

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: INVUE

Report Number: P148734

Luminaire Tested: **VXS-F02-LED-E1-RW-7030**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P148734  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33677)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: VXS-F02-LED-E1-RW-7030  
Description: VISION SITE SMALL LED LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE  
Light Source: (14) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4710.9 lumens  
Efficiency: N/A  
Efficacy: 85.7 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')  
IES Classification: Type I - Short - Full Cutoff  
BUG Rating: B2 - U0 - G2

Input Watts (W): 55  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

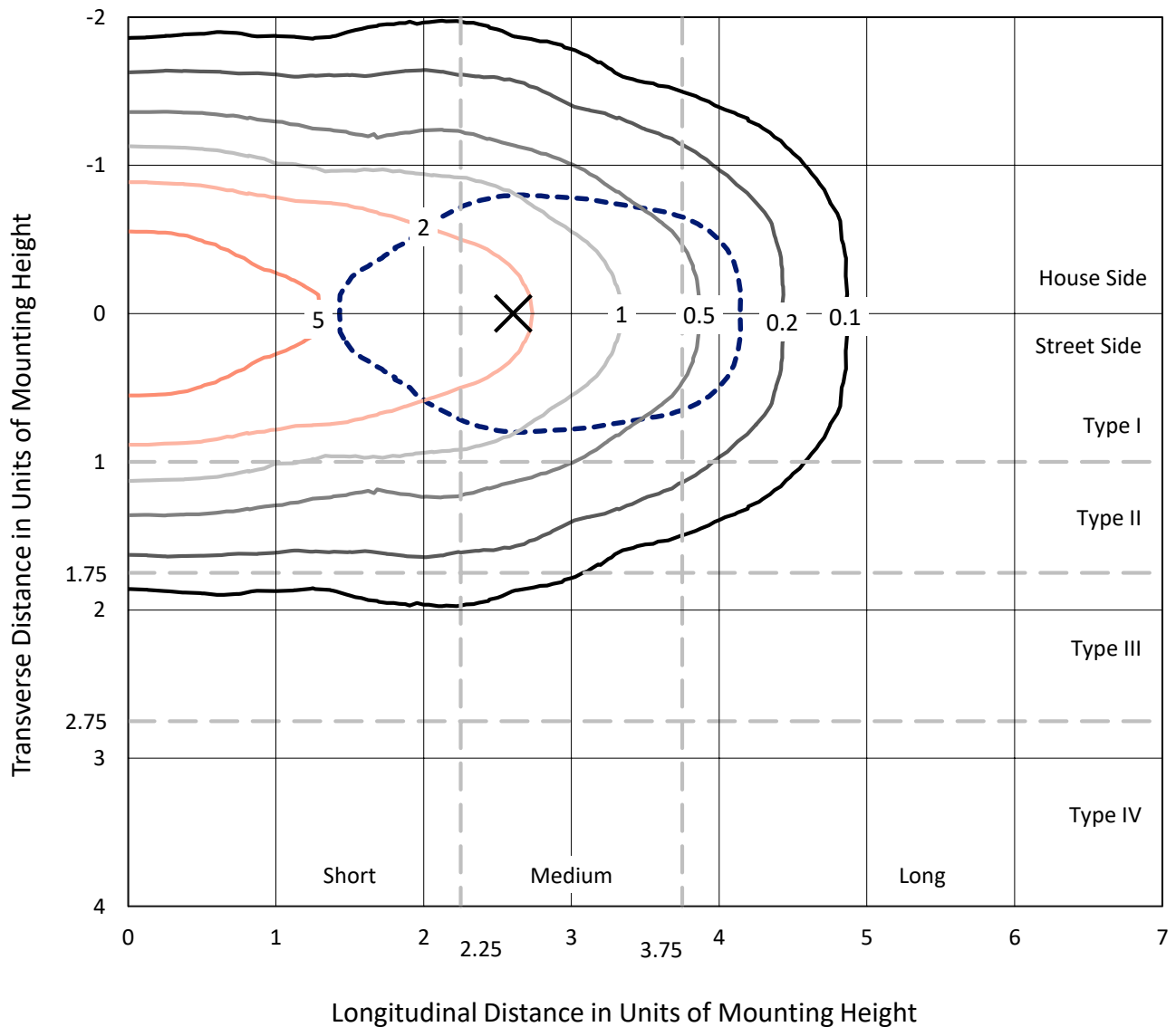


REPORT NUMBER: P148734

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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

