

Section 6.2.2 (o)(a3)

Hopping channel carrier frequencies are separated by 891 .87 kHz.

Each bearer is independent and hops at a rate of 1 00 hops/sec.

The hopping sequence is either table-generated or RNG-generated:

1. A table-generated hop sequence is 75 hops long, each channel is used exactly 40 times once in the sequence. Therefore, in a 30 second period each frequency channel is used exactly 40 times in that sequence.
2. An RNG-generated hop sequence is 3000 hops long; each channel is used exactly 40 times in the entire sequence. Therefore, in a 30 second period each frequency channel is used exactly 40 times in that sequence.

The hopping sequence contains 75 logical channels these are mapped-onto 75 physical channels using a mapping table.

The highest channel occupancy is when an FP has 4 traffic bearers (i.e. 8 slots utilized), each using the same hopping sequence. As shown previously, for a given sequence, in a 30 second period each frequency channel is used exactly 40 times. A slot is 1026 usec long, therefore the average time of occupancy on any frequency channel in a 30 second period is:

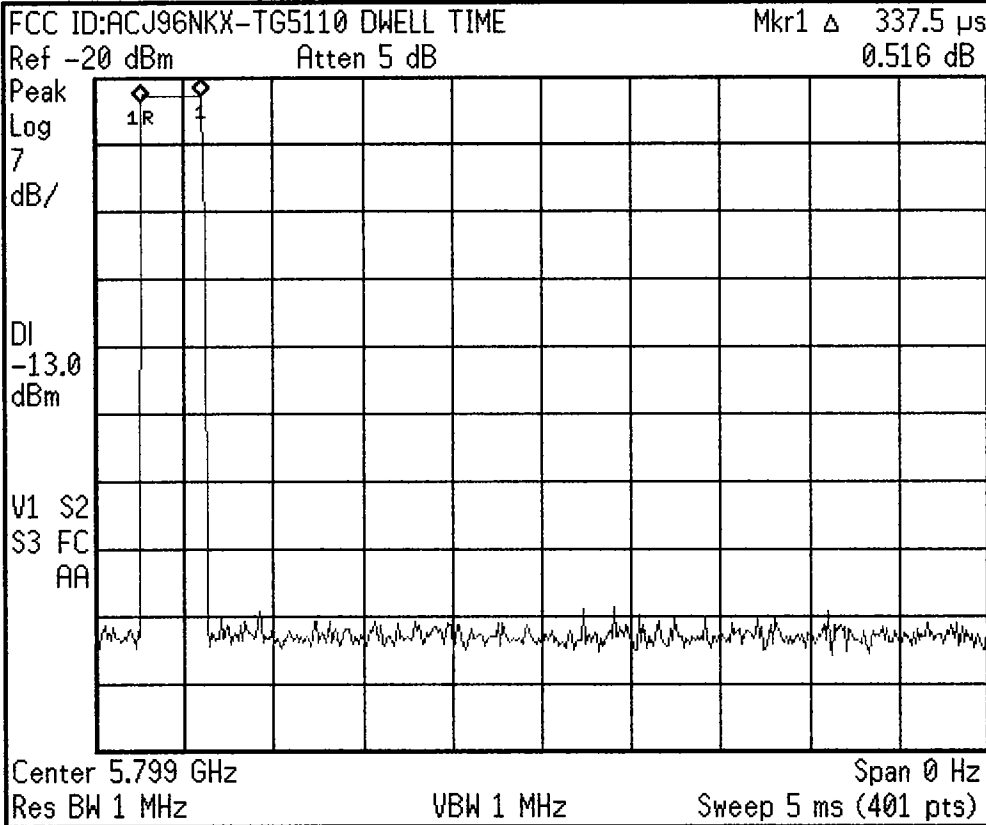
$$T = 1026 \text{ usec} \times 40 \times 8 = 328.3 \text{ msec}$$

