

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: P145328

Luminaire Tested: **VPL-E04-LED-E1-GL3-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P145328
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33702)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: VPL-E04-LED-E1-GL3-8030
Description: VALET LED LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ GLARE CONTROL
Light Source: (84) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10022.2 lumens
Efficiency: N/A
Efficacy: 103.1 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G2

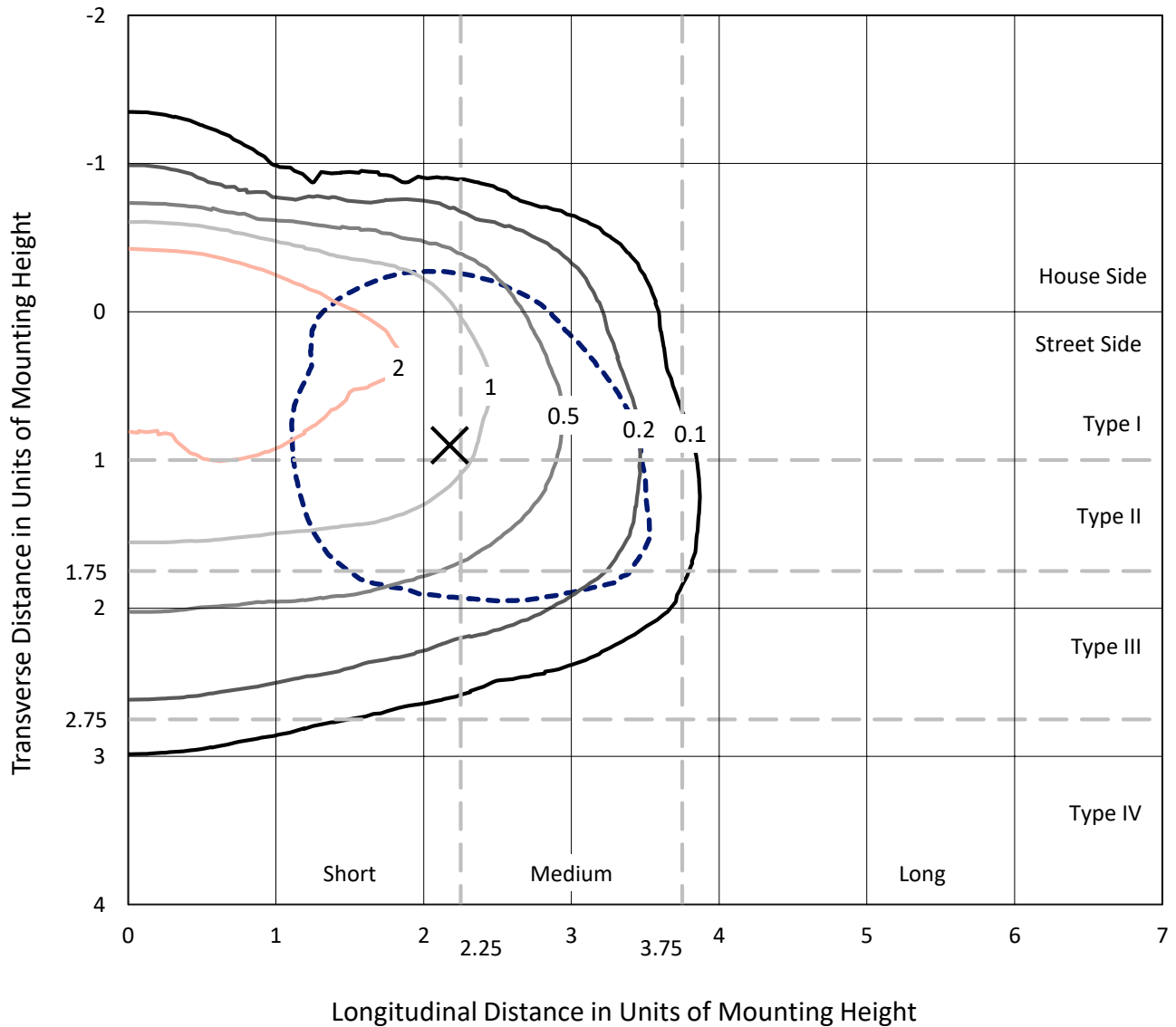
Input Watts (W): 97.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

