	920.0	1760.8	1309.6	1220.8	1151.2	1120.0
77.5°	190.4	182.4	200.8	232.0	309.6	490.4	1323.2	1604.8	1542.4	1459.2	1282.4
80°	94.4	97.6	103.2	109.6	138.4	199.2	661.6	1660.0	1840.0	1920.0	1763.2
82.5°	37.6	42.4	60.0	64.0	76.0	84.8	212.8	920.0	1317.6	1787.2	2333.6
85°	19.2	18.4	32.0	38.4	44.8	40.0	75.2	343.2	617.6	962.4	1559.2
87.5°	2.4	3.2	7.2	9.6	13.6	12.8	21.6	74.4	118.4	168.0	236.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P159210

CATALOG NUMBER: VTS-E04-LED-E1-T2

CANDELA DISTRIBUTION (continued):

	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°	75°
0°	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8
2.5°	1181.6	1180.8	1180.8	1177.6	1177.6	1178.4	1176.0	1174.4	1174.4	1175.2	1172.0
5°	1229.6	1227.2	1227.2	1224.0	1220.0	1220.0	1216.8	1216.0	1214.4	1211.2	1208.8
7.5°	1285.6	1283.2	1279.2	1276.8	1275.2	1272.8	1268.8	1267.2	1264.0	1260.8	1257.6
10°	1343.2	1340.0	1338.4	1334.4	1332.8	1328.0	1325.6	1326.4	1320.0	1317.6	1318.4
12.5°	1400.8	1397.6	1392.0	1390.4	1389.6	1384.8	1382.4	1380.8	1376.0	1375.2	1372.8
15°	1452.0	1453.6	1451.2	1447.2	1444.0	1443.2	1440.8	1439.2	1436.0	1432.8	1429.6
17.5°	1518.4	1520.8	1517.6	1512.0	1512.0	1511.2	1512.0	1511.2	1505.6	1508.0	1506.4
20°	1603.2	1604.8	1596.8	1599.2	1600.8	1600.0	1602.4	1604.8	1603.2	1603.2	1605.6
22.5°	1700.8	1703.2	1698.4	1701.6	1706.4	1702.4	1709.6	1708.8	1710.4	1712.8	1713.6
25°	1800.8	1805.6	1801.6	1810.4	1807.2	1810.4	1819.2	1816.8	1820.8	1827.2	1829.6
27.5°	1900.8	1904.0	1904.8	1910.4	1916.0	1920.8	1932.0	1932.0	1935.2	1946.4	1946.4
30°	2005.6	2008.8	2012.0	2020.0	2023.2	2032.0	2043.2	2046.4	2044.8	2060.8	2065.6
32.5°	2126.4	2129.6	2135.2	2144.8	2148.8	2157.6	2157.6	2166.4	2172.8	2186.4	2187.2
35°	2287.2	2289.6	2287.2	2286.4	2292.0	2304.0	2304.8	2317.6	2323.2	2336.8	2340.8