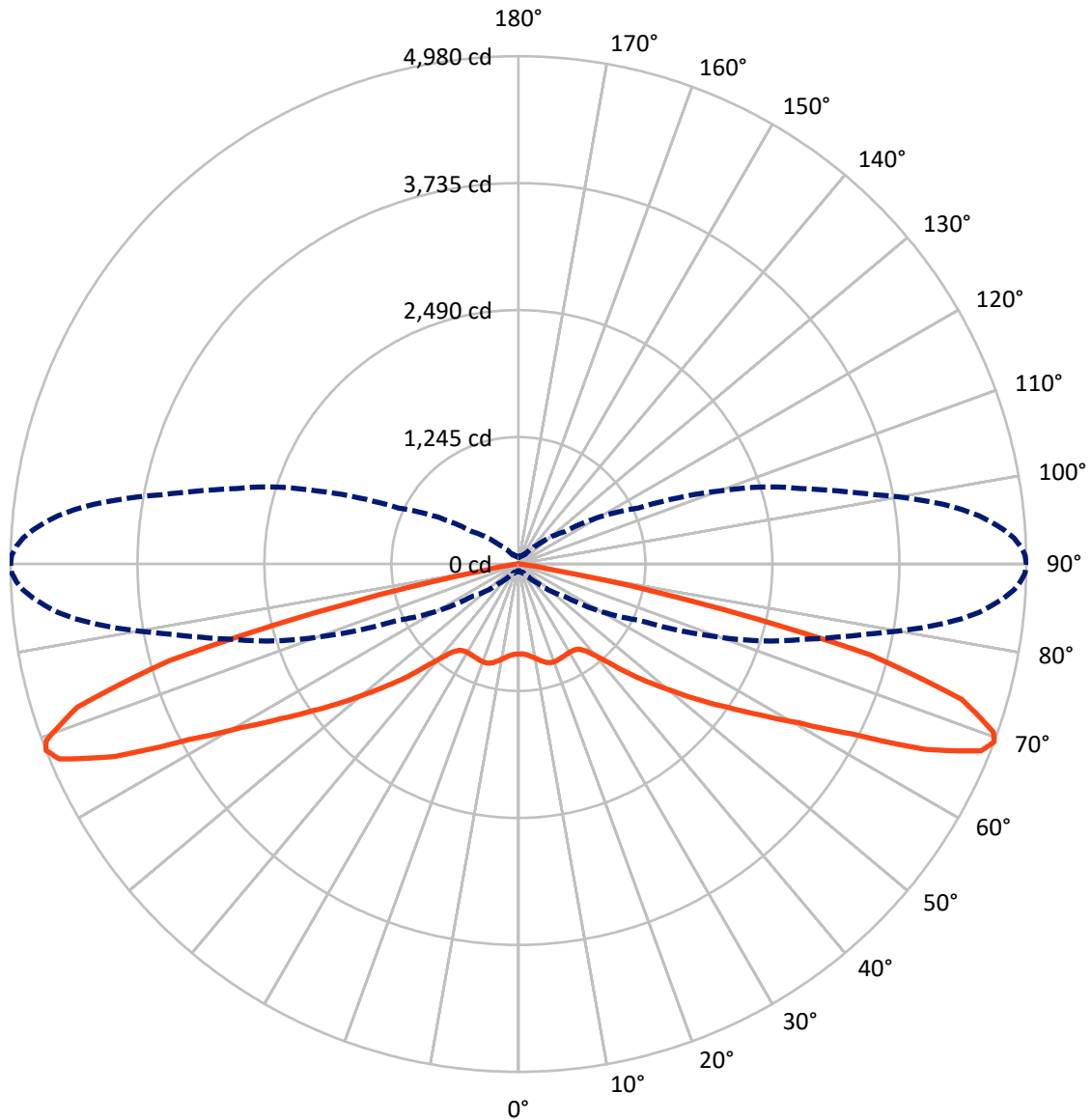


Based on 10 foot mounting height. Maximum calculated value = 9 fc  
 Type I - Short - Full Cutoff

REPORT NUMBER: P148734

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### Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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CATALOG NUMBER: VXS-F02-LED-E1-RW-7030

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 2355.4   | 0.0    | 2355.4 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Street Side</b> | Lumens    | 2355.4   | 0.0    | 2355.4 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Total</b>       | Lumens    | 4710.9   | 0.0    | 4710.9 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 86.6   | 1.8       |
| 10°-20°   | 273.1  | 5.8       |
| 20°-30°   | 442.5  | 9.4       |
| 30°-40°   | 551.5  | 11.7      |
| 40°-50°   | 689.1  | 14.6      |
| 50°-60°   | 850.9  | 18.1      |
| 60°-70°   | 1057.3 | 22.4      |
| 70°-80°   | 701.9  | 14.9      |
| 80°-90°   | 58.0   | 1.2       |
| 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°    | 4710.9 | 100.0     |
| 0°-180°   | 4710.9 | 100.0     |