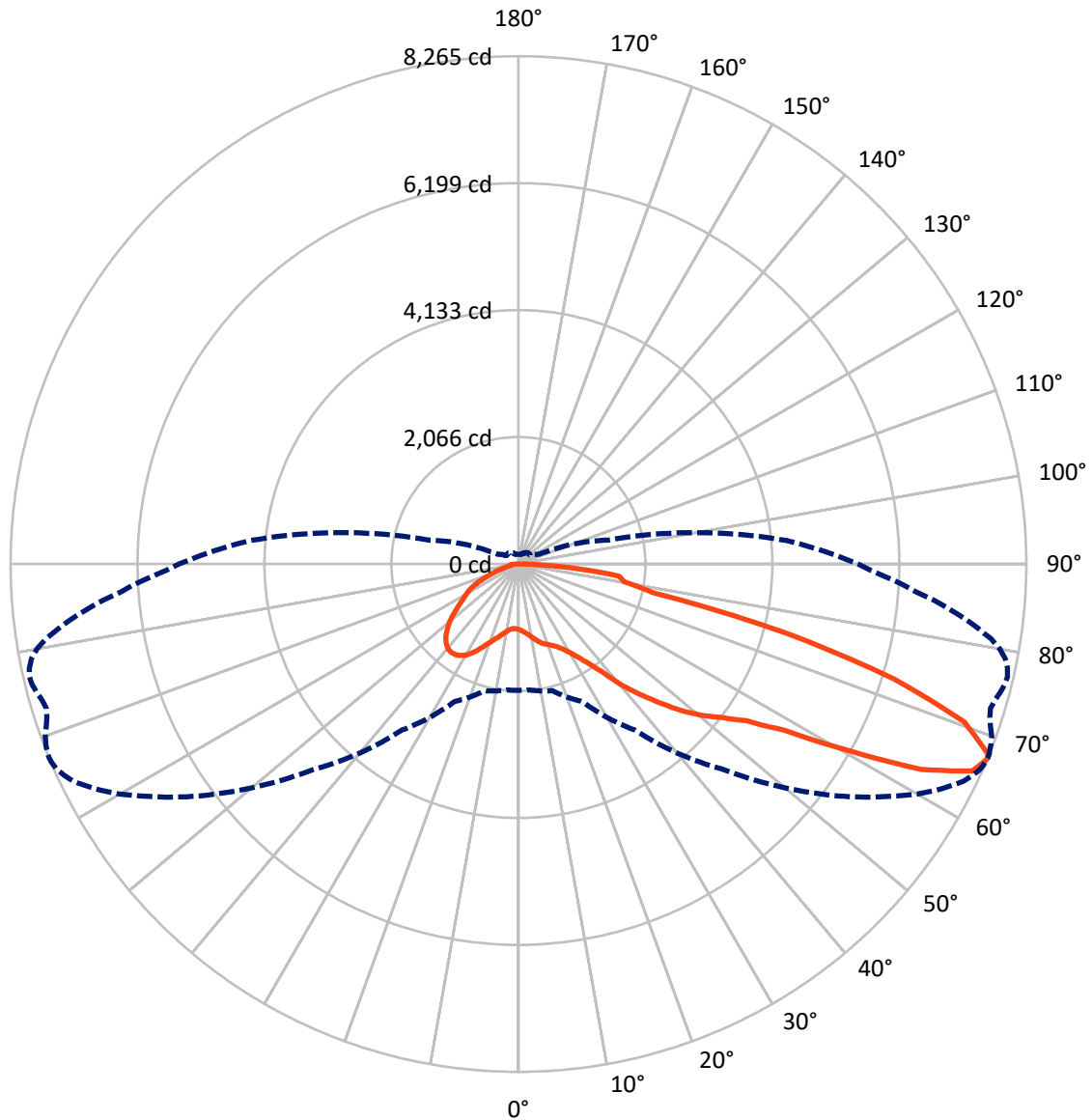
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.4 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67.5-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2373.2 | 0.0 | 2373.2 |
| | % Fixture | 23.7 | 0.0 | 23.7 |
| Street Side | Lumens | 7649.0 | 0.0 | 7649.0 |
| | % Fixture | 76.3 | 0.0 | 76.3 |
| Total | Lumens | 10022.2 | 0.0 | 10022.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 106.4 | 1.1 |
| 10°-20° | 364.4 | 3.6 |
| 20°-30° | 648.7 | 6.5 |
| 30°-40° | 944.9 | 9.4 |
| 40°-50° | 1455.9 | 14.5 |
| 50°-60° | 2132.1 | 21.3 |
| 60°-70° | 2831.3 | 28.2 |
| 70°-80° | 1334.6 | 13.3 |
| 80°-90° | 204.0 | 2.0 |
