

Erratum

Erratum for “Laboratory Tests to Standardize Environment Test Conditions of Micro/Nano Satellite Units” [Trans. JSASS Aerospace Tech. Japan Vol. 12, No. ists29, pp. Pf_1-Pf_10, 2014]

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The numbers in Tables 4, 5, 6, 7 and 14, especially the standard deviation were miscalculated. The correct tables are the following,

Table 4 . Resonant frequency range.
 (dummy satellite, 300-1000Hz)

	Resonant frequency[Hz]		
	Perpendicular to the axial(x)	Perpendicular to the axial(y)	Axial direction (z)
Average	566.4	586.5	320.9
Standard deviation	68.15	185.2	39.29
Lower value	453	277	255
Upper value	677	887	385

Table 5 . Normal tolerance limit of amplification factor in logarithm of the dummy satellite in the range: 300-1000Hz
 (real values are shown in bracket).

	Amplification factor		
	Perpendicular to the axial(x)	Perpendicular to the axial(y)	Axial direction (z)
Average	0.39(2.4)	0.49(3.1)	0.14(1.4)
Standard deviation	0.20(1.6)	0.28(3.1)	0.11(1.3)
NTL (Min)	0.06(1.15)	0.02 (1.05)	-0.04(0.91)
NTL (Max)	0.72(5.25)	0.96 (9.12)	0.32(2.09)

Table 6 . Resonant frequency range
 (dummy satellite, 1000-2000Hz).

	Resonant frequency[Hz]		
	Perpendicular to the axial(x)	Perpendicular to the axial(y)	Axial direction
Average	1798.2	1798.2	1694.1
Standard deviation	214.9	404.3	147.8
Lower value	1439	1001	1447
Upper value	2147	2332	1934

Table 7 . Normal tolerance limit of amplification factor in logarithm of the dummy satellite in the range: 1000-2000Hz
 (real values are shown in bracket).

	Amplification factor		
	Perpendicular to the axial(x)	Perpendicular to the axial(y)	Axial direction
Average	0.33(2.1)	0.32(2.1)	0.29(1.9)
Standard deviation	0.16(1.4)	0.18(1.5)	0.16(1.4)
NTL (Min)	0.049(1.12)	0.014(1.03)	0.002(1.00)
NTL (Max)	0.59(3.89)	0.61(4.08)	0.53(3.36)

Table 14. Resonant frequency range (20-300Hz).

	Resonant frequency [Hz]		
	Perpendicular to the axial direction 1	Perpendicular to the axial direction 2	Axial direction
Average	54	49	172
Standard deviation	12.6	12.9	24.1
Lower value	31	27	130
Upper value	76	72	214

Because these numbers change, Fig. 14 also changes. The correct figure is the following,

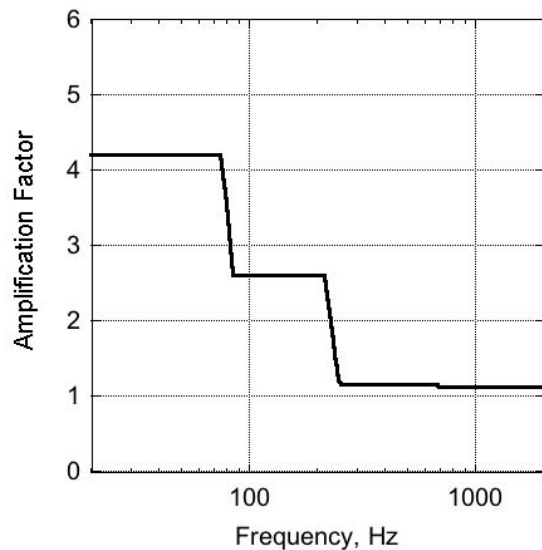


Fig. 14 The amplification factor and resonance frequency range for unit QT test level (20-2000Hz).

As Fig. 14 changes, Fig.15 also changes. In addition, when Fig.15 was calculated from the original Fig.14, a wrong factor of 1.5 was multiplied between 300 and 1000Hz instead of 1.15. The correct figure is the following,

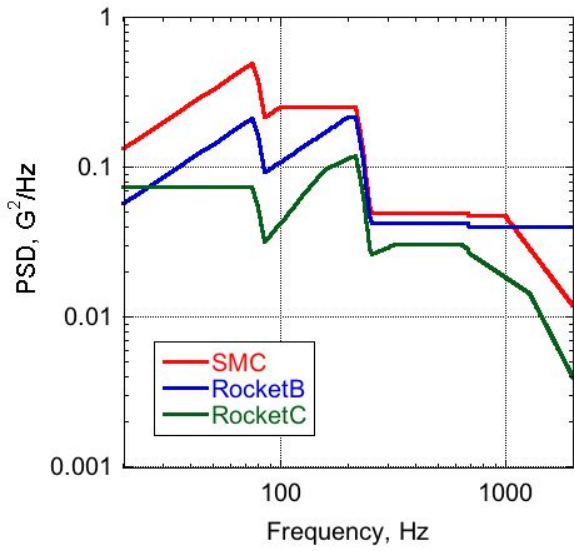


Fig.15 Unit QT level (20-2000Hz)