REPORT NUMBER: P148734

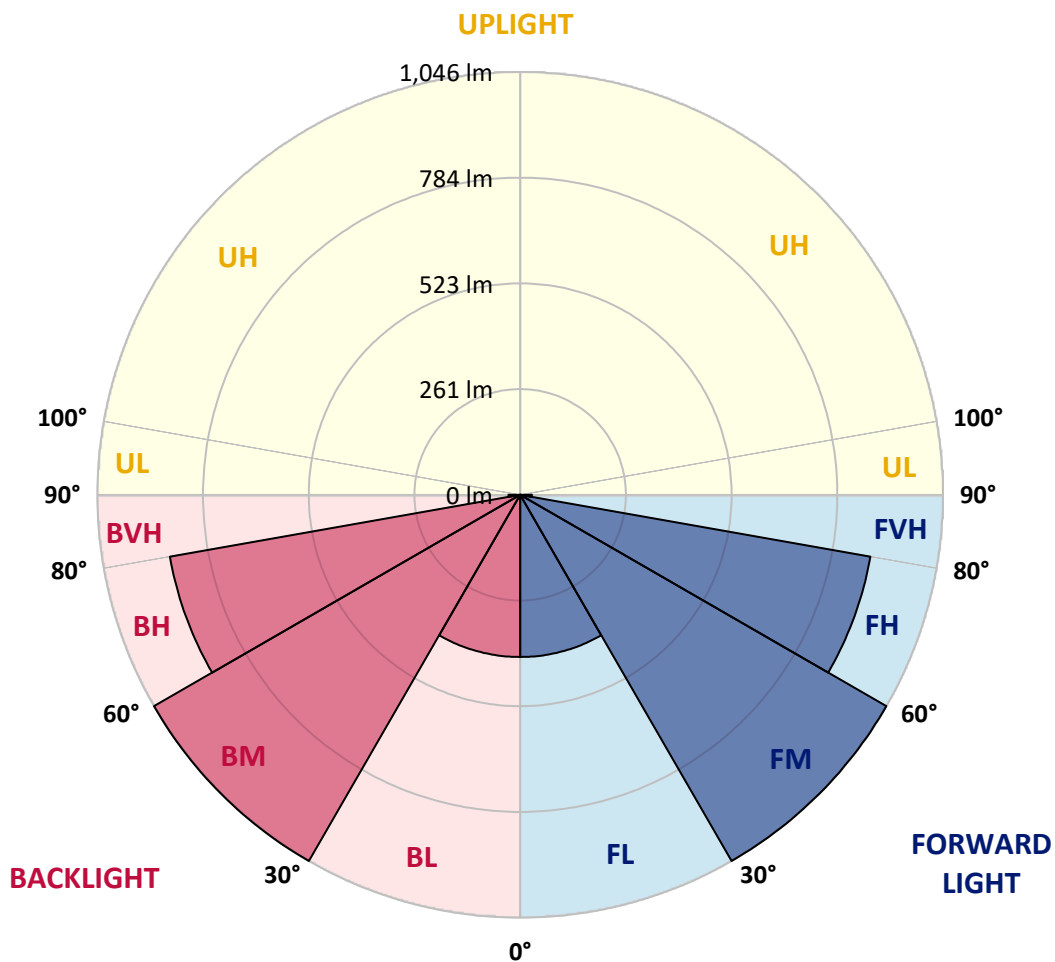
CATALOG NUMBER: VXS-F02-LED-E1-RW-7030

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 401.1  | 8.5       |                         |      |         |
| FM   | (30°-60°)   | 1045.8 | 22.2      |                         |      |         |
| FH   | (60°-80°)   | 879.6  | 18.7      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 29.0   | 0.6       |                         |      | G1/100  |
| BL   | (0°-30°)    | 401.1  | 8.5       | B1/500                  |      |         |
| BM   | (30°-60°)   | 1045.8 | 22.2      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 879.6  | 18.7      | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 29.0   | 0.6       |                         |      | 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 I Short