| 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° | 10022.2 | 100.0 |
| 0°-180° | 10022.2 | 100.0 |



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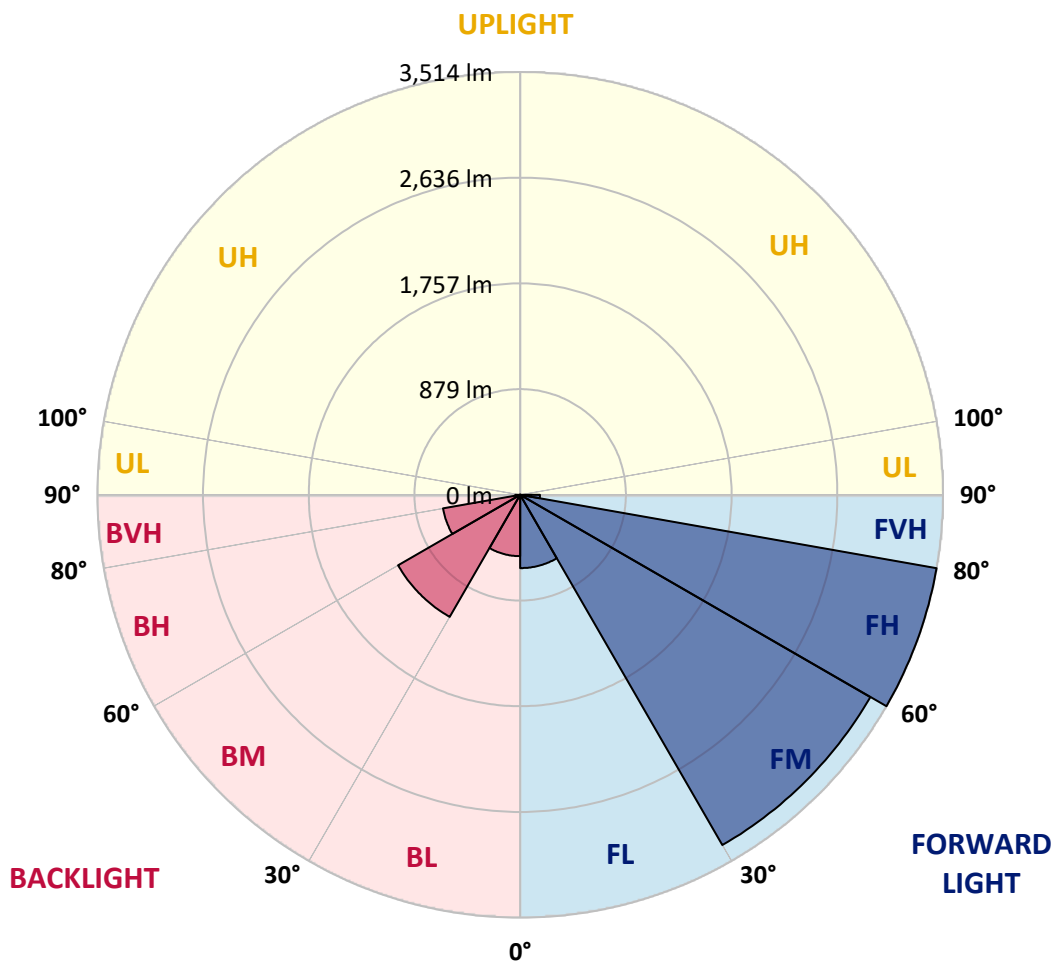
CATALOG NUMBER: VPL-E04-LED-E1-GL3-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 609.3 | 6.1 | | | |
| FM (30°-60°) | 3361.0 | 33.5 | | | |
| FH (60°-80°) | 3514.3 | 35.1 | | | G2/5000 |
| FVH (80°-90°) | 164.4 | 1.6 | | | G2/225 |
| BL (0°-30°) | 510.2 | 5.1 | B2/1000 | | |
| BM (30°-60°) | 1171.9 | 11.7 | B2/2500 | | |
| BH (60°-80°) | 651.5 | 6.5 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 39.6 | 0.4 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G2