As a comparison, the lowest channel occupancy is when only a single dummy bearer is being transmitted. The transmission is 338 usec long, therefore the average time of occupancy on any frequency channel in a 30 second period is:

$$T = 338 \text{ USEC} \times 40 \times 1 = 13.520 \text{ msec}$$

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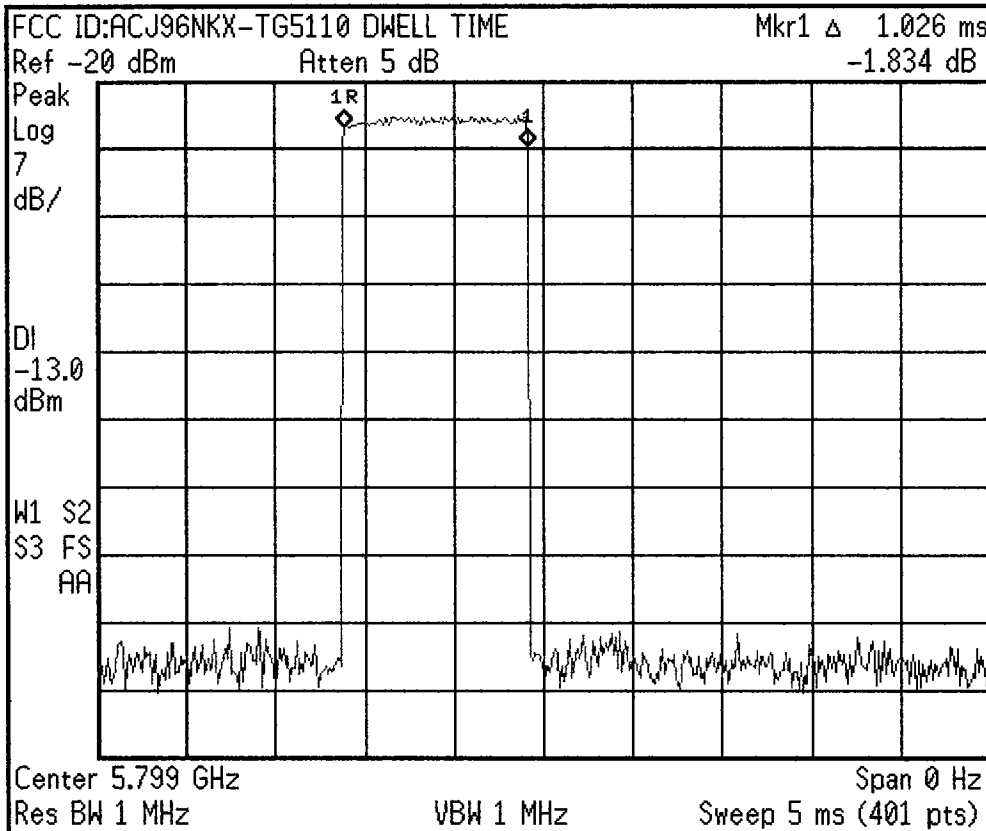
L



Freq/Channel	
Center Freq	5.79890000 GHz
Start Freq	5.79890000 GHz
Stop Freq	5.79890000 GHz
CF Step	1.00000000 MHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off
Scale Type	Log Lin

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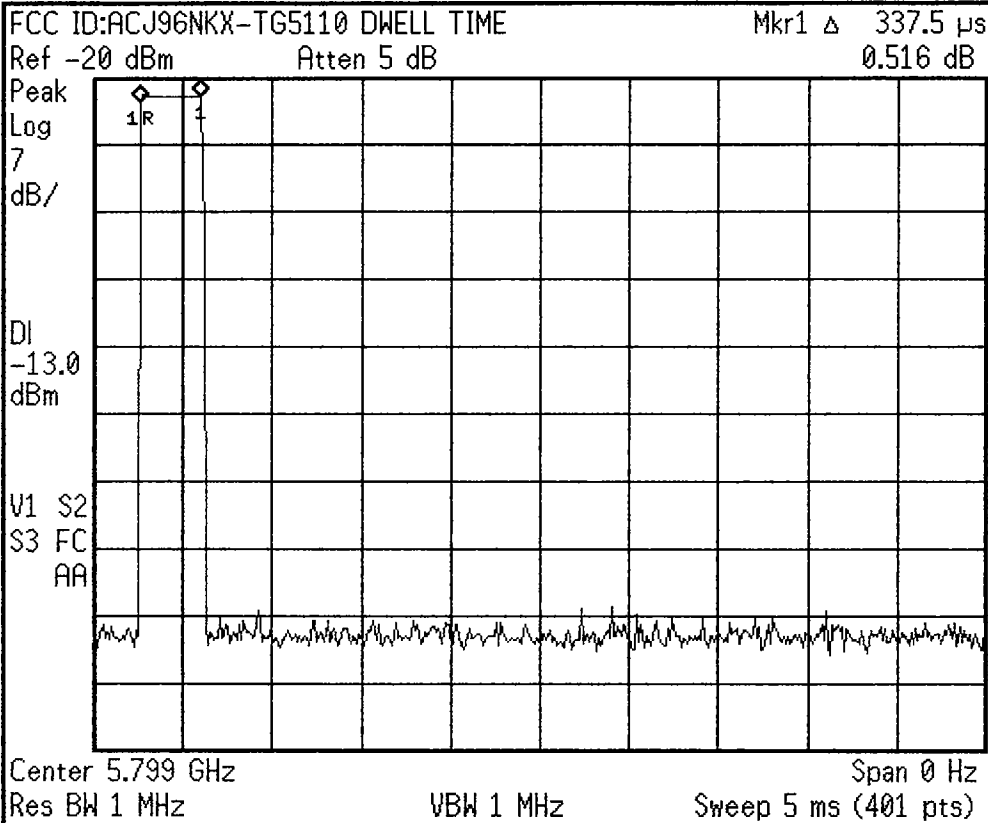
L