REPORT NUMBER: P148734

CATALOG NUMBER: VXS-F02-LED-E1-RW-7030

**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 15°   | 25°   | 35°   | 45°    | 55°    | 65°    | 66°    | 67°    | 68°    |
|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|
| 0°    | 882.7 | 882.7 | 882.7 | 882.7 | 882.7 | 882.7  | 882.7  | 882.7  | 882.7  | 882.7  | 882.7  |
| 2.5°  | 886.7 | 887.4 | 887.0 | 888.0 | 887.7 | 887.6  | 887.2  | 886.2  | 886.1  | 885.9  | 885.8  |
| 5°    | 895.2 | 894.2 | 895.8 | 897.2 | 896.8 | 897.0  | 896.8  | 896.8  | 896.6  | 896.6  | 896.4  |
| 7.5°  | 904.3 | 904.0 | 905.0 | 909.0 | 909.6 | 911.0  | 912.8  | 914.0  | 914.1  | 914.2  | 914.2  |
| 10°   | 912.1 | 912.4 | 914.8 | 920.6 | 923.6 | 928.4  | 933.2  | 937.0  | 937.3  | 937.5  | 937.8  |
| 12.5° | 918.4 | 918.6 | 922.4 | 931.4 | 938.8 | 947.8  | 958.1  | 963.9  | 964.4  | 964.9  | 965.4  |
| 15°   | 918.9 | 919.6 | 926.2 | 941.0 | 955.6 | 970.4  | 982.7  | 990.5  | 990.9  | 991.3  | 991.7  |
| 17.5° | 912.4 | 912.8 | 923.8 | 945.8 | 970.2 | 993.2  | 1006.0 | 1009.6 | 1009.8 | 1009.9 | 1010.0 |
| 20°   | 895.2 | 896.6 | 912.2 | 944.5 | 981.7 | 1011.8 | 1025.2 | 1020.4 | 1019.9 | 1019.5 | 1019.0 |
| 22.5° | 867.6 | 867.4 | 887.8 | 931.4 | 984.0 | 1026.4 | 1038.3 | 1025.7 | 1024.2 | 1022.7 | 1021.3 |
| 25°   | 822.8 | 825.9 | 849.8 | 902.1 | 971.2 | 1029.8 | 1047.5 | 1028.4 | 1026.3 | 1024.2 | 1022.0 |
| 27.5° | 774.4 | 776.1 | 801.5 | 857.5 | 941.2 | 1018.4 | 1052.1 | 1034.0 | 1031.6 | 1029.2 | 1026.8 |
| 30°   | 717.8 | 720.0 | 747.2 | 805.8 | 893.2 | 989.2  | 1050.8 | 1046.6 | 1043.8 | 1041.0 | 1038.2 |
| 32.5° | 662.6 | 665.0 | 689.4 | 753.6 | 842.8 | 949.3  | 1043.2 | 1064.4 | 1061.5 | 1058.7 | 1055.8 |
| 35°   | 605.2 | 609.0 | 638.6 | 703.4 | 794.0 | 904.8  | 1031.7 | 1087.2 | 1085.7 | 1084.1 | 1082.5 |
| 37.5° | 557.7 | 558.4 | 587.2 | 655.2 | 748.7 | 862.4  | 1016.4 | 1116.2 | 1117.4 | 1118.5 | 1119.7 |
| 40°   | 504.7 | 509.4 | 538.2 | 610.0 | 707.8 | 826.4  | 1001.8 | 1155.4 | 1161.4 | 1167.4 | 1173.4 |
| 42.5° | 457.2 | 457.6 | 486.8 | 561.0 | 663.3 | 797.4  | 993.8  | 1202.6 | 1215.4 | 1228.3 | 1241.1 |
| 45°   | 407.2 | 409.2 | 435.6 | 507.2 | 612.0 | 763.3  | 993.6  | 1257.2 | 1277.7 | 1298.2 | 1318.7 |
| 47.5° | 359.9 | 360.6 | 388.6 | 455.1 | 553.2 | 715.6  | 991.8  | 1315.8 | 1343.7 | 1371.6 | 1399.5 |
| 50°   | 314.7 | 314.0 | 341.3 | 405.4 | 495.1 | 653.0  | 976.4  | 1382.1 | 1417.3 | 1452.6 | 1487.8 |
| 52.5° | 262.9 | 266.4 | 294.8 | 356.2 | 442.4 | 589.4  | 931.8  | 1454.8 | 1496.9 | 1539.1 | 1581.2 |
| 55°   | 212.2 | 213.7 | 244.0 | 301.4 | 388.8 | 530.0  | 853.8  | 1521.6 | 1571.3 | 1621.0 | 1670.7 |
| 57.5° | 156.4 | 160.8 | 187.5 | 244.0 | 334.5 | 480.1  | 754.7  | 1556.2 | 1616.8 | 1677.2 | 1737.8 |
| 60°   | 110.4 | 113.9 | 137.5 | 185.0 | 274.9 | 427.5  | 669.6  | 1536.9 | 1615.5 | 1694.1 | 1772.7 |
| 62.5° | 85.9  | 88.7  | 107.6 | 138.4 | 214.4 | 375.0  | 608.5  | 1474.3 | 1581.3 | 1688.2 | 1795.2 |
| 65°   | 75.4  | 77.9  | 95.0  | 110.8 | 160.1 | 321.4  | 575.1  | 1408.2 | 1549.6 | 1691.0 | 1832.4 |
| 67.5° | 68.2  | 71.2  | 85.9  | 97.0  | 130.4 | 280.5  | 566.2  | 1366.4 | 1526.6 | 1686.7 | 1846.9 |
| 69°   | 64.9  | 67.9  | 81.2  | 90.5  | 121.2 | 265.9  | 551.2  | 1300.8 | 1460.1 | 1619.3 | 1778.5 |
| 70°   | 62.8  | 65.4  | 77.6  | 87.2  | 118.1 | 255.8  | 526.0  | 1219.0 | 1375.3 | 1531.7 | 1688.0 |
| 72.5° | 58.3  | 59.6  | 70.4  | 79.7  | 109.6 | 206.9  | 404.6  | 905.3  | 1040.8 | 1176.4 | 1311.9 |
| 75°   | 51.5  | 53.0  | 63.1  | 72.1  | 85.4  | 128.4  | 256.1  | 560.0  | 661.2  | 762.4  | 863.5  |
| 77.5° | 44.4  | 45.8  | 54.5  | 68.8  | 66.3  | 80.2   | 153.0  | 311.6  | 370.3  | 429.0  | 487.7  |
| 80°   | 35.7  | 37.2  | 45.0  | 68.4  | 54.8  | 62.3   | 110.0  | 217.9  | 233.7  | 249.6  | 265.4  |
| 82.5° | 26.2  | 27.4  | 35.2  | 55.3  | 42.0  | 47.0   | 83.9   | 184.8  | 190.3  | 195.8  | 201.3  |
| 85°   | 13.3  | 13.6  | 22.4  | 33.7  | 26.6  | 24.4   | 47.3   | 126.4  | 129.9  | 133.4  | 136.9  |
| 87.5° | 2.3   | 2.3   | 5.0   | 5.8   | 6.5   | 4.0    | 6.1    | 21.6   | 22.3   | 23.0   | 23.7   |
| 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: P148734