Type III Short





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CATALOG NUMBER: VPL-E04-LED-E1-GL3-8030

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 60° | 61° | 62° | 64° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 |
| 2.5° | 1119.5 | 1114.7 | 1115.4 | 1117.4 | 1110.7 | 1107.3 | 1099.9 | 1095.2 | 1094.5 | 1093.8 | 1091.1 |
| 5° | 1185.0 | 1180.2 | 1182.3 | 1176.9 | 1164.0 | 1155.3 | 1139.7 | 1131.6 | 1130.3 | 1128.9 | 1125.5 |
| 7.5° | 1253.2 | 1247.1 | 1240.3 | 1234.3 | 1220.1 | 1205.9 | 1185.6 | 1173.5 | 1172.1 | 1170.1 | 1168.1 |
| 10° | 1334.2 | 1325.4 | 1320.0 | 1301.1 | 1276.8 | 1257.2 | 1237.0 | 1224.1 | 1223.4 | 1221.4 | 1217.4 |
| 12.5° | 1425.3 | 1415.9 | 1405.8 | 1380.8 | 1343.0 | 1313.9 | 1290.3 | 1282.9 | 1276.8 | 1277.5 | 1273.4 |
| 15° | 1515.8 | 1505.7 | 1492.2 | 1460.4 | 1410.5 | 1367.3 | 1336.9 | 1326.1 | 1326.8 | 1323.4 | 1325.4 |
| 17.5° | 1592.1 | 1583.3 | 1563.7 | 1523.2 | 1465.2 | 1405.8 | 1367.3 | 1362.5 | 1363.9 | 1363.2 | 1365.2 |
| 20° | 1642.1 | 1636.7 | 1607.0 | 1558.3 | 1492.9 | 1427.4 | 1388.2 | 1388.2 | 1388.9 | 1391.6 | 1396.3 |
| 22.5° | 1672.5 | 1664.4 | 1625.2 | 1557.0 | 1492.2 | 1437.5 | 1407.1 | 1413.9 | 1417.9 | 1419.9 | 1427.4 |
| 25° | 1689.3 | 1679.2 | 1625.9 | 1535.4 | 1469.2 | 1444.9 | 1435.5 | 1452.3 | 1459.1 | 1462.5 | 1474.6 |
| 27.5° | 1689.3 | 1677.2 | 1617.1 | 1508.4 | 1442.9 | 1467.2 | 1489.5 | 1518.5 | 1523.2 | 1533.4 | 1547.5 |
| 30° | 1670.4 | 1661.0 | 1603.6 | 1488.1 | 1436.1 | 1509.1 | 1576.6 | 1609.7 | 1621.1 | 1632.6 | 1650.8 |
| 32.5° | 1650.2 | 1642.1 | 1596.8 | 1498.9 | 1473.9 | 1596.8 | 1709.6 | 1754.8 | 1761.6 | 1771.0 | 1789.9 |
| 35° | 1648.8 | 1646.1 | 1626.5 | 1567.8 | 1588.1 | 1757.5 | 1910.1 | 1941.2 | 1960.1 | 1964.8 | 1972.9 |
| 37.5° | 1663.0 | 1668.4 | 1685.3 | 1679.2 | 1752.1 | 1996.5 | 2172.8 | 2234.9 | 2249.7 | 2241.6 | 2249.1 |
| 40° | 1696.1 | 1709.6 | 1772.4 | 1850.0 | 2002.6 | 2285.5 | 2530.6 | 2602.2 | 2618.4 | 2613.7 | 2611.6 |
| 42.5° | 1800.7 | 1819.0 | 1911.5 | 2077.6 | 2263.2 | 2584.6 | 2862.8 | 2939.8 | 2945.2 | 2947.9 | 2930.3 |
| 45° | 1964.8 | 1974.9 | 2097.8 | 2309.8 | 2545.5 | 2906.7 | 3194.3 | 3280.1 | 3276.7 | 3263.2 | 3250.4 |
| 47.5° | 2151.2 | 2172.1 | 2319.3 | 2575.9 | 2837.2 | 3204.5 | 3529.9 | 3613.6 | 3621.1 | 3608.9 | 3585.3 |
| 50° | 2320.6 | 2336.8 | 2502.9 | 2807.5 | 3094.4 | 3452.3 | 3812.8 | 3897.2 | 3895.9 | 3902.6 | 3909.4 |
| 52.5° | 2454.3 | 2469.2 | 2627.2 | 2962.1 | 3283.5 | 3660.2 | 4026.2 | 4130.2 | 4146.4 | 4157.2 | 4170.7 |
| 55° | 2523.2 | 2538.7 | 2684.6 | 3026.2 | 3398.2 | 3863.5 | 4272.6 | 4421.8 | 4449.5 | 4473.8 | 4496.1 |
| 57.5° | 2524.5 | 2544.8 | 2678.5 | 3021.5 | 3457.7 | 4045.1 | 4598.7 | 4866.8 | 4906.0 | 4968.1 | 5044.4 |
| 60° | 2483.4 | 2511.7 | 2631.9 | 2977.6 | 3525.9 | 4275.3 | 5136.2 | 5649.3 | 5726.3 | 5835.0 | 5932.9 |
| 62.5° | 2376.0 | 2404.4 | 2511.7 | 2866.2 | 3605.5 | 4570.4 | 5912.7 | 6664.8 | 6828.9 | 6949.1 | 7142.9 |
| 65° | 2206.5 | 2233.5 | 2324.0 | 2681.9 | 3542.1 | 4803.3 | 6491.3 | 7393.4 | 7560.8 | 7711.4 | 7938.9 |
| 67° | 2055.3 | 2058.0 | 2134.3 | 2470.5 | 3294.9 | 4731.1 | 6607.4 | 7490.6 | 7645.2 | 7797.8 | 8061.8 |
| 67.5° | 2001.9 | 2016.8 | 2076.2 | 2400.3 | 3201.1 | 4677.7 | 6561.5 | 7437.9 | 7587.8 | 7750.5 | 8019.9 |
| 70° | 1618.4 | 1622.5 | 1679.9 | 1914.8 | 2540.1 | 3878.3 | 5893.8 | 6766.1 | 6868.7 | 7107.1 | 7371.8 |
| 72.5° | 987.1 | 980.4 | 998.6 | 1172.8 | 1671.8 | 2685.9 | 4718.9 | 5570.3 | 5710.8 | 5914.0 | 6092.9 |
| 75° | 543.5 | 575.9 | 598.2 | 719.1 | 939.2 | 1579.3 | 3213.2 | 4030.2 | 4236.2 | 4357.0 | 4392.8 |
| 77.5° | 332.2 | 329.5 | 339.6 | 463.9 | 770.4 | 1080.3 | 1775.1 | 2364.5 | 2479.3 | 2513.7 | 2380.7 |
| 80° | 158.0 | 164.1 | 162.0 | 191.1 | 373.4 | 911.5 | 1241.0 | 1518.5 | 1576.6 | 1609.7 | 1652.9 |
| 82.5° | 86.4 | 89.8 | 102.0 | 114.1 | 147.2 | 392.3 | 1070.9 | 1400.3 | 1439.5 | 1496.2 | 1559.7 |
| 85° | 54.0 | 56.7 | 78.3 | 82.4 | 90.5 | 120.9 | 446.3 | 818.3 | 851.4 | 964.2 | 1000.0 |
| 87.5° | 22.3 | 24.3 | 42.5 | 38.5 | 45.9 | 42.5 | 135.0 | 208.0 | 220.8 | 235.0 | 260.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CATALOG NUMBER: VPL-E04-LED-E1-GL3-8030

