Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

RSS 210 and FCC 15.247 (DTS) Antenna Port Measurements
802.11a mode

Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

Date of Test: 4/8/2008
Test Engineer: Suhaila Khushzad
Test Location: FT Lab # 1

Config. Used: 1
Config Change: None
EUT Voltage: Powered From Host System(3.3V DC)

General Test Configuration

The EUT was connected to the spectrum analyzer or power meter via a suitable attenuator. All measurements were made on a single chain.

All measurements have been corrected to allow for the external attenuators used.

Ambient Conditions:

Temperature: 19.9 °C
Rel. Humidity: 36 %

Summary of Results

Run #	Test Performed	Limit	Pass / Fail	Result / Margin
1	Output Power	15.247(b)	Pass	15.5 dBm(35.2mW)
2	Power spectral Density (PSD)	15.247(d)	Pass	-8.0 dBm/3kHz
3	6dB Bandwidth	15.247(a)	Pass	16.25 MHz
3	99% Bandwidth	RSS GEN	-	17.1 MHz
4	Antenna Conducted - Out of Band Spurious	15.247(b)	Pass	All emissions below the -30dBc limit

Modifications Made During Testing

No modifications were made to the EUT during testing

Deviations From The Standard

No deviations were made from the requirements of the standard.

Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
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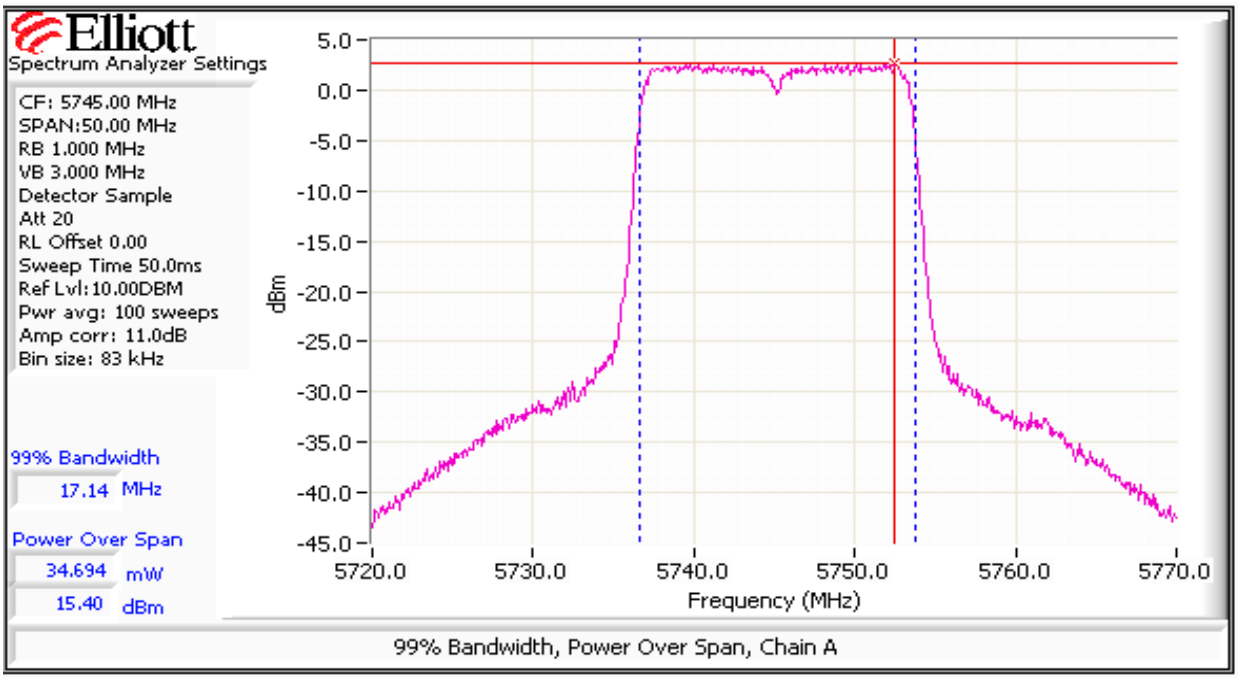
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #1: Output Power

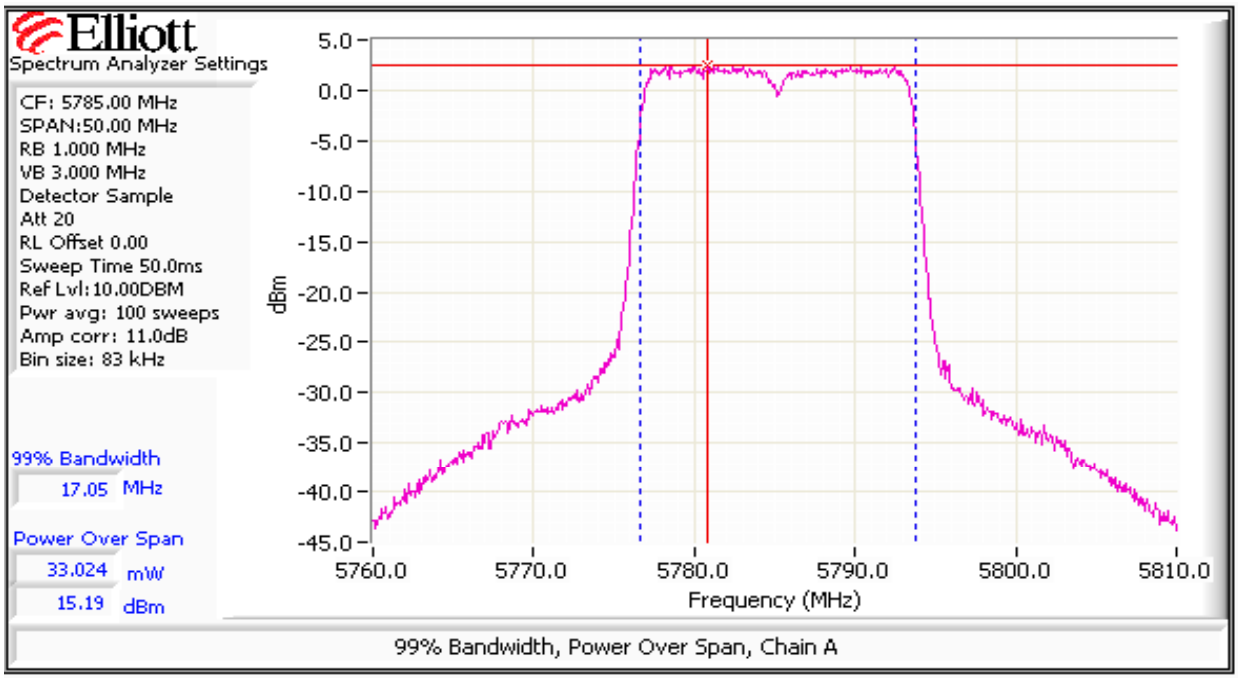
Power Setting[2]	Frequency (MHz)	Output Power (dBm) [1]	Output Power mW	Antenna Gain (dBi)	Result	EIRP [Note 2] dBm	EIRP [Note 2] W	Output Power (dBm) [3]	Output Power mW
26	5745, Chain A	15.4	34.7	5.0	Pass	20.4	0.110	16.7	46.8
26	5785, Chain A	15.2	33.0	5.0	Pass	20.2	0.104	16.6	45.7
26.5	5825, Chain A	15.4	34.5	5.0	Pass	20.4	0.109	16.7	46.8
25	5745, Chain B	15.1	32.5	5.0	Pass	20.1	0.103	16.6	45.7
25.5	5785, Chain B	15.2	33.3	5.0	Pass	20.2	0.105	16.6	45.7
26	5825, Chain B	15.5	35.2	5.0	Pass	20.5	0.111	16.7	46.8
25.5	5745, Chain C	14.9	31.0	5.0	Pass	19.9	0.098	16.6	45.7
26	5785, Chain C	15.2	32.7	5.0	Pass	20.2	0.104	16.7	46.8
26.5	5825, Chain C	15.3	34.2	5.0	Pass	20.3	0.108	16.7	46.8

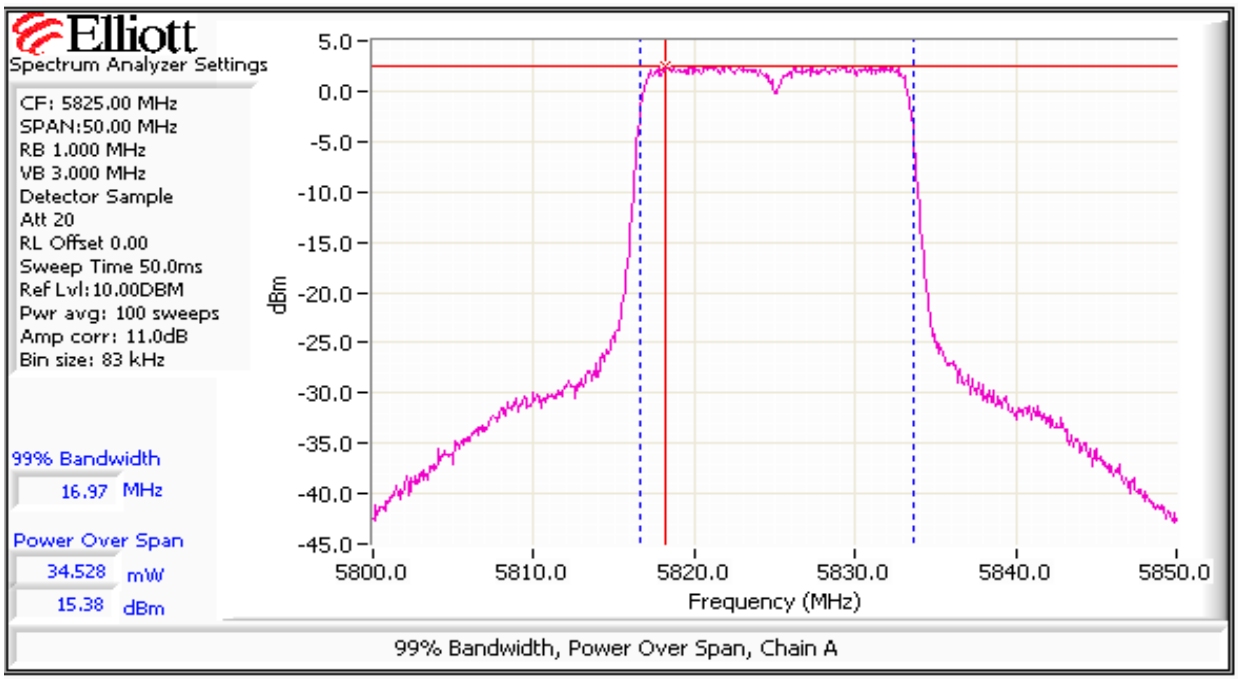
Note 1:	Output power measured using a spectrum analyzer (see plots below): RBW=1MHz, VB=3 MHz, sample detector, power averaging on (transmitted signal was continuous) and power integration over 50 MHz. Spurious limit is -30dBc because this method was used. The output power limit is 30dBm.
Note 2:	Power setting - the software power setting used during testing, included for reference only.
Note 3:	Power measured using average power sensor and is included for manufacturer's reference only.



Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

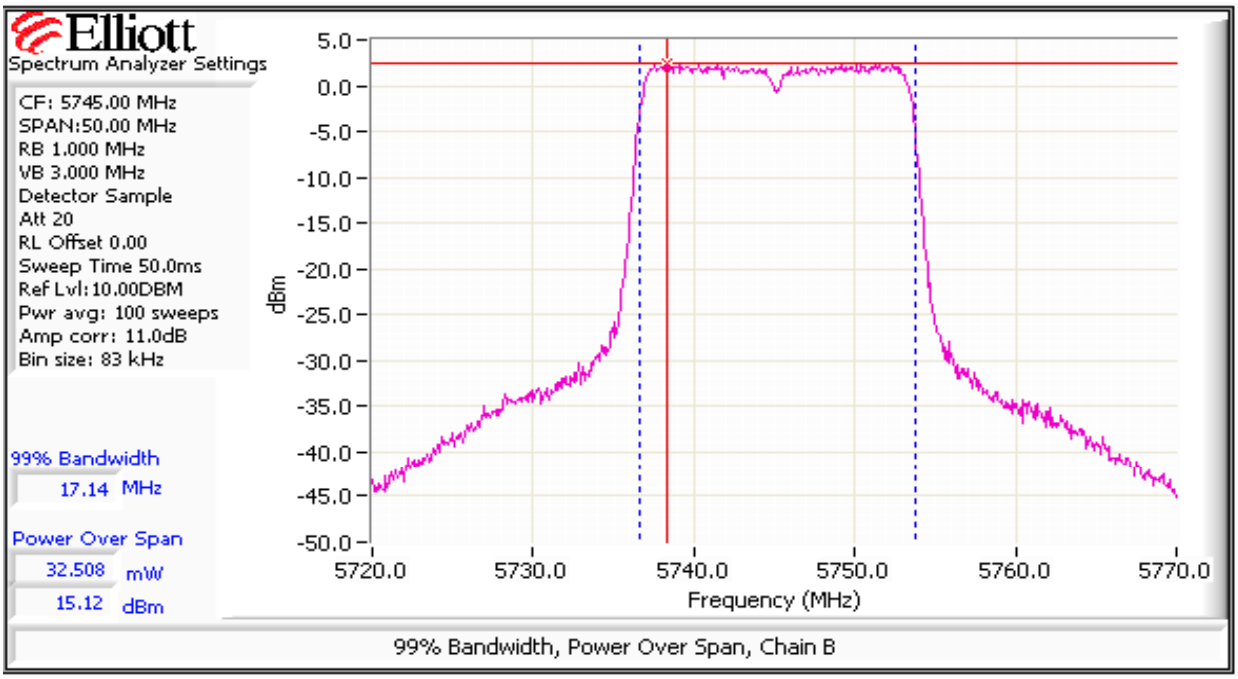
Run #1: Output Power

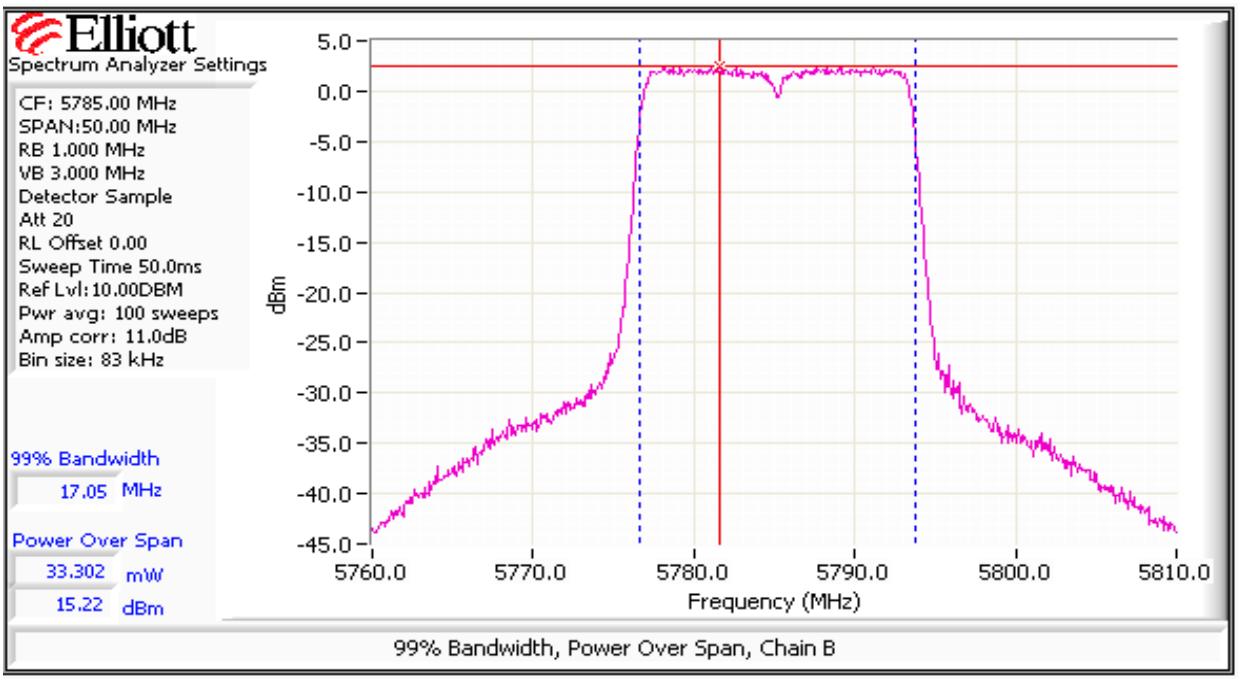




Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

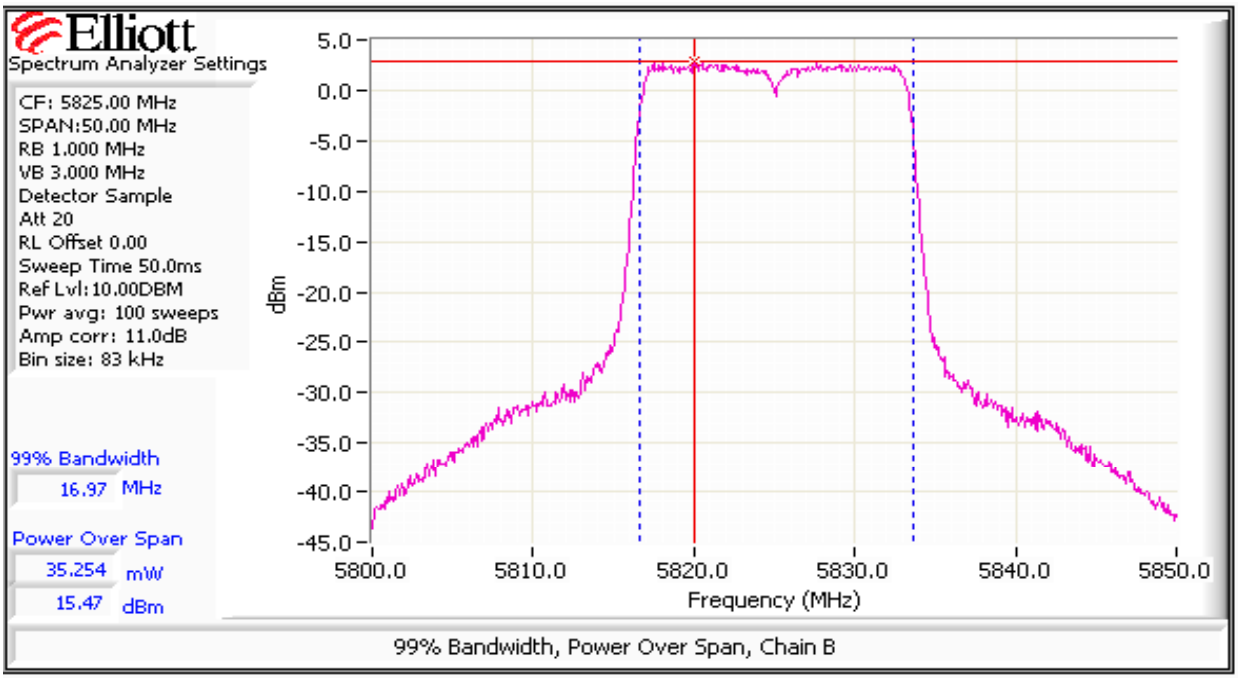
Run #1: Output Power

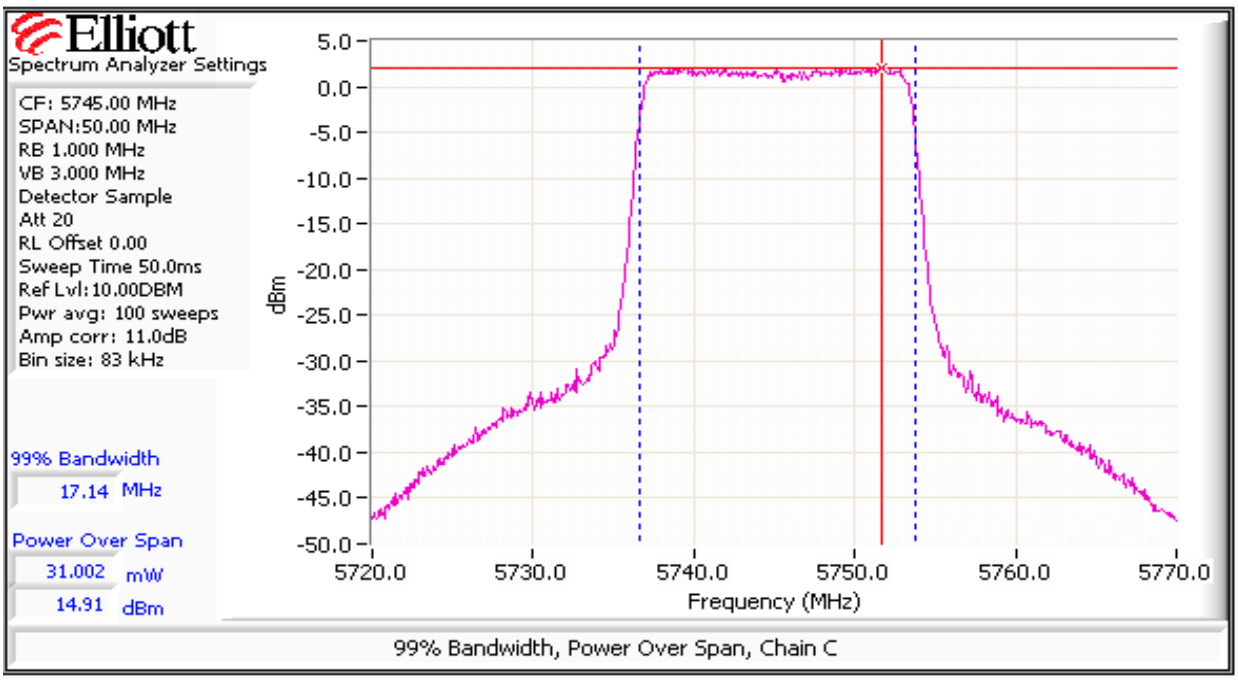




Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

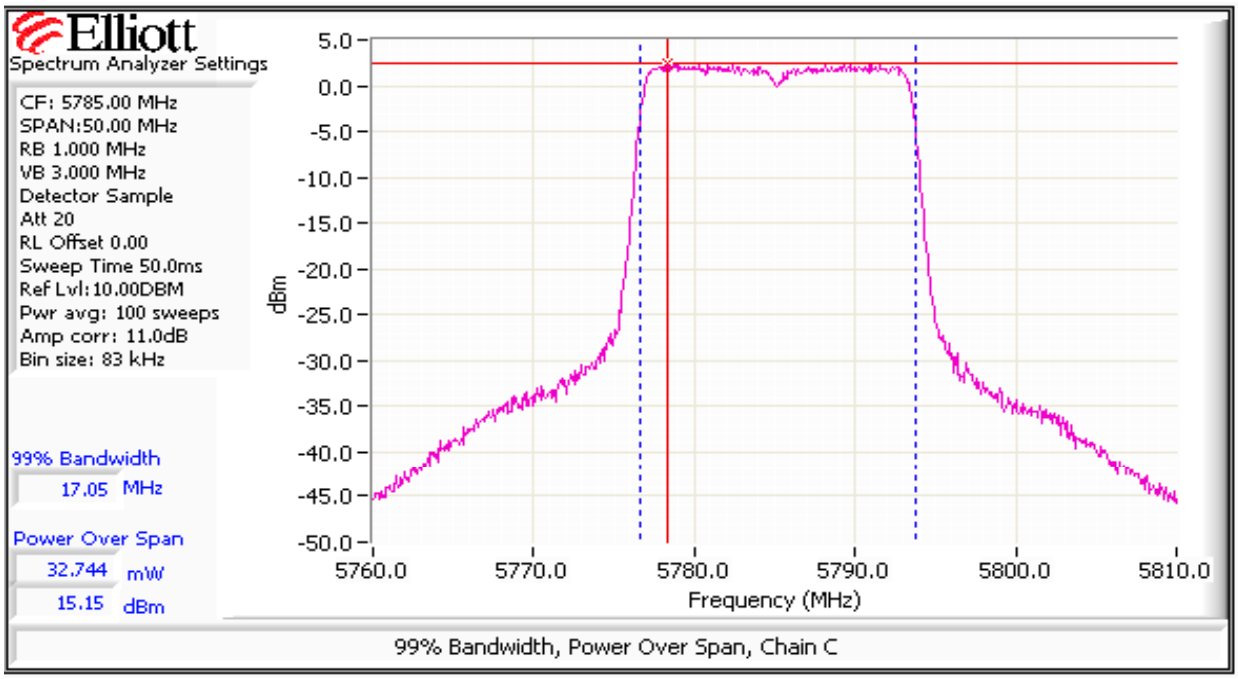
Run #1: Output Power

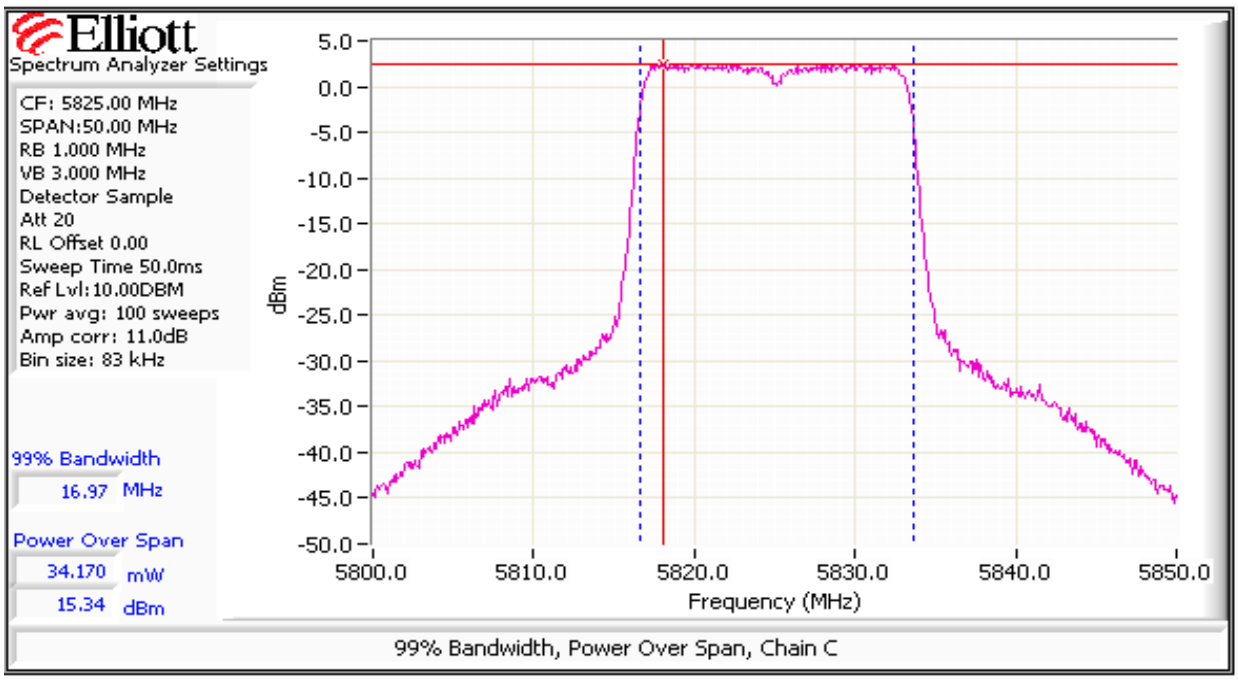




Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #1: Output Power



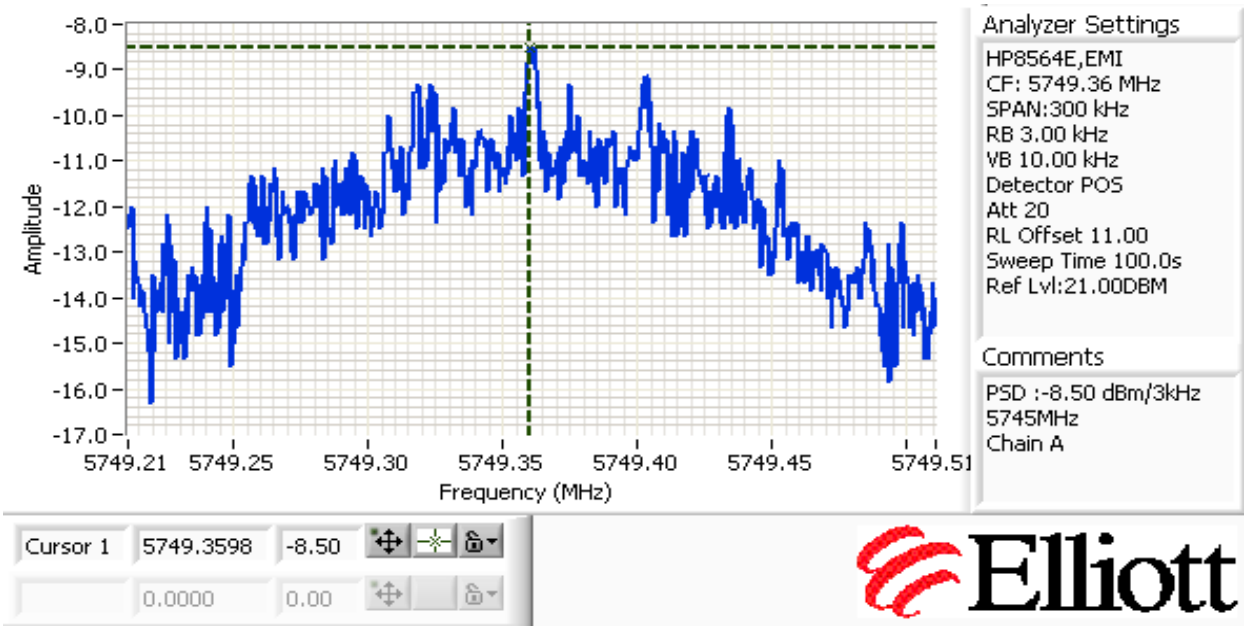


Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #2: Power spectral Density

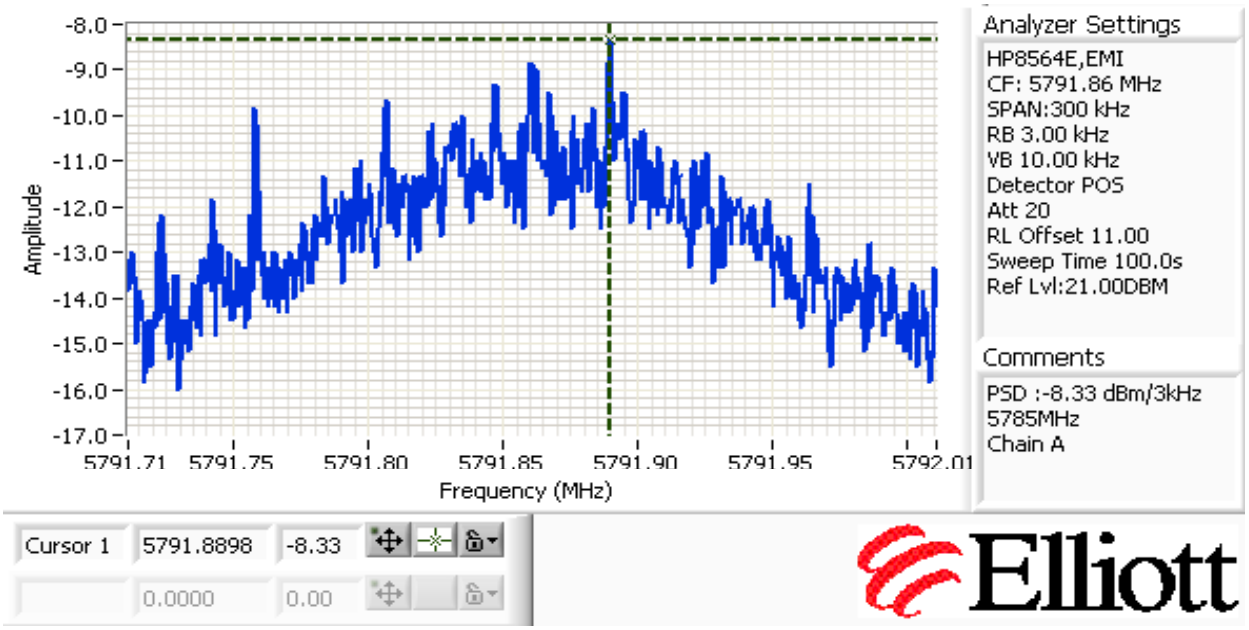
Power Setting	Frequency (MHz)	PSD (dBm/3kHz) Note 1	Limit dBm/3kHz	Result
26	5745, Chain A	-8.5	8.0	Pass
26	5785, Chain A	-8.3	8.0	Pass
26.5	5825, Chain A	-8.0	8.0	Pass
25	5745, Chain B	-9.2	8.0	Pass
25.5	5785, Chain B	-8.2	8.0	Pass
26	5825, Chain B	-8.0	8.0	Pass
25.5	5745, Chain C	-9.0	8.0	Pass
26	5785, Chain C	-8.3	8.0	Pass
26.5	5825, Chain C	-8.2	8.0	Pass

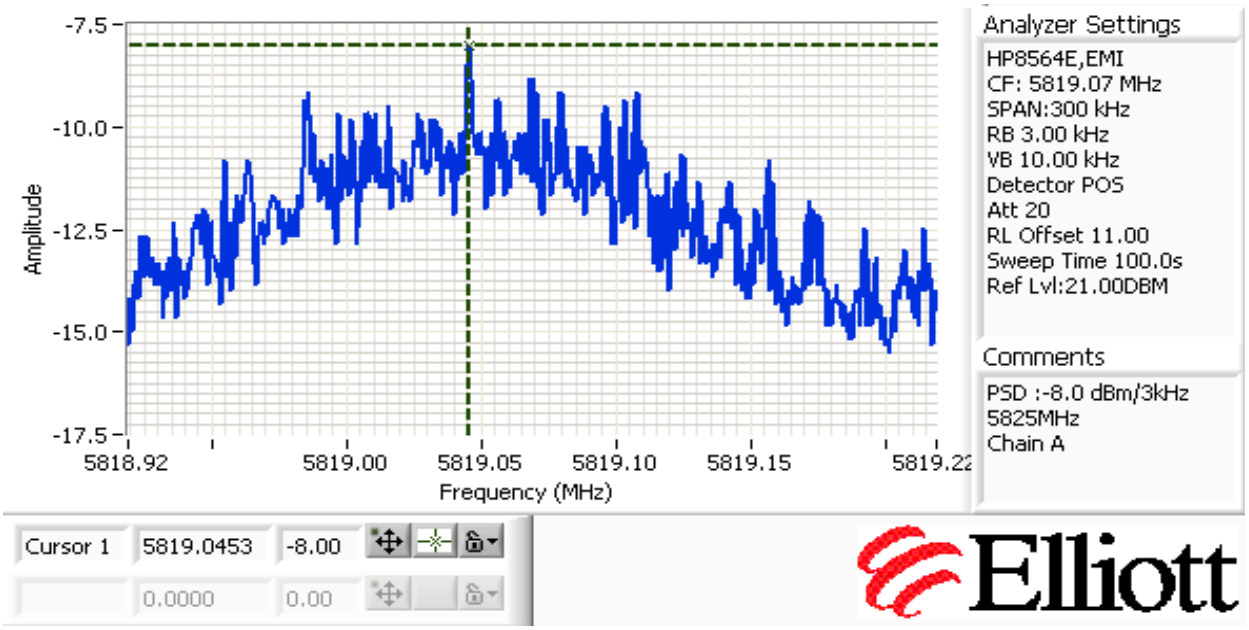
Note 1:	Power spectral density measured using RB=3 kHz, VB=10kHz, analyzer with peak detector and with a sweep time set to ensure a dwell time of at least 1 second per 3kHz. The measurement is made at the frequency of PPSD determined from preliminary scans using RB=3kHz using multiple sweeps at a faster rate over the 6dB bandwidth of the signal.



Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

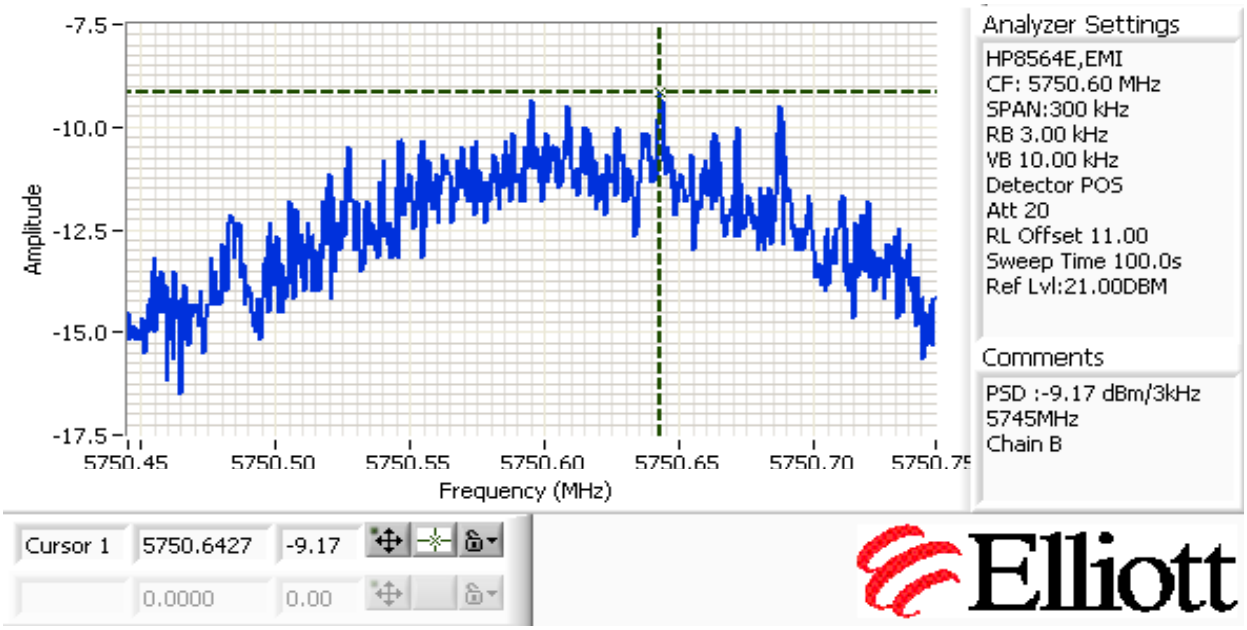
Run #2: Power spectral Density

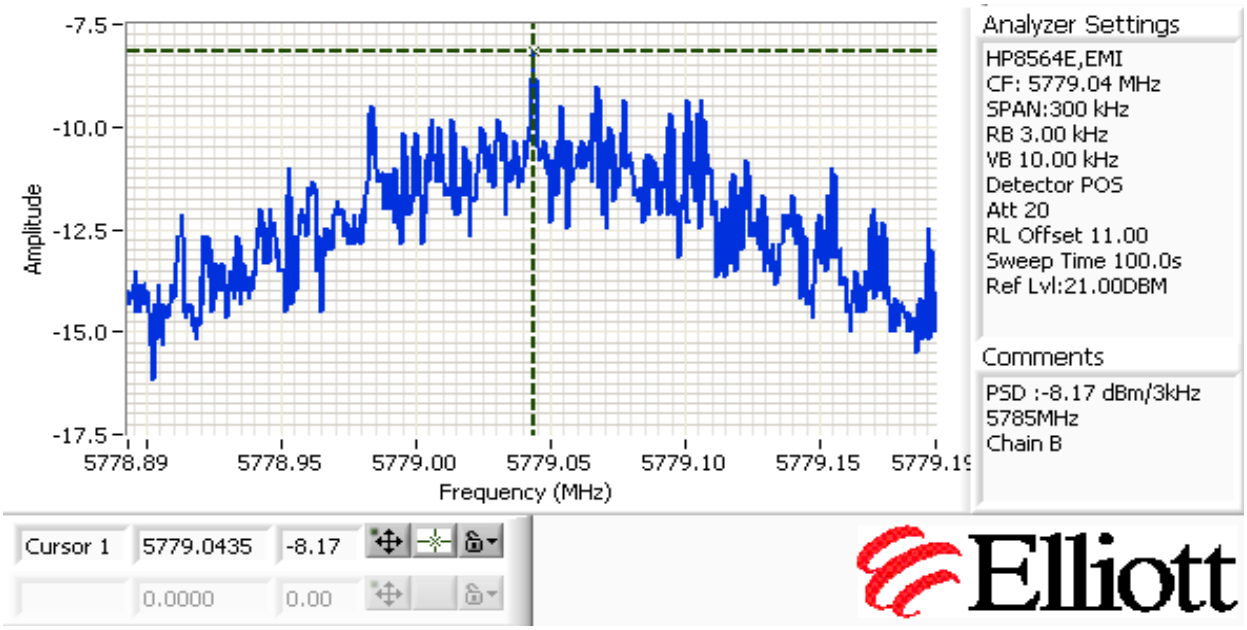




Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

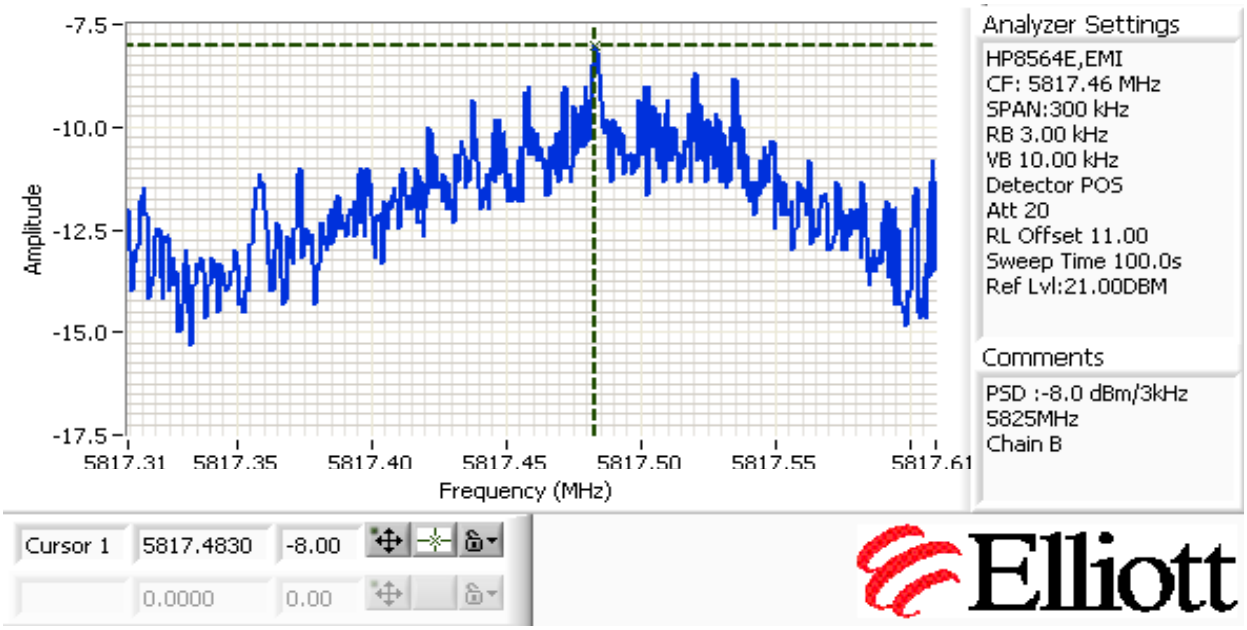
Run #2: Power spectral Density

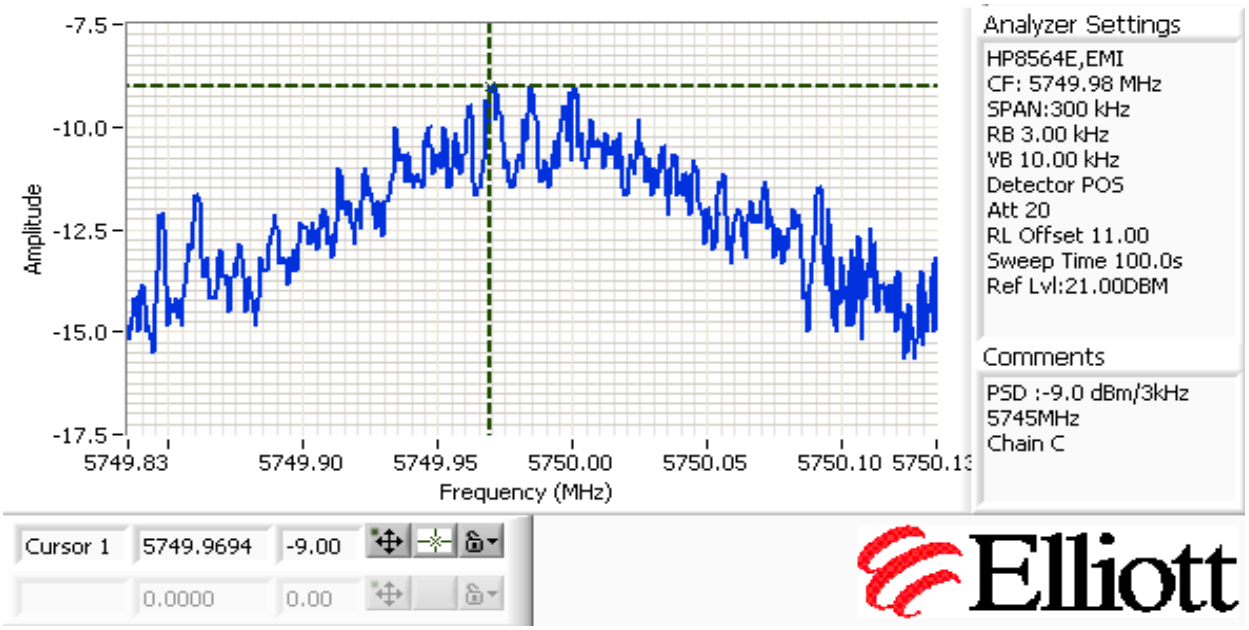




Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

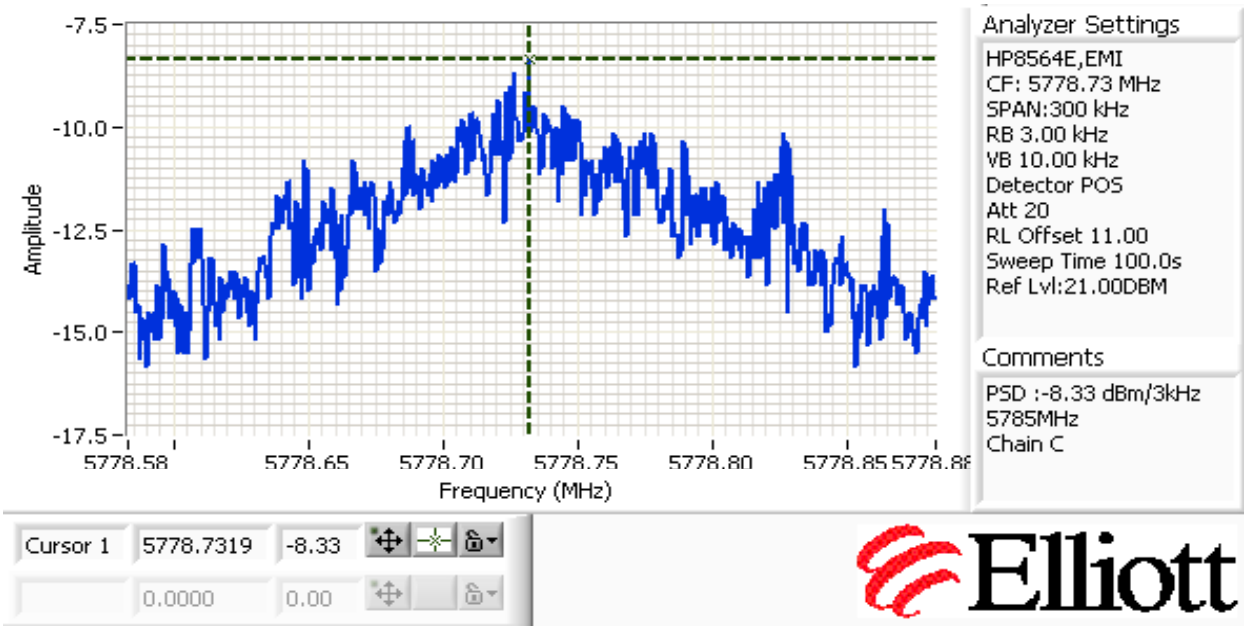
Run #2: Power spectral Density

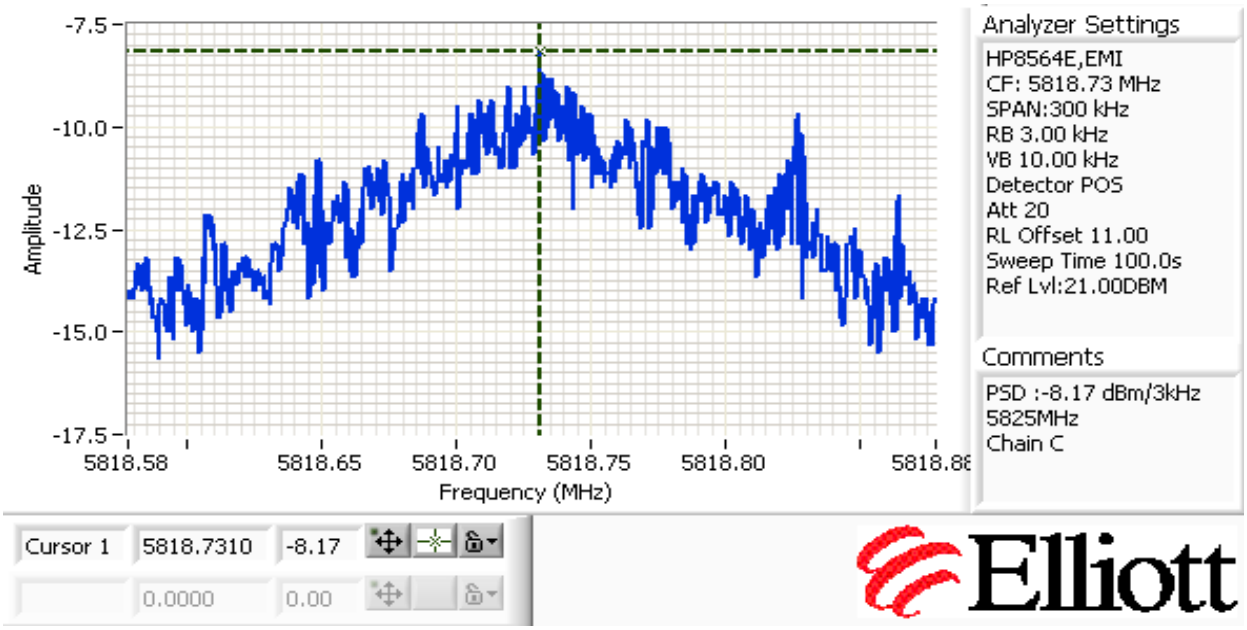




Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #2: Power spectral Density



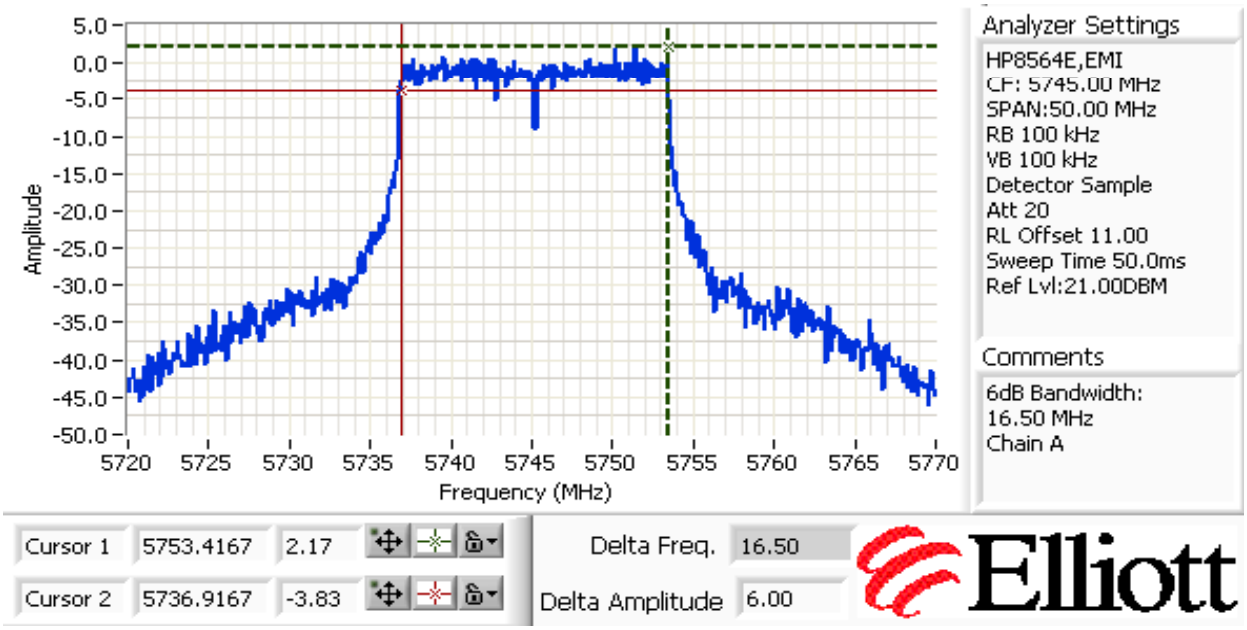


Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #3: Signal Bandwidth

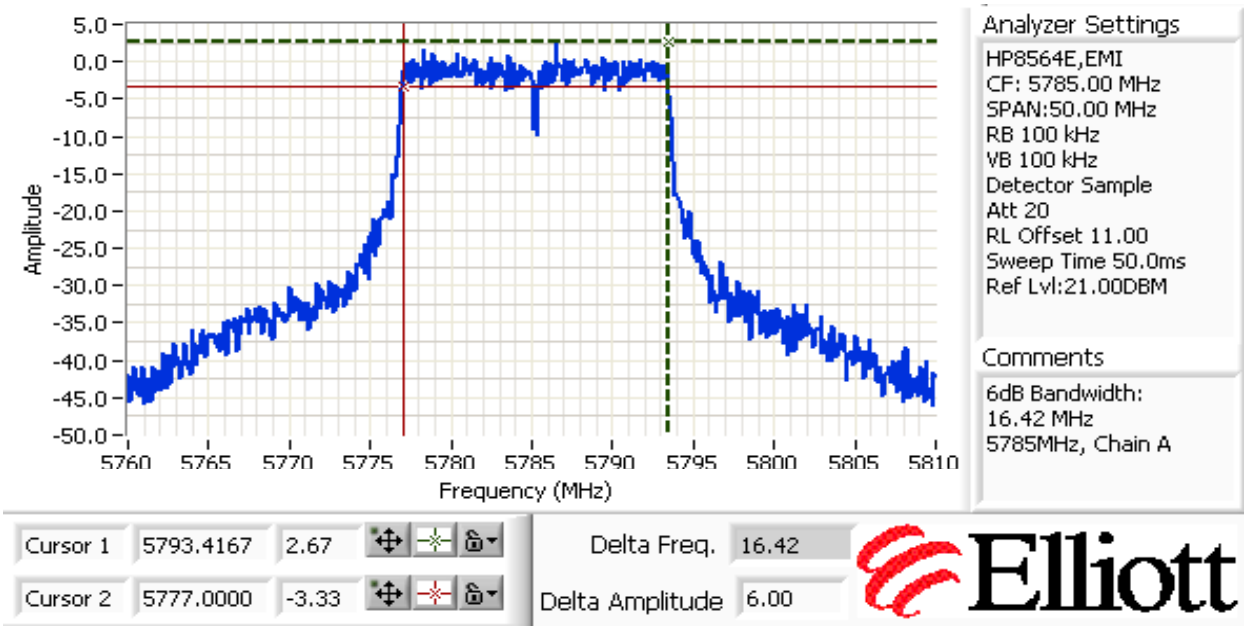
Power Setting	Frequency (MHz)	Resolution Bandwidth	Bandwidth (MHz) 6dB	99%
26	5745, Chain A	100kHz	16.5	17.1
26	5785, Chain A	100kHz	16.42	17.1
26.5	5825, Chain A	100kHz	16.25	17.0
25.5	5785, Chain B	100kHz	16.58	17.1
26	5785, Chain C	100kHz	16.5	17.1

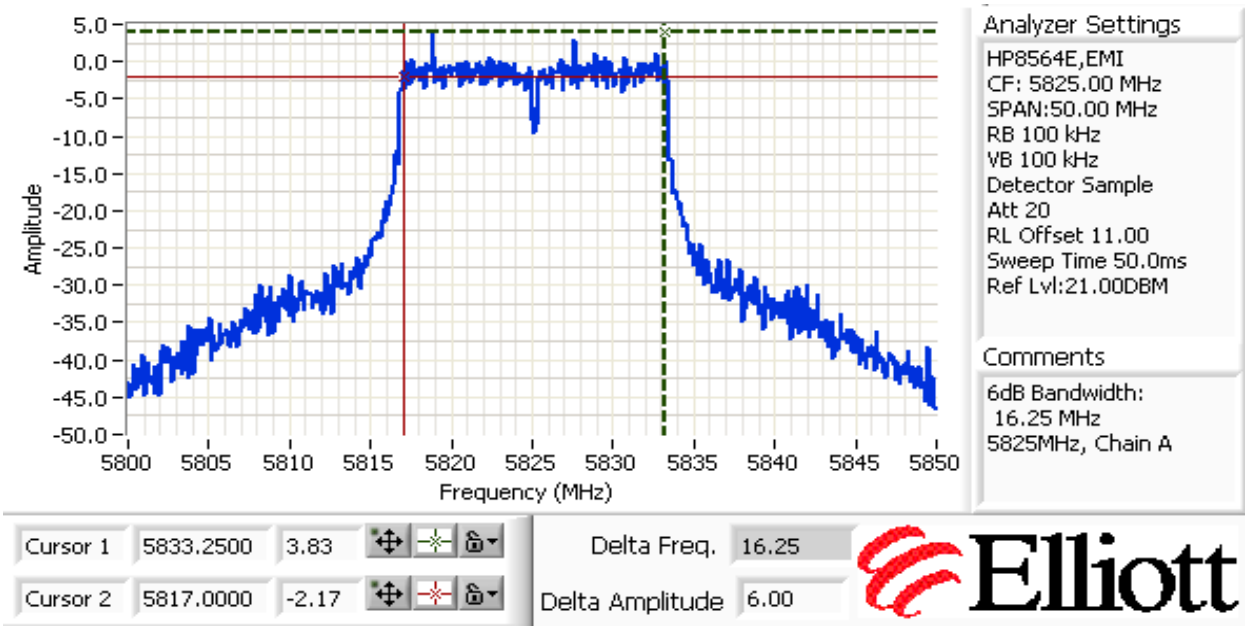
Note 1:	99% bandwidth measured in accordance with RSS GEN, with RB > 1% of the span and VB > 3xRB
Note 2:	Center channel of Chains B and C measured to verify no significant difference in signal bandwidth from Chain A.



Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

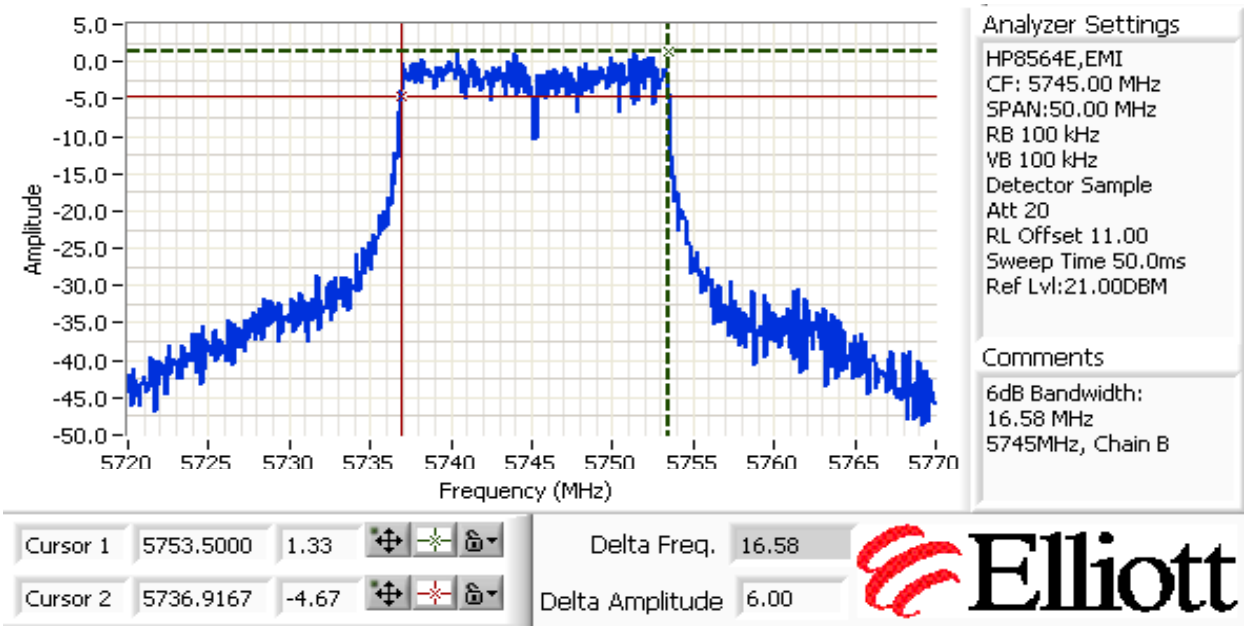
Run #3: Signal Bandwidth

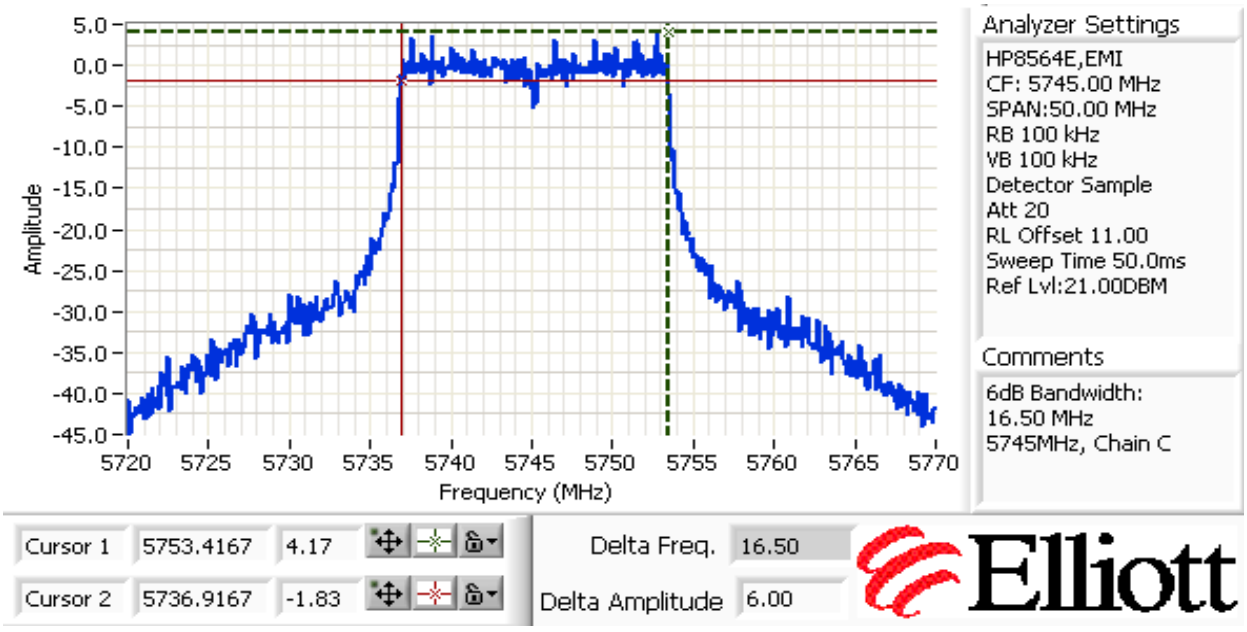




Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #3: Signal Bandwidth





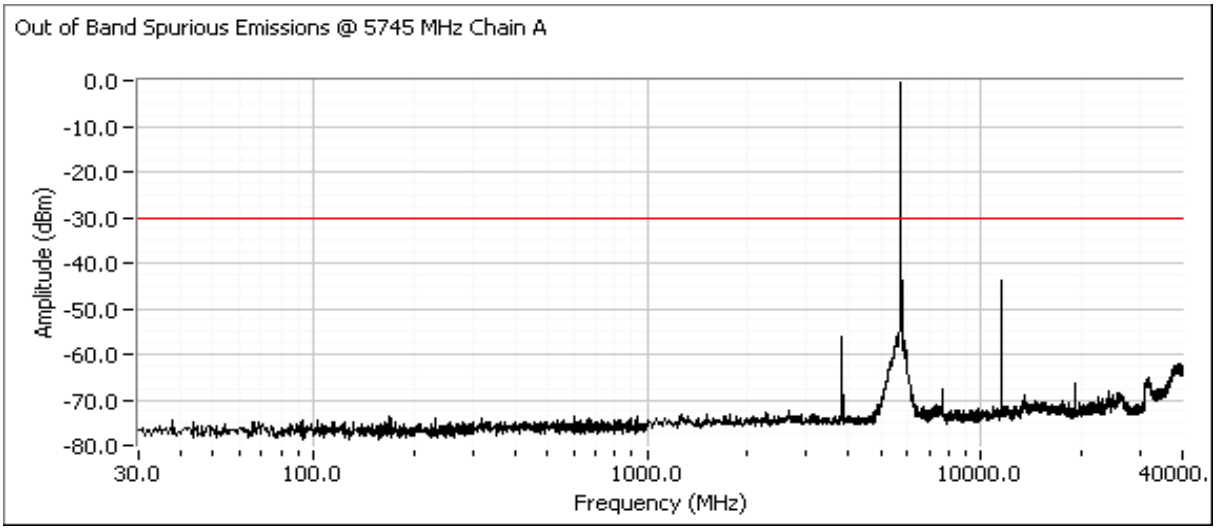
Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #4: Out of Band Spurious Emissions

All measured using RB = 100kHz, VB = 300kHz.