CATALOG NUMBER: VXS-F02-LED-E1-RW-7030

**CANDELA DISTRIBUTION (continued):**

|       | 69°    | 70°    | 71°    | 72°    | 73°    | 74°    | 75°    | 76°    | 77°    | 78°    | 79°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 882.7  | 882.7  | 882.7  | 882.7  | 882.7  | 882.7  | 882.7  | 882.7  | 882.7  | 882.7  | 882.7  |
| 2.5°  | 885.7  | 885.6  | 885.1  | 885.2  | 885.6  | 885.3  | 885.7  | 885.8  | 886.0  | 885.1  | 884.9  |
| 5°    | 896.4  | 896.2  | 896.2  | 896.2  | 896.4  | 896.3  | 896.5  | 896.9  | 896.8  | 896.2  | 896.0  |
| 7.5°  | 914.3  | 914.3  | 914.6  | 914.3  | 914.8  | 914.6  | 914.1  | 914.9  | 915.4  | 915.5  | 916.0  |
| 10°   | 938.1  | 938.3  | 939.2  | 939.1  | 940.0  | 939.8  | 940.0  | 940.8  | 941.4  | 941.5  | 942.2  |
| 12.5° | 965.9  | 966.4  | 966.8  | 967.3  | 968.2  | 967.7  | 968.9  | 969.4  | 970.1  | 971.6  | 970.9  |
| 15°   | 992.1  | 992.5  | 993.9  | 994.0  | 994.8  | 995.2  | 996.2  | 996.7  | 996.9  | 998.2  | 998.3  |
| 17.5° | 1010.2 | 1010.4 | 1010.8 | 1010.6 | 1011.4 | 1011.1 | 1011.8 | 1012.2 | 1012.9 | 1013.6 | 1014.7 |
| 20°   | 1018.5 | 1018.0 | 1017.7 | 1017.5 | 1016.9 | 1016.2 | 1016.4 | 1016.8 | 1016.8 | 1017.4 | 1018.3 |
| 22.5° | 1019.8 | 1018.3 | 1016.8 | 1015.8 | 1014.2 | 1012.9 | 1011.6 | 1011.8 | 1011.8 | 1011.7 | 1012.2 |
| 25°   | 1019.9 | 1017.8 | 1015.4 | 1012.4 | 1010.4 | 1007.4 | 1005.0 | 1004.8 | 1004.2 | 1004.2 | 1004.5 |
| 27.5° | 1024.4 | 1022.0 | 1018.7 | 1015.4 | 1010.8 | 1006.9 | 1003.1 | 1001.7 | 1000.3 | 999.5  | 999.1  |
| 30°   | 1035.4 | 1032.6 | 1028.6 | 1024.4 | 1019.4 | 1013.4 | 1007.9 | 1006.2 | 1004.2 | 1002.4 | 1001.0 |
| 32.5° | 1052.9 | 1050.1 | 1045.7 | 1041.2 | 1034.5 | 1028.6 | 1023.2 | 1020.4 | 1017.6 | 1014.6 | 1011.8 |
| 35°   | 1080.9 | 1079.4 | 1075.5 | 1071.6 | 1066.7 | 1062.0 | 1057.1 | 1054.0 | 1049.4 | 1047.0 | 1043.6 |
| 37.5° | 1120.8 | 1122.0 | 1122.0 | 1122.4 | 1120.9 | 1118.7 | 1115.2 | 1111.9 | 1110.4 | 1104.1 | 1100.1 |
| 40°   | 1179.4 | 1185.4 | 1190.9 | 1195.2 | 1198.9 | 1202.6 | 1205.9 | 1204.0 | 1204.6 | 1203.0 | 1200.5 |
| 42.5° | 1254.0 | 1266.8 | 1278.6 | 1290.3 | 1298.8 | 1312.0 | 1321.2 | 1324.2 | 1331.6 | 1334.5 | 1340.0 |