CANDELA DISTRIBUTION (continued):

| | 65° | 66° | 67° | 67.5° | 68° | 69° | 70° | 71° | 72° | 73° | 74° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 |
| 2.5° | 1091.8 | 1091.1 | 1088.4 | 1087.7 | 1089.1 | 1089.1 | 1087.7 | 1085.7 | 1085.0 | 1084.4 | 1083.0 |
| 5° | 1124.2 | 1122.8 | 1120.8 | 1119.5 | 1118.8 | 1118.8 | 1116.8 | 1114.7 | 1112.7 | 1110.0 | 1109.3 |
| 7.5° | 1162.7 | 1162.7 | 1162.0 | 1160.0 | 1158.0 | 1155.3 | 1153.2 | 1151.2 | 1149.2 | 1147.8 | 1145.8 |
| 10° | 1213.3 | 1216.0 | 1211.3 | 1209.9 | 1209.3 | 1205.2 | 1204.5 | 1202.5 | 1201.2 | 1197.8 | 1197.8 |
| 12.5° | 1273.4 | 1270.7 | 1270.0 | 1267.3 | 1267.3 | 1265.3 | 1264.6 | 1264.0 | 1262.6 | 1259.9 | 1259.2 |
| 15° | 1323.4 | 1323.4 | 1322.7 | 1321.4 | 1322.7 | 1321.4 | 1319.3 | 1320.7 | 1318.7 | 1319.3 | 1317.3 |
| 17.5° | 1363.9 | 1366.6 | 1365.9 | 1366.6 | 1365.9 | 1365.9 | 1367.3 | 1367.3 | 1368.6 | 1365.9 | 1366.6 |
| 20° | 1397.6 | 1401.7 | 1403.7 | 1402.4 | 1403.7 | 1404.4 | 1407.8 | 1409.1 | 1411.2 | 1412.5 | 1412.5 |
| 22.5° | 1432.8 | 1438.2 | 1442.2 | 1442.2 | 1444.9 | 1447.6 | 1453.7 | 1455.0 | 1459.8 | 1459.1 | 1462.5 |
| 25° | 1482.0 | 1490.8 | 1493.5 | 1497.6 | 1501.0 | 1505.7 | 1513.1 | 1516.5 | 1518.5 | 1523.2 | 1528.6 |
| 27.5° | 1557.7 | 1568.5 | 1570.5 | 1575.2 | 1584.0 | 1586.7 | 1594.8 | 1598.2 | 1605.6 | 1615.7 | 1617.8 |
| 30° | 1661.0 | 1674.5 | 1675.2 | 1680.6 | 1690.7 | 1694.1 | 1700.8 | 1709.6 | 1715.7 | 1725.8 | 1726.5 |
| 32.5° | 1801.4 | 1814.9 | 1812.9 | 1823.0 | 1822.3 | 1832.5 | 1830.4 | 1844.0 | 1849.4 | 1854.8 | 1869.6 |
| 35° | 1988.4 | 1987.1 | 1997.2 | 2000.6 | 1998.6 | 2006.7 | 2005.3 | 2011.4 | 2016.8 | 2016.8 | 2033.0 |
| 37.5° | 2257.8 | 2255.8 | 2254.5 | 2240.3 | 2236.9 | 2237.6 | 2234.9 | 2240.3 | 2231.5 | 2231.5 | 2249.1 |
| 40° | 2619.1 | 2606.9 | 2597.5 | 2588.0 | 2578.6 | 2565.7 | 2554.9 | 2552.2 | 2537.4 | 2536.7 | 2529.9 |
| 42.5° | 2933.0 | 2921.6 | 2914.8 | 2896.6 | 2887.1 | 2885.1 | 2858.8 | 2851.3 | 2847.3 | 2850.0 | 2843.2 |
| 45° | 3262.5 | 3250.4 | 3224.7 | 3216.6 | 3213.9 | 3199.7 | 3195.7 | 3177.5 | 3172.1 | 3181.5 | 3178.1 |
| 47.5° | 3602.2 | 3584.6 | 3570.4 | 3561.0 | 3557.6 | 3545.4 | 3527.9 | 3542.7 | 3535.3 | 3529.9 | 3519.8 |
| 50° | 3907.3 | 3887.8 | 3887.8 | 3870.9 | 3873.6 | 3865.5 | 3847.2 | 3851.3 | 3830.4 | 3838.5 | 3833.1 |
| 52.5° | 4163.2 | 4164.6 | 4171.3 | 4152.4 | 4155.8 | 4155.8 | 4149.7 | 4130.2 | 4135.6 | 4132.9 | 4145.7 |
| 55° | 4488.7 | 4511.0 | 4498.8 | 4502.2 | 4506.2 | 4525.1 | 4538.6 | 4527.2 | 4508.3 | 4523.1 | 4564.3 |
| 57.5° | 5057.9 | 5078.1 | 5090.3 | 5099.7 | 5115.3 | 5124.0 | 5197.0 | 5207.1 | 5185.5 | 5230.0 | 5321.9 |
| 60° | 6047.7 | 6072.0 | 6108.5 | 6156.4 | 6166.5 | 6228.0 | 6265.8 | 6310.4 | 6326.6 | 6365.0 | 6463.6 |
| 62.5° | 7238.1 | 7292.8 | 7299.5 | 7360.3 | 7407.5 | 7350.1 | 7365.0 | 7419.7 | 7357.6 | 7442.6 | 7446.7 |
| 65° | 8017.2 | 8096.9 | 8099.6 | 8121.9 | 8139.4 | 8085.4 | 8061.1 | 8036.8 | 7978.1 | 7974.7 | 8033.4 |
| 67° | 8150.9 | 8223.8 | 8254.2 | 8265.0 | 8262.3 | 8234.7 | 8194.8 | 8124.6 | 8067.9 | 8035.5 | 8059.8 |
| 67.5° | 8113.1 | 8184.7 | 8227.2 | 8237.4 | 8238.0 | 8211.0 | 8174.6 | 8098.3 | 8044.9 | 8008.5 | 8034.1 |
| 70° | 7491.9 | 7659.4 | 7732.3 | 7694.5 | 7716.1 | 7716.1 | 7714.8 | 7644.5 | 7618.2 | 7583.1 | 7569.6 |
| 72.5° | 6229.3 | 6345.5 | 6438.0 | 6388.7 | 6394.8 | 6440.7 | 6429.9 | 6437.3 | 6361.7 | 6353.6 | 6228.7 |
| 75° | 4462.3 | 4499.5 | 4468.4 | 4503.5 | 4314.5 | 4247.0 | 4132.2 | 3964.7 | 3920.8 | 3851.3 | 3643.3 |
| 77.5° | 2370.6 | 2328.7 | 2245.7 | 2238.9 | 2161.3 | 2101.2 | 2026.9 | 1978.3 | 1855.4 | 1787.2 | 1631.3 |
| 80° | 1674.5 | 1694.7 | 1726.5 | 1745.4 | 1762.9 | 1776.4 | 1748.7 | 1671.1 | 1568.5 | 1453.7 | 1345.0 |
| 82.5° | 1599.5 | 1627.2 | 1646.1 | 1655.6 | 1648.8 | 1627.2 | 1563.7 | 1489.5 | 1352.4 | 1253.2 | 1135.7 |
| 85° | 1008.7 | 1031.0 | 992.5 | 984.4 | 1001.3 | 864.9 | 790.0 | 729.2 | 590.8 | 549.6 | 485.5 |
| 87.5° | 270.8 | 285.6 | 286.3 | 277.5 | 272.1 | 239.7 | 212.0 | 187.7 | 155.3 | 145.8 | 118.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CANDELA DISTRIBUTION (continued):

