## C-4.2 Summary Table of Supplemental, Non-USGS LiDAR Base Specification version 1.3, Density Testing Methodology Results

| Test Name | Use Overlap Bit Flag Points | Raster Cell Size (in meters) | Minimum Point Count Requirement for Pass (green cells) | Percent of Passing Cells | Percent of Failing Cells |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Grid Cell Size Based on Nyquist Sampling Criteria ( $2 \times$ Required NPS) Including Overlap Bit Flagged Points | Yes | $\begin{aligned} & 2 \times 0.71 \\ & =1.42 \end{aligned}$ | 1 | 0.00 | 100.00 |
| Grid Cell Size Based on Nyquist Sampling Criteria ( $2 \times$ Required NPS) Excluding Overlap Bit Flagged Points | No | $\begin{aligned} & 2 \times 0.71 \\ & =1.42 \end{aligned}$ | 1 | 0.00 | 100.00 |
| Grid Based Test: Grid Cell $=1 \mathrm{~m} \times 1 \mathrm{~m}$, Required PPSM Tested Including Overlap Bit Flagged Points | Yes | 1 | $\begin{aligned} & 1 \times 2 \\ & =2 \end{aligned}$ | 0.00 | 100.00 |
| Grid Based Test: Grid Cell $=10 \mathrm{~m} \times 10 \mathrm{~m}$, Required PPSM Tested on Scaled Up Point Count Including Overlap Bit Flagged Points | Yes | 10 | $\begin{aligned} & 100 \times 2 \\ & =200 \end{aligned}$ | 0.00 | 100.00 |
| Grid Based Test: Grid Cell $=100 \mathrm{~m} \times 100 \mathrm{~m}$, Required PPSM Tested on Scaled Up Point Count Including Overlap Bit Flagged Points | Yes | 100 | $\begin{aligned} & 10,000 \times 2 \\ & =20,000 \end{aligned}$ | 0.00 | 100.00 |
| Grid Based Test: Grid Cell $=1,000 \mathrm{~m} \times 1,000 \mathrm{~m}$, Required PPSM Tested on Scaled Up Point Count Including Overlap Bit Flagged Points | Yes | 1000 | $\begin{aligned} & 1,000,000 \times 2 \\ & =2,000,000 \end{aligned}$ | 0.00 | 100.00 |
| Grid Based Test: Grid Cell $=1 \mathrm{~m} \times 1 \mathrm{~m}$, Required PPSM Tested Excluding Overlap Bit Flagged Points | No | 1 | $\begin{aligned} & 1 \times 2 \\ & =2 \end{aligned}$ | 0.00 | 100.00 |
| Grid Based Test: Grid Cell $=10 \mathrm{~m} \times 10 \mathrm{~m}$, Required PPSM Tested on Scaled Up Point Count Excluding Overlap Bit Flagged Points | No | 10 | $\begin{aligned} & 100 \times 2 \\ & =200 \end{aligned}$ | 0.00 | 100.00 |
| Grid Based Test: Grid Cell $=100 \mathrm{~m} \times 100 \mathrm{~m}$, Required PPSM Tested on Scaled Up Point Count Excluding Overlap Bit Flagged Points | No | 100 | $\begin{aligned} & 10,000 \times 2 \\ & =20,000 \end{aligned}$ | 0.00 | 100.00 |
| Grid Based Test: Grid Cell $=1,000 \mathrm{~m} \times 1,000 \mathrm{~m}$, Required PPSM Tested on Scaled Up Point Count Excluding Overlap Bit Flagged Points | No | 1000 | $\begin{aligned} & 1,000,000 \times 2 \\ & =2,000,000 \end{aligned}$ | 0.00 | 100.00 |