Frequency (MHz)	Limit	Result
5745, Chain A	-30dBc	Pass
5785, Chain A	-30dBc	Pass
5825, Chain A	-30dBc	Pass
5745, Chain B	-30dBc	Pass
5785, Chain B	-30dBc	Pass
5825, Chain B	-30dBc	Pass
5745, Chain C	-30dBc	Pass
5785, Chain C	-30dBc	Pass
5825, Chain C	-30dBc	Pass

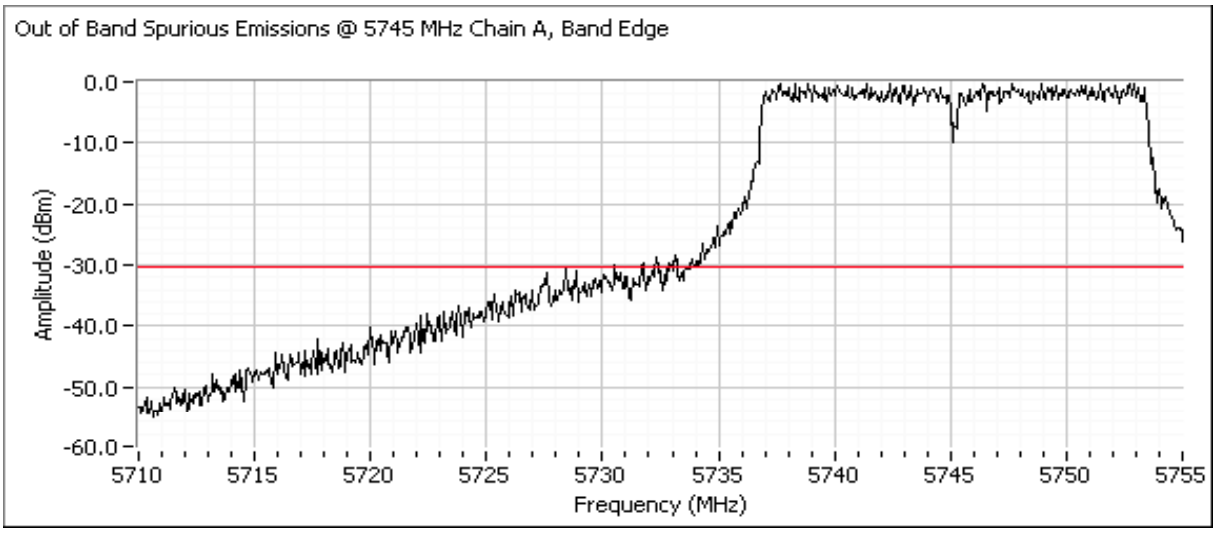
Plots for low channel, Chain A power setting(s) = 26



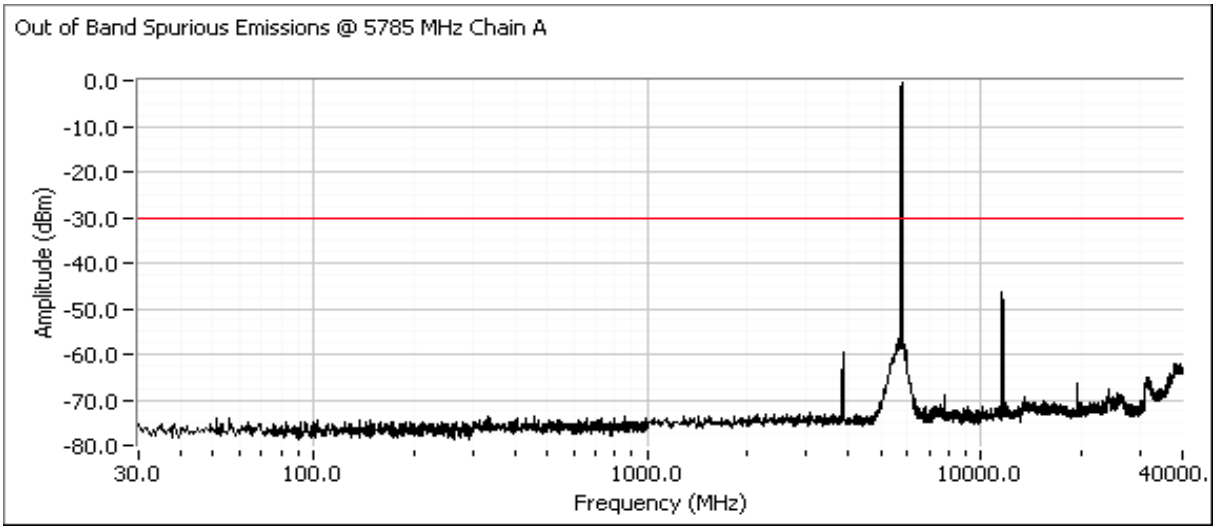
Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #4: Out of Band Spurious Emissions

Additional plot from 5715 - 5755 MHz showing compliance with -30dBc at the band edge.



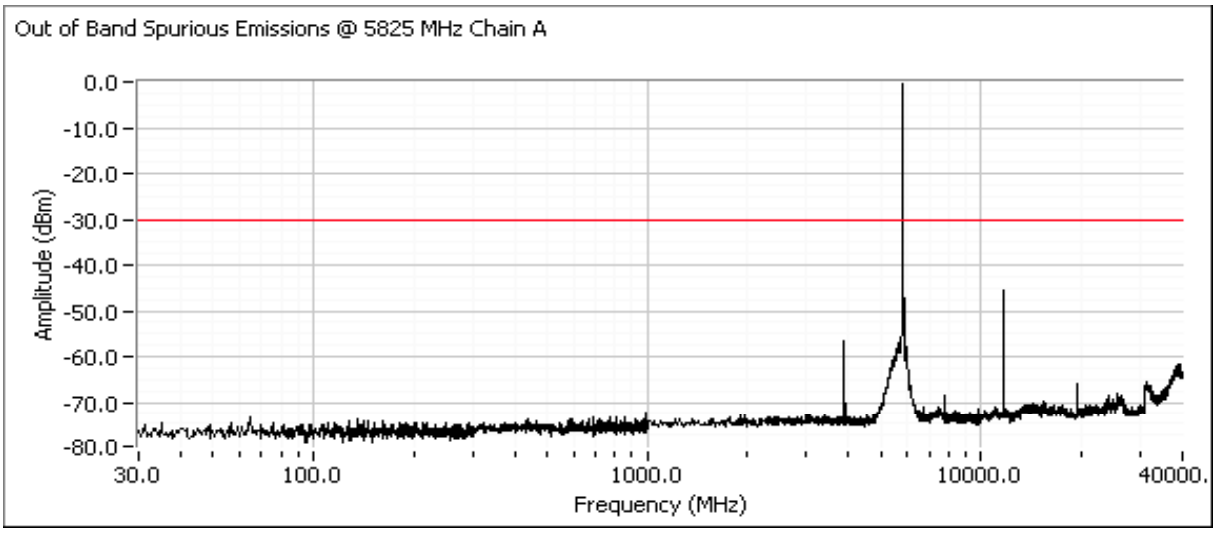
Plots for center channel, Chain A power setting(s) = 26



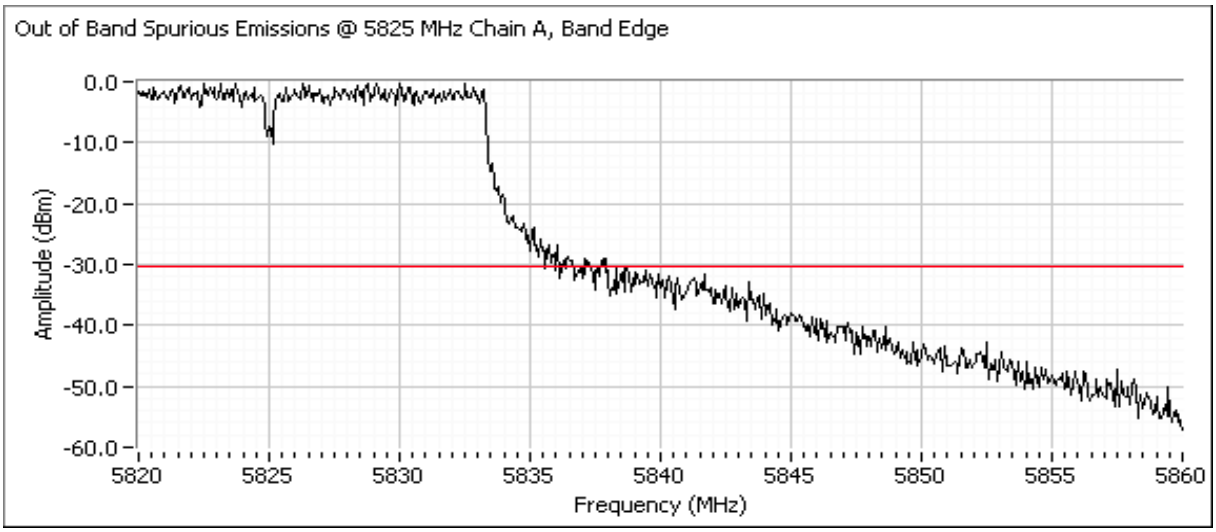
Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #4: Out of Band Spurious Emissions

Plots for high channel, Chain A power setting(s) = 26.5



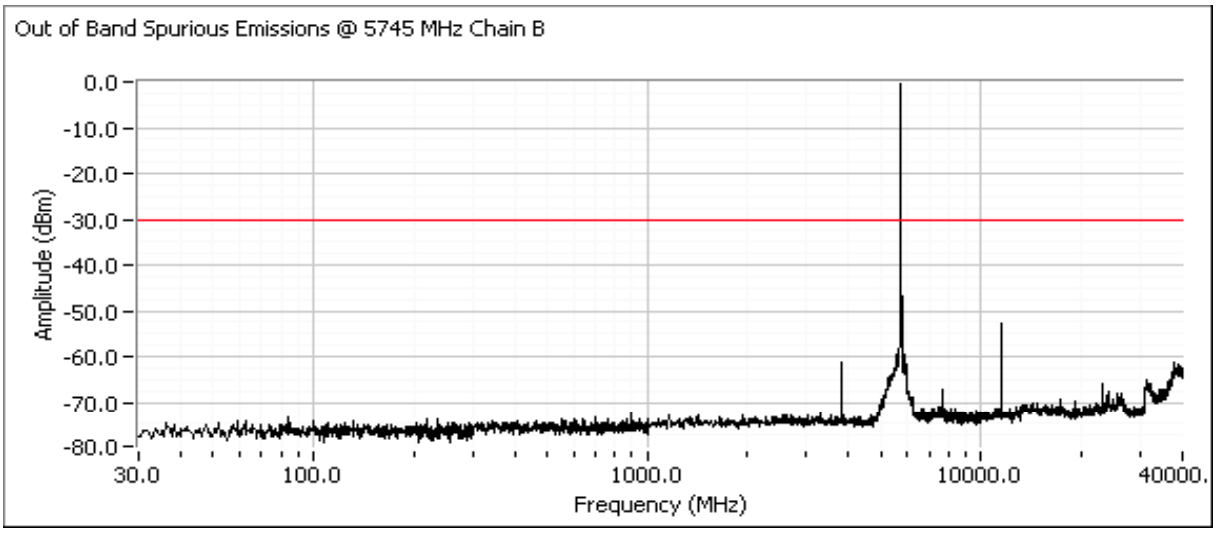
Additional plot from 5820 - 5860 MHz showing compliance with -30dBc at the band edge.



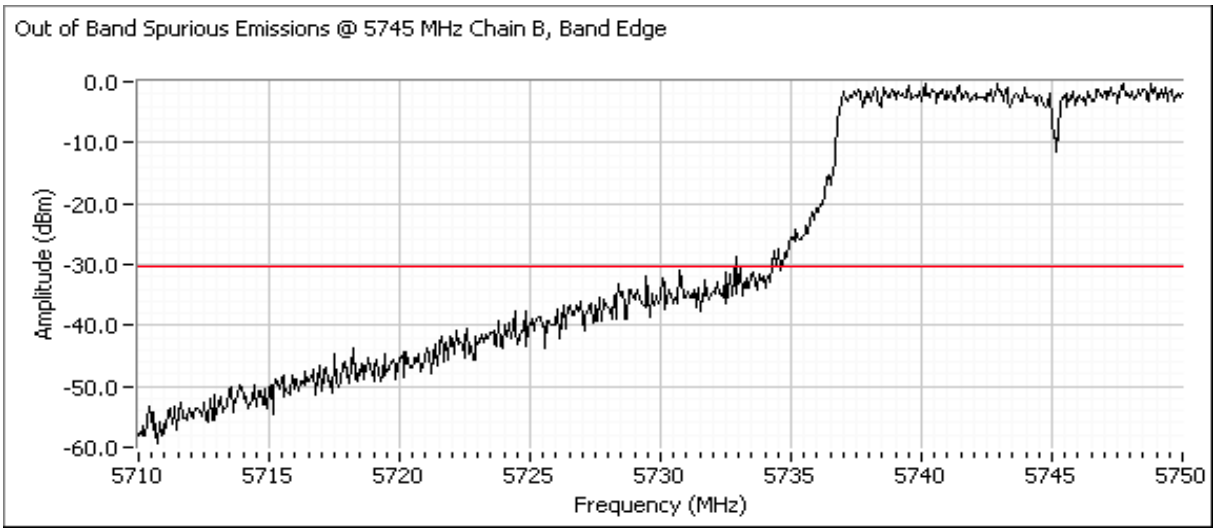
Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #4: Out of Band Spurious Emissions

Plots for low channel, Chain B power setting(s) = 25



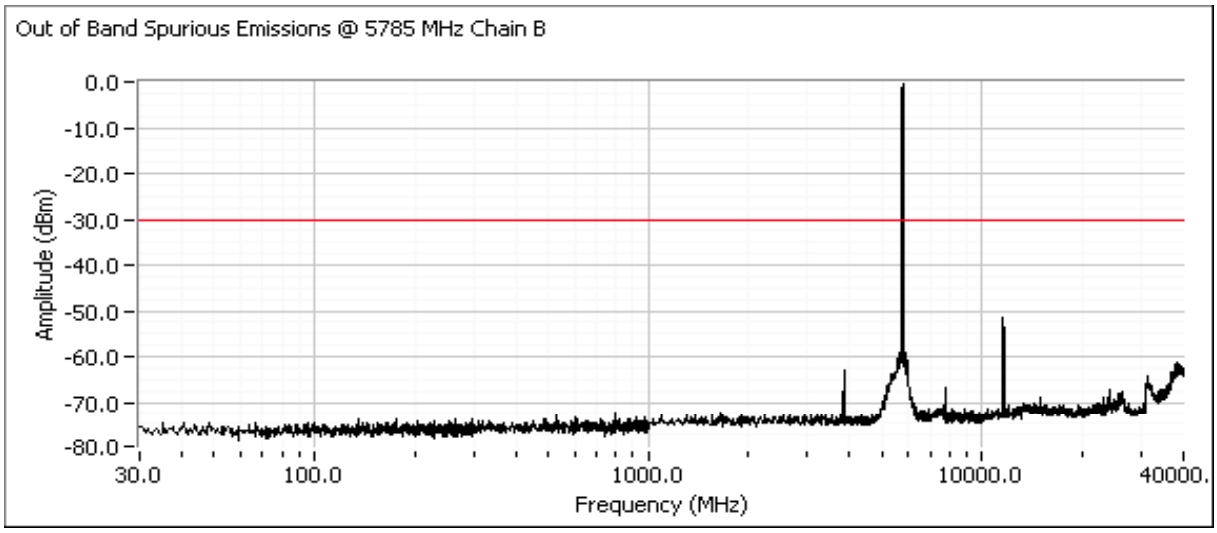
Additional plot from 5715 - 5755 MHz showing compliance with -30dBc at the band edge.



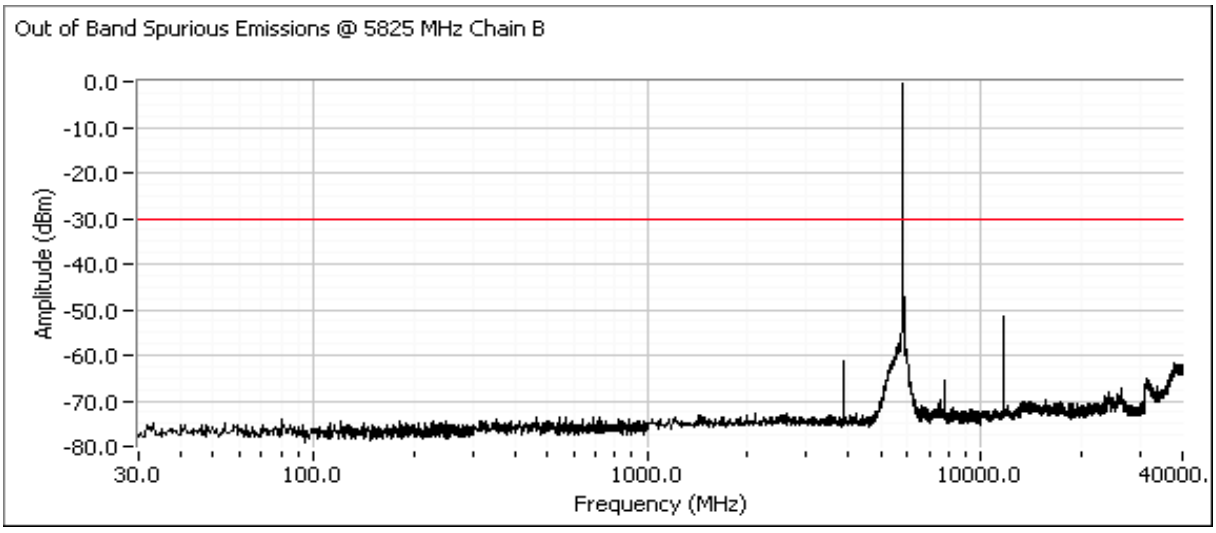
Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #4: Out of Band Spurious Emissions

Plots for center channel, Chain B power setting(s) = 25.5



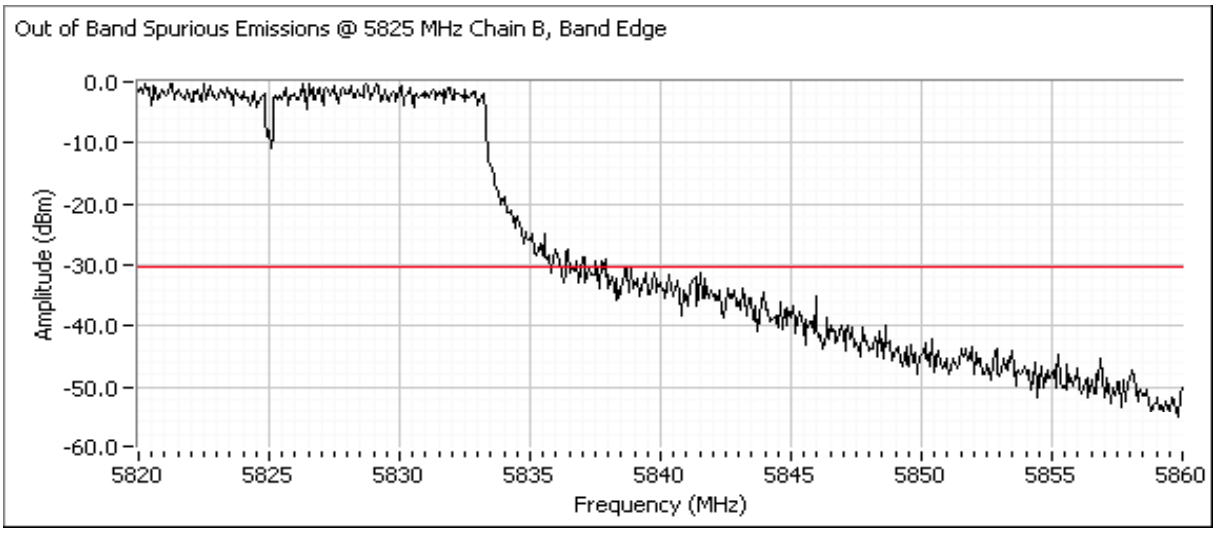
Plots for high channel, Chain B power setting(s) = 26



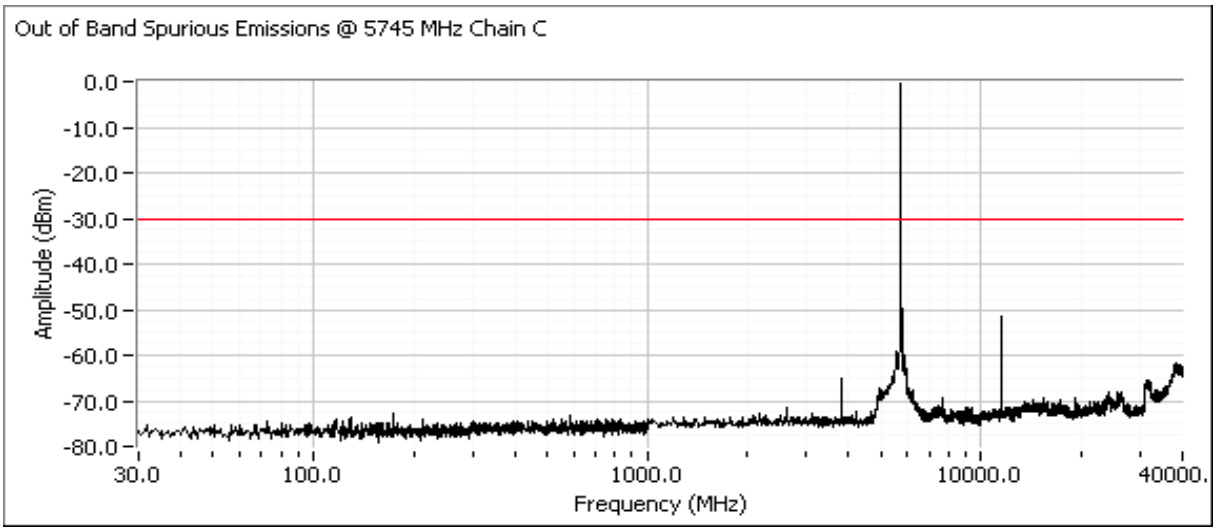
Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #4: Out of Band Spurious Emissions

Additional plot from 5820 - 5860 MHz showing compliance with -30dBc at the band edge.



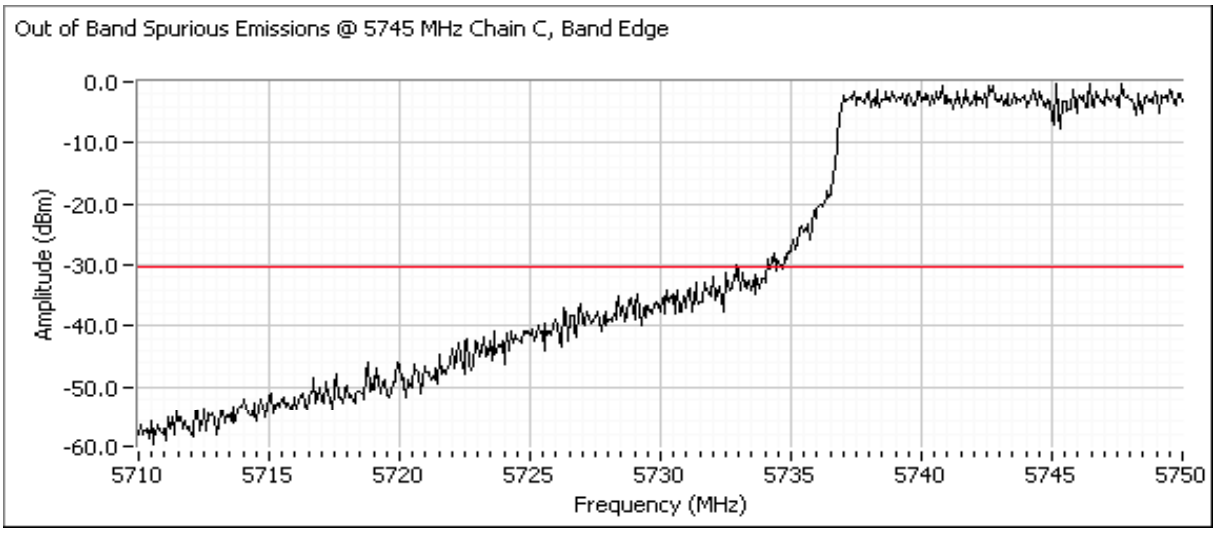
Plots for low channel, Chain C power setting(s) = 25.5



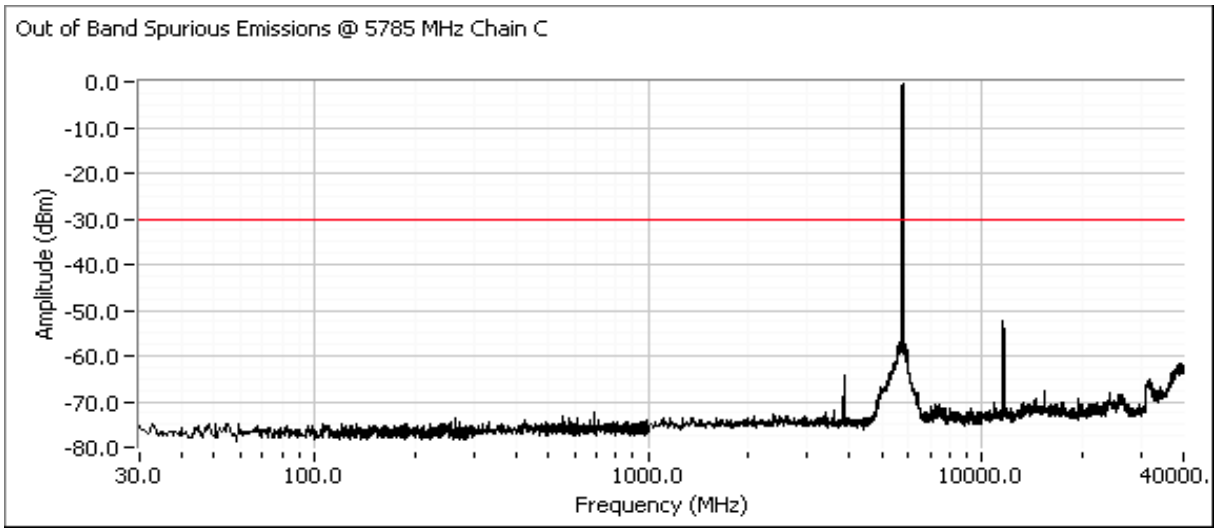
Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #4: Out of Band Spurious Emissions

Additional plot from 5715 - 5755 MHz showing compliance with -30dBc at the band edge.



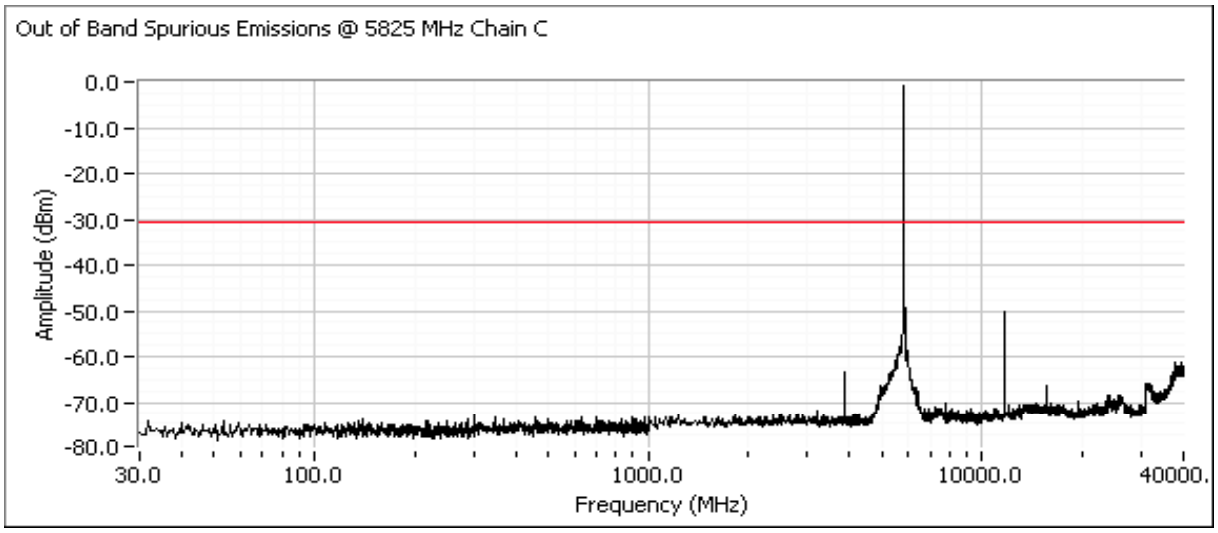
Plots for center channel, Chain C power setting(s) = 26



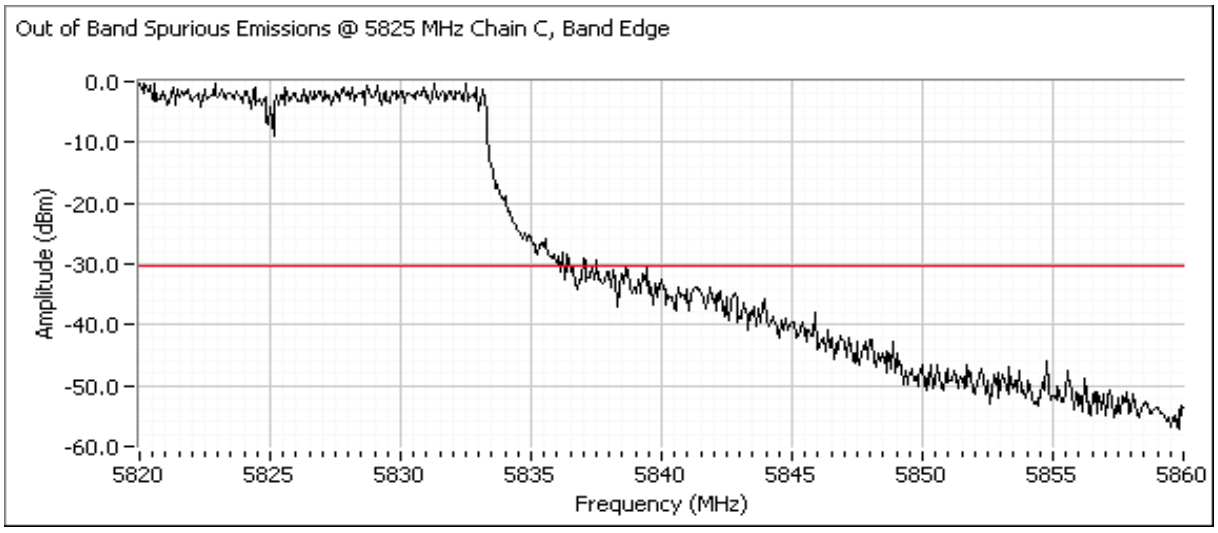
Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #4: Out of Band Spurious Emissions

Plots for high channel, Chain C power setting(s) = 26.5



Additional plot from 5820 - 5860 MHz showing compliance with -30dBc at the band edge.



Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

RSS 210 and FCC 15.247 (DTS) Antenna Port Measurements
802.11n 20MHz Single Chain

Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

Date of Test: 4/9/2008
Test Engineer: Rafael Varelas
Test Location: FT Lab # 1

Config. Used: 1
Config Change: None
EUT Voltage: Powered From Host System(3.3V DC)

General Test Configuration

The EUT was connected to the spectrum analyzer or power meter via a suitable attenuator. All measurements were made on a single chain.

All measurements have been corrected to allow for the external attenuators used.