| | 75° | 76° | 77° | 78° | 79° | 80° | 81° | 82° | 83° | 84° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 |
| 2.5° | 1083.0 | 1082.3 | 1082.3 | 1080.3 | 1079.0 | 1078.3 | 1077.6 | 1075.6 | 1074.2 | 1074.2 | 1073.6 |
| 5° | 1108.7 | 1107.3 | 1105.3 | 1104.6 | 1101.9 | 1100.6 | 1097.9 | 1096.5 | 1094.5 | 1093.1 | 1092.5 |
| 7.5° | 1145.1 | 1141.8 | 1137.7 | 1138.4 | 1134.3 | 1132.3 | 1130.9 | 1128.2 | 1126.2 | 1124.2 | 1123.5 |
| 10° | 1193.7 | 1193.1 | 1189.0 | 1190.4 | 1182.9 | 1186.3 | 1179.6 | 1180.2 | 1176.2 | 1172.1 | 1171.5 |
| 12.5° | 1255.9 | 1255.2 | 1251.1 | 1246.4 | 1245.1 | 1245.7 | 1241.7 | 1242.4 | 1237.6 | 1236.3 | 1234.9 |
| 15° | 1315.3 | 1313.9 | 1311.9 | 1308.5 | 1306.5 | 1305.8 | 1304.5 | 1303.1 | 1299.1 | 1299.1 | 1294.3 |
| 17.5° | 1366.6 | 1367.3 | 1364.6 | 1361.9 | 1360.5 | 1358.5 | 1357.8 | 1357.8 | 1354.4 | 1351.1 | 1351.7 |
| 20° | 1411.8 | 1413.2 | 1413.2 | 1411.2 | 1411.8 | 1410.5 | 1409.8 | 1411.2 | 1407.8 | 1406.4 | 1404.4 |
| 22.5° | 1462.5 | 1462.5 | 1463.1 | 1464.5 | 1466.5 | 1467.2 | 1467.2 | 1465.8 | 1463.8 | 1463.1 | 1459.1 |
| 25° | 1532.7 | 1530.0 | 1533.4 | 1534.7 | 1534.7 | 1538.1 | 1536.7 | 1537.4 | 1538.1 | 1536.1 | 1534.0 |
| 27.5° | 1621.1 | 1618.4 | 1625.2 | 1629.9 | 1629.2 | 1631.3 | 1635.3 | 1630.6 | 1633.3 | 1635.3 | 1630.6 |
| 30° | 1729.8 | 1736.6 | 1741.3 | 1744.7 | 1743.3 | 1749.4 | 1751.4 | 1750.8 | 1748.7 | 1752.1 | 1752.1 |
| 32.5° | 1868.3 | 1864.9 | 1877.0 | 1884.5 | 1885.1 | 1883.8 | 1887.2 | 1891.2 | 1887.8 | 1893.2 | 1890.5 |
| 35° | 2033.0 | 2035.0 | 2037.7 | 2045.8 | 2049.2 | 2043.8 | 2049.2 | 2053.9 | 2052.6 | 2053.3 | 2056.0 |
| 37.5° | 2245.7 | 2249.1 | 2246.4 | 2247.0 | 2245.7 | 2271.3 | 2275.4 | 2279.5 | 2274.7 | 2270.7 | 2282.8 |
| 40° | 2540.8 | 2540.8 | 2540.1 | 2548.9 | 2534.0 | 2550.2 | 2545.5 | 2557.0 | 2569.1 | 2562.4 | 2580.6 |
| 42.5° | 2831.1 | 2847.3 | 2848.6 | 2835.8 | 2846.6 | 2864.2 | 2864.2 | 2871.6 | 2882.4 | 2871.6 | 2889.1 |
| 45° | 3164.0 | 3184.2 | 3180.8 | 3202.4 | 3186.2 | 3206.5 | 3209.9 | 3200.4 | 3224.0 | 3226.7 | 3220.0 |
| 47.5° | 3527.2 | 3531.3 | 3531.9 | 3539.4 | 3542.7 | 3558.9 | 3558.3 | 3575.8 | 3570.4 | 3543.4 | 3552.9 |
| 50° | 3838.5 | 3848.6 | 3854.0 | 3858.7 | 3875.6 | 3887.1 | 3902.6 | 3905.3 | 3901.3 | 3893.2 | 3885.7 |
| 52.5° | 4149.7 | 4174.0 | 4189.6 | 4231.4 | 4257.8 | 4278.7 | 4304.4 | 4313.8 | 4309.1 | 4307.1 | 4277.3 |
| 55° | 4566.3 | 4624.4 | 4714.2 | 4772.3 | 4835.7 | 4872.9 | 4902.6 | 4917.4 | 4906.6 | 4912.0 | 4850.6 |
| 57.5° | 5350.9 | 5487.3 | 5565.6 | 5664.9 | 5776.9 | 5823.5 | 5836.4 | 5889.0 | 5831.0 | 5772.9 | 5726.3 |
| 60° | 6517.0 | 6642.5 | 6785.0 | 6887.0 | 6924.8 | 7053.7 | 6993.0 | 6924.8 | 6862.7 | 6742.5 | 6606.8 |
| 62.5° | 7569.6 | 7731.6 | 7804.6 | 7899.8 | 7874.1 | 7863.3 | 7822.8 | 7714.1 | 7581.1 | 7402.1 | 7221.2 |
| 65° | 8088.8 | 8180.0 | 8225.2 | 8256.3 | 8227.2 | 8152.3 | 8018.6 | 7857.9 | 7667.5 | 7435.9 | 7198.2 |
| 67° | 8109.7 | 8151.6 | 8166.5 | 8136.7 | 8071.9 | 7955.1 | 7786.3 | 7558.8 | 7324.5 | 7059.1 | 6791.8 |
| 67.5° | 8075.3 | 8103.0 | 8110.4 | 8063.8 | 7986.9 | 7860.6 | 7680.3 | 7437.2 | 7188.1 | 6912.6 | 6643.9 |
| 70° | 7605.4 | 7585.1 | 7519.6 | 7455.5 | 7215.1 | 7045.6 | 6731.7 | 6472.4 | 6126.7 | 5873.5 | 5586.5 |
| 72.5° | 6178.7 | 6086.2 | 6022.7 | 5739.1 | 5448.8 | 5280.7 | 4943.1 | 4633.2 | 4317.9 | 4076.8 | 3900.6 |
| 75° | 3468.5 | 3400.9 | 3224.7 | 3074.8 | 2835.1 | 2615.7 | 2458.4 | 2261.2 | 2072.2 | 1960.1 | 1877.7 |
| 77.5° | 1567.1 | 1374.0 | 1241.0 | 1072.9 | 866.9 | 696.8 | 517.2 | 478.0 | 407.8 | 390.3 | 351.8 |
| 80° | 1222.8 | 1084.4 | 910.2 | 717.7 | 506.4 | 340.3 | 249.8 | 212.0 | 199.2 | 191.1 | 187.0 |
| 82.5° | 1020.2 | 840.6 | 707.6 | 502.3 | 321.4 | 216.1 | 162.7 | 147.2 | 137.7 | 131.0 | 124.9 |
| 85° | 436.2 | 345.0 | 284.3 | 203.2 | 144.5 | 114.1 | 99.9 | 91.2 | 82.4 | 74.9 | 70.2 |
| 87.5° | 102.0 | 78.3 | 71.6 | 60.8 | 57.4 | 56.7 | 56.0 | 53.3 | 50.0 | 45.9 | 41.2 |
| 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: P145328