| 45°   | 1339.2 | 1359.7 | 1379.4 | 1397.6 | 1414.6 | 1433.5 | 1452.0 | 1465.6 | 1480.7 | 1497.6 | 1514.6 |
| 47.5° | 1427.5 | 1455.4 | 1484.4 | 1508.1 | 1532.7 | 1560.7 | 1585.1 | 1605.8 | 1632.8 | 1657.7 | 1685.1 |
| 50°   | 1523.1 | 1558.4 | 1591.4 | 1620.7 | 1652.2 | 1684.5 | 1718.0 | 1748.4 | 1784.8 | 1824.8 | 1868.0 |
| 52.5° | 1623.4 | 1665.6 | 1703.8 | 1740.6 | 1777.5 | 1814.5 | 1850.2 | 1893.1 | 1938.0 | 1990.8 | 2044.7 |
| 55°   | 1720.4 | 1770.2 | 1813.5 | 1854.3 | 1896.8 | 1938.1 | 1975.0 | 2032.3 | 2087.4 | 2150.3 | 2220.7 |
| 57.5° | 1798.2 | 1858.8 | 1908.8 | 1957.3 | 2005.1 | 2049.0 | 2094.4 | 2159.0 | 2229.3 | 2302.7 | 2392.1 |
| 60°   | 1851.3 | 1930.0 | 1993.9 | 2052.2 | 2110.8 | 2166.1 | 2218.2 | 2302.8 | 2386.3 | 2477.6 | 2588.8 |
| 62.5° | 1902.2 | 2009.2 | 2092.5 | 2172.1 | 2251.1 | 2322.2 | 2386.9 | 2493.3 | 2602.4 | 2715.3 | 2847.6 |
| 65°   | 1973.8 | 2115.2 | 2238.0 | 2348.9 | 2458.3 | 2562.7 | 2659.6 | 2794.4 | 2932.1 | 3080.7 | 3238.6 |
| 67.5° | 2007.0 | 2167.2 | 2327.0 | 2476.6 | 2615.6 | 2747.8 | 2872.2 | 3035.1 | 3197.3 | 3369.5 | 3560.3 |
| 69°   | 1937.8 | 2097.0 | 2267.8 | 2431.2 | 2584.7 | 2724.9 | 2859.6 | 3026.0 | 3194.6 | 3370.5 | 3562.9 |
| 70°   | 1844.4 | 2000.7 | 2173.2 | 2343.9 | 2490.8 | 2636.9 | 2776.4 | 2941.5 | 3112.3 | 3288.7 | 3490.1 |
| 72.5° | 1447.5 | 1583.1 | 1751.2 | 1916.9 | 2064.3 | 2210.9 | 2346.4 | 2515.4 | 2687.2 | 2872.4 | 3063.2 |
| 75°   | 964.7  | 1065.9 | 1191.2 | 1344.9 | 1480.0 | 1609.7 | 1741.0 | 1883.8 | 2051.6 | 2204.2 | 2378.7 |
| 77.5° | 546.4  | 605.1  | 677.9  | 777.9  | 874.8  | 952.4  | 1046.0 | 1113.2 | 1210.6 | 1294.7 | 1383.4 |
| 80°   | 281.2  | 297.1  | 318.8  | 342.8  | 356.4  | 354.3  | 368.2  | 354.4  | 357.5  | 346.2  | 334.2  |
| 82.5° | 206.8  | 212.3  | 222.1  | 226.9  | 226.4  | 210.6  | 193.8  | 170.5  | 149.9  | 128.3  | 108.5  |
| 85°   | 140.5  | 144.0  | 146.4  | 150.2  | 149.1  | 142.3  | 127.2  | 106.8  | 87.1   | 69.9   | 55.9   |
| 87.5° | 24.3   | 25.0   | 24.8   | 26.9   | 27.0   | 25.1   | 20.6   | 17.6   | 14.9   | 11.0   | 7.8    |
| 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: P148734