37.5°	2448.0	2447.2	2436.8	2425.6	2426.4	2421.6	2418.4	2424.0	2426.4	2427.2	2436.0
40°	2664.8	2644.0	2628.0	2600.0	2587.2	2567.2	2555.2	2554.4	2541.6	2540.0	2542.4
42.5°	2948.8	2924.8	2887.2	2840.0	2804.0	2767.2	2740.0	2724.0	2696.0	2681.6	2669.6
45°	3345.6	3286.4	3241.6	3185.6	3116.0	3052.0	2984.8	2954.4	2900.8	2868.0	2831.2
47.5°	3830.4	3772.0	3703.2	3645.6	3554.4	3465.6	3373.6	3292.8	3199.2	3124.8	3064.0
50°	4356.8	4322.4	4272.8	4219.2	4101.6	4043.2	3927.2	3817.6	3716.8	3584.0	3468.0
52.5°	4896.8	4916.8	4905.6	4886.4	4812.0	4789.6	4689.6	4556.0	4454.4	4363.2	4161.6
55°	5562.4	5586.4	5634.4	5662.4	5653.6	5710.4	5685.6	5581.6	5540.8	5498.4	5355.2
57.5°	6580.8	6752.0	6935.2	7096.0	7133.6	7335.2	7292.0	7396.0	7469.6	7416.8	7370.4
60°	7666.4	8012.0	8323.2	8648.8	8913.6	9112.0	9374.4	9551.2	9662.4	9862.4	9878.4
62.5°	8104.0	8573.6	8968.8	9346.4	9660.8	9936.0	10172.8	10416.8	10616.8	10797.6	10928.0
65°	7864.0	8354.4	8833.6	9216.8	9519.2	9756.0	10013.6	10207.2	10404.0	10520.0	10656.8
67.5°	6537.6	7187.2	7776.8	8208.8	8622.4	8863.2	9168.0	9358.4	9567.2	9689.6	9777.6
70°	4262.4	5108.0	5913.6	6568.8	7127.2	7408.0	7776.0	8036.0	8287.2	8293.6	8440.0
72.5°	2300.0	3007.2	3681.6	4351.2	4988.0	5361.6	5724.8	6040.8	6290.4	6184.0	6329.6
75°	1280.8	1612.0	1980.8	2383.2	2771.2	2984.8	3256.0	3257.6	3386.4	3184.0	3235.2
77.5°	1232.0	1216.8	1222.4	1233.6	1252.8	1212.0	1211.2	1186.4	1148.0	1078.4	1090.4
80°	1618.4	1424.8	1285.6	1067.2	859.2	700.8	656.8	667.2	698.4	760.8	840.0
82.5°	2340.0	2176.8	1943.2	1599.2	1255.2	968.0	795.2	705.6	701.6	764.0	884.0
85°	1704.0	1802.4	1787.2	1492.0	1230.4	999.2	727.2	614.4	508.8	484.0	526.4
87.5°	251.2	208.0	234.4	196.0	142.4	110.4	96.8	77.6	74.4	76.0	83.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P159210