CATALOG NUMBER: VPL-E04-LED-E1-GL3-8030

CANDELA DISTRIBUTION (continued):

| | 86° | 87° | 88° | 89° | 90° | 95° | 105° | 115° | 125° | 135° | 145° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 | 1066.1 |
| 2.5° | 1072.9 | 1072.2 | 1070.9 | 1068.8 | 1068.8 | 1066.1 | 1057.4 | 1051.3 | 1044.5 | 1040.5 | 1036.4 |
| 5° | 1091.1 | 1090.4 | 1087.1 | 1085.0 | 1083.7 | 1078.3 | 1063.4 | 1052.0 | 1039.8 | 1031.0 | 1024.3 |
| 7.5° | 1121.5 | 1119.5 | 1116.8 | 1115.4 | 1111.4 | 1104.6 | 1083.0 | 1066.8 | 1049.2 | 1035.1 | 1023.6 |
| 10° | 1170.8 | 1167.4 | 1163.4 | 1159.3 | 1160.7 | 1149.9 | 1124.9 | 1101.2 | 1075.6 | 1053.3 | 1037.8 |
| 12.5° | 1230.9 | 1230.9 | 1228.9 | 1226.2 | 1221.4 | 1209.3 | 1175.5 | 1147.8 | 1116.8 | 1089.1 | 1077.6 |
| 15° | 1294.3 | 1291.0 | 1287.6 | 1283.5 | 1282.9 | 1266.7 | 1236.3 | 1204.5 | 1172.1 | 1148.5 | 1135.0 |
| 17.5° | 1346.3 | 1347.7 | 1343.0 | 1341.6 | 1340.3 | 1324.1 | 1291.6 | 1263.3 | 1239.7 | 1214.7 | 1193.1 |
| 20° | 1401.7 | 1399.0 | 1397.6 | 1395.6 | 1394.9 | 1381.4 | 1355.8 | 1338.2 | 1317.3 | 1279.5 | 1222.8 |
| 22.5° | 1461.1 | 1457.7 | 1459.1 | 1455.0 | 1454.4 | 1444.9 | 1426.0 | 1420.6 | 1389.5 | 1309.9 | 1211.3 |
| 25° | 1538.1 | 1532.0 | 1534.0 | 1534.0 | 1534.7 | 1525.9 | 1523.9 | 1514.5 | 1436.1 | 1302.4 | 1165.4 |
| 27.5° | 1629.9 | 1632.6 | 1632.6 | 1631.9 | 1627.2 | 1629.9 | 1639.4 | 1607.0 | 1452.3 | 1263.3 | 1096.5 |
| 30° | 1749.4 | 1750.8 | 1752.1 | 1756.9 | 1746.7 | 1764.3 | 1775.8 | 1672.5 | 1440.2 | 1209.3 | 1010.1 |
| 32.5° | 1894.6 | 1889.2 | 1891.9 | 1894.6 | 1898.0 | 1916.2 | 1909.4 | 1705.5 | 1404.4 | 1135.7 | 902.7 |
| 35° | 2054.6 | 2064.7 | 2067.4 | 2073.5 | 2080.3 | 2108.0 | 2030.3 | 1712.3 | 1349.7 | 1037.1 | 765.7 |
| 37.5° | 2293.0 | 2309.2 | 2309.2 | 2330.8 | 2317.9 | 2351.7 | 2138.3 | 1696.1 | 1266.7 | 900.0 | 611.0 |
| 40° | 2593.4 | 2600.8 | 2608.3 | 2611.0 | 2604.2 | 2600.2 | 2209.2 | 1656.2 | 1149.9 | 727.9 | 447.0 |
| 42.5° | 2900.0 | 2897.3 | 2897.9 | 2902.7 | 2884.4 | 2808.1 | 2253.1 | 1586.7 | 1004.7 | 543.5 | 320.7 |
| 45° | 3230.1 | 3218.6 | 3215.3 | 3205.8 | 3189.6 | 3028.9 | 2278.1 | 1488.8 | 813.6 | 382.2 | 251.8 |
| 47.5° | 3551.5 | 3537.3 | 3515.7 | 3489.4 | 3458.3 | 3206.5 | 2275.4 | 1361.9 | 623.9 | 273.5 | 222.1 |
| 50° | 3881.0 | 3856.0 | 3809.4 | 3783.8 | 3731.1 | 3382.7 | 2259.9 | 1220.7 | 449.0 | 226.2 | 208.0 |
| 52.5° | 4257.8 | 4213.2 | 4170.0 | 4118.7 | 4031.6 | 3599.5 | 2236.2 | 1062.1 | 327.5 | 207.3 | 198.5 |
| 55° | 4819.5 | 4746.6 | 4675.7 | 4569.0 | 4484.6 | 3889.8 | 2196.4 | 891.3 | 258.6 | 199.9 | 193.1 |
| 57.5° | 5594.0 | 5469.7 | 5379.9 | 5236.1 | 5101.1 | 4291.5 | 2153.9 | 736.0 | 230.9 | 197.8 | 190.4 |
| 60° | 6465.6 | 6278.6 | 6111.2 | 5934.3 | 5780.3 | 4793.2 | 2131.6 | 614.4 | 224.8 | 199.9 | 191.1 |
| 62.5° | 7012.6 | 6791.8 | 6582.5 | 6366.4 | 6144.9 | 5032.9 | 2035.0 | 530.7 | 227.5 | 208.6 | 196.5 |
| 65° | 6943.7 | 6699.9 | 6472.4 | 6209.1 | 6000.4 | 4806.7 | 1789.3 | 449.0 | 232.3 | 224.2 | 211.3 |
| 67° | 6479.1 | 6242.8 | 5983.6 | 5725.6 | 5523.1 | 4376.6 | 1510.4 | 378.1 | 237.7 | 241.7 | 227.5 |
| 67.5° | 6354.9 | 6088.9 | 5827.6 | 5590.6 | 5371.2 | 4243.6 | 1437.5 | 360.6 | 239.0 | 246.4 | 232.9 |
| 70° | 5299.6 | 5088.9 | 4783.1 | 4607.5 | 4448.8 | 3440.1 | 1072.2 | 280.2 | 243.1 | 267.4 | 258.6 |
| 72.5° | 3708.2 | 3504.3 | 3344.2 | 3248.4 | 3155.9 | 2499.6 | 754.2 | 223.5 | 237.0 | 278.9 | 270.1 |
| 75° | 1873.0 | 1826.4 | 1770.4 | 1739.3 | 1740.6 | 1453.0 | 454.4 | 190.4 | 222.8 | 267.4 | 245.1 |
| 77.5° | 370.0 | 360.6 | 364.6 | 399.0 | 393.0 | 447.7 | 225.5 | 161.4 | 189.7 | 205.9 | 176.2 |
| 80° | 178.9 | 172.8 | 167.4 | 166.1 | 162.7 | 156.0 | 141.8 | 134.4 | 153.9 | 135.7 | 116.8 |
| 82.5° | 116.1 | 109.4 | 106.7 | 101.3 | 102.0 | 110.7 | 123.6 | 129.0 | 124.9 | 93.9 | 79.0 |
| 85° | 65.5 | 64.8 | 63.5 | 64.8 | 67.5 | 88.5 | 132.3 | 120.9 | 100.6 | 66.2 | 59.4 |
| 87.5° | 39.2 | 37.1 | 37.8 | 38.5 | 39.8 | 65.5 | 104.7 | 87.1 | 64.1 | 34.4 | 35.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CANDELA DISTRIBUTION (continued):

| | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|
| 0° | 1066.1 | 1066.1 | 1066.1 | 1066.1 |
| 2.5° | 1035.7 | 1033.0 | 1033.0 | 1032.4 |
| 5° | 1018.9 | 1014.8 | 1014.1 | 1014.1 |
| 7.5° | 1016.2 | 1010.8 | 1010.1 | 1008.1 |
| 10° | 1028.3 | 1026.3 | 1027.0 | 1024.9 |
| 12.5° | 1066.8 | 1069.5 | 1072.2 | 1072.2 |
| 15° | 1125.5 | 1123.5 | 1126.9 | 1123.5 |
| 17.5° | 1168.8 | 1151.2 | 1147.2 | 1145.1 |
| 20° | 1170.1 | 1133.6 | 1121.5 | 1119.5 |
| 22.5° | 1128.2 | 1074.2 | 1054.0 | 1050.6 |
| 25° | 1057.4 | 989.2 | 963.5 | 960.8 |
| 27.5° | 968.2 | 891.9 | 854.1 | 852.8 |
| 30° | 860.9 | 770.4 | 722.5 | 715.0 |
| 32.5° | 729.9 | 622.5 | 571.9 | 555.7 |
| 35° | 578.6 | 468.6 | 421.3 | 420.0 |
| 37.5° | 432.1 | 346.4 | 316.0 | 314.6 |
| 40° | 316.7 | 272.1 | 260.6 | 258.6 |
| 42.5° | 258.6 | 240.4 | 235.6 | 233.6 |
| 45° | 231.6 | 224.2 | 221.5 | 219.4 |
| 47.5° | 215.4 | 210.7 | 208.6 | 208.6 |
| 50° | 202.6 | 201.2 | 199.9 | 199.9 |
| 52.5° | 193.8 | 193.1 | 191.8 | 191.1 |
| 55° | 186.4 | 183.7 | 184.3 | 183.7 |
| 57.5° | 181.6 | 177.6 | 177.6 | 177.6 |
| 60° | 178.9 | 171.5 | 171.5 | 172.2 |
| 62.5° | 179.6 | 168.1 | 167.4 | 167.4 |
| 65° | 185.0 | 166.1 | 162.0 | 162.7 |
| 67° | 191.8 | 164.1 | 156.0 | 155.3 |
| 67.5° | 193.8 | 162.7 | 153.9 | 153.3 |
| 70° | 201.9 | 158.7 | 143.8 | 142.5 |
| 72.5° | 203.2 | 152.6 | 133.7 | 132.3 |
| 75° | 189.1 | 144.5 | 125.6 | 122.2 |
| 77.5° | 147.2 | 124.2 | 113.4 | 113.4 |
| 80° | 103.3 | 95.2 | 81.0 | 80.3 |
| 82.5° | 75.6 | 71.6 | 59.4 | 58.1 |
| 85° | 55.4 | 52.0 | 43.9 | 43.9 |
| 87.5° | 34.4 | 33.1 | 28.4 | 27.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)