

PROPOSED INTERFACE REVISION NOTICE (PIRN)

Note: This Cover Page is not intended for signature. It is to be used during the document update (pre-ICWG) process.

Affected ICD/IS:
IS-GPS-705, Rev. D

PIRN Number:
PIRN-IS-705D-001

Authority:
RFC-00267

PIRN Date: 02-JUL-2015

CLASSIFIED BY: N/A
DECLASSIFY ON: N/A

Document Title:
Navstar GPS Space Segment/User Segment L5 Interfaces

Reason For Change (Driver):

A plot of typical GPS III phase noise spectral density is currently TBD in IS-GPS-705 and IS-GPS-800. A plot of L5 IIF data is provided in IS-GPS-705. Since these are provided for user reference and do not drive design, they do not belong in interface specifications.

Description of Change:

Remove section 6.3.2 from IS-GPS-705 and associated reference in 3.3.1.3. Remove section 6.3.3 from IS-GPS-800. Move data to an application note TBD.

Prepared By: Justin Malek **Checked By:** Randall Grossman

DISTRIBUTION A. Approved for public release: distribution unlimited.

THIS DOCUMENT SPECIFIES TECHNICAL REQUIREMENTS AND NOTHING HEREIN CONTAINED SHALL BE DEEMED TO ALTER THE TERMS OF ANY CONTRACT OR PURCHASE ORDER BETWEEN ALL PARTIES AFFECTED.

Interface Control Contractor:
Leidos Inc (GPS SE&I)
300 N. Sepulveda Blvd., Suite 3000
El Segundo, CA 90245

CODE IDENT 5UTE1

IS705-47 :

WAS :

The phase noise spectral density of the un-modulated carrier shall be such that a phase locked loop of 10 Hz one-sided noise bandwidth shall be able to track the carrier to an accuracy of 0.1 radians root mean square (RMS). See additional supporting material for phase noise characteristics in section 6.3.2.

IS :

The phase noise spectral density of the un-modulated carrier shall be such that a phase locked loop of 10 Hz one-sided noise bandwidth shall be able to track the carrier to an accuracy of 0.1 radians root mean square (RMS).

IS705-137 :

WAS :

Integrated Phase Noise Characteristics.

CS Effectivity: N/A

SS Effectivity: N/A

IS :

<DELETED OBJECT>

IS705-138 :

WAS :

As an aid to user equipment receiver designers, a plot is provided (Figure 6-1) of a typical GPS Block IIF phase noise spectral density for the un-modulated L5 carrier. A plot of a typical GPS III phase noise spectral density will be added TBD.

CS Effectivity: N/A

SS Effectivity: N/A

IS :

<DELETED OBJECT>

IS705-139 :

WAS :

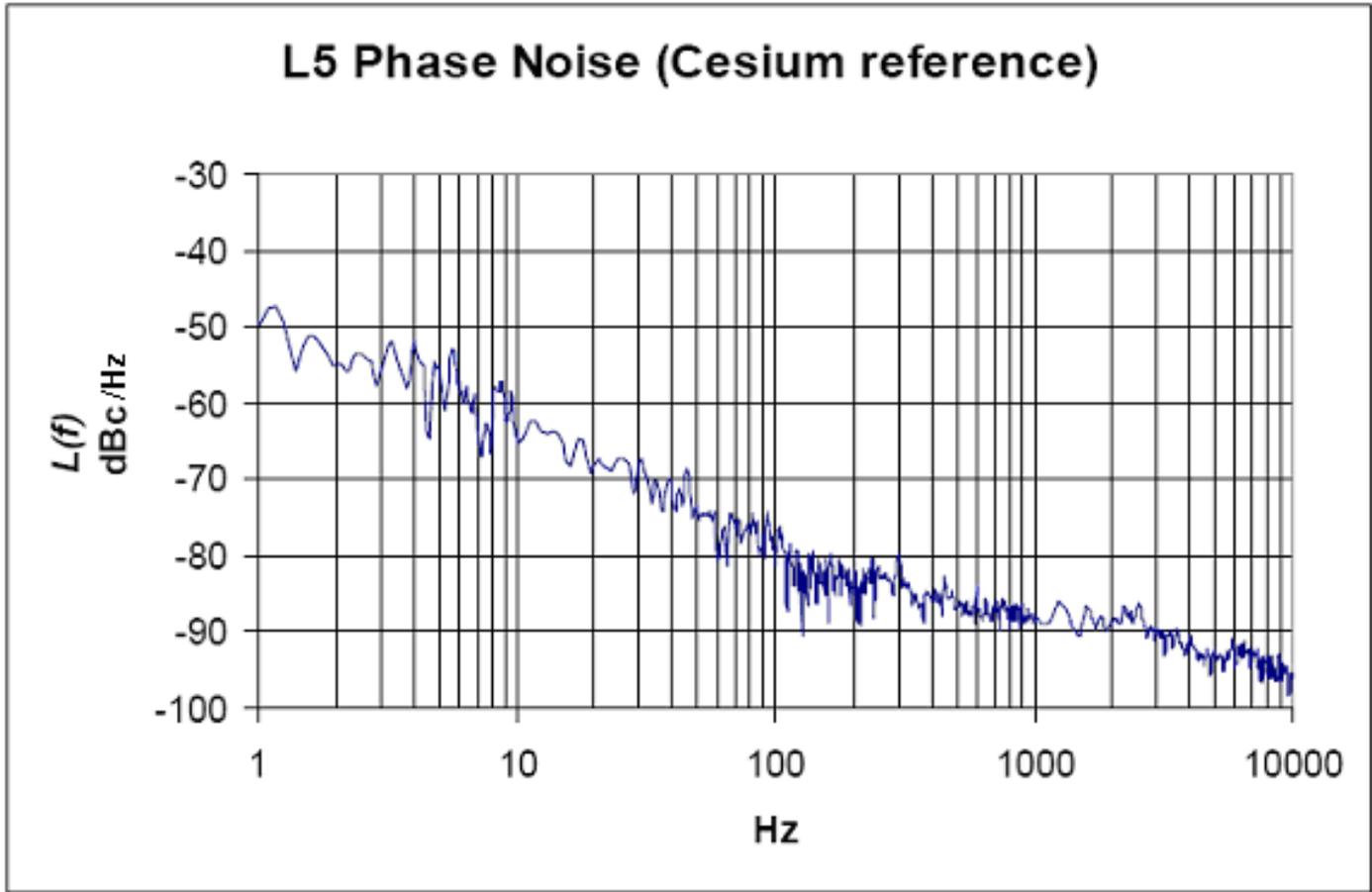


Figure 6-1. Carrier Phase Noise Spectral Density

CS Effectivity: N/A

SS Effectivity: N/A

IS :

<DELETED OBJECT>