CATALOG NUMBER: VTS-E04-LED-E1-T2

CANDELA DISTRIBUTION (continued):

	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	86°
0°	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8
2.5°	1172.8	1169.6	1166.4	1168.8	1166.4	1165.6	1163.2	1161.6	1160.8	1160.8	1160.8
5°	1208.8	1204.8	1202.4	1201.6	1199.2	1196.8	1196.0	1192.0	1191.2	1191.2	1188.8
7.5°	1257.6	1254.4	1250.4	1248.0	1246.4	1242.4	1238.4	1237.6	1236.8	1233.6	1231.2
10°	1314.4	1309.6	1304.8	1304.8	1301.6	1300.8	1296.8	1291.2	1290.4	1285.6	1284.0
12.5°	1368.0	1366.4	1360.8	1359.2	1356.8	1354.4	1352.0	1349.6	1347.2	1343.2	1344.8
15°	1432.0	1428.0	1423.2	1424.0	1423.2	1420.0	1416.8	1414.4	1412.8	1411.2	1411.2
17.5°	1508.8	1507.2	1506.4	1502.4	1499.2	1501.6	1501.6	1501.6	1497.6	1498.4	1499.2
20°	1606.4	1608.0	1606.4	1603.2	1602.4	1604.8	1599.2	1608.0	1603.2	1600.0	1601.6
22.5°	1714.4	1720.0	1713.6	1714.4	1718.4	1720.0	1714.4	1721.6	1719.2	1714.4	1718.4
25°	1832.0	1836.0	1832.8	1832.0	1834.4	1840.0	1839.2	1838.4	1844.0	1839.2	1841.6
27.5°	1952.8	1955.2	1956.8	1959.2	1960.8	1960.0	1963.2	1963.2	1966.4	1960.8	1963.2
30°	2072.8	2072.8	2076.0	2079.2	2079.2	2079.2	2085.6	2086.4	2081.6	2083.2	2077.6
32.5°	2200.8	2201.6	2204.8	2204.8	2211.2	2212.0	2219.2	2209.6	2219.2	2211.2	2212.8
35°	2351.2	2361.6	2363.2	2371.2	2377.6	2380.0	2380.0	2380.8	2389.6	2383.2	2385.6
37.5°	2439.2	2441.6	2448.0	2452.0	2452.0	2455.2	2457.6	2455.2	2457.6	2456.8	2459.2
40°	2543.2	2540.8	2548.0	2549.6	2546.4	2550.4	2549.6	2547.2	2553.6	2548.8	2552.0
42.5°	2669.6	2656.0	2655.2	2661.6	2655.2	2658.4	2657.6	2652.0	2660.0	2662.4	2660.0
45°	2804.8	2797.6	2783.2	2783.2	2776.8	2774.4	2775.2	2774.4	2775.2	2784.8	2788.0
47.5°	3024.8	2980.8	2956.0	2932.8	2913.6	2912.8	2904.0	2908.8	2915.2	2931.2	2945.6
50°	3393.6	3292.0	3229.6	3172.0	3130.4	3116.0	3099.2	3097.6	3103.2	3121.6	3146.4
52.5°	4051.2	3910.4	3777.6	3654.4	3547.2	3464.8	3424.0	3402.4	3394.4	3412.8	3436.8
55°	5254.4	4988.8	4801.6	4676.8	4410.4	4297.6	4152.8	4086.4	4021.6	4028.0	4068.8
57.5°	7310.4	7167.2	7010.4	6792.0	6628.8	6432.0	6070.4	5868.8	5877.6	5924.8	5777.6
60°	10004.8	9860.0	9795.2	9596.8	9483.2	9404.0	9212.0	8877.6	8759.2	8736.8	8466.4
62.5°	11028.0	11062.4	11113.6	11169.6	11166.4	11200.8	11032.8	10924.0	10787.2	10609.6	10342.4
65°	10760.8	10848.0	10952.0	11102.4	11273.6	11400.0	11506.4	11493.6	11365.6	11128.8	10846.4
67.5°	9856.0	9942.4	10018.4	10220.0	10500.8	10757.6	10984.8	11139.2	11053.6	10857.6	10528.0
70°	8496.0	8558.4	8606.4	8781.6	9089.6	9403.2	9700.0	9959.2	9932.8	9695.2	9432.0
72.5°	6156.0	6307.2	6388.8	6376.8	6567.2	6918.4	6960.0	7181.6	7243.2	6987.2	6568.0
75°	2999.2	3001.6	2907.2	2876.0	2885.6	2946.4	2830.4	2837.6	2797.6	2616.0	2466.4
77.5°	1048.0	1019.2	950.4	868.8	752.0	642.4	531.2	483.2	467.2	420.0	387.2
80°	903.2	945.6	932.0	864.8	741.6	591.2	441.6	327.2	279.2	262.4	246.4
82.5°	1025.6	1188.8	1292.8	1287.2	1118.4	840.0	524.0	300.8	214.4	188.0	172.8
85°	572.0	615.2	627.2	571.2	474.4	324.0	180.8	127.2	108.0	98.4	88.8
87.5°	91.2	83.2	81.6	71.2	67.2	61.6	54.4	51.2	47.2	44.8	44.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P159210

CATALOG NUMBER: VTS-E04-LED-E1-T2

CANDELA DISTRIBUTION (continued):

