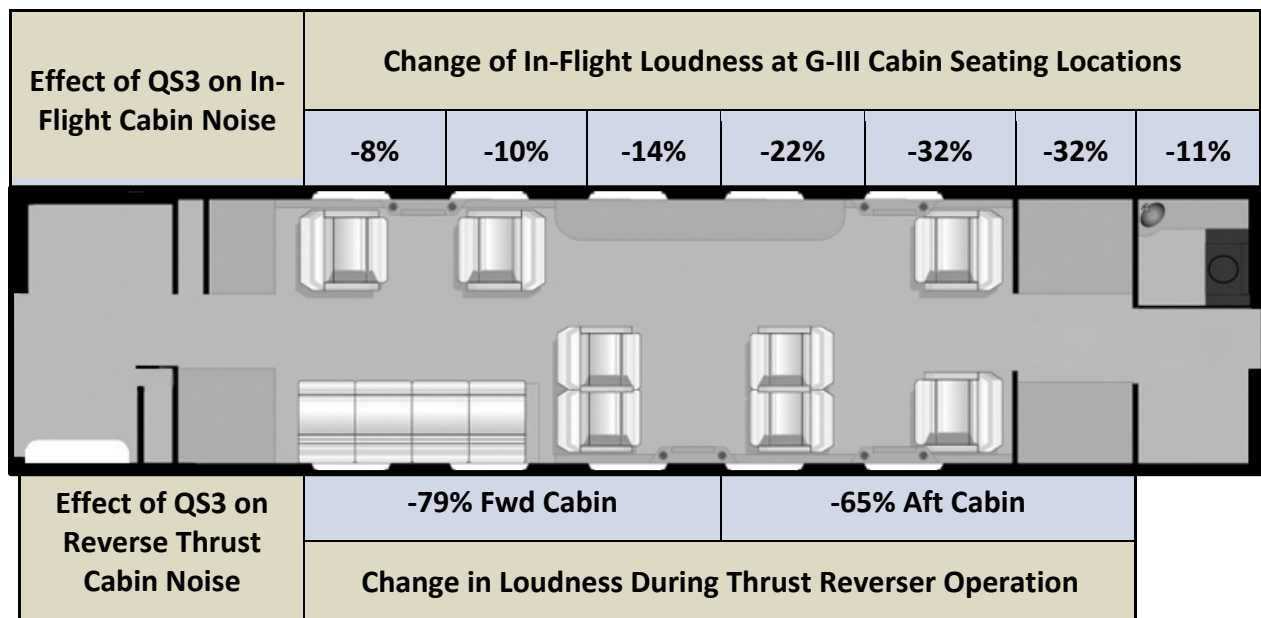


### 3.4 CABIN NOISE

Incorporation of the QS3 system significantly reduces cabin noise. In-flight cabin noise level monitoring was performed with G-III aircraft S/N 416 prior to and following installation of the QS3 system. The results of the installation on Speech Interference Level (SIL) loudness at various cabin locations during flight at Mach = 0.8 and FL400 and during ground thrust reversal are shown in the following illustration.



The chart depicts change in loudness attributed to the QS3 system. Absolute values of cabin noise levels may vary among individual aircraft due to interior configuration and selection of materials.

The dramatic reduction in noise during thrust reverser is principally due to the 52% efficiency of the QS3 cascade-type reverser vs. 11% efficiency of the OEM target-type reverser. During reverse thrust operation, QS3's reverser draws 80% N<sub>2</sub>, producing the same reverse thrust as the OEM reverser at 92% N<sub>2</sub>.