0.56 mm mrad/mm mrms Gauss, Xyrms=0.3 mm

Laser size variation XYrms

|  |  |
| --- | --- |
| laser size rms (mm) | beam size on viewers - rms (mm) |
| v1 | v2 | v3 |
| x | x | x |
| 0.1 | 1.087 | 1.4536 | 2.7672 |
| 0.2 | 1.4643 | 1.979 | 3.8232 |
| 0.3 | 1.9415 | 2.6382 | 5.1339 |
| 0.4 | 2.4675 | 3.3616 | 6.5643 |
| 0.5 | 3.0243 | 4.1257 | 8.0694 |
| 0.6 | 3.6061 | 4.9222 | 9.635 |
| 0.7 | 4.211 | 5.7494 | 11.2583 |
| 0.8 | 4.8399 | 6.6087 | 12.9409 |
| 0.9 | 5.4949 | 7.5018 | 14.688 |
| 1 | 6.1778 | 8.4326 | 16.5048 |

X off

|  |  |
| --- | --- |
| Xoff (mm) | rms (mm) for 0.3mm spot size |
| v1 | v2 | v3 |
| x | x | x |
| 0 | 1.9415 | 2.6382 | 5.1339 |
| 0.5 | 1.9637 | 2.668 | 5.1906 |
| 1 | 2.0305 | 2.7574 | 5.361 |
| 1.5 | 2.1437 | 2.9087 | 5.6489 |
| 2 | 2.3055 | 3.125 | 6.0597 |
| 2.5 | 2.5189 | 3.4095 | 6.5997 |
| 3 | 2.7862 | 3.766 | 7.2749 |
| 3.5 | 3.1098 | 4.197 | 8.0908 |
| 4 | 3.4916 | 4.7055 | 9.0525 |
| 4.5 | 3.9333 | 5.2936 | 10.1643 |
| 5 | 4.4365 | 5.9628 | 11.4293 |

Y off

|  |  |
| --- | --- |
| Yoff (mm) | rms (mm) for 0.3 mm spot size |
| v1 | v2 | v3 |
| x | x | x |
| 0 | 1.9415 | 2.6382 | 5.1339 |
| 0.5 | 1.9487 | 2.6479 | 5.1524 |
| 1 | 1.9706 | 2.6772 | 5.2082 |
| 1.5 | 2.0073 | 2.7263 | 5.3019 |
| 2 | 2.0593 | 2.796 | 5.4344 |
| 2.5 | 2.1272 | 2.8866 | 5.6068 |
| 3 | 2.2113 | 2.9991 | 5.8204 |
| 3.5 | 2.3124 | 3.1341 | 6.0767 |
| 4 | 2.4312 | 3.2927 | 6.3774 |
| 4.5 | 2.5683 | 3.4756 | 6.7239 |
| 5 | 2.7244 | 3.6836 | 7.1177 |

Emittance variation

|  |  |
| --- | --- |
| Emittance (mm mrad) |  rms (mm) for 0.3mm spot size |
| v1 | v2 | v3 |
| x | x | x |
| 0.1 | 1.7133 | 2.3441 | 4.6024 |
| 0.2 | 1.7372 | 2.3747 | 4.6576 |
| 0.3 | 1.7763 | 2.425 | 4.7482 |
| 0.44 | 1.8547 | 2.526 | 4.9307 |
| 0.5 | 1.896 | 2.5793 | 5.0272 |
| 0.6 | 1.974 | 2.6803 | 5.2103 |
| 0.7 | 2.0625 | 2.7949 | 5.4187 |
| 0.8 | 2.1601 | 2.9215 | 5.6497 |
| 0.9 | 2.2656 | 3.0587 | 5.9005 |
| 1 | 2.378 | 3.2051 | 6.1688 |