	87°	88°	89°	90°	91°	92°	93°	94°	95°	96°	97°
0°	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8
2.5°	1160.0	1159.2	1156.8	1154.4	1152.8	1152.0	1151.2	1149.6	1148.8	1148.0	1146.4
5°	1187.2	1185.6	1181.6	1177.6	1176.0	1173.6	1171.2	1169.6	1168.0	1167.2	1164.0
7.5°	1229.6	1228.0	1223.2	1220.0	1219.2	1212.8	1212.0	1209.6	1205.6	1204.8	1200.0
10°	1280.8	1280.0	1276.0	1273.6	1272.0	1268.8	1264.0	1260.0	1256.0	1256.0	1252.8
12.5°	1340.0	1336.8	1339.2	1333.6	1332.0	1328.8	1326.4	1325.6	1320.8	1316.8	1316.0
15°	1409.6	1405.6	1405.6	1404.0	1402.4	1399.2	1398.4	1399.2	1394.4	1396.0	1391.2
17.5°	1496.0	1497.6	1496.8	1496.8	1492.8	1492.8	1486.4	1494.4	1488.8	1492.8	1491.2
20°	1604.0	1604.8	1603.2	1605.6	1607.2	1606.4	1605.6	1604.8	1607.2	1610.4	1608.0
22.5°	1719.2	1719.2	1718.4	1727.2	1717.6	1724.8	1727.2	1722.4	1735.2	1733.6	1736.0
25°	1844.0	1844.0	1850.4	1857.6	1859.2	1853.6	1856.8	1852.8	1860.8	1867.2	1868.8
27.5°	1960.0	1970.4	1975.2	1970.4	1974.4	1983.2	1982.4	1982.4	1988.0	1986.4	2001.6
30°	2079.2	2085.6	2092.0	2088.8	2090.4	2101.6	2102.4	2103.2	2110.4	2120.8	2132.0
32.5°	2215.2	2221.6	2218.4	2228.8	2228.0	2241.6	2244.0	2246.4	2268.8	2264.8	2288.0
35°	2382.4	2388.8	2385.6	2396.8	2395.2	2400.0	2408.8	2418.4	2422.4	2445.6	2464.0
37.5°	2460.8	2460.8	2468.0	2480.8	2485.6	2493.6	2507.2	2519.2	2539.2	2564.0	2592.8
40°	2555.2	2557.6	2567.2	2580.8	2589.6	2608.0	2632.8	2649.6	2680.0	2707.2	2740.8
42.5°	2669.6	2680.0	2691.2	2709.6	2728.8	2757.6	2792.8	2814.4	2854.4	2889.6	2931.2
45°	2803.2	2813.6	2840.0	2873.6	2901.6	2933.6	2962.4	3013.6	3049.6	3086.4	3122.4
47.5°	2964.8	2995.2	3016.8	3056.8	3091.2	3133.6	3169.6	3217.6	3256.8	3301.6	3332.0
50°	3172.0	3209.6	3237.6	3289.6	3323.2	3370.4	3416.0	3452.0	3492.0	3536.0	3560.8
52.5°	3469.6	3508.0	3543.2	3608.0	3649.6	3681.6	3742.4	3787.2	3824.0	3856.0	3883.2
55°	4114.4	4103.2	4200.8	4326.4	4340.8	4456.8	4478.4	4516.0	4584.0	4593.6	4669.6
57.5°	5956.8	5899.2	6040.8	6224.8	6192.8	6134.4	6378.4	6393.6	6359.2	6451.2	6347.2
60°	8506.4	8405.6	8444.0	8494.4	8421.6	8387.2	8399.2	8433.6	8400.0	8363.2	8262.4
62.5°	10208.8	10053.6	9942.4	9848.8	9730.4	9644.8	9548.8	9430.4	9398.4	9264.0	9151.2
65°	10572.0	10330.4	10154.4	9977.6	9814.4	9663.2	9518.4	9416.8	9282.4	9123.2	9005.6
67.5°	10172.8	9873.6	9616.0	9359.2	9174.4	8952.0	8843.2	8677.6	8512.0	8329.6	8221.6
70°	9012.8	8700.8	8376.8	8125.6	7874.4	7599.2	7545.6	7349.6	7254.4	7005.6	6962.4
72.5°	6220.8	6012.8	5868.0	5557.6	5404.8	5264.0	5219.2	5037.6	5056.8	4784.0	4883.2
75°	2212.0	2182.4	2140.0	1964.8	1933.6	1879.2	1864.8	1852.0	1981.6	1801.6	1932.0
77.5°	380.0	377.6	356.0	345.6	365.6	352.8	356.0	349.6	387.2	392.8	384.0
80°	236.0	229.6	222.4	217.6	218.4	213.6	214.4	216.0	218.4	217.6	220.0
82.5°	161.6	156.0	152.8	149.6	154.4	156.0	160.0	164.0	170.4	174.4	179.2
85°	88.0	80.8	80.8	80.0	86.4	91.2	97.6	105.6	116.8	126.4	136.8
87.5°	44.8	43.2	44.0	45.6	51.2	55.2	63.2	70.4	80.0	90.4	100.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P159210