Freq/Channel	
Center Freq	5.79890000 GHz
Start Freq	5.79890000 GHz
Stop Freq	5.79890000 GHz
CF Step	1.00000000 MHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off
Scale Type	Log Lin

Agilent

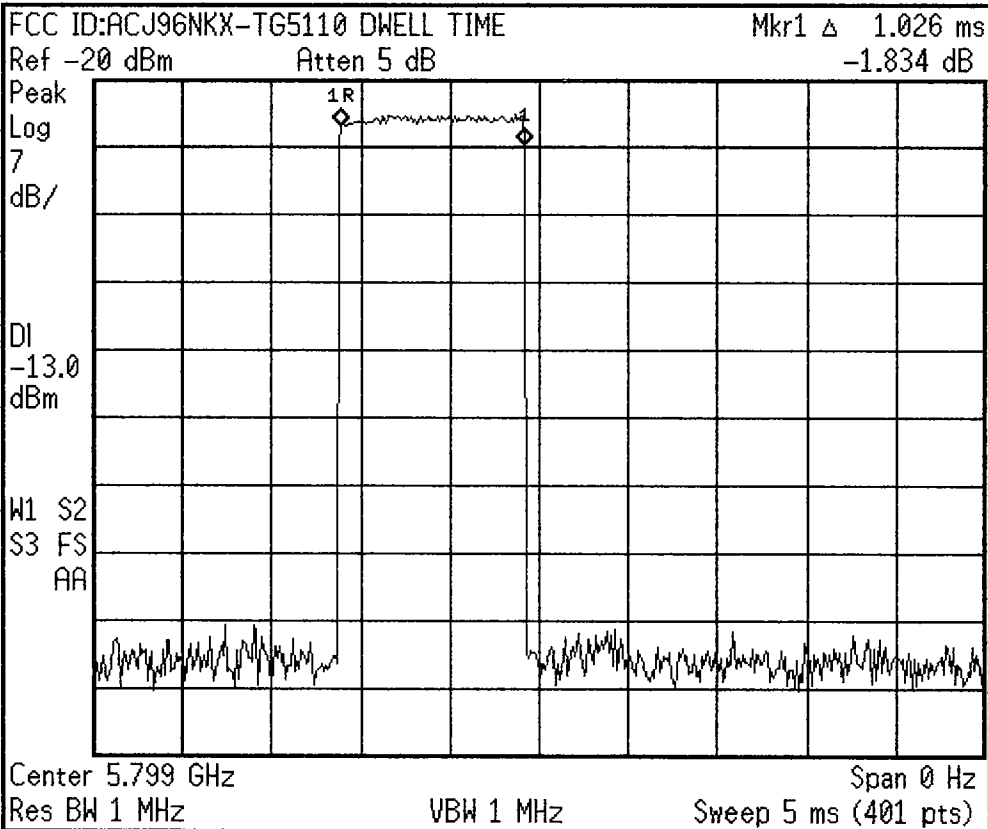
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Center Freq 5.79890000 GHz
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Stop Freq 5.79890000 GHz
CF Step 1.00000000 MHz Auto Man
Freq Offset 0.00000000 Hz
Signal Track On Off
Scale Type Log Lin

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Freq/Channel
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