CATALOG NUMBER: VXS-F02-LED-E1-RW-7030

**CANDELA DISTRIBUTION (continued):**

|       | 80°    | 81°    | 82°    | 83°    | 84°    | 85°    | 86°    | 87°    | 88°    | 89°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 882.7  | 882.7  | 882.7  | 882.7  | 882.7  | 882.7  | 882.7  | 882.7  | 882.7  | 882.7  | 882.7  |
| 2.5°  | 884.7  | 884.7  | 885.2  | 884.7  | 884.7  | 884.7  | 884.4  | 885.0  | 884.7  | 883.9  | 883.2  |
| 5°    | 896.2  | 895.5  | 895.2  | 895.8  | 896.3  | 895.2  | 896.0  | 896.8  | 895.5  | 895.8  | 895.2  |
| 7.5°  | 915.6  | 915.4  | 915.1  | 915.6  | 915.6  | 915.3  | 915.6  | 914.8  | 914.4  | 915.1  | 915.9  |
| 10°   | 941.4  | 941.2  | 941.8  | 941.8  | 942.7  | 942.2  | 942.0  | 942.8  | 942.2  | 941.8  | 942.0  |
| 12.5° | 971.9  | 971.2  | 972.4  | 972.4  | 973.2  | 973.2  | 972.9  | 973.2  | 972.9  | 972.2  | 971.6  |
| 15°   | 999.1  | 998.0  | 998.3  | 1000.3 | 1000.0 | 1000.6 | 1000.6 | 1000.0 | 999.8  | 999.5  | 999.8  |
| 17.5° | 1015.4 | 1014.9 | 1014.9 | 1015.9 | 1016.6 | 1016.4 | 1016.4 | 1016.4 | 1016.1 | 1016.4 | 1016.9 |
| 20°   | 1018.4 | 1018.4 | 1018.6 | 1019.6 | 1020.9 | 1020.2 | 1020.2 | 1020.6 | 1020.2 | 1020.7 | 1020.9 |
| 22.5° | 1012.6 | 1013.2 | 1013.6 | 1014.9 | 1015.2 | 1015.2 | 1015.1 | 1015.4 | 1015.9 | 1015.9 | 1016.4 |
| 25°   | 1004.6 | 1005.0 | 1005.8 | 1006.8 | 1007.8 | 1007.8 | 1007.8 | 1008.4 | 1008.3 | 1008.6 | 1008.8 |
| 27.5° | 998.6  | 999.0  | 999.8  | 1000.8 | 1002.1 | 1002.1 | 1002.0 | 1002.6 | 1002.6 | 1002.8 | 1003.3 |
| 30°   | 999.2  | 998.3  | 999.0  | 999.6  | 1000.3 | 1000.3 | 1000.0 | 1000.3 | 1000.6 | 1000.6 | 1000.8 |
| 32.5° | 1010.1 | 1007.8 | 1007.1 | 1006.8 | 1007.0 | 1006.3 | 1006.1 | 1005.5 | 1005.1 | 1005.0 | 1004.9 |
| 35°   | 1038.8 | 1035.2 | 1035.0 | 1032.9 | 1031.0 | 1029.0 | 1029.2 | 1027.6 | 1028.2 | 1027.0 | 1025.9 |
| 37.5° | 1097.6 | 1093.6 | 1096.0 | 1091.8 | 1089.0 | 1087.0 | 1084.7 | 1081.8 | 1080.0 | 1082.2 | 1082.3 |
| 40°   | 1202.8 | 1200.1 | 1199.4 | 1200.2 | 1197.6 | 1198.8 | 1193.3 | 1191.8 | 1188.6 | 1190.8 | 1193.8 |
| 42.5° | 1348.4 | 1346.6 | 1356.2 | 1358.0 | 1359.0 | 1360.4 | 1361.4 | 1353.2 | 1352.9 | 1351.2 | 1346.1 |