Ambient Conditions:

Temperature: 21.4 °C
Rel. Humidity: 35 %

Summary of Results

Run #	Test Performed	Limit	Pass / Fail	Result / Margin
1	Output Power	15.247(b)	Pass	15.9 dBm(38.9mW)
2	Power spectral Density (PSD)	15.247(d)	Pass	-7.6 dBm/3kHz
3	6dB Bandwidth	15.247(a)	Pass	17.7 MHz
3	99% Bandwidth	RSS GEN	-	18.6 MHz
4	Antenna Conducted - Out of Band Spurious	15.247(b)	Pass	All emissions below the -30dBc limit

Modifications Made During Testing

No modifications were made to the EUT during testing

Deviations From The Standard

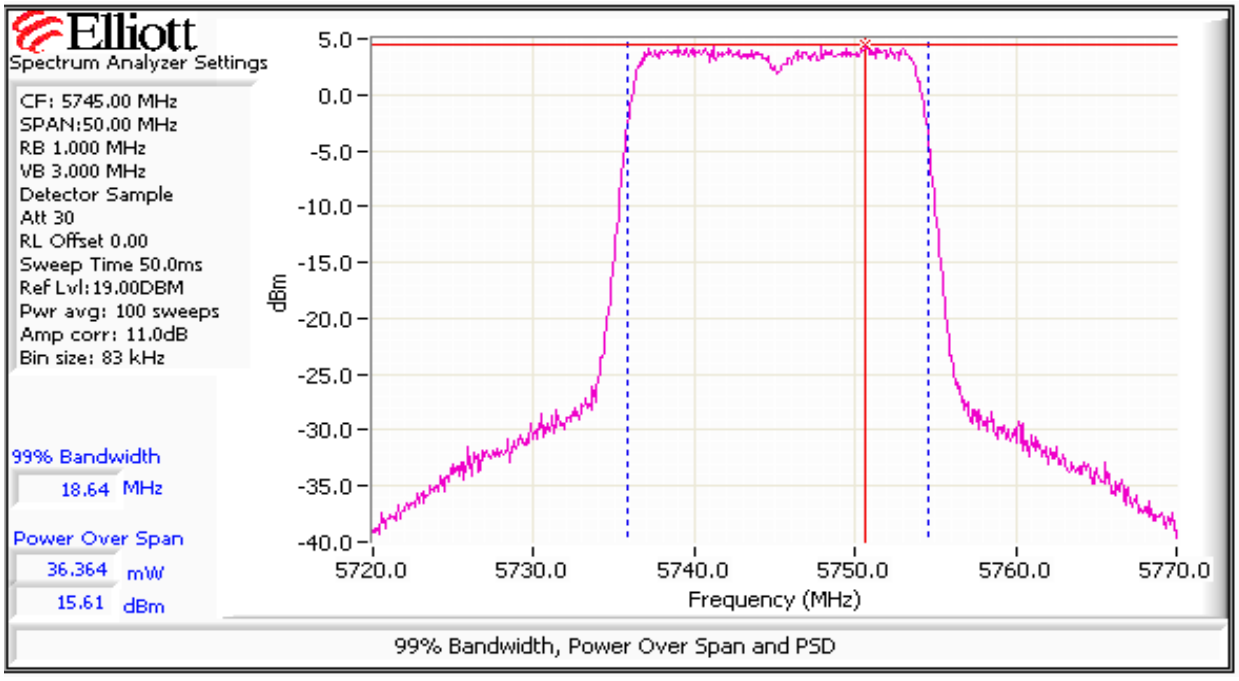
No deviations were made from the requirements of the standard.

Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

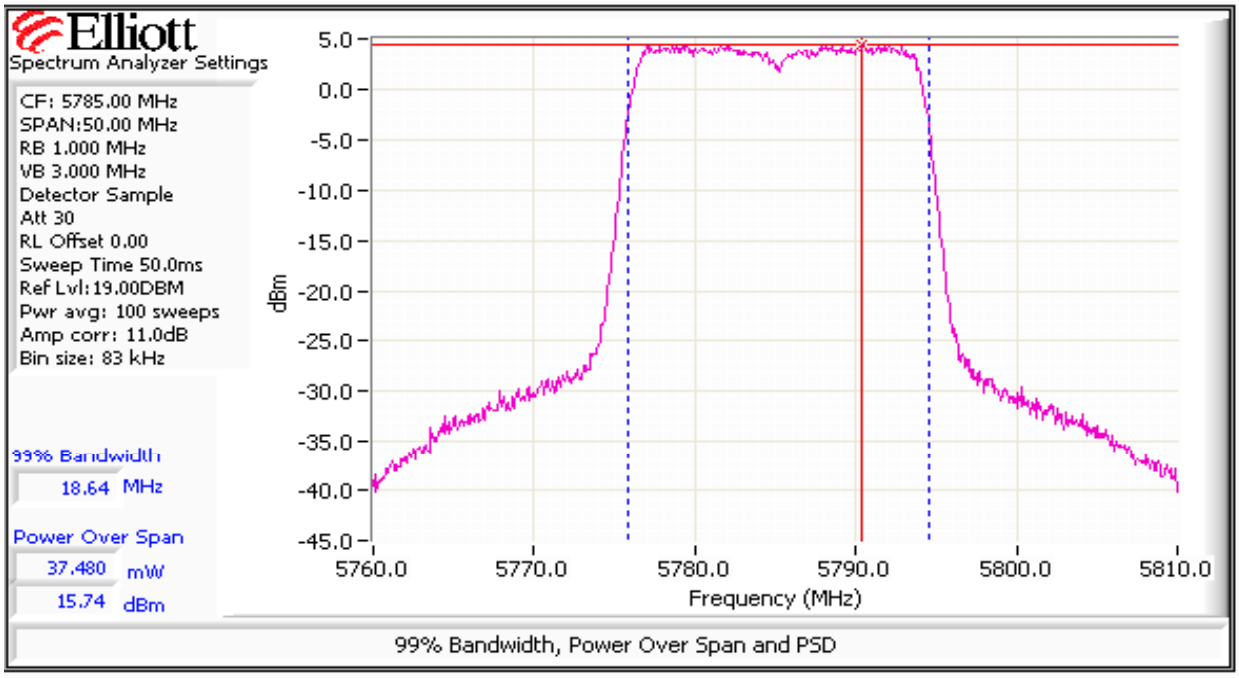
Run #1: Output Power

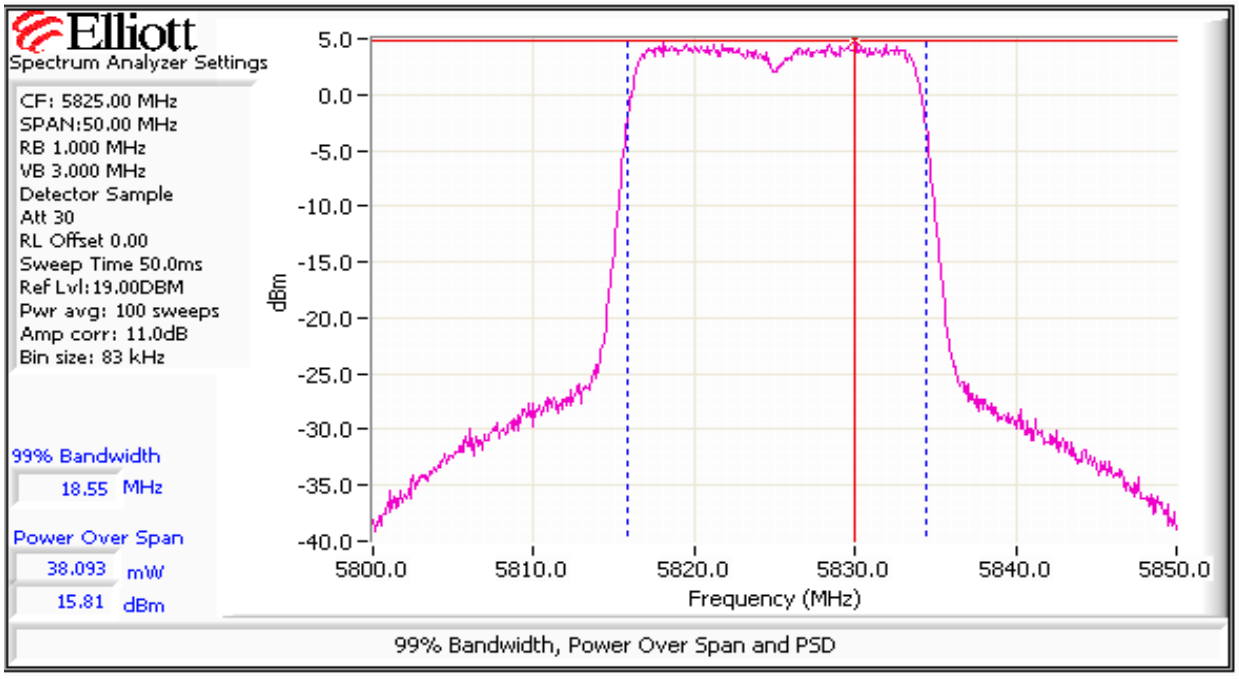
Power Setting[2]	Frequency (MHz)	Output Power (dBm)[1]	Output Power mW	Antenna Gain (dBi)	Result	EIRP[Note 2] dBm	EIRP[Note 2] W	Output Power (dBm)[3]	Output Power mW
26	5745, Chain A	15.6	36.3	5.0	Pass	20.6	0.115	16.7	46.8
26	5785, Chain A	15.7	37.2	5.0	Pass	20.7	0.117	16.6	45.7
26.5	5825, Chain A	15.8	38.0	5.0	Pass	20.8	0.120	16.7	46.8
25.5	5745, Chain B	15.9	38.9	5.0	Pass	20.9	0.123	16.8	47.9
25.5	5785, Chain B	15.5	35.5	5.0	Pass	20.5	0.112	16.7	46.8
26	5825, Chain B	15.9	38.9	5.0	Pass	20.9	0.123	16.6	45.7
26	5745, Chain C	15.8	38.0	5.0	Pass	20.8	0.120	16.6	45.7
26	5785, Chain C	15.7	37.2	5.0	Pass	20.7	0.117	16.5	44.7
26.5	5825, Chain C	15.9	38.9	5.0	Pass	20.9	0.123	16.7	46.8

Note 1:	Output power measured using a spectrum analyzer (see plots below): RBW=1MHz, VB=3 MHz, sample detector, power averaging on (transmitted signal was continuous) and power integration over 50 MHz. Spurious limit is -30dBc because this method was used. The output power limit is 30dBm.
Note 2:	Power setting - the software power setting used during testing, included for reference only.
Note 3:	Power measured using average power sensor and is included for manufacturer's reference only.

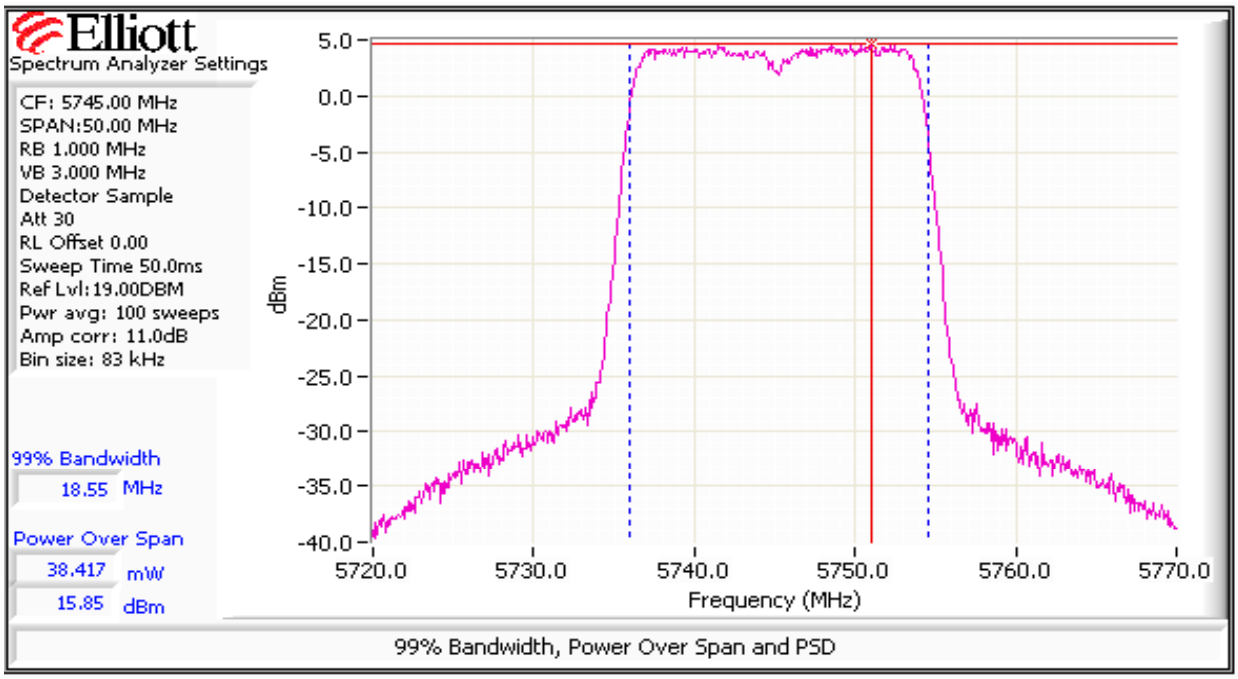


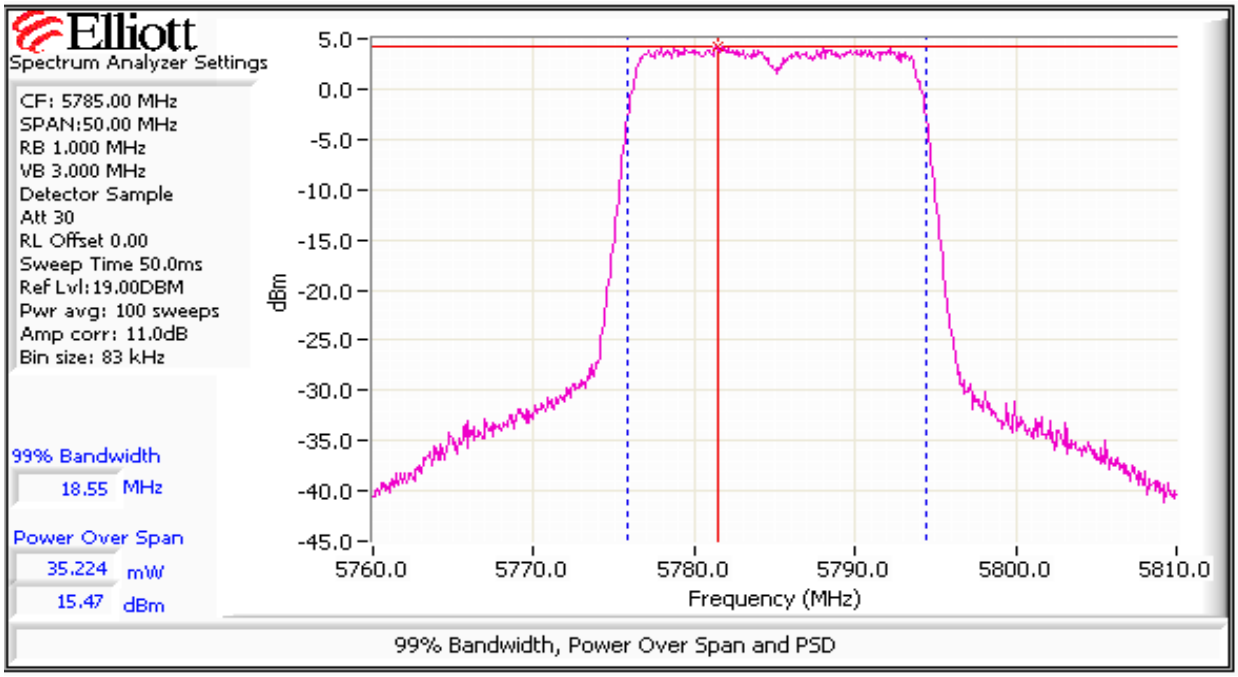
Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A



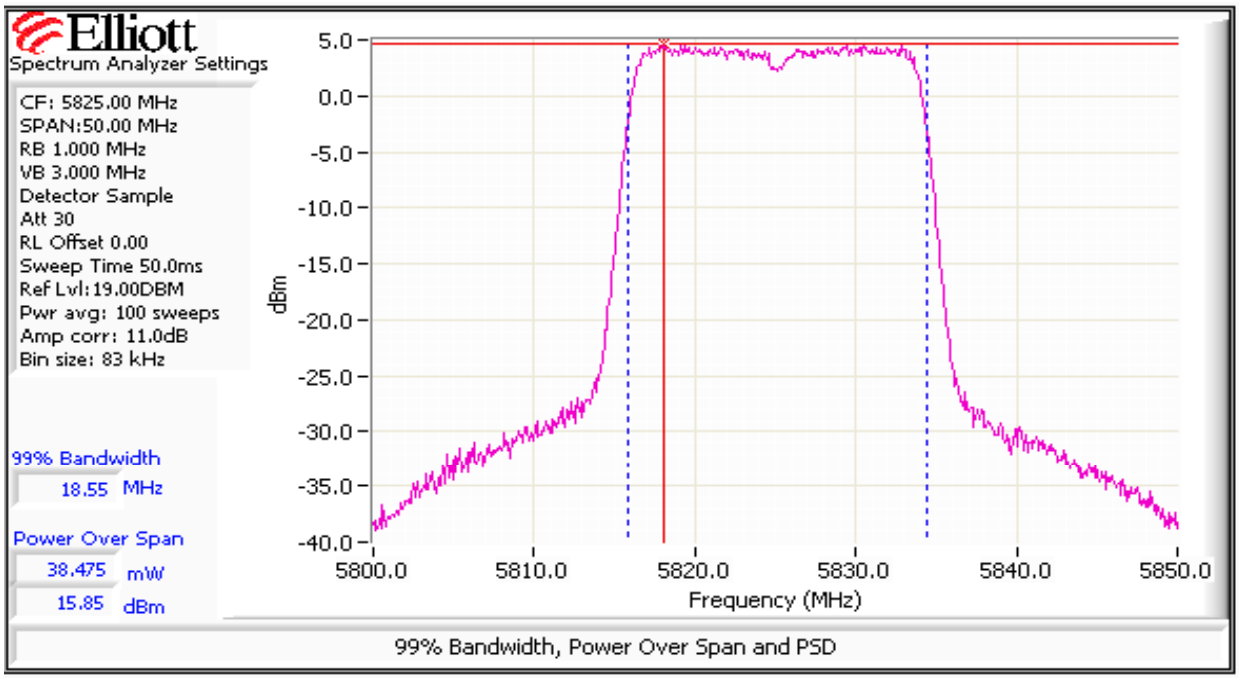


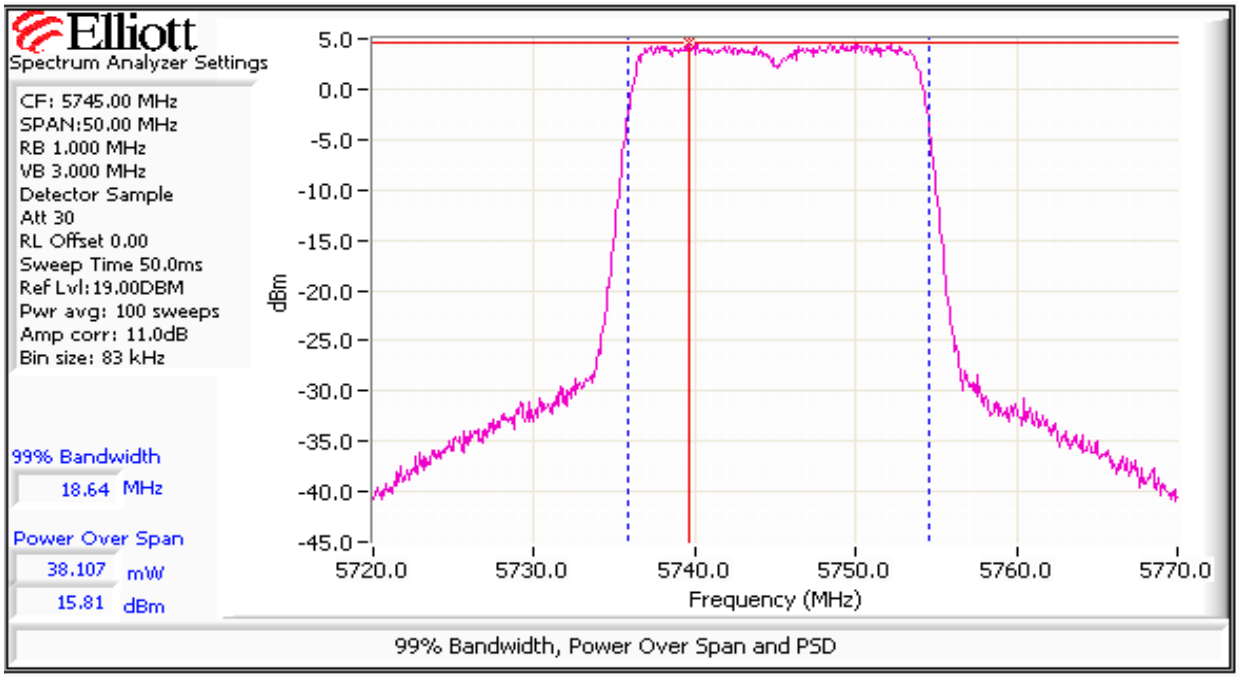
Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A



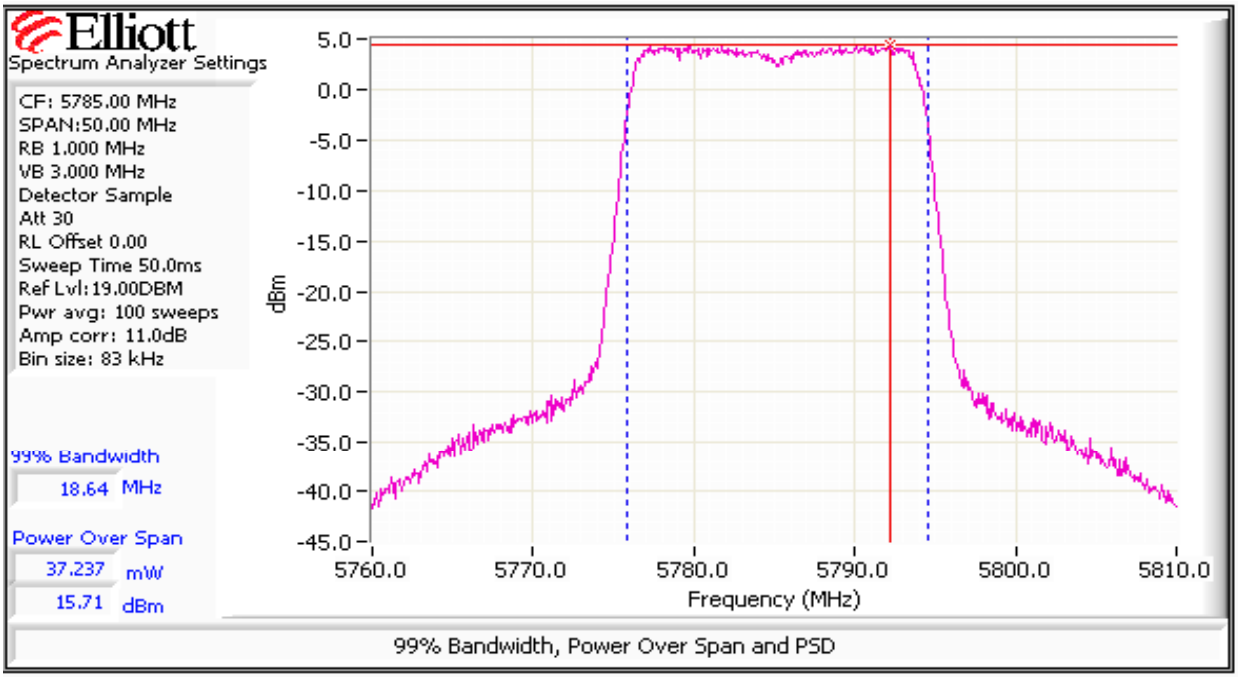


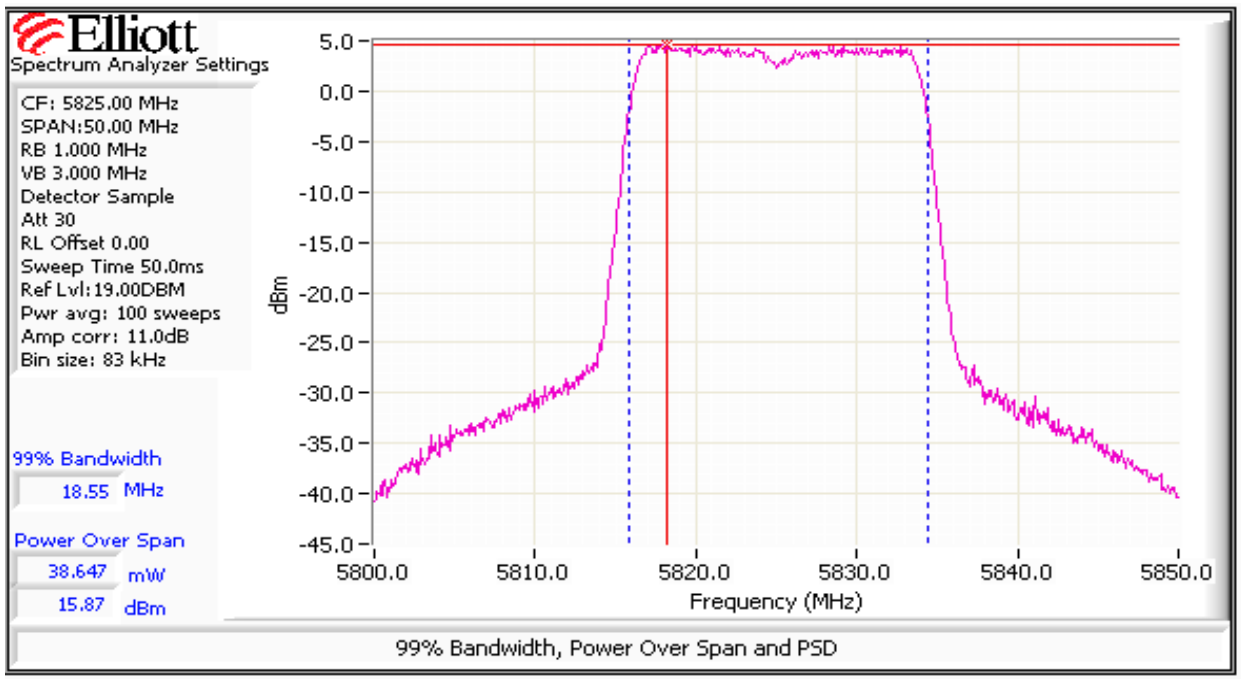
Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A





Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A



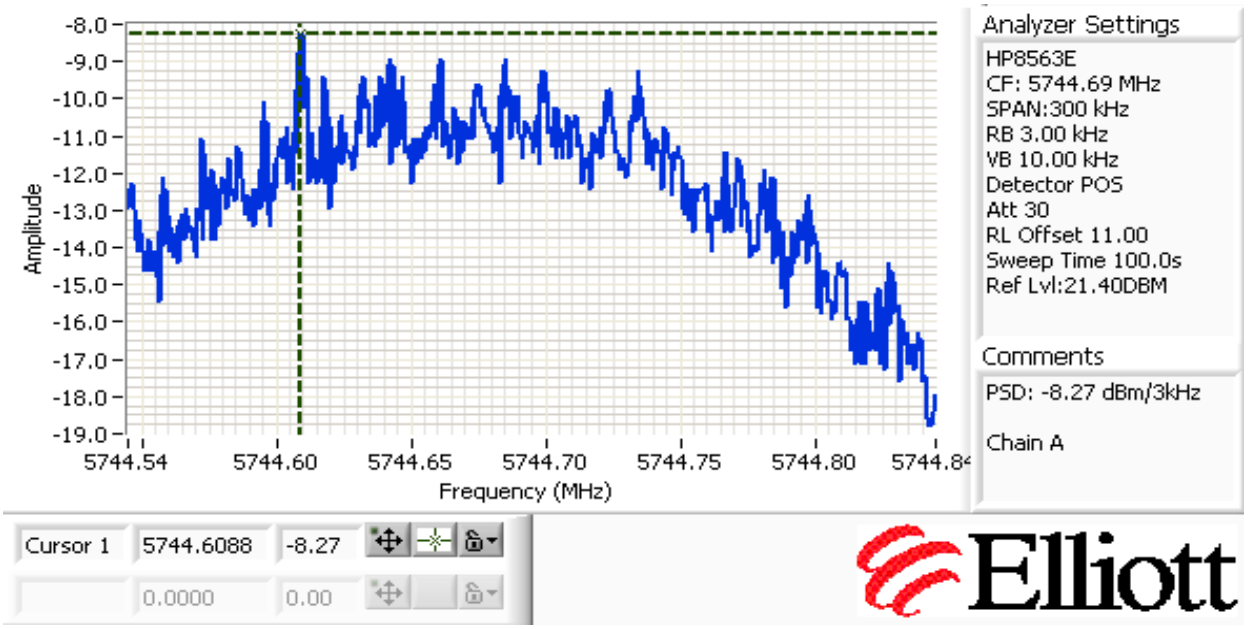


Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

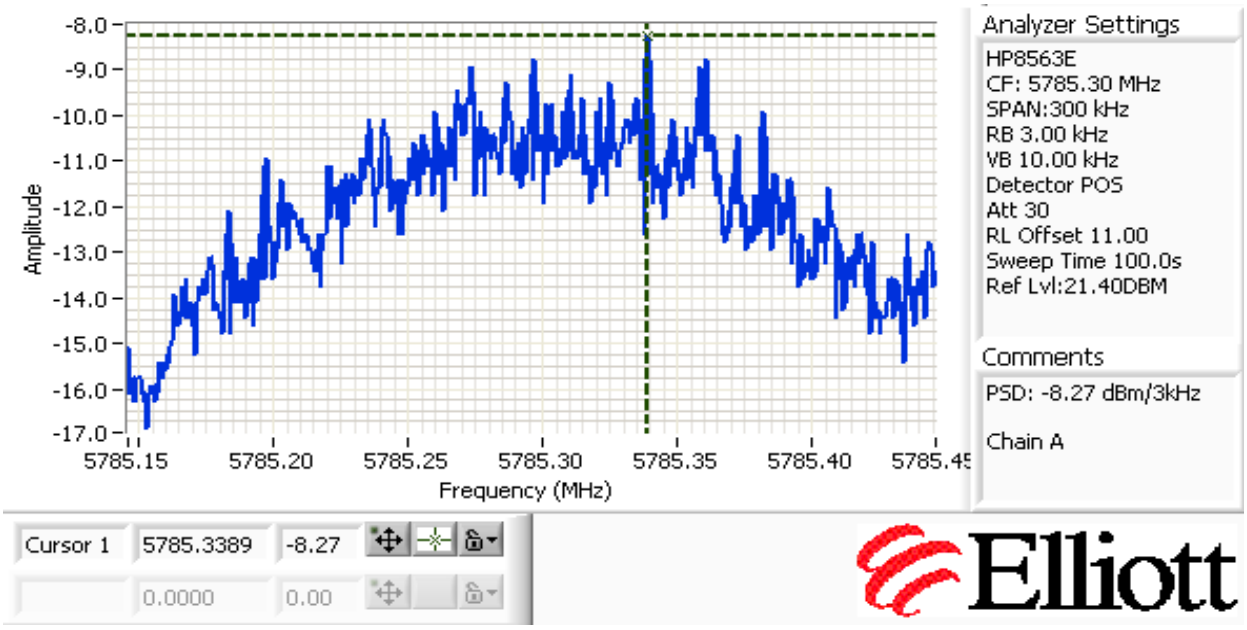
Run #2: Power spectral Density

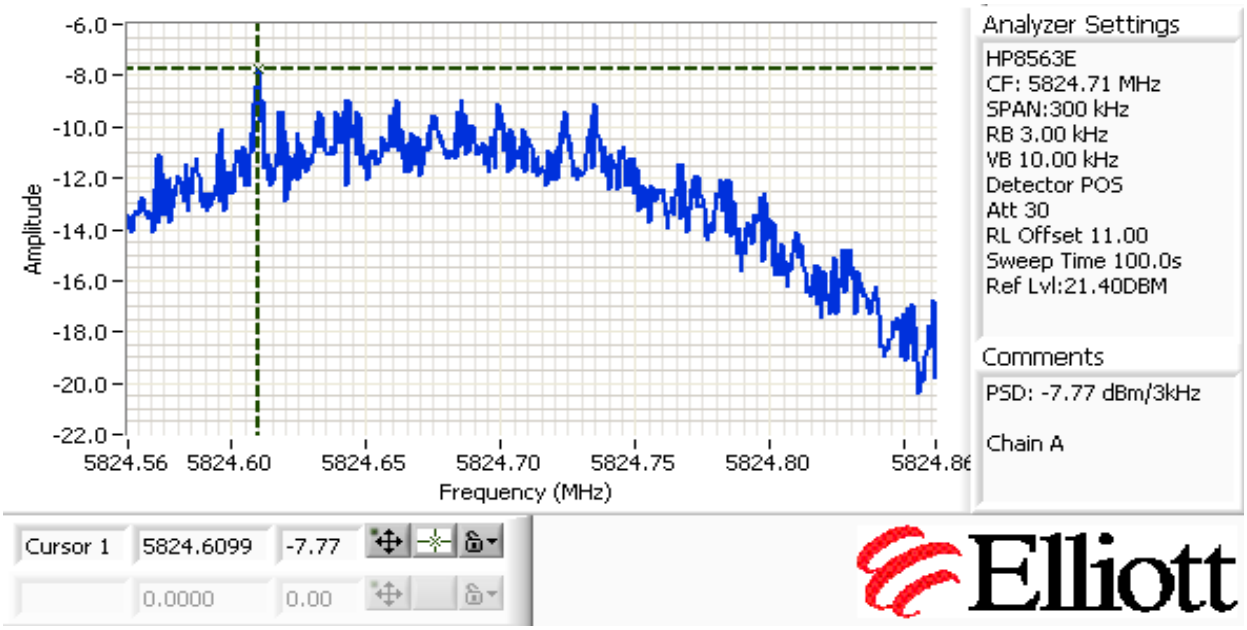
Power Setting	Frequency (MHz)	PSD (dBm/3kHz) Note 1	Limit dBm/3kHz	Result
26	5745, Chain A	-8.3	8.0	Pass
26	5785, Chain A	-8.3	8.0	Pass
26.5	5825, Chain A	-7.8	8.0	Pass
25.5	5745, Chain B	-8.3	8.0	Pass
25.5	5785, Chain B	-8.6	8.0	Pass
26	5825, Chain B	-7.6	8.0	Pass
26	5745, Chain C	-8.6	8.0	Pass
26	5785, Chain C	-8.4	8.0	Pass
26.5	5825, Chain C	-8.4	8.0	Pass

Note 1:	Power spectral density measured using RB=3 kHz, VB=10kHz, analyzer with peak detector and with a sweep time set to ensure a dwell time of at least 1 second per 3kHz. The measurement is made at the frequency of PPSD determined from preliminary scans using RB=3kHz using multiple sweeps at a faster rate over the 6dB bandwidth of the signal.



Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A





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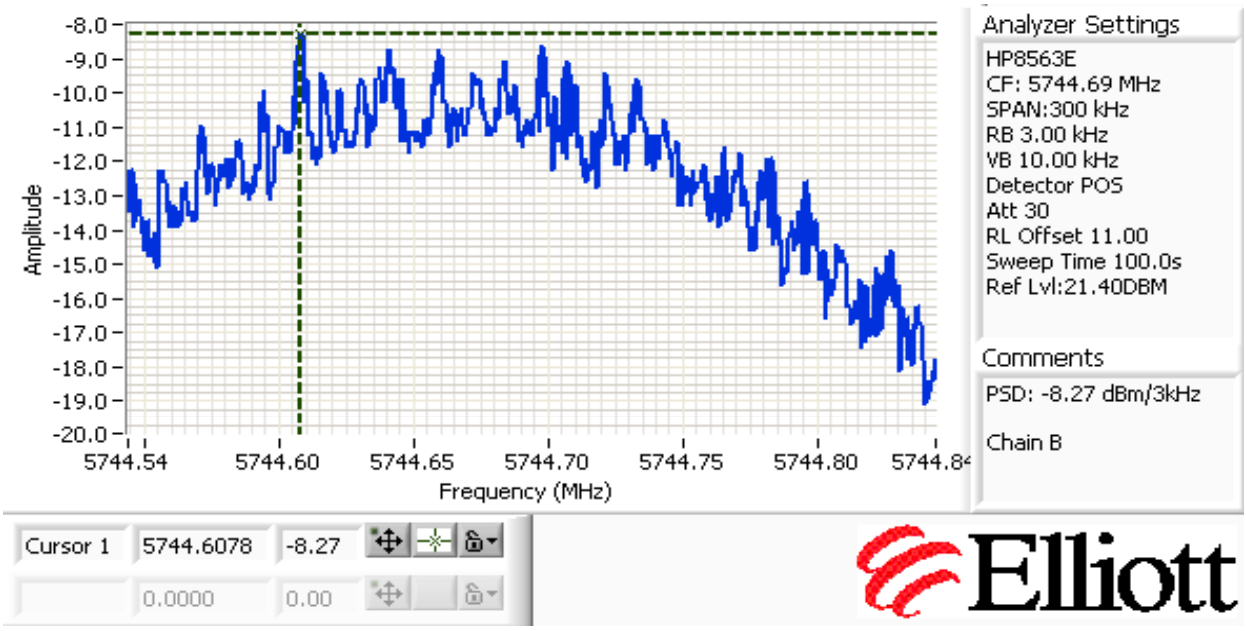
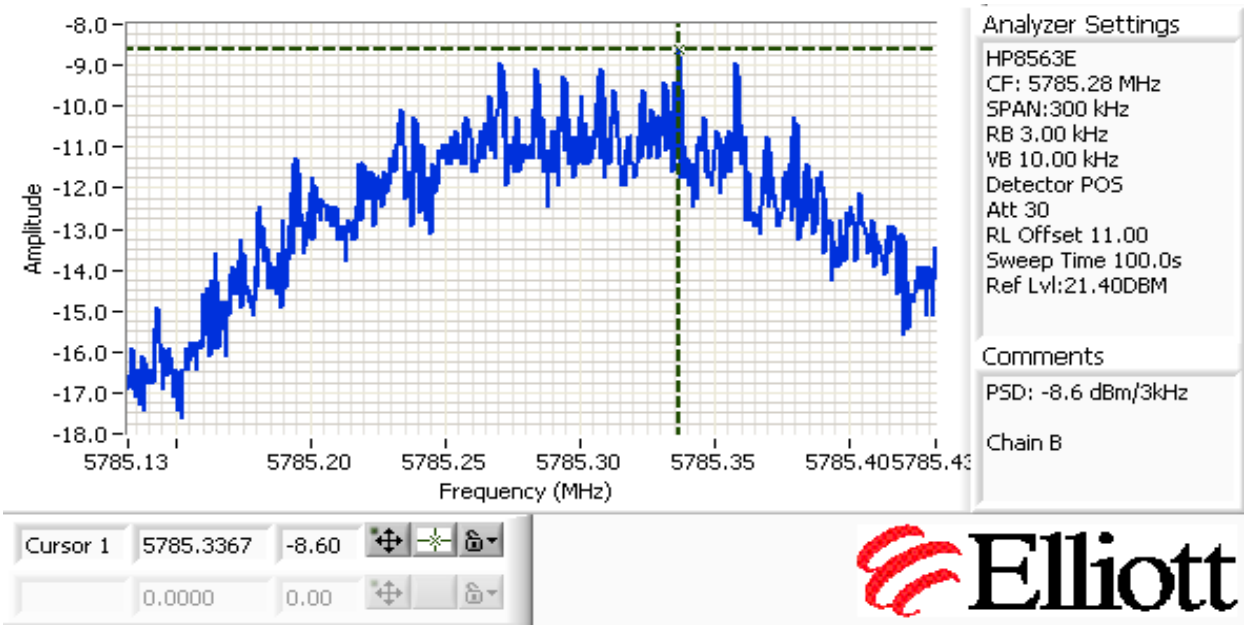
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A





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Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
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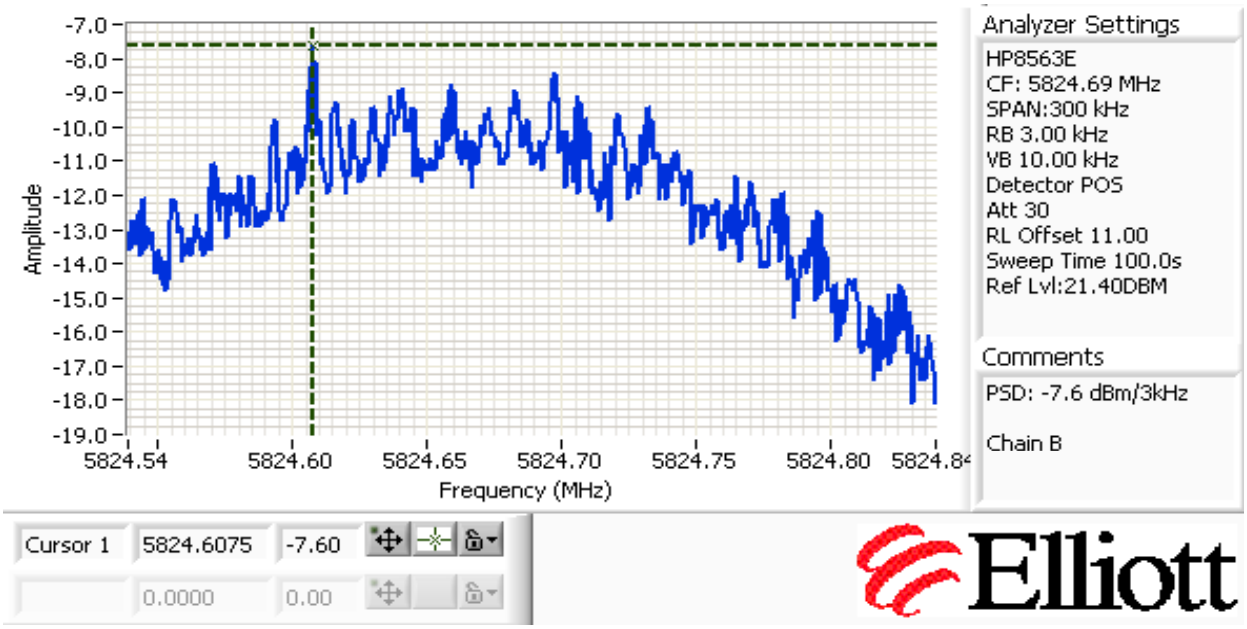
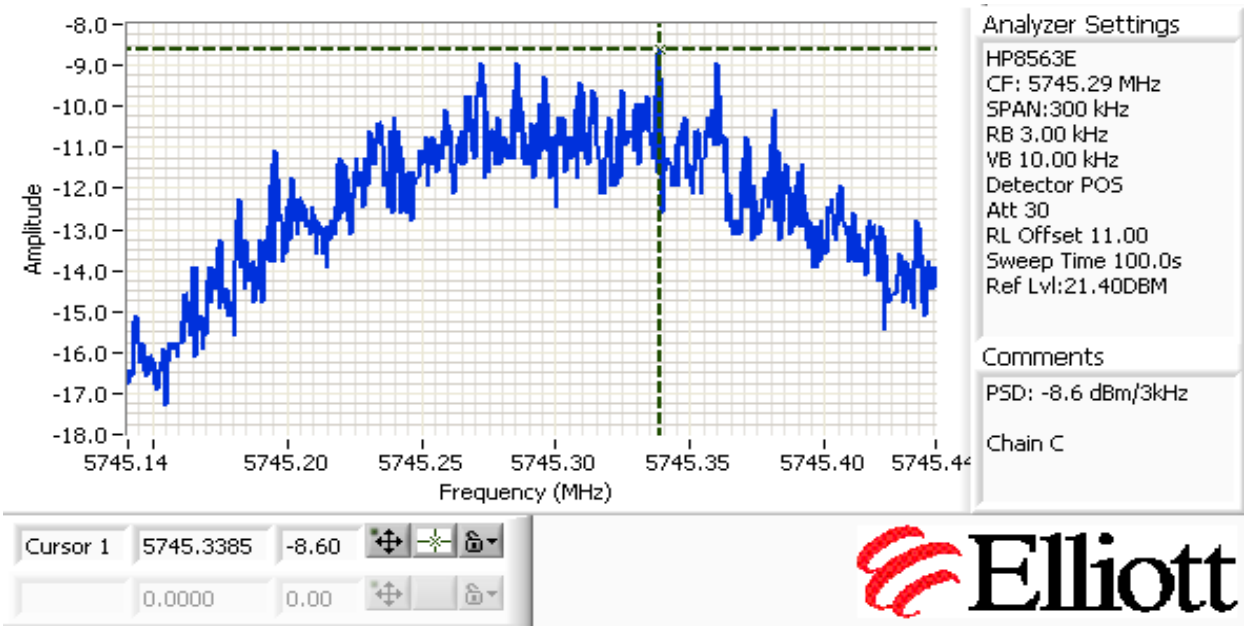
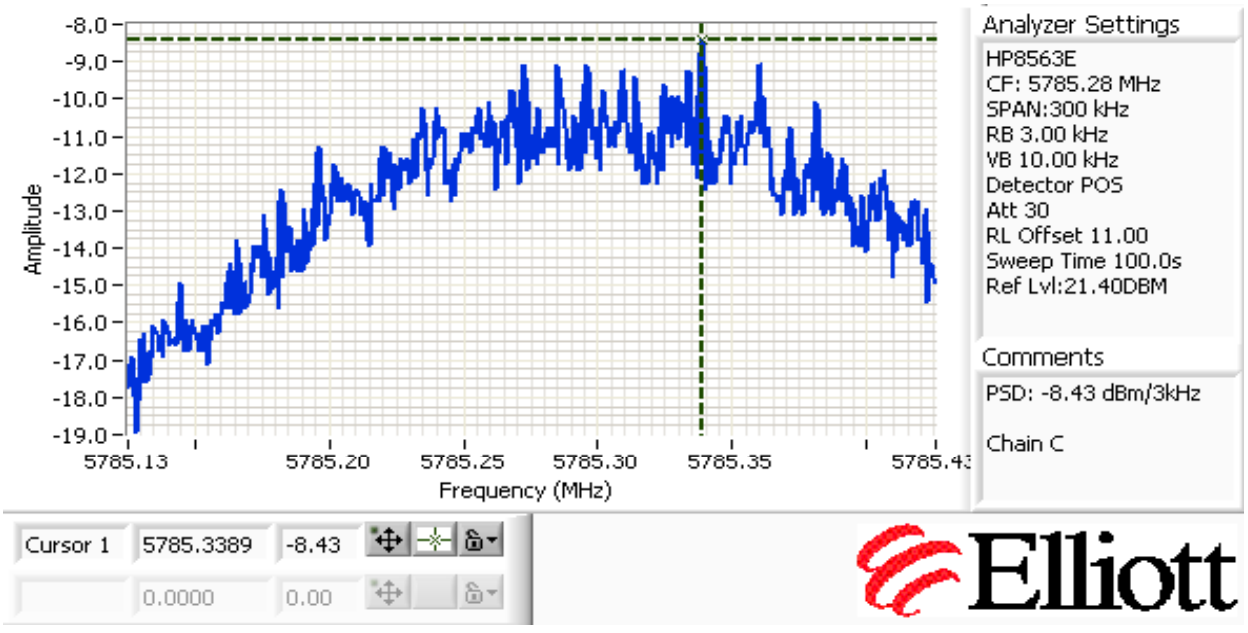
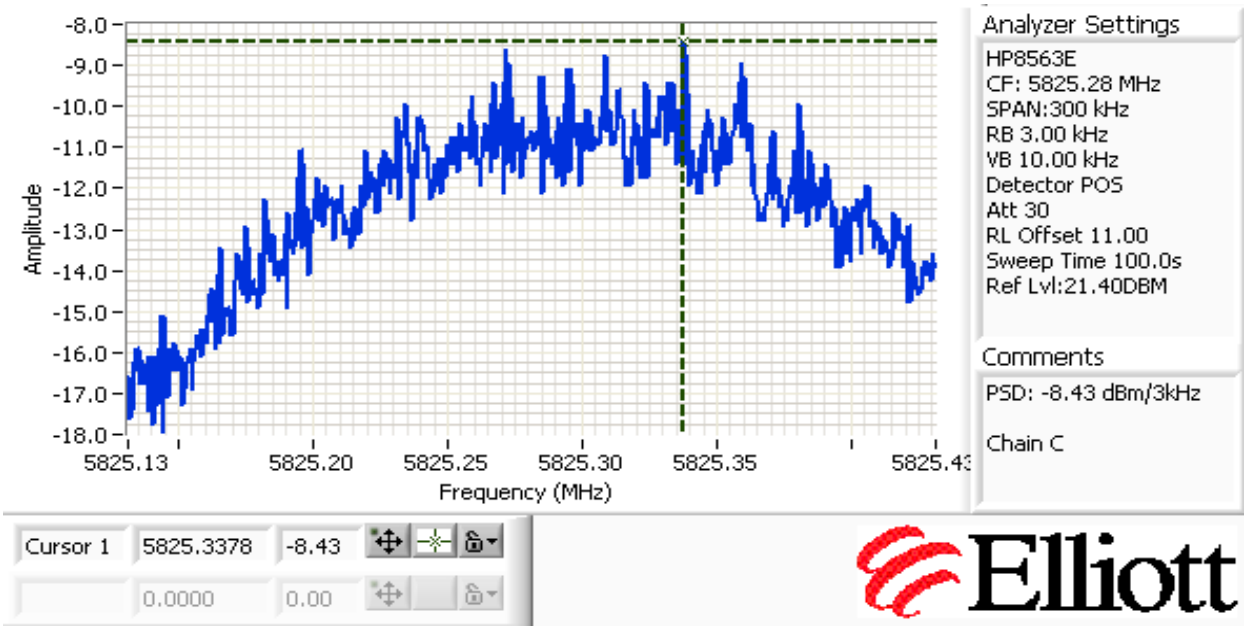
Standard:	FCC 15.247 / RSS -210	Class:	N/A





Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A



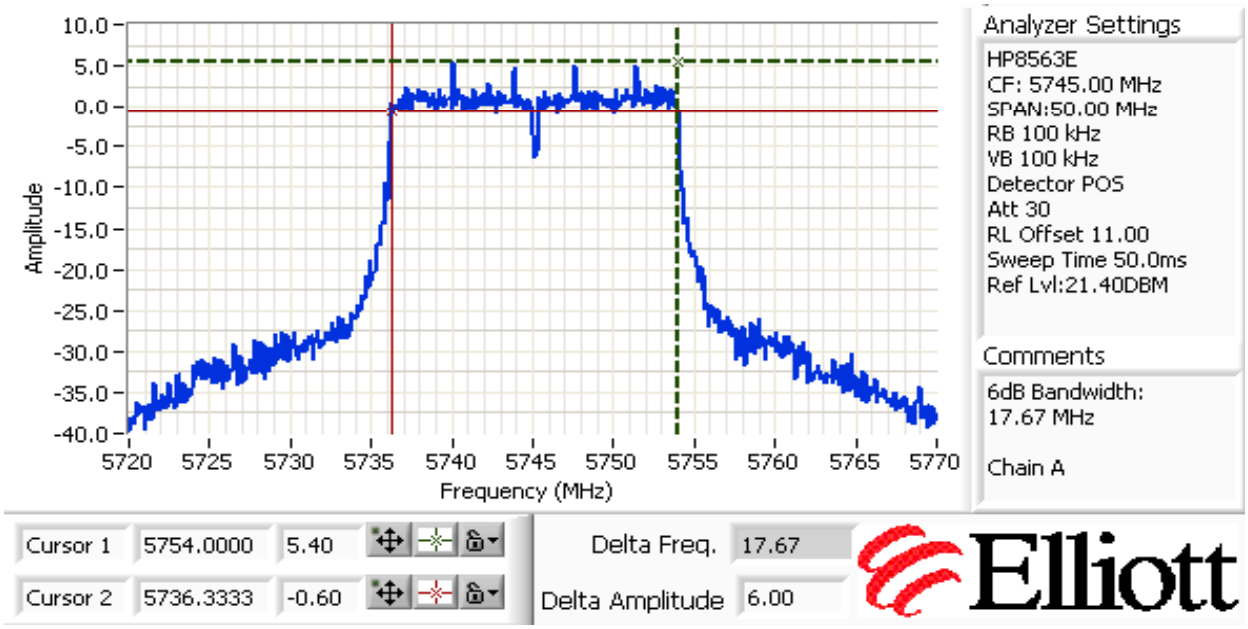


Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

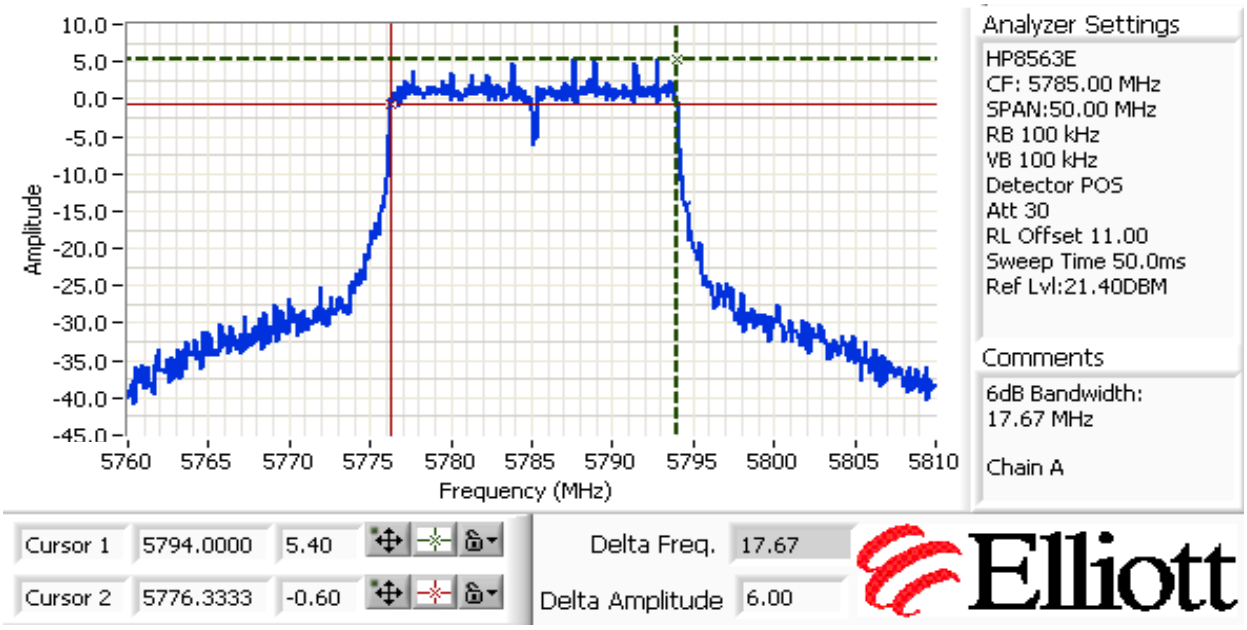
Run #3: Signal Bandwidth

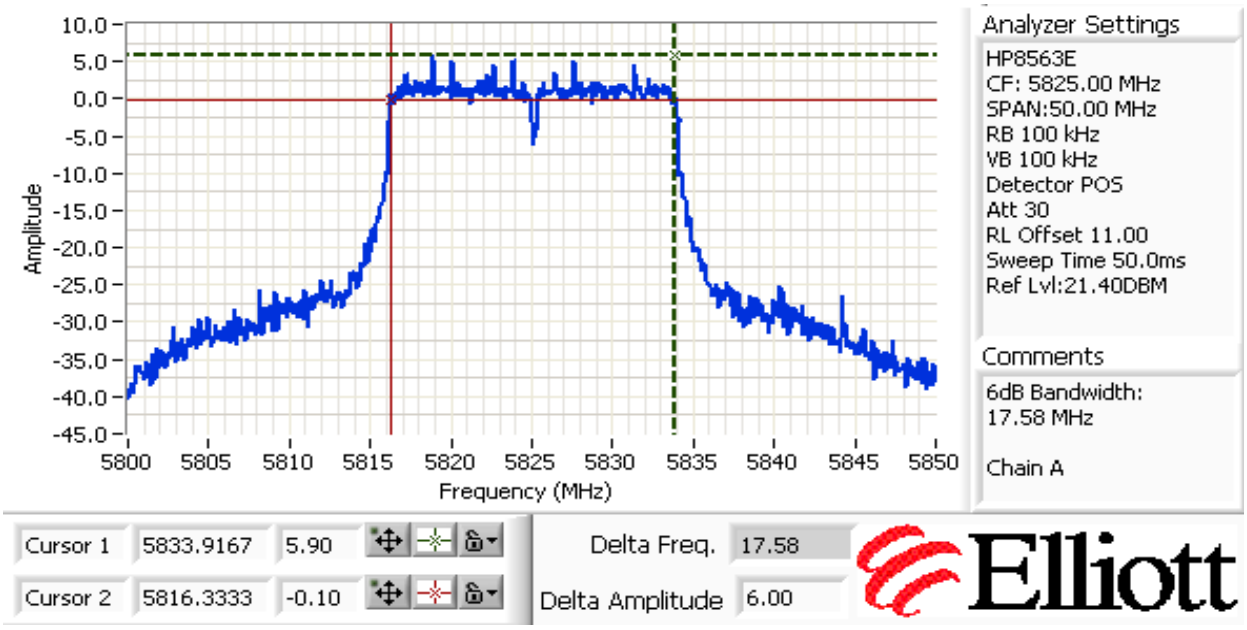
Power Setting	Frequency (MHz)	Resolution Bandwidth	Bandwidth (MHz) 6dB	99%
26	5745, Chain A	100kHz	17.67	18.64
26	5785, Chain A	100kHz	17.67	18.64
26.5	5825, Chain A	100kHz	17.60	18.55
25.5	5785, Chain B	100kHz	17.60	18.55
26	5785, Chain C	100kHz	17.67	18.64

Note 1:	99% bandwidth measured in accordance with RSS GEN, with RB > 1% of the span and VB > 3xRB
Note 2:	Center channel of Chains B and C measured to verify no significant difference in signal bandwidth from Chain A.

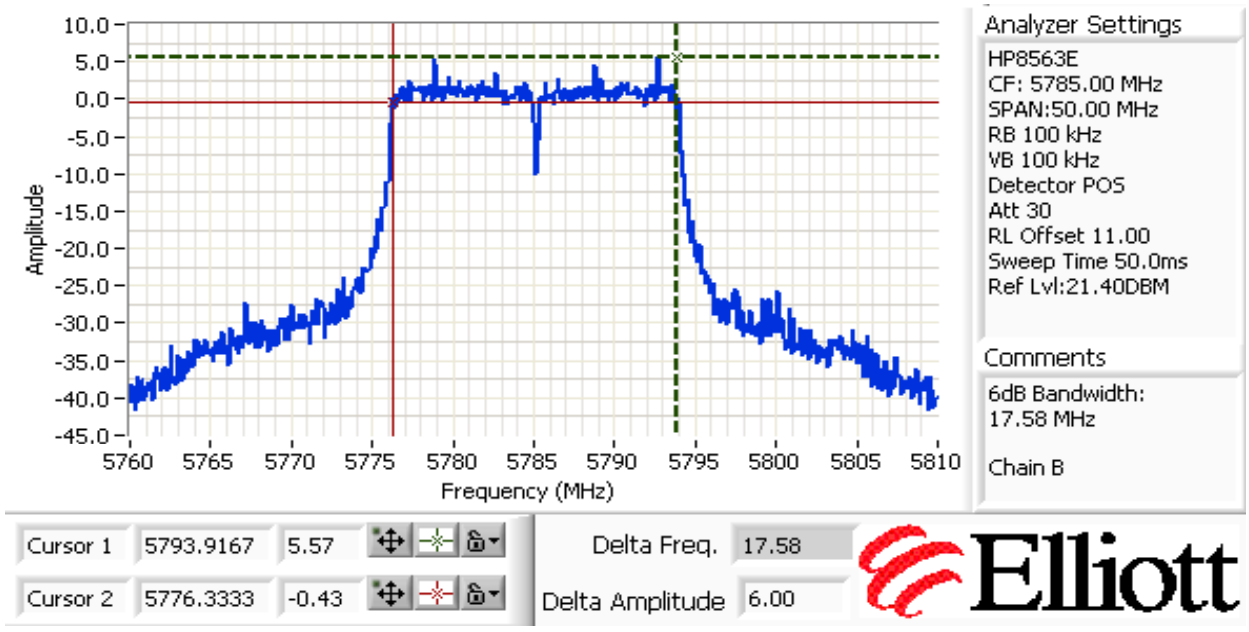


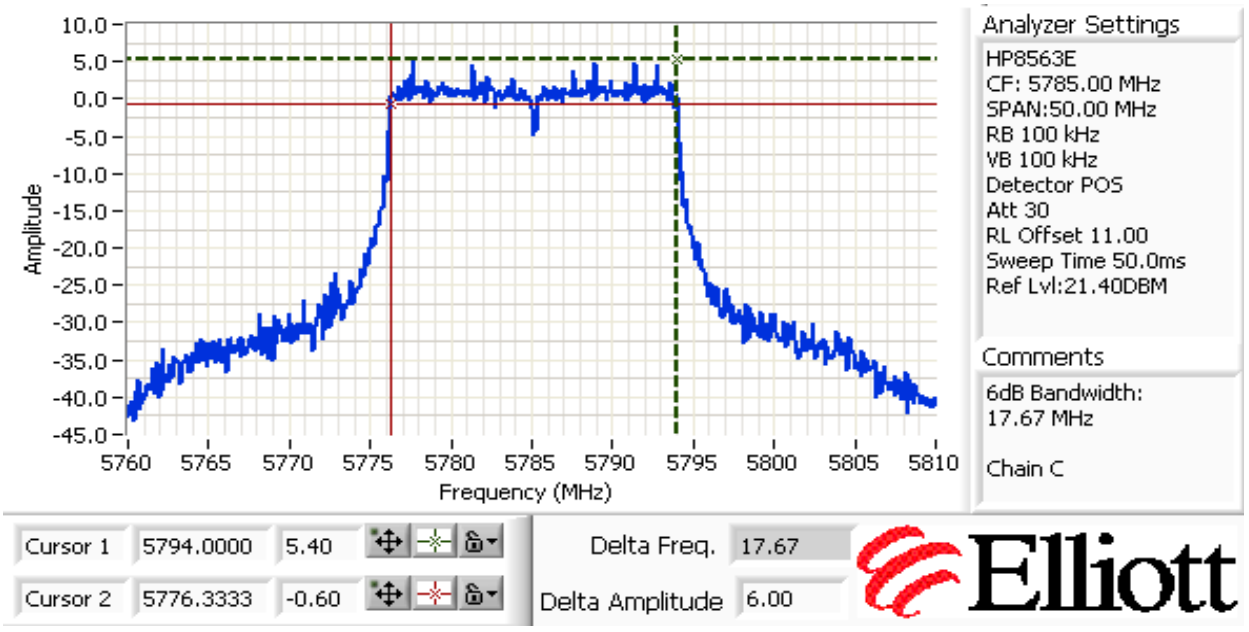
Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A





Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A





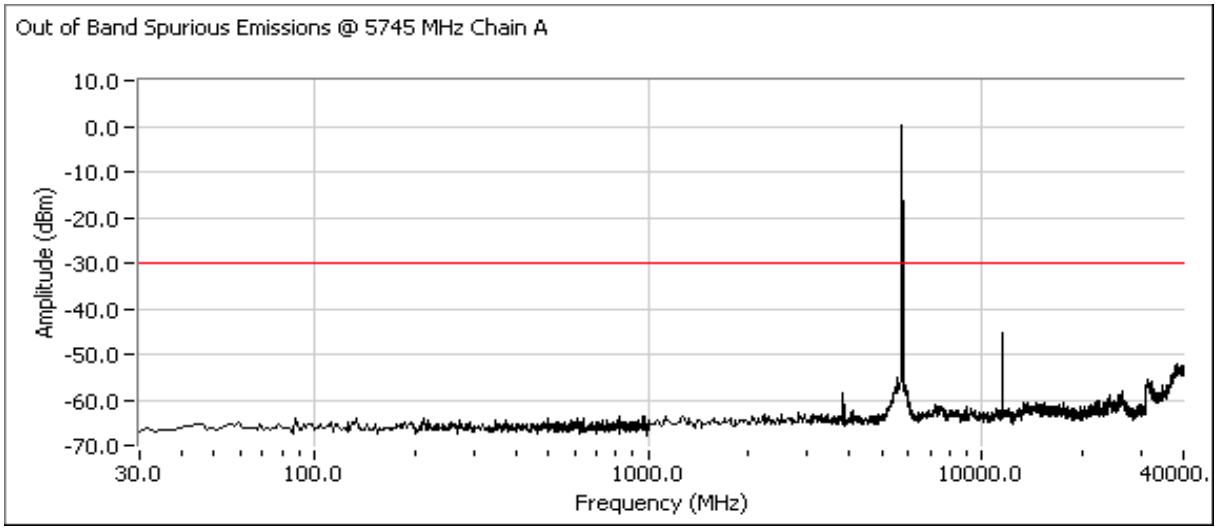
Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #4: Out of Band Spurious Emissions

All measured using RB = 100kHz, VB = 300kHz.