CATALOG NUMBER: VTS-E04-LED-E1-T2

CANDELA DISTRIBUTION (continued):

	98°	99°	100°	101°	102°	103°	104°	105°	115°	125°	135°
0°	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8
2.5°	1145.6	1145.6	1144.8	1144.8	1144.0	1143.2	1142.4	1140.0	1131.2	1123.2	1117.6
5°	1163.2	1160.8	1160.0	1157.6	1156.8	1155.2	1152.8	1150.4	1134.4	1120.0	1109.6
7.5°	1199.2	1196.0	1194.4	1192.0	1189.6	1186.4	1183.2	1180.8	1161.6	1144.8	1132.0
10°	1246.4	1244.8	1244.0	1240.8	1240.8	1236.0	1235.2	1229.6	1208.8	1193.6	1182.4
12.5°	1312.0	1308.8	1308.0	1304.0	1305.6	1304.0	1302.4	1299.2	1284.0	1266.4	1251.2
15°	1393.6	1393.6	1389.6	1386.4	1387.2	1385.6	1388.8	1384.8	1375.2	1359.2	1334.4
17.5°	1492.0	1490.4	1492.0	1489.6	1491.2	1492.8	1488.8	1489.6	1484.8	1464.8	1428.0
20°	1606.4	1604.0	1613.6	1609.6	1618.4	1610.4	1612.0	1614.4	1614.4	1588.0	1538.4
22.5°	1737.6	1736.0	1736.0	1744.0	1747.2	1748.0	1751.2	1753.6	1760.0	1726.4	1647.2
25°	1868.8	1874.4	1875.2	1885.6	1890.4	1890.4	1892.8	1901.6	1920.8	1874.4	1772.0
27.5°	2002.4	2016.0	2019.2	2026.4	2033.6	2040.8	2046.4	2052.8	2084.0	2033.6	1900.0
30°	2136.0	2151.2	2162.4	2170.4	2179.2	2196.8	2200.0	2212.8	2264.8	2203.2	2021.6
32.5°	2292.8	2314.4	2328.8	2339.2	2352.8	2369.6	2379.2	2395.2	2445.6	2344.8	2110.4
35°	2480.0	2492.8	2513.6	2531.2	2539.2	2568.0	2583.2	2587.2	2625.6	2467.2	2176.0
37.5°	2609.6	2631.2	2667.2	2692.0	2706.4	2722.4	2748.0	2764.8	2801.6	2578.4	2208.8
40°	2774.4	2807.2	2836.0	2872.8	2896.0	2908.0	2933.6	2947.2	2952.0	2673.6	2198.4
42.5°	2975.2	3004.8	3043.2	3072.8	3090.4	3104.0	3124.8	3130.4	3068.0	2718.4	2142.4
45°	3164.0	3209.6	3242.4	3264.0	3276.8	3284.0	3296.8	3297.6	3164.0	2696.0	2046.4
47.5°	3367.2	3400.0	3430.4	3445.6	3444.0	3445.6	3440.8	3437.6	3212.0	2618.4	1923.2
50°	3592.0	3613.6	3626.4	3633.6	3637.6	3622.4	3600.8	3586.4	3216.0	2508.0	1798.4
52.5°	3893.6	3920.8	3918.4	3917.6	3885.6	3871.2	3813.6	3784.0	3192.8	2378.4	1657.6
55°	4657.6	4631.2	4579.2	4604.8	4474.4	4406.4	4316.8	4233.6	3223.2	2255.2	1494.4
57.5°	6388.8	6399.2	6251.2	6172.0	5952.0	5676.8	5455.2	5240.0	3496.8	2180.0	1281.6
60°	8195.2	8059.2	7871.2	7584.8	7301.6	6892.8	6498.4	6125.6	3769.6	2101.6	1029.6
62.5°	8984.0	8790.4	8506.4	8136.0	7691.2	7191.2	6700.0	6245.6	3637.6	1848.0	748.8
65°	8824.0	8528.0	8214.4	7780.8	7240.0	6692.0	6118.4	5654.4	3043.2	1378.4	461.6
67.5°	7987.2	7736.0	7404.8	6890.4	6312.0	5741.6	5216.0	4696.0	2260.8	859.2	258.4
70°	6741.6	6496.0	6160.0	5633.6	5056.0	4510.4	3953.6	3529.6	1440.8	414.4	186.4
72.5°	4676.8	4477.6	4240.0	3864.8	3358.4	2862.4	2485.6	2160.0	798.4	220.0	170.4
75°	1899.2	1900.0	1856.8	1698.4	1435.2	1237.6	1055.2	895.2	333.6	187.2	168.0
77.5°	430.4	437.6	478.4	453.6	408.8	382.4	342.4	302.4	203.2	192.8	169.6
80°	217.6	218.4	216.0	216.8	214.4	215.2	212.0	209.6	190.4	198.4	169.6
82.5°	181.6	185.6	184.8	184.8	185.6	185.6	185.6	184.8	197.6	208.8	164.0
85°	144.0	152.0	158.4	164.8	172.0	176.8	179.2	181.6	192.0	205.6	148.8
87.5°	108.8	118.4	126.4	132.8	144.0	144.0	152.0	157.6	157.6	160.8	78.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P159210