| 45°   | 1528.2 | 1538.6 | 1538.2 | 1549.7 | 1550.2 | 1546.7 | 1548.2 | 1544.4 | 1542.9 | 1537.4 | 1544.1 |
| 47.5° | 1712.8 | 1732.9 | 1740.5 | 1743.0 | 1752.4 | 1754.8 | 1745.8 | 1742.8 | 1748.0 | 1739.0 | 1740.2 |
| 50°   | 1911.1 | 1932.7 | 1950.3 | 1962.2 | 1969.0 | 1969.4 | 1962.6 | 1961.2 | 1965.9 | 1948.8 | 1956.9 |
| 52.5° | 2106.2 | 2138.8 | 2172.0 | 2189.6 | 2202.2 | 2203.2 | 2208.4 | 2202.1 | 2204.7 | 2200.6 | 2208.7 |
| 55°   | 2298.4 | 2355.0 | 2393.9 | 2428.4 | 2450.2 | 2469.0 | 2470.9 | 2477.6 | 2478.2 | 2486.4 | 2478.1 |
| 57.5° | 2486.4 | 2548.0 | 2615.9 | 2677.0 | 2710.8 | 2732.2 | 2752.4 | 2779.8 | 2785.8 | 2782.4 | 2787.8 |
| 60°   | 2708.4 | 2803.6 | 2895.8 | 2966.2 | 3024.8 | 3080.8 | 3111.0 | 3153.9 | 3160.8 | 3179.4 | 3163.2 |
| 62.5° | 2988.9 | 3127.1 | 3252.2 | 3347.0 | 3436.0 | 3523.2 | 3589.0 | 3622.2 | 3642.3 | 3681.2 | 3668.4 |
| 65°   | 3419.1 | 3585.0 | 3750.6 | 3886.3 | 4011.0 | 4114.8 | 4214.8 | 4262.6 | 4315.4 | 4370.6 | 4380.7 |
| 67.5° | 3773.5 | 3978.8 | 4165.6 | 4330.9 | 4482.0 | 4597.4 | 4701.4 | 4784.0 | 4848.5 | 4889.1 | 4892.4 |
| 69°   | 3789.6 | 4003.0 | 4205.8 | 4383.3 | 4540.8 | 4663.4 | 4773.0 | 4865.0 | 4927.6 | 4969.2 | 4980.4 |
| 70°   | 3712.7 | 3931.1 | 4147.2 | 4326.4 | 4487.8 | 4613.2 | 4729.4 | 4817.0 | 4886.9 | 4929.4 | 4944.1 |
| 72.5° | 3280.1 | 3513.4 | 3744.4 | 3901.4 | 4066.2 | 4215.6 | 4308.6 | 4398.0 | 4496.6 | 4509.4 | 4550.1 |
| 75°   | 2585.7 | 2781.8 | 2961.0 | 3081.0 | 3218.8 | 3352.8 | 3444.0 | 3467.6 | 3519.2 | 3584.0 | 3560.8 |
| 77.5° | 1498.4 | 1558.8 | 1674.4 | 1704.0 | 1678.9 | 1737.2 | 1756.6 | 1715.4 | 1713.3 | 1751.3 | 1675.9 |
| 80°   | 332.0  | 313.2  | 336.8  | 319.2  | 319.7  | 320.2  | 314.9  | 312.9  | 316.6  | 312.9  | 307.7  |
| 82.5° | 91.9   | 89.0   | 89.4   | 88.5   | 90.2   | 89.0   | 88.2   | 90.2   | 89.9   | 89.8   | 91.5   |
| 85°   | 44.2   | 43.8   | 43.0   | 42.8   | 41.7   | 40.4   | 38.4   | 38.4   | 39.5   | 38.0   | 38.8   |
| 87.5° | 5.8    | 5.5    | 5.6    | 6.5    | 5.8    | 4.8    | 4.8    | 4.8    | 4.6    | 4.6    | 4.6    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)