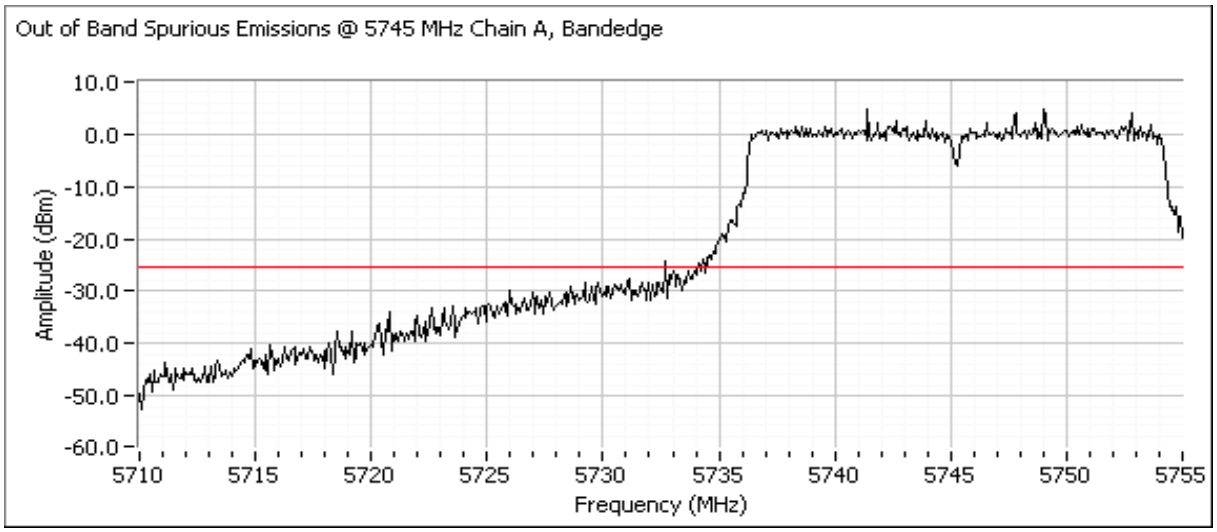
Frequency (MHz)	Limit	Result
5745, Chain A	-30dBc	Pass
5785, Chain A	-30dBc	Pass
5825, Chain A	-30dBc	Pass
5745, Chain B	-30dBc	Pass
5785, Chain B	-30dBc	Pass
5825, Chain B	-30dBc	Pass
5745, Chain C	-30dBc	Pass
5785, Chain C	-30dBc	Pass
5825, Chain C	-30dBc	Pass

Plots for low channel, Chain A power setting(s) = 26.0

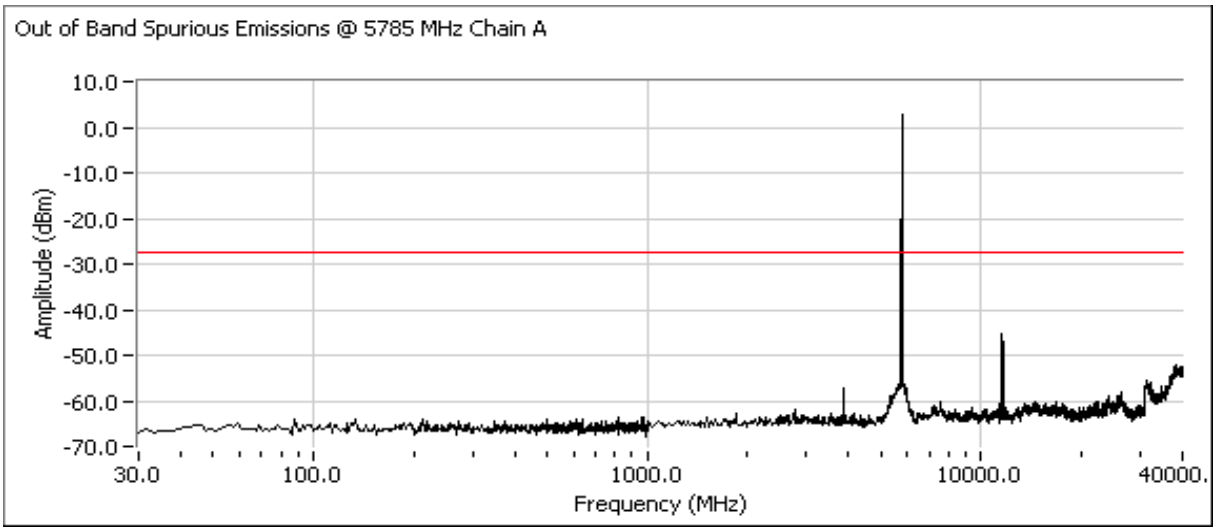


Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Additional plot from 5715 - 5755 MHz showing compliance with -30dBc at the band edge.

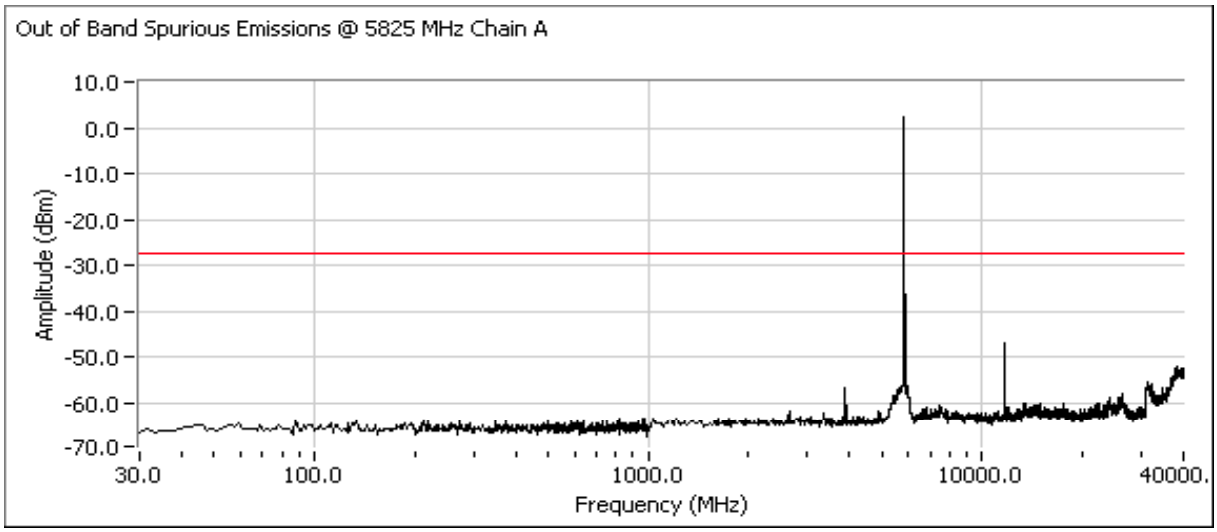


Plots for center channel, Chain A power setting(s) = 26.0

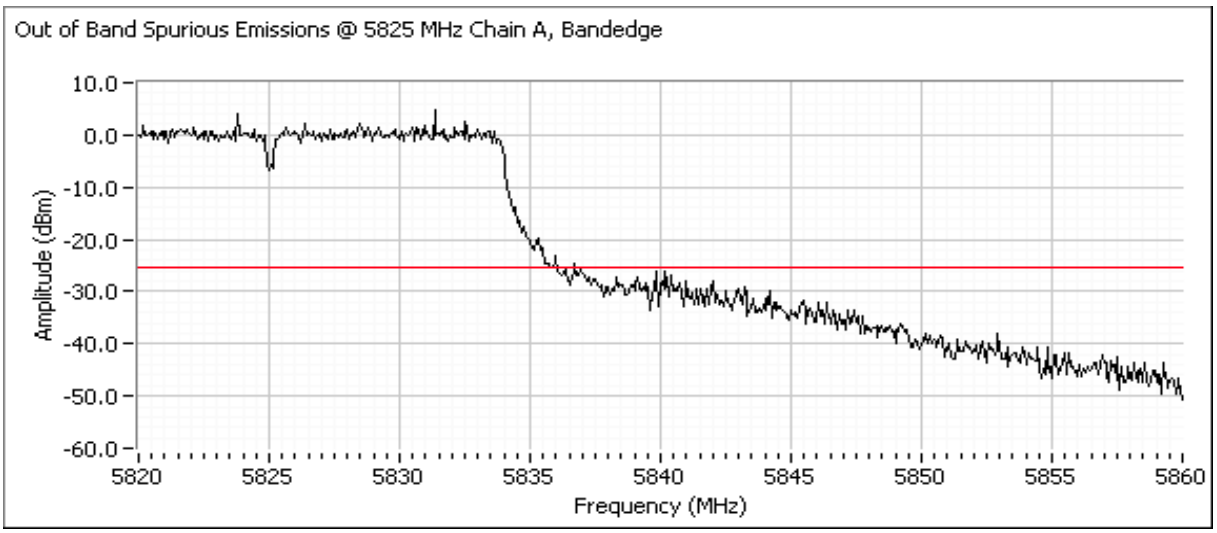


Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Plots for high channel, Chain A power setting(s) = 26.5

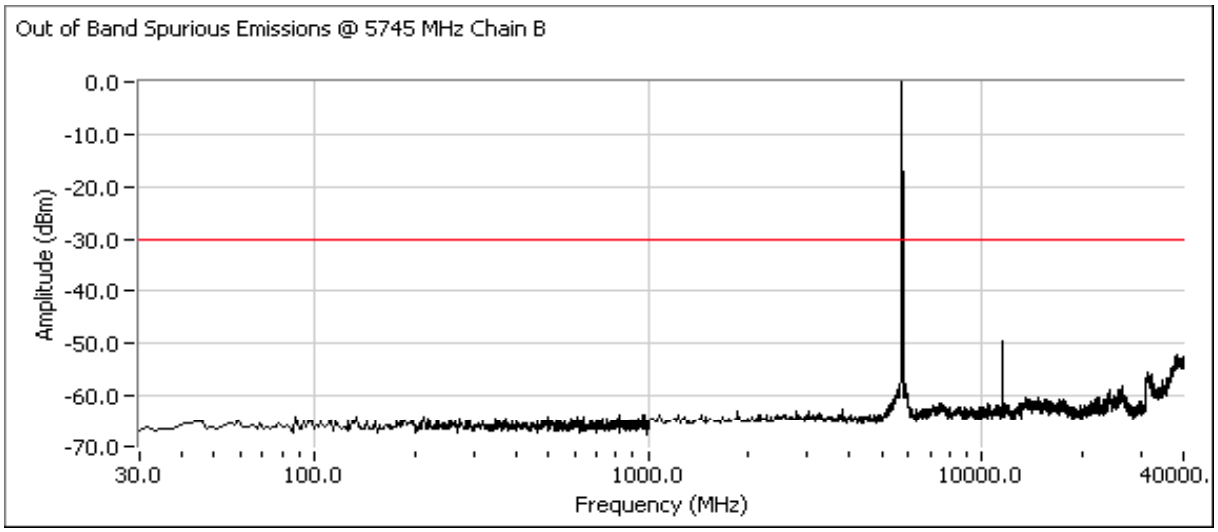


Additional plot from 5820 - 5860 MHz showing compliance with -30dBc at the band edge.

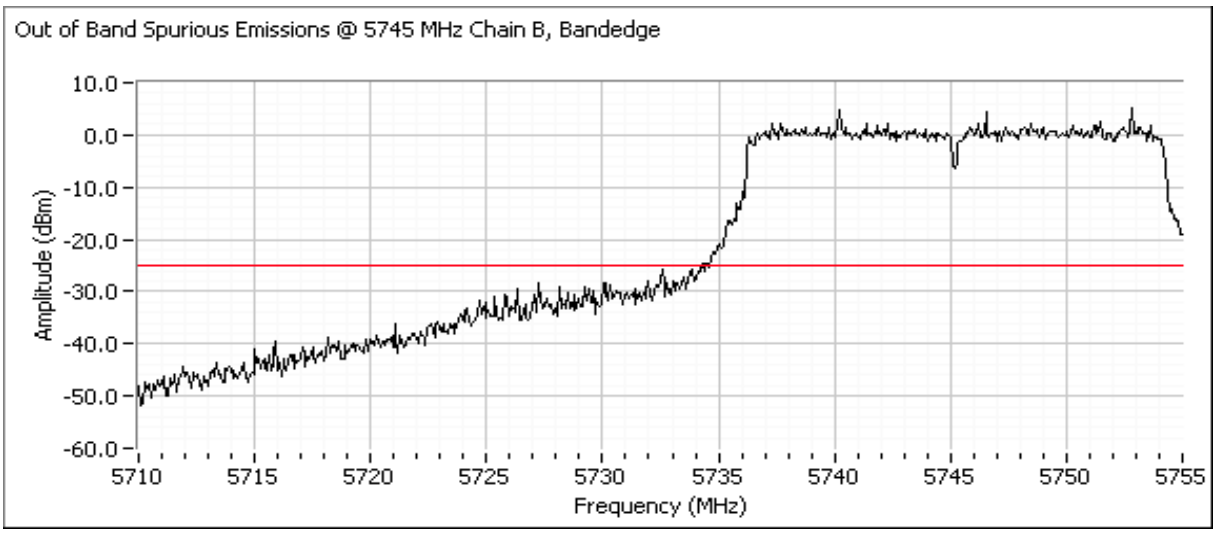


Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Plots for low channel, Chain B power setting(s) = 25.5

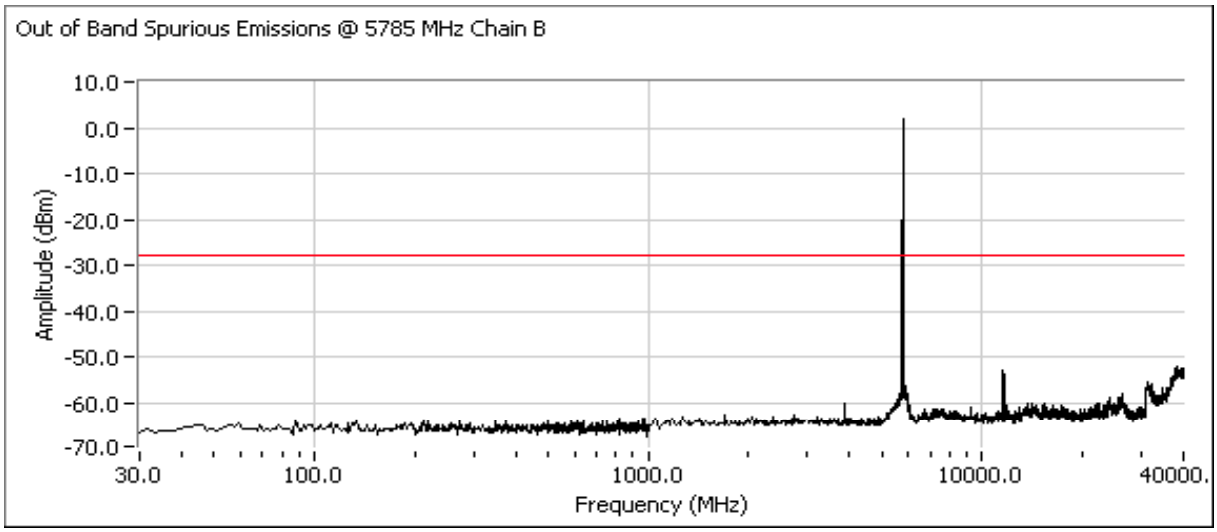


Additional plot from 5715 - 5755 MHz showing compliance with -30dBc at the band edge.

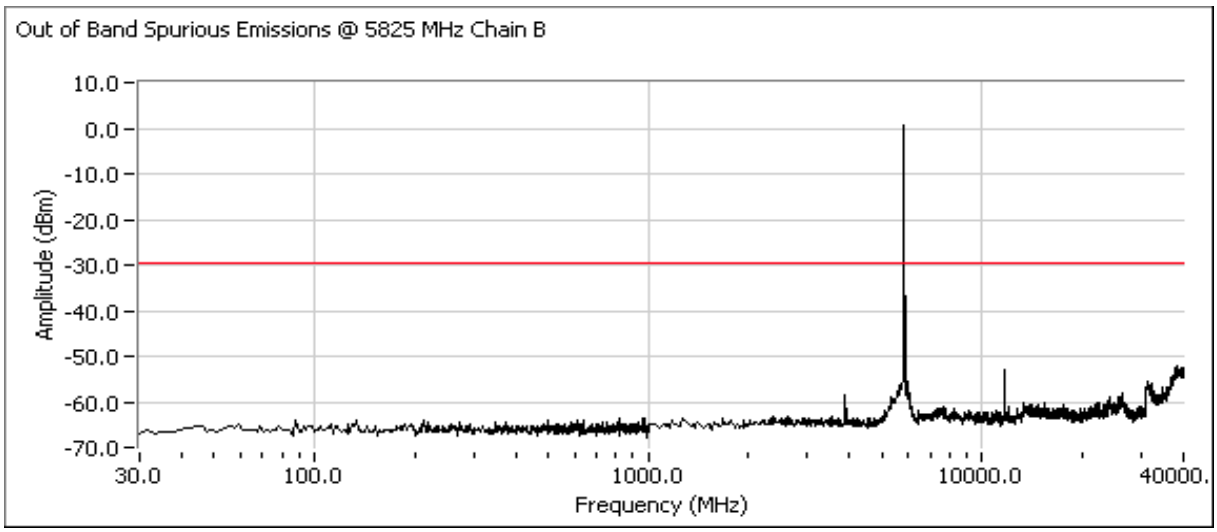


Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Plots for center channel, Chain B power setting(s) = 25.5

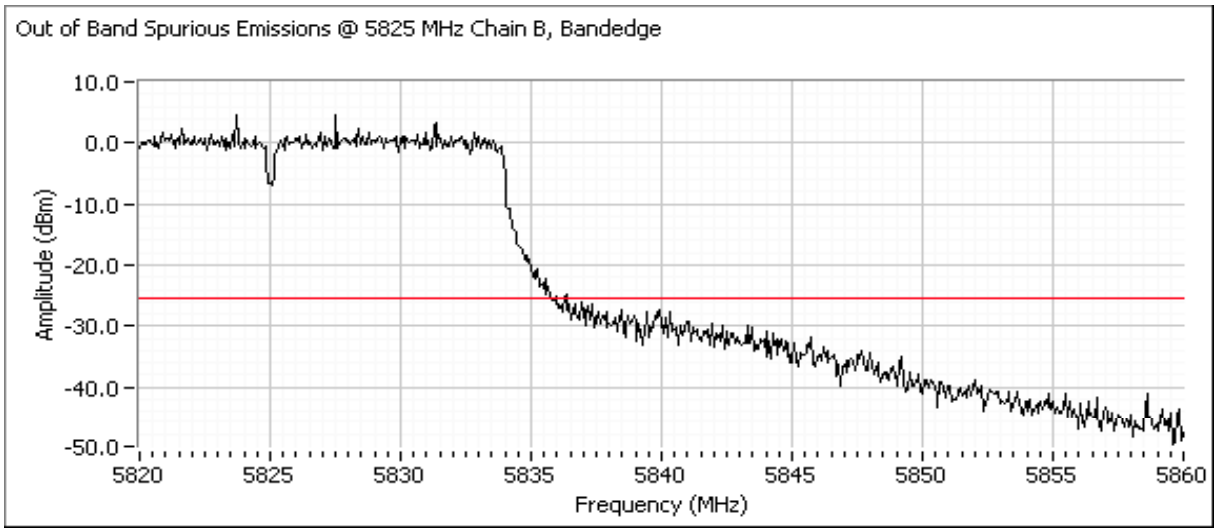


Plots for high channel, Chain B power setting(s) = 26.0

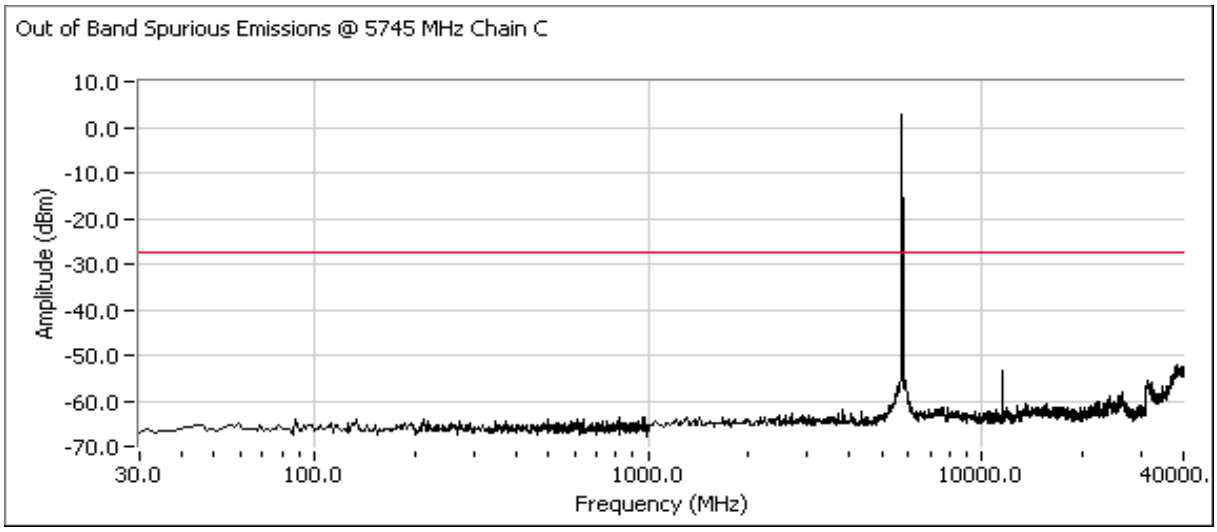


Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Additional plot from 5820 - 5860 MHz showing compliance with -30dBc at the band edge.

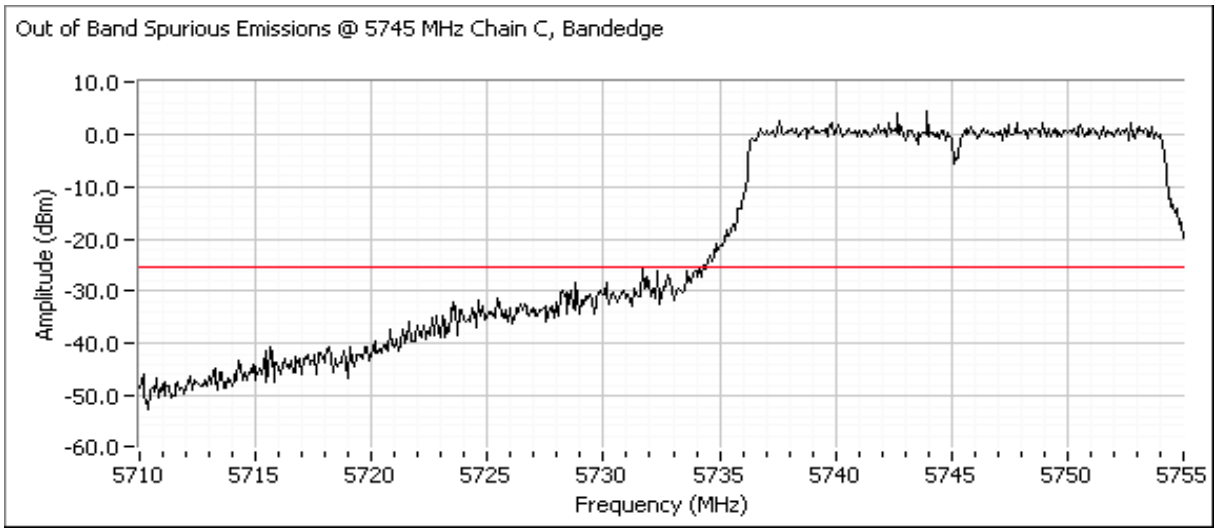


Plots for low channel, Chain C power setting(s) = 26.0

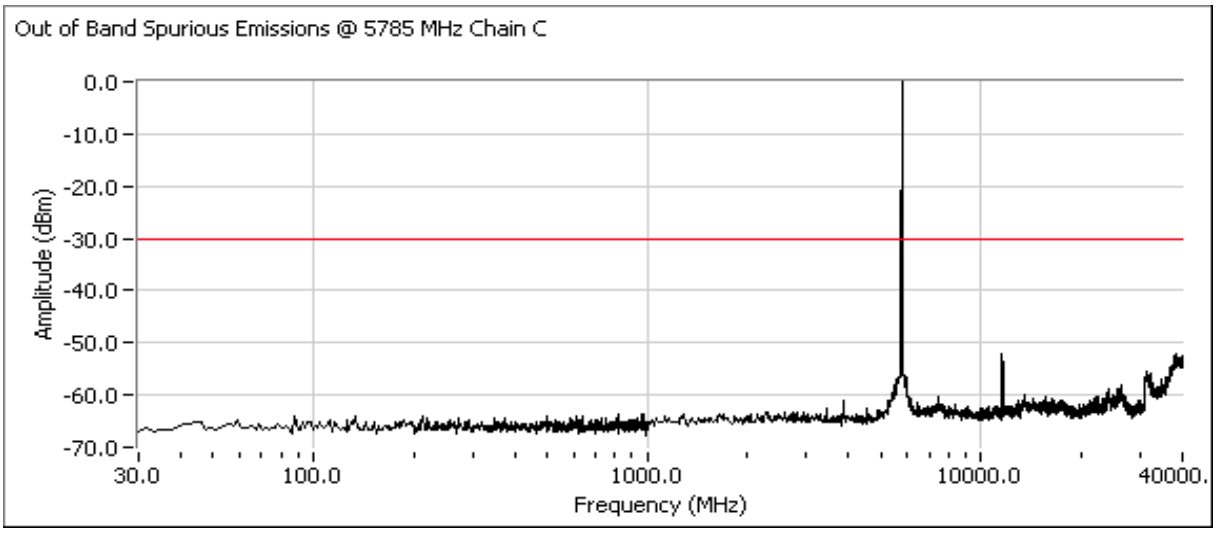


Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Additional plot from 5715 - 5755 MHz showing compliance with -30dBc at the band edge.

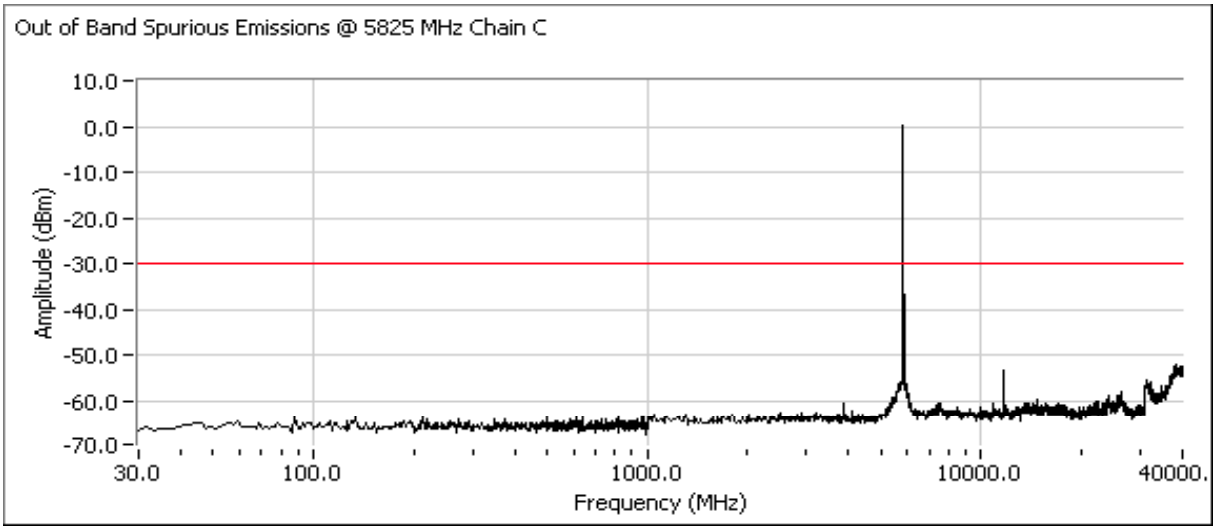


Plots for center channel, Chain C power setting(s) = 26.0

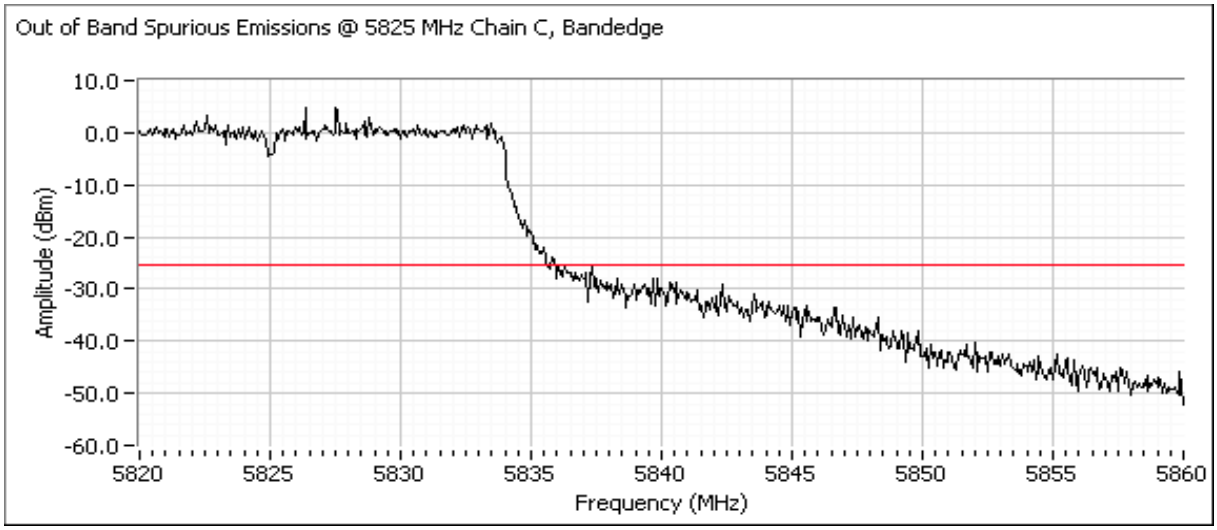


Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Plots for high channel, Chain C power setting(s) = 26.5



Additional plot from 5820 - 5860 MHz showing compliance with -30dBc at the band edge.



Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

RSS 210 and FCC 15.247 (DTS) Antenna Port Measurements
MIMO and Smart Antenna Systems, 5725 - 5850MHz
Power, PSD, Bandwidth and Spurious Emissions - 802.11n 20MHz

Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

Date of Test: 4/18/2008
Test Engineer: Suhaila Khushzad
Test Location: FT Lab # 1

Config. Used: 1
Config Change: None
EUT Voltage: Powered From Host System(3.3V DC)

General Test Configuration

The EUT was connected to the spectrum analyzer or power meter via a suitable attenuator. All measurements were made on each chain separately.

All measurements have been corrected to allow for the external attenuators used.

Ambient Conditions:

Temperature: 23 °C
Rel. Humidity: 35 %

Summary of Results

Run #	Test Performed	Limit	Pass / Fail	Result / Margin
1	Output Power Chain A + B	15.247(b)	Pass	15.8dBm
2	Power spectral Density (PSD) Chain A + B	15.247(d)	Pass	-7.7 dBm/3 kHz
3	Output Power Chain A + C	15.247(b)	Pass	16 dBm
4	PSD Chain A + C	15.247(d)	Pass	-4.6 dBm/3kHz
5	Output Power Chain B + C	15.247(b)	Pass	18 dBm(63mW)
6	PSD Chain B + C	15.247(d)	Pass	-1.1 dBm/3kHz
7	Output Power Chain A+B+C	15.247(b)	Pass	18 dBm(63mW)
8	PSD Chain A+B+C	15.247(d)	Pass	-5.5dBm/3kHz
-	6dB Bandwidth	15.247(a)		Covered by single-chain measurements
-	99% Bandwidth	RSS GEN	-	
-	Spurious emissions	15.247(b)		

Modifications Made During Testing

No modifications were made to the EUT during testing

Deviations From The Standard

No deviations were made from the requirements of the standard.

Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #1: Output Power - Dual Chain (A + B)

Operating Mode: 802.11n 20MHz

Transmitted signal on chain is coherent ? no

5745 MHz	Chain A	Chain B	Chain C	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	27.0	26.5						
Output Power (dBm) Note 1	12.4	12.6			15.5 dBm	0.036 W	30.0 dBm	1.000 W
Antenna Gain (dBi) Note 2	5	5				5.0 dBi	Pass	
eirp (dBm) Note 2	17.42	17.62			20.5 dBm	0.113 W		

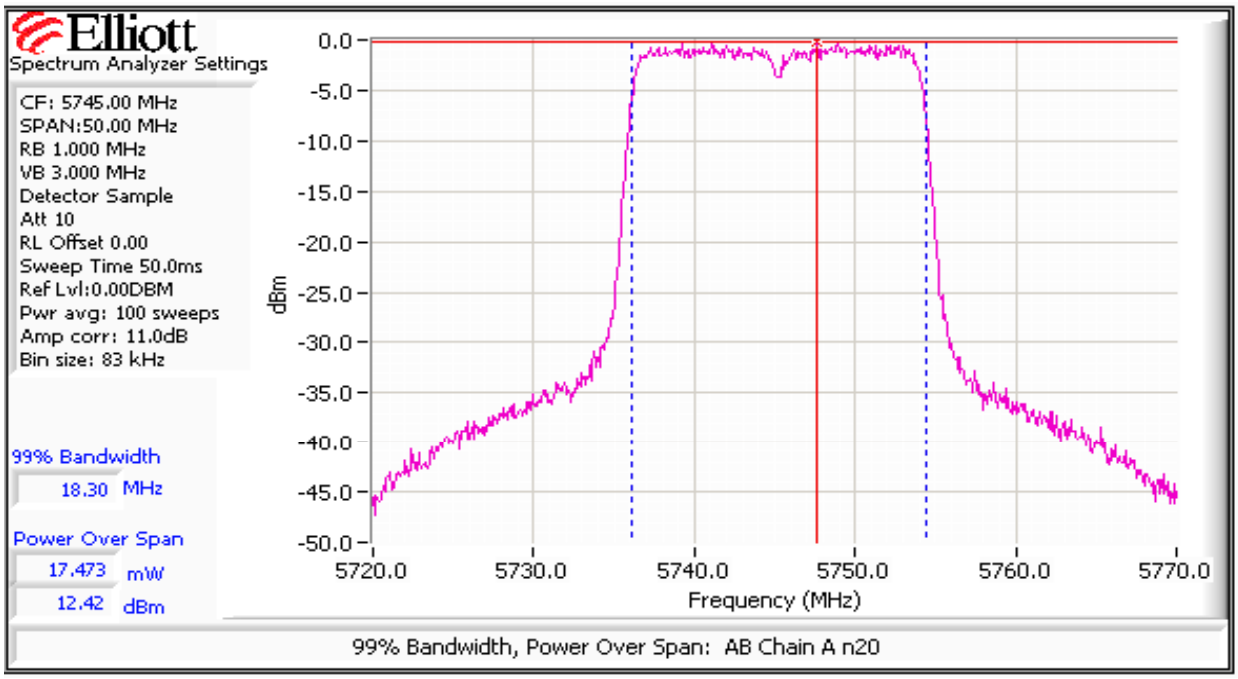
5785 MHz	Chain A	Chain B	Chain C	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	27.5	27.0						
Output Power (dBm) Note 1	12.64	12.8			15.7 dBm	0.037 W	30.0 dBm	1.000 W
Antenna Gain (dBi) Note 2	5	5				5.0 dBi	Pass	
eirp (dBm) Note 2	17.64	17.8			20.7 dBm	0.118 W		

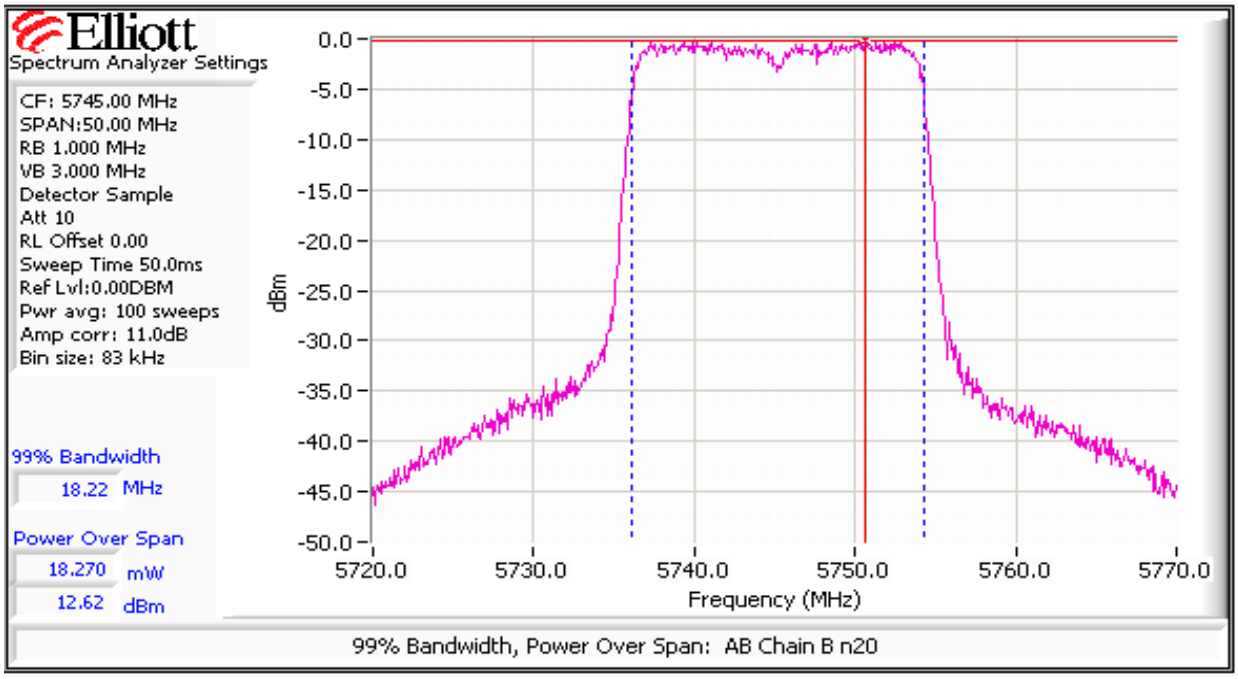
5825 MHz	Chain A	Chain B	Chain C	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	28.0	27.5						
Output Power (dBm) Note 1	12.61	12.91			15.8 dBm	0.038 W	30.0 dBm	1.000 W
Antenna Gain (dBi) Note 2	5	5				5.0 dBi	Pass	
eirp (dBm) Note 2	17.61	17.91			20.8 dBm	0.119 W		

Note 1:	Output power measured using a spectrum analyzer (see plots below) with RBW=1MHz, VB=3 MHz, sample detector, power averaging on (transmitted signal was continuous) and power integration over 50 MHz (reference method 1 of FCC DA 02-2138 for U-NII devices, August 30, 2002). Spurious limit becomes -30dBc.
Note 2:	As there is no coherency between chains the total EIRP is the sum of the individual EIRPs and effective antenna gain equals the eirp divide by the sum of the power on each chain.

Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

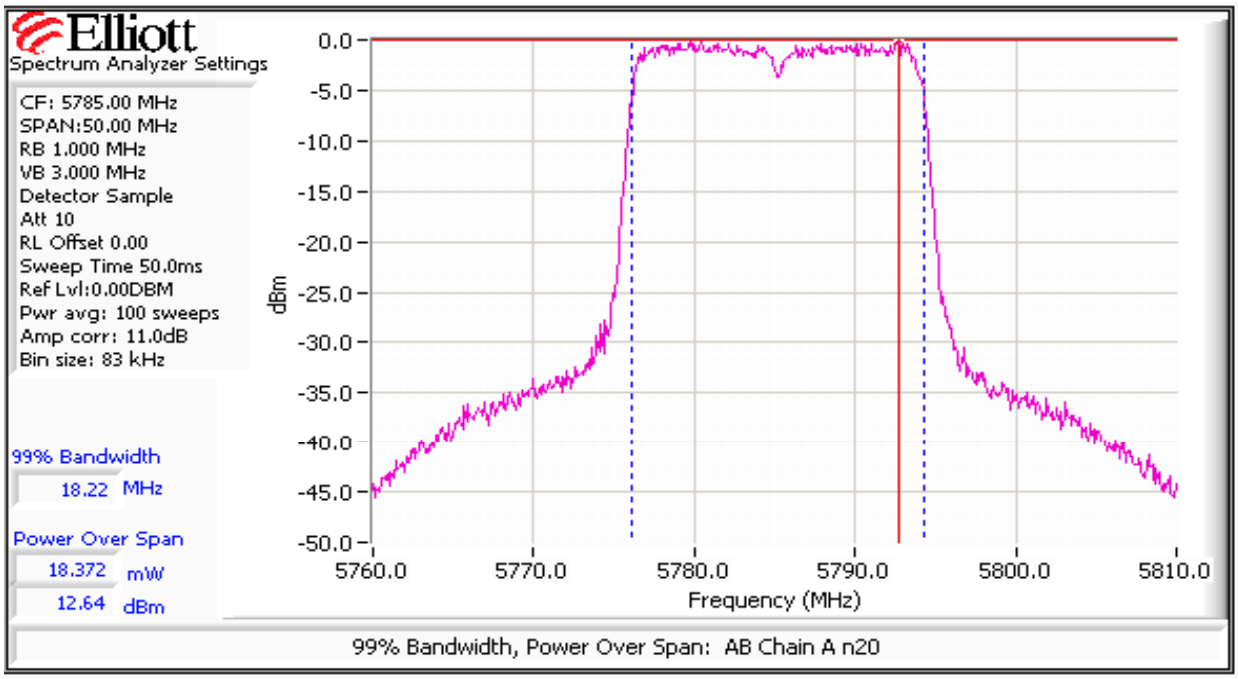
Run #1: Output Power - Dual Chain (A + B)

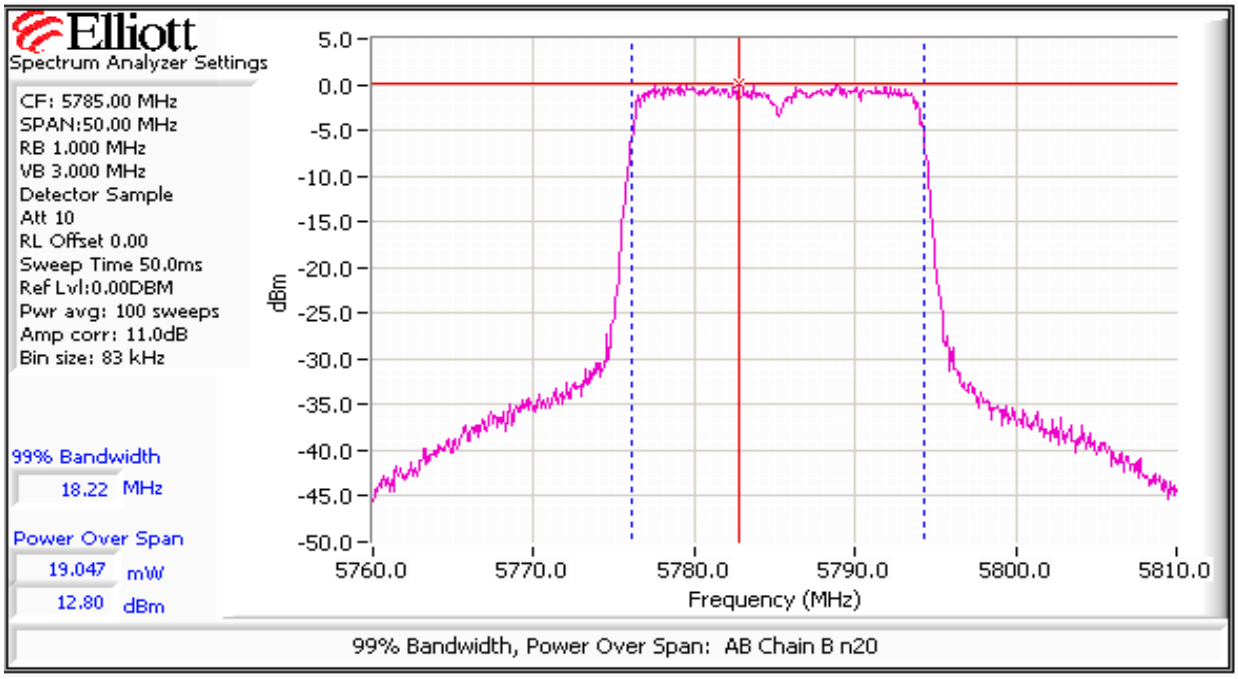




Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

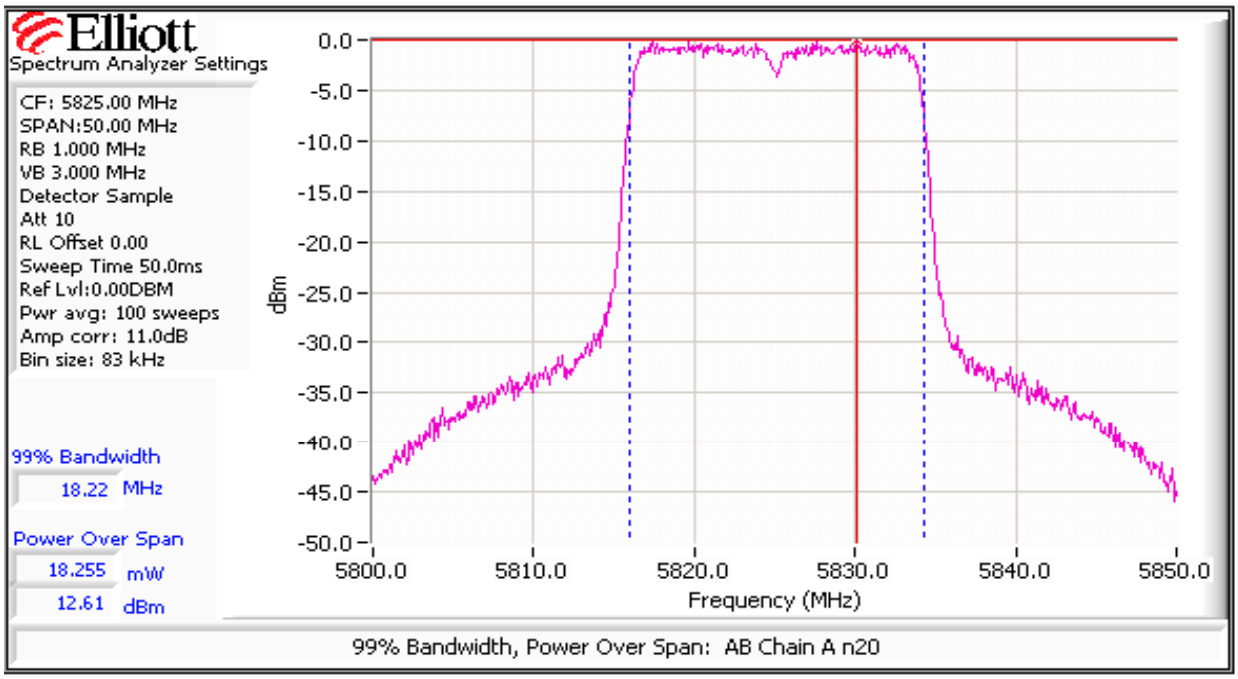
Run #1: Output Power - Dual Chain (A + B)

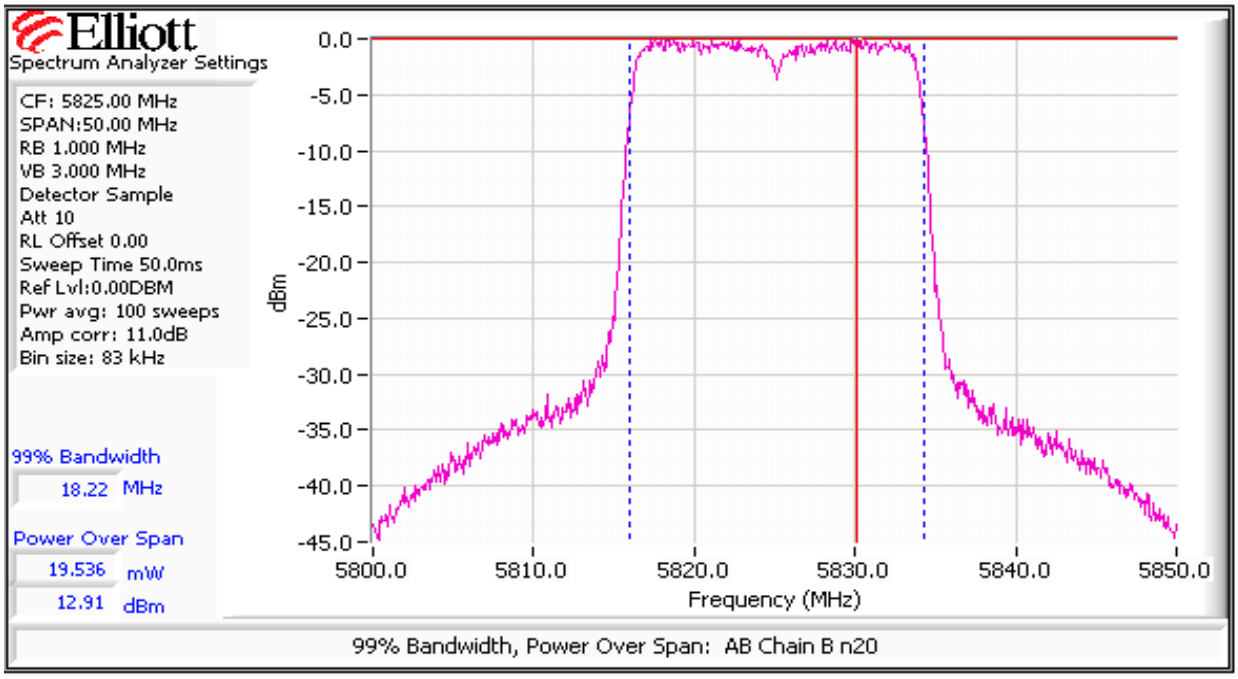




Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #1: Output Power - Dual Chain (A + B)





Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

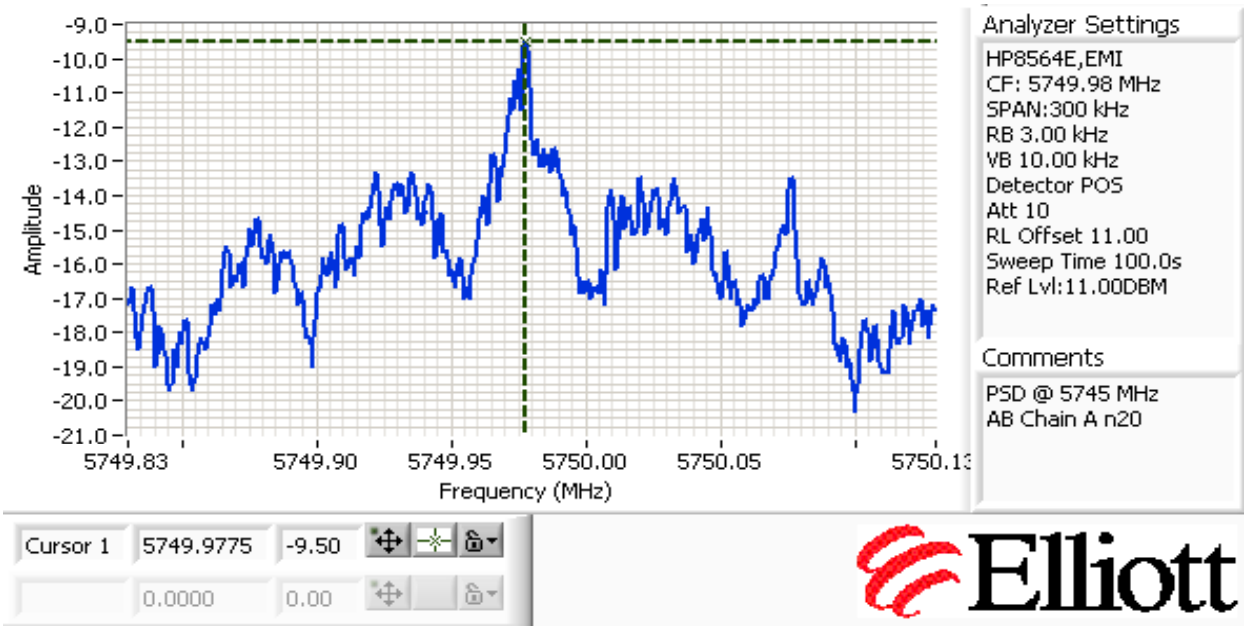
Run #2: Power spectral Density - Chain A + B

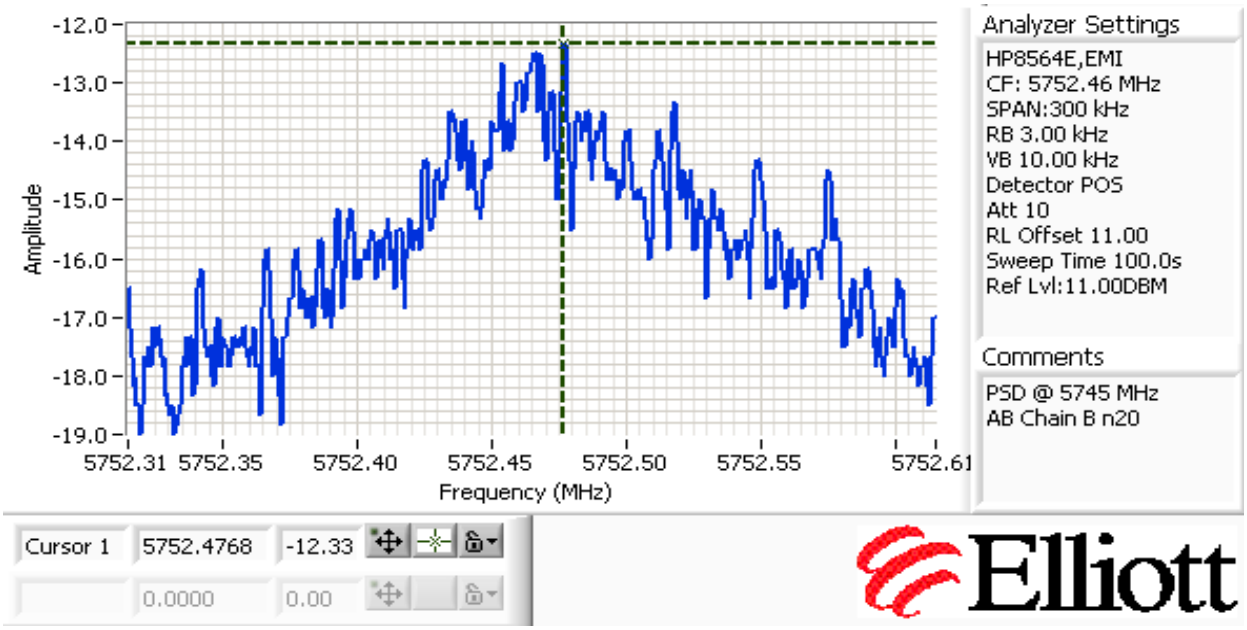
Power Setting	Frequency (MHz)	PSD (dBm/3kHz) Note 1					Limit dBm/3kHz	Result
		Chain A	Chain B	Chain C	Chain 4	Total		
27, 26.5	5745	-9.5	-12.3			-7.7	8.0	Pass
27.5, 27	5785	-11.2	-11.3			-8.2	8.0	Pass
28, 27.5	5825	-12.8	-11.3			-9.0	8.0	Pass

Note 1:	Power spectral density measured using RB=3 kHz, VB=10kHz, analyzer with peak detector and with a sweep time set to ensure a dwell time of at least 1 second per 3kHz. The measurement is made at the frequency of PPSD determined from preliminary scans using RB=3kHz using multiple sweeps at a faster rate over the 6dB bandwidth of the signal.
Note 2:	Power setting - if a single number the same power setting was used for each chain. If multiple numbers the power setting for each chain is separated by a comma (e.g. x,y would indicate power setting x for Chain A, power setting y for Chain B.

Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

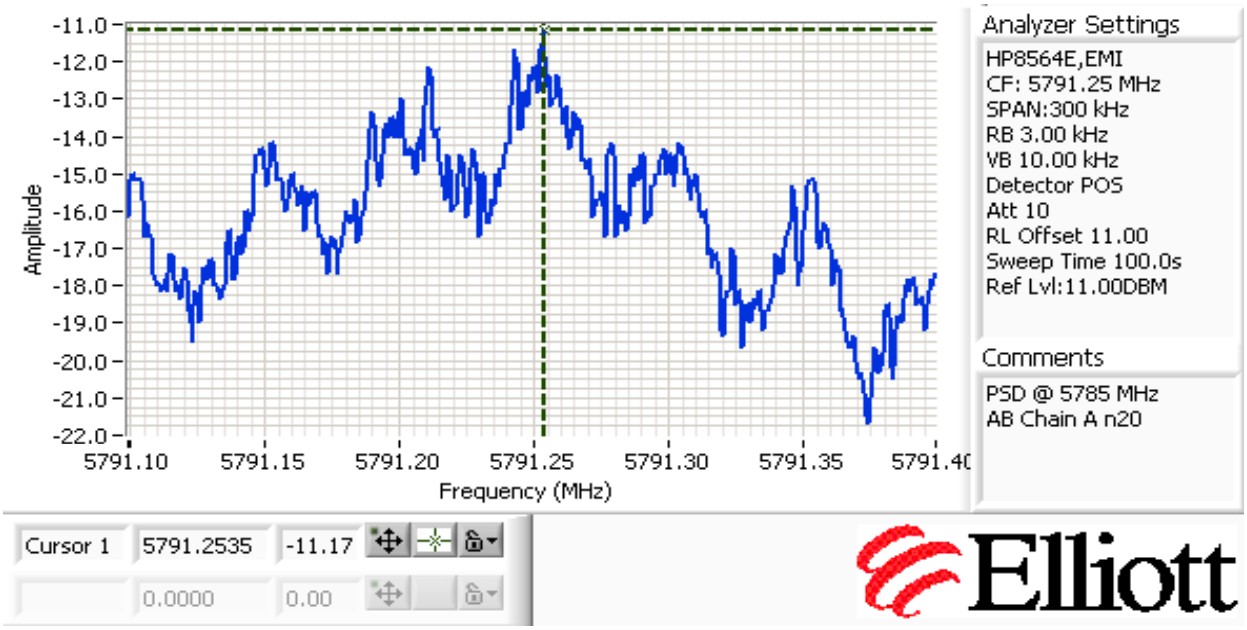
Run #2: Power spectral Density - Chain A + B

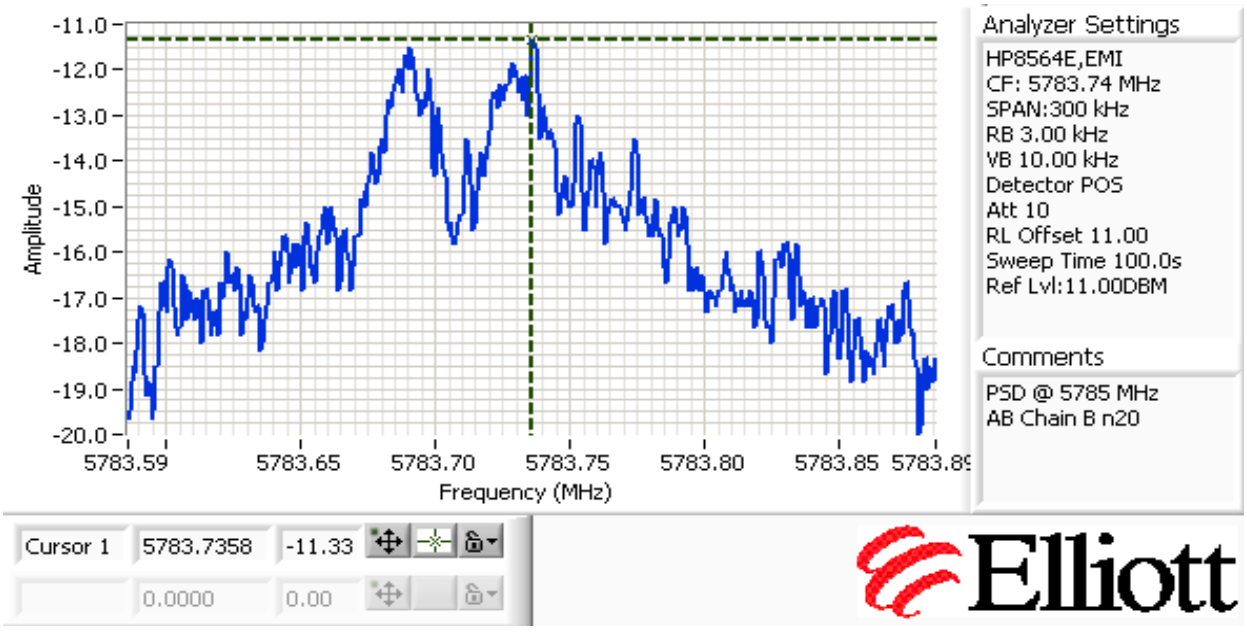




Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

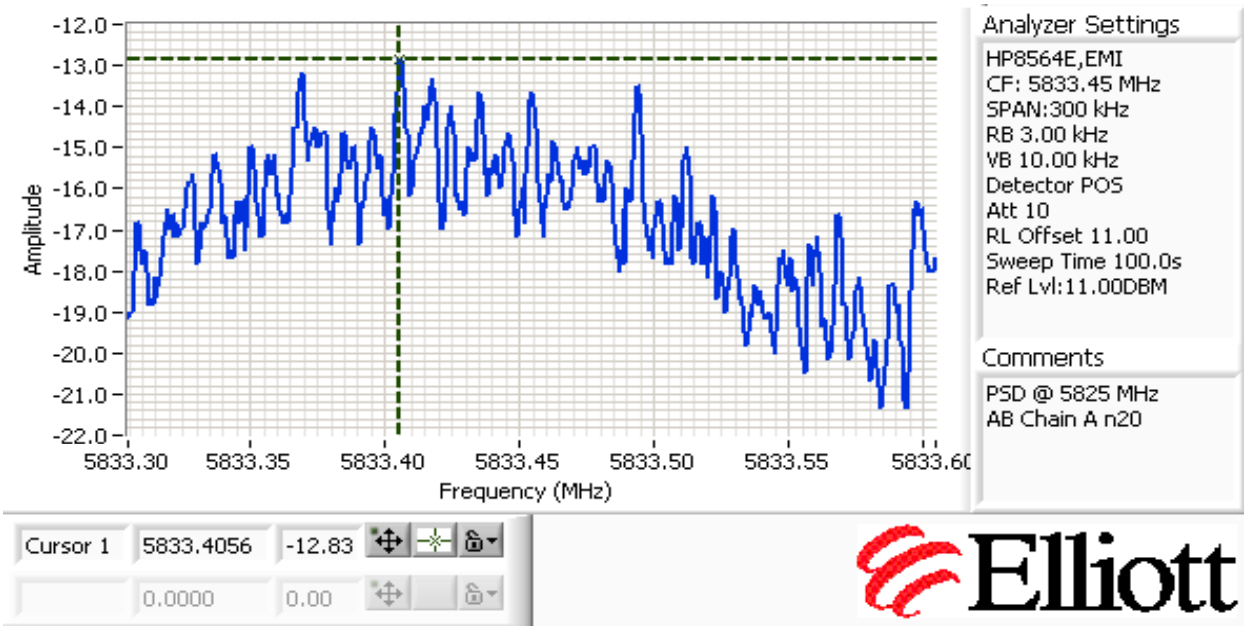
Run #2: Power spectral Density - Chain A + B

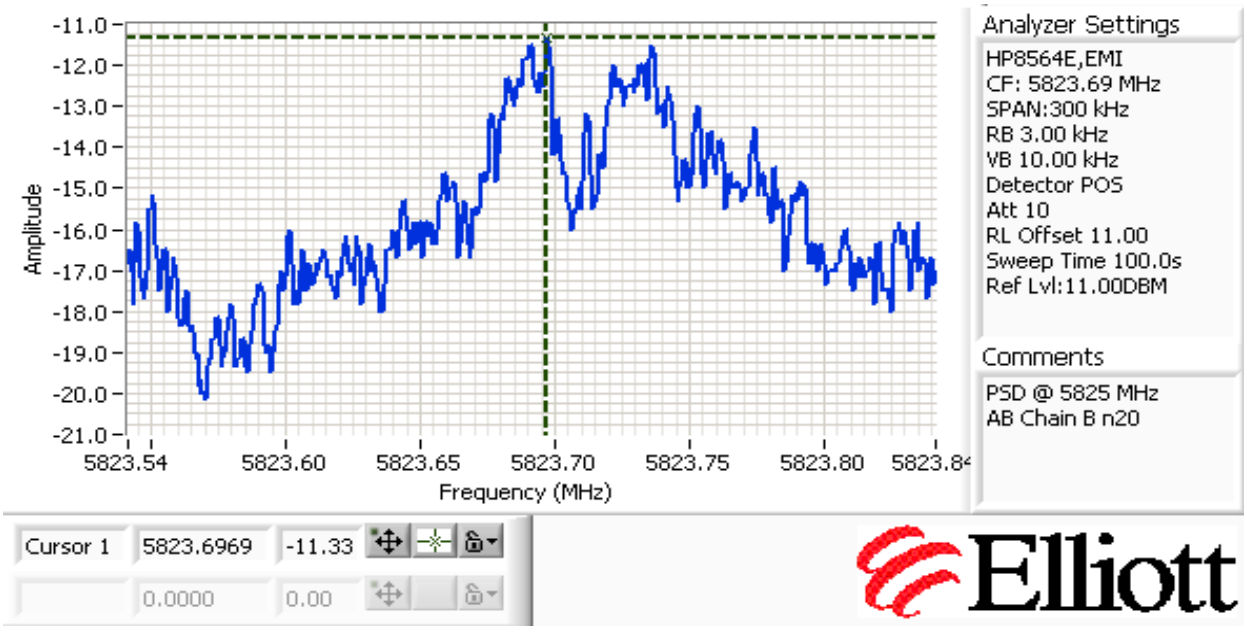




Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #2: Power spectral Density - Chain A + B





Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #3: Output Power - Dual Chain A + C

Operating Mode: 802.11n 20MHz

Transmitted signal on chain is coherent ? No

5745 MHz	Chain A	Chain B	Chain C	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	27.5		27.5					
Output Power (dBm) Note 1	12.73		13.17		16.0 dBm	0.039 W	30.0 dBm	1.000 W
Antenna Gain (dBi) Note 2	5		5			5.0 dBi	Pass	
eirp (dBm) Note 2	17.73		18.17		21.0 dBm	0.125 W		

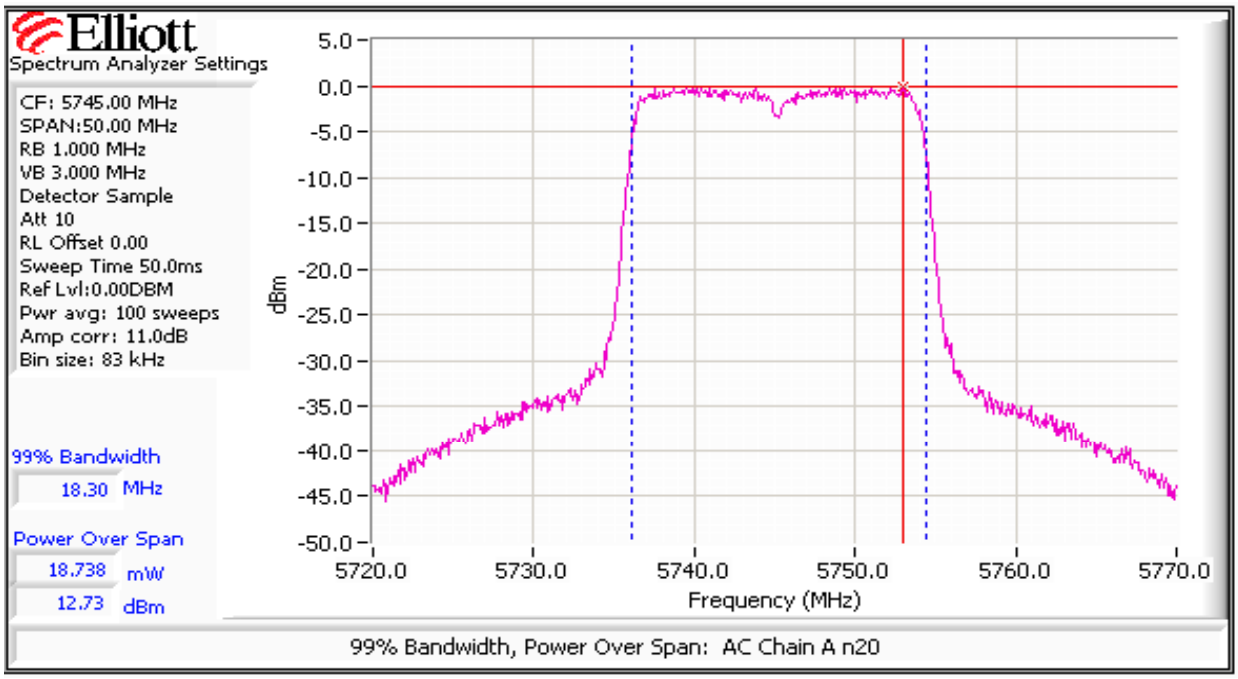
5785 MHz	Chain A	Chain B	Chain C	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	28.0		28.0					
Output Power (dBm) Note 1	12.64		12.9		15.8 dBm	0.038 W	30.0 dBm	1.000 W
Antenna Gain (dBi) Note 2	5		5			5.0 dBi	Pass	
eirp (dBm) Note 2	17.64		17.9		20.8 dBm	0.120 W		

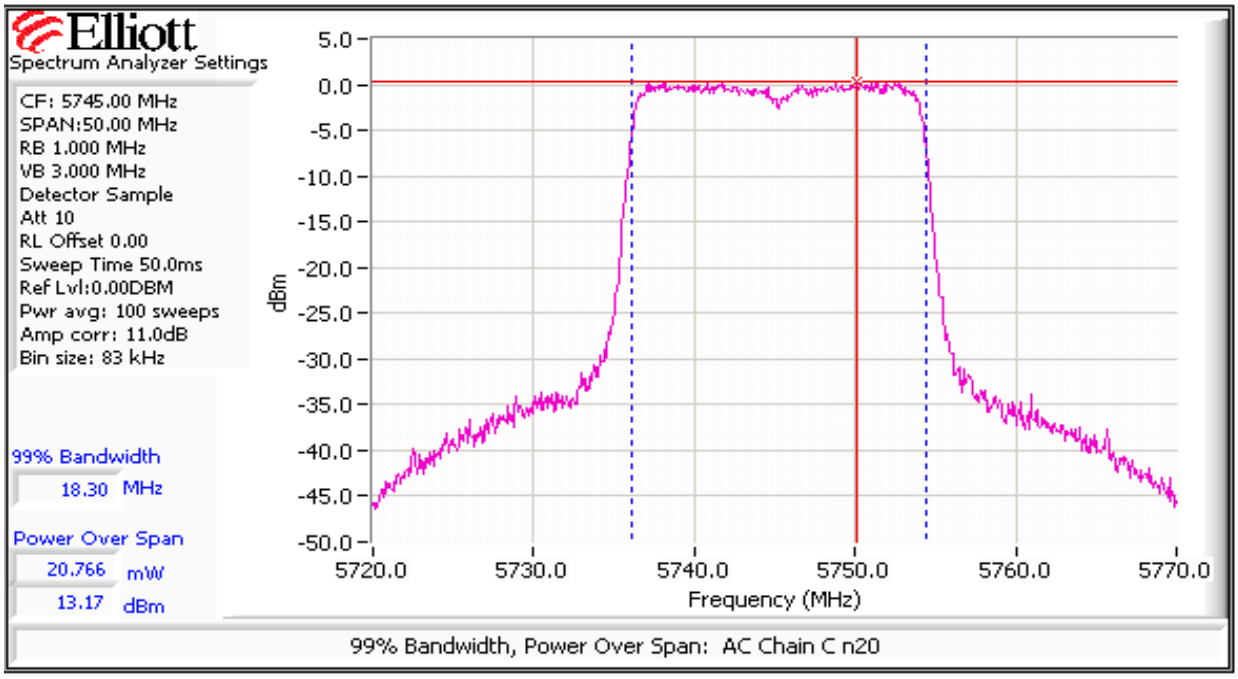
5825 MHz	Chain A	Chain B	Chain C	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	28.5		28.5					
Output Power (dBm) Note 1	12.76		13.04		15.9 dBm	0.039 W	30.0 dBm	1.000 W
Antenna Gain (dBi) Note 2	5		5			5.0 dBi	Pass	
eirp (dBm) Note 2	17.76		18.04		20.9 dBm	0.123 W		

Note 1:	Output power measured using a spectrum analyzer (see plots below) with RBW=1MHz, VB=3 MHz, sample detector, power averaging on (transmitted signal was continuous) and power integration over ??? MHz (reference method 1 of FCC DA 02-2138 for U-NII devices, August 30, 2002). Spurious limit becomes -30dBc.
Note 2:	As there is no coherency between chains the total EIRP is the sum of the individual EIRPs and effective antenna gain equals the eirp divide by the sum of the power on each chain.

Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

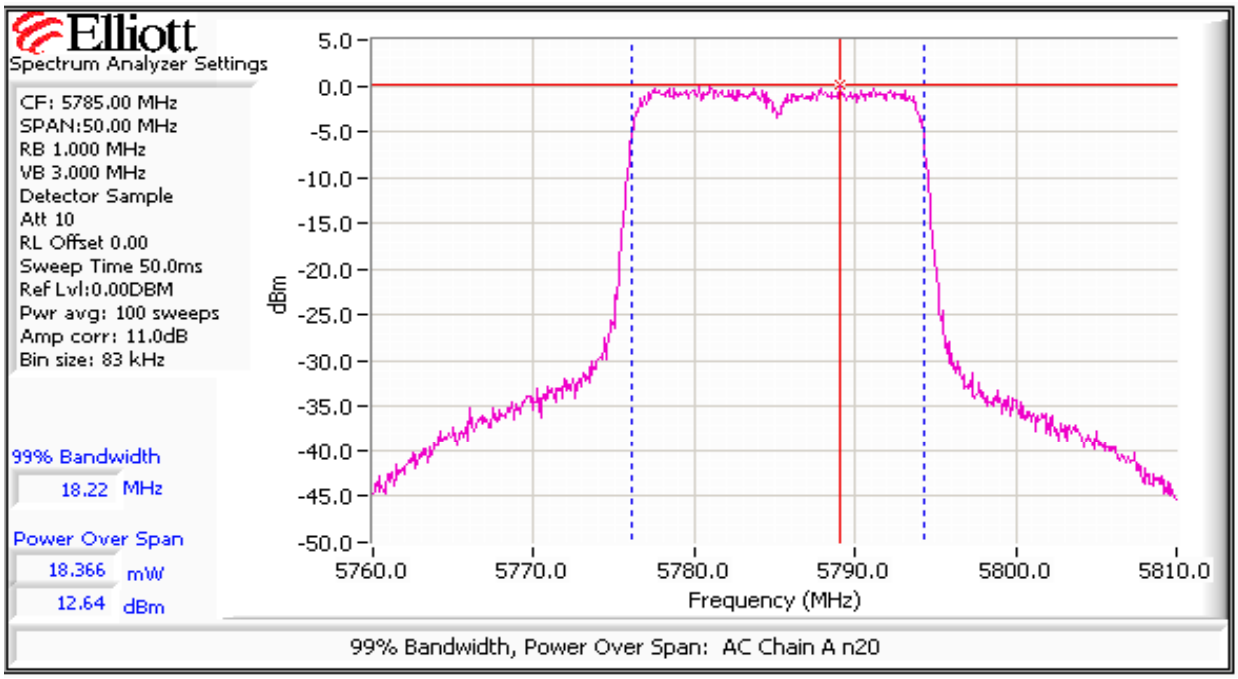
Run #3: Output Power - Dual Chain A + C

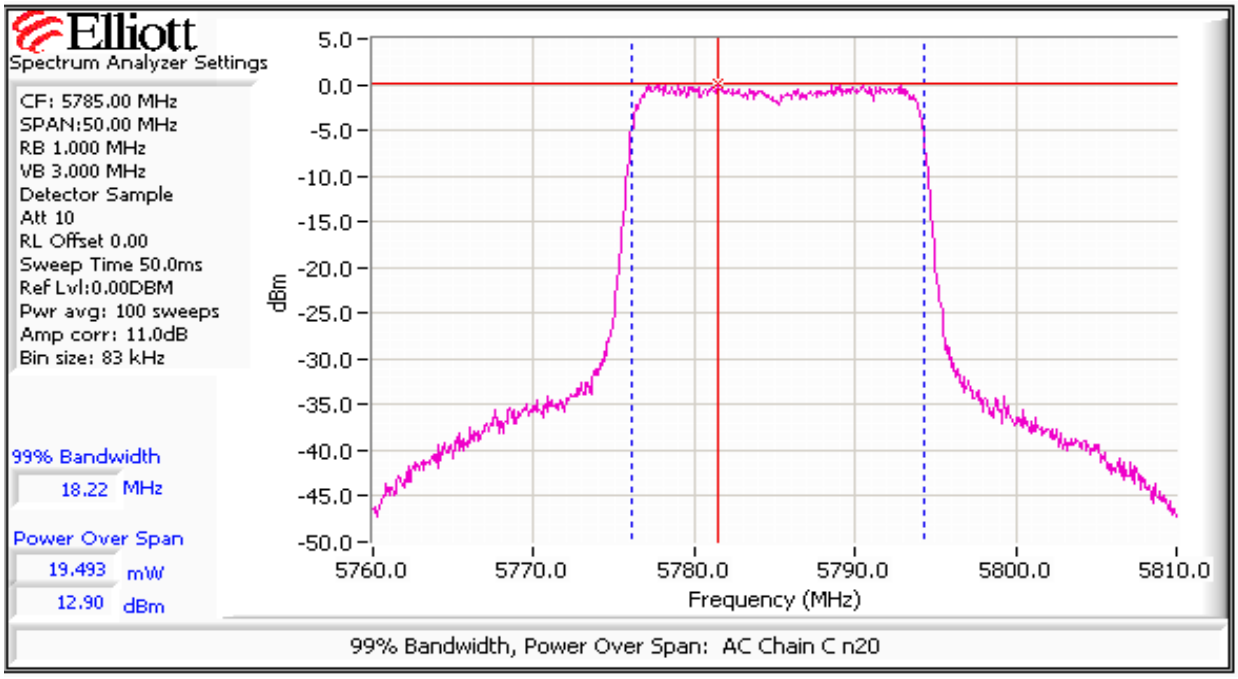




Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

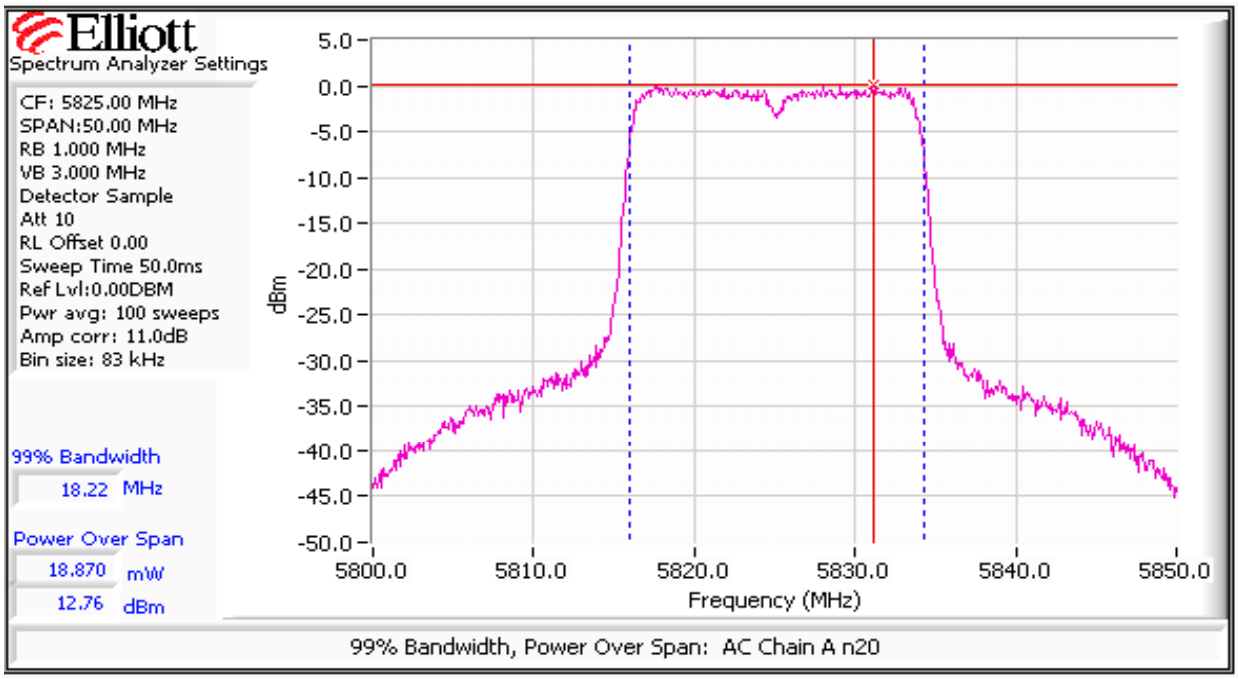
Run #3: Output Power - Dual Chain A + C

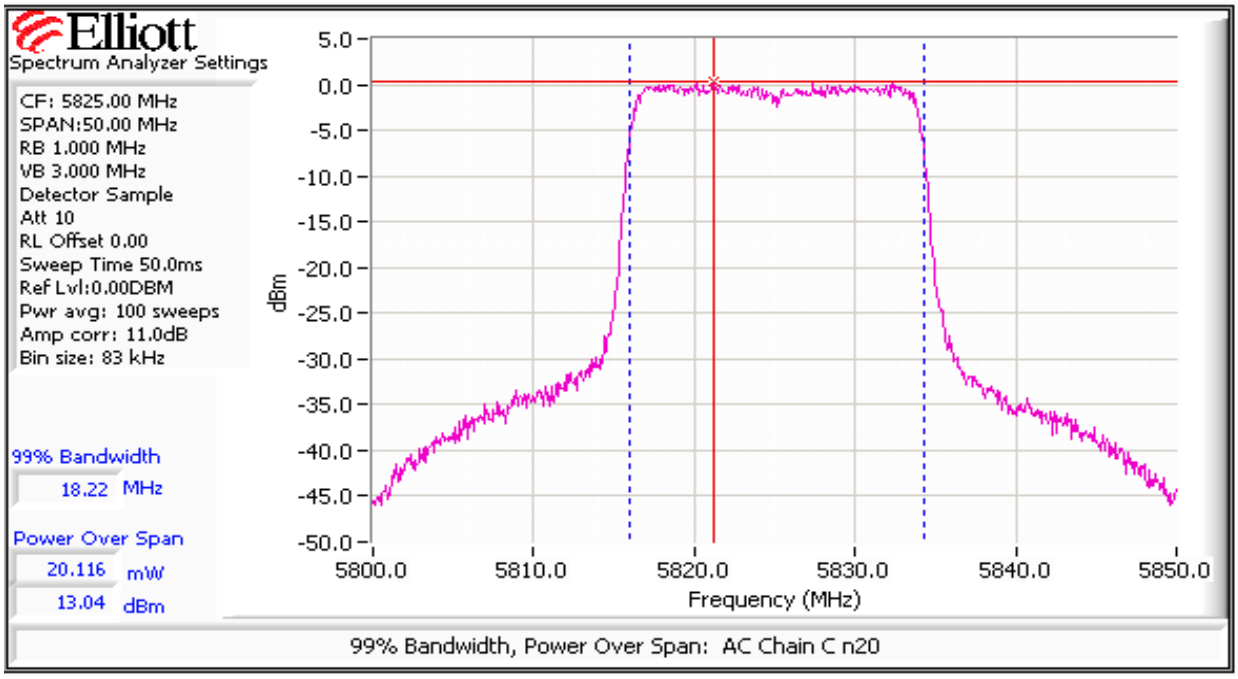




Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #3: Output Power - Dual Chain A + C





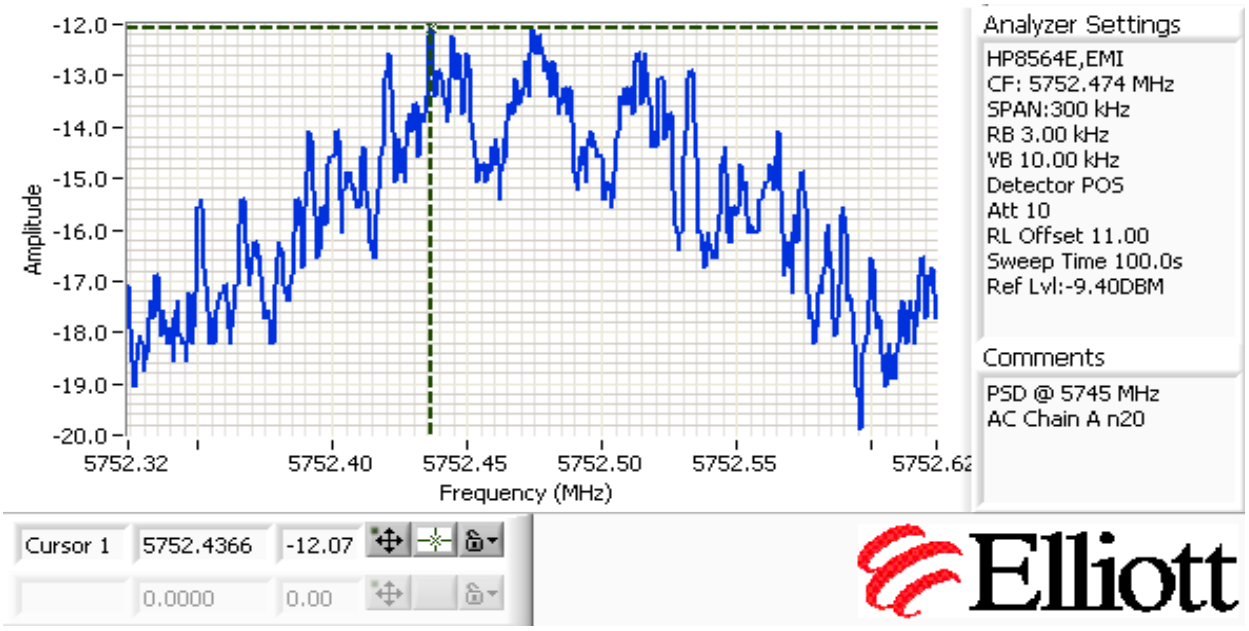
Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

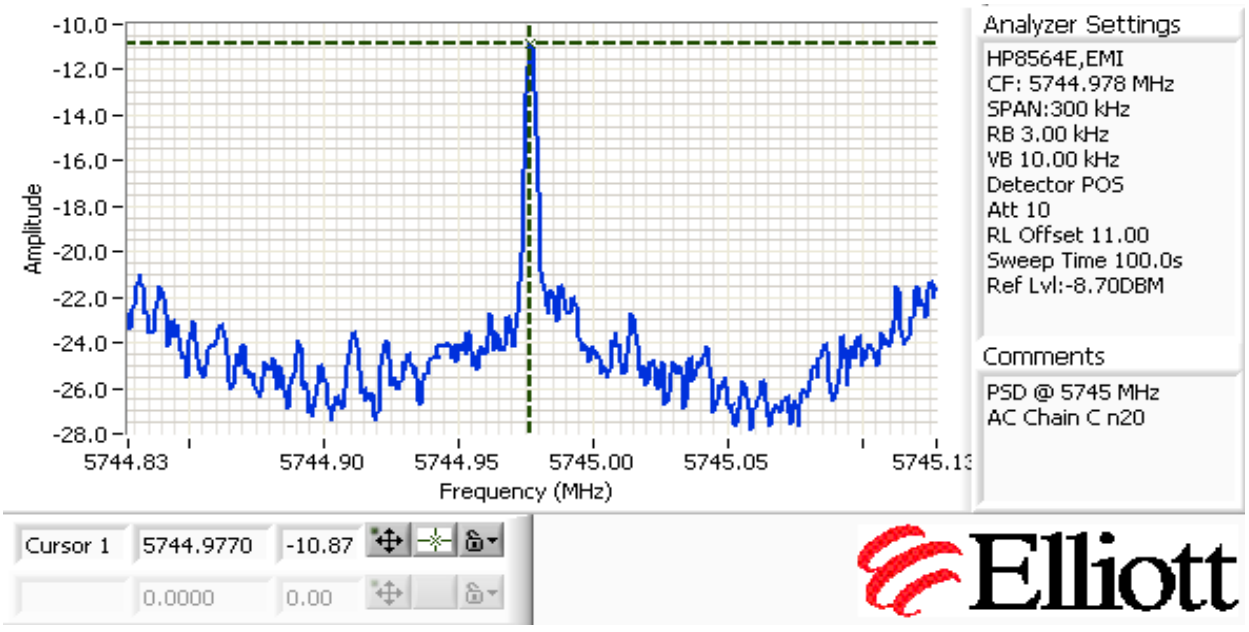
Run #4: Power spectral Density - Chain A + C

Power Setting	Frequency (MHz)	PSD (dBm/3kHz) Note 1					Limit dBm/3kHz	Result
		Chain A	Chain B	Chain C	Chain 4	Total		
27.5	5745	-12.1		-10.9		-8.4	8.0	Pass
28.0	5785	-13.2		-6.0		-5.2	8.0	Pass
28.5	5825	-9.0		-6.5		-4.6	8.0	Pass

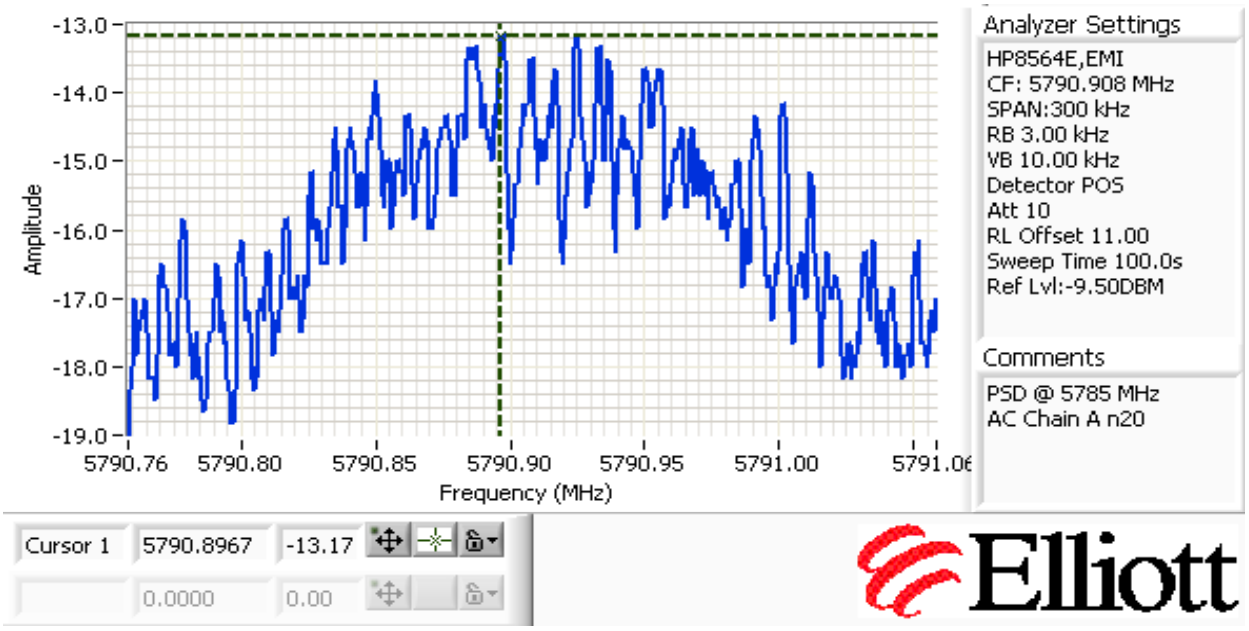
Note 1:	Power spectral density measured using RB=3 kHz, VB=10kHz, analyzer with peak detector and with a sweep time set to ensure a dwell time of at least 1 second per 3kHz. The measurement is made at the frequency of PPSD determined from preliminary scans using RB=3kHz using multiple sweeps at a faster rate over the 6dB bandwidth of the signal.
Note 2:	Power setting - if a single number the same power setting was used for each chain. If multiple numbers the power setting for each chain is separated by a comma (e.g. x,y would indicate power setting x for Chain A, power setting y for Chain B.

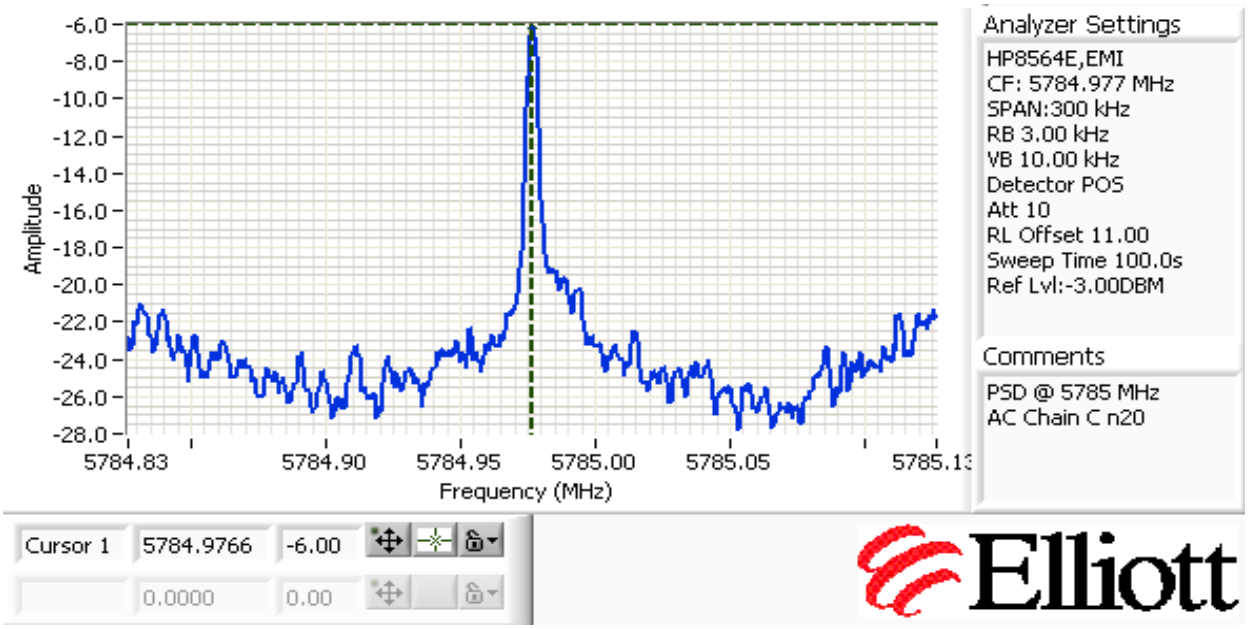
Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A



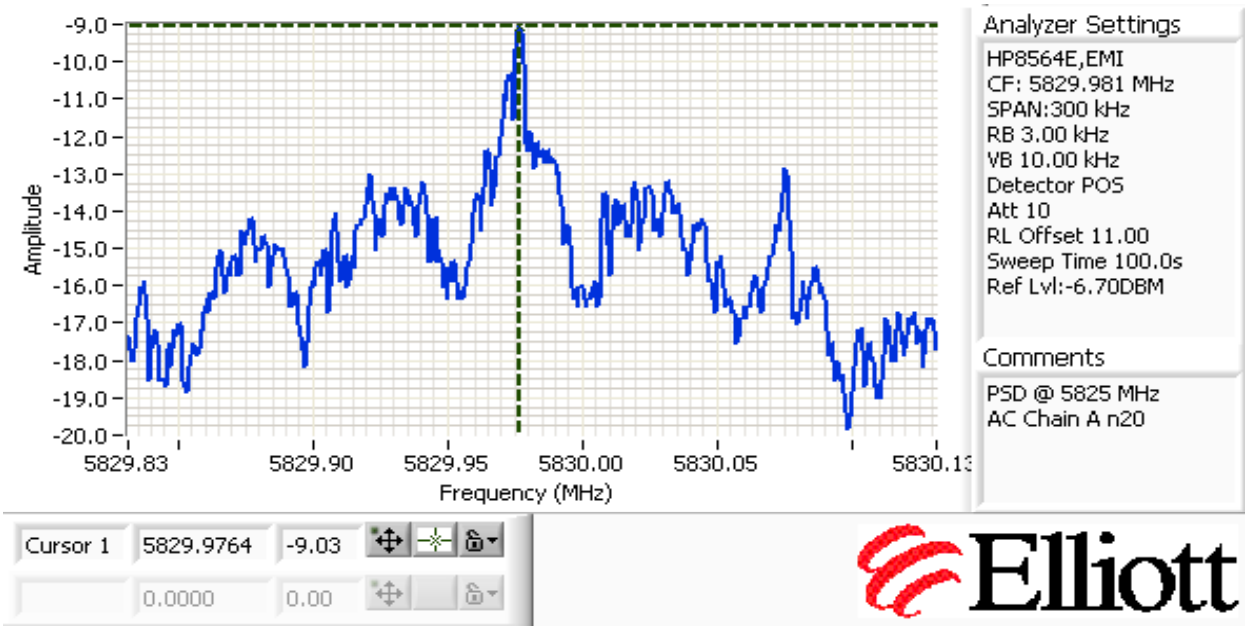