CATALOG NUMBER: VTS-E04-LED-E1-T2

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	1148.8	1148.8	1148.8	1148.8	1148.8
2.5°	1109.6	1106.4	1103.2	1101.6	1098.4
5°	1101.6	1095.2	1091.2	1091.2	1088.0
7.5°	1124.8	1122.4	1116.8	1113.6	1116.8
10°	1174.4	1170.4	1164.0	1159.2	1161.6
12.5°	1240.8	1224.8	1212.0	1206.4	1202.4
15°	1309.6	1277.6	1252.0	1237.6	1233.6
17.5°	1383.2	1327.2	1288.8	1267.2	1263.2
20°	1458.4	1388.8	1334.4	1306.4	1305.6
22.5°	1548.8	1456.0	1386.4	1349.6	1347.2
25°	1644.0	1516.0	1424.0	1376.8	1372.0
27.5°	1726.4	1564.0	1447.2	1391.2	1386.4
30°	1795.2	1600.0	1466.4	1401.6	1395.2
32.5°	1844.8	1620.8	1474.4	1404.8	1397.6
35°	1860.8	1612.8	1452.0	1376.0	1368.0
37.5°	1839.2	1560.8	1389.6	1305.6	1296.0
40°	1774.4	1469.6	1288.0	1201.6	1189.6
42.5°	1675.2	1357.6	1165.6	1083.2	1068.0
45°	1552.8	1231.2	1044.0	952.0	944.8
47.5°	1424.8	1098.4	907.2	824.0	815.2
50°	1286.4	944.8	773.6	683.2	683.2
52.5°	1121.6	795.2	618.4	550.4	544.8
55°	932.0	626.4	492.8	440.8	433.6
57.5°	728.0	481.6	393.6	363.2	355.2
60°	535.2	361.6	316.8	300.0	296.8
62.5°	363.2	275.2	255.2	248.0	247.2
65°	245.6	214.4	208.8	206.4	207.2
67.5°	188.8	178.4	176.0	175.2	175.2
70°	164.0	157.6	155.2	156.0	155.2
72.5°	154.4	145.6	146.4	148.0	147.2
75°	151.2	140.0	143.2	144.0	140.8
77.5°	148.8	133.6	141.6	144.0	135.2
80°	144.0	128.0	147.2	148.0	132.8
82.5°	132.0	113.6	147.2	136.0	120.0
85°	112.0	86.4	166.4	118.4	88.8
87.5°	71.2	51.2	112.8	80.8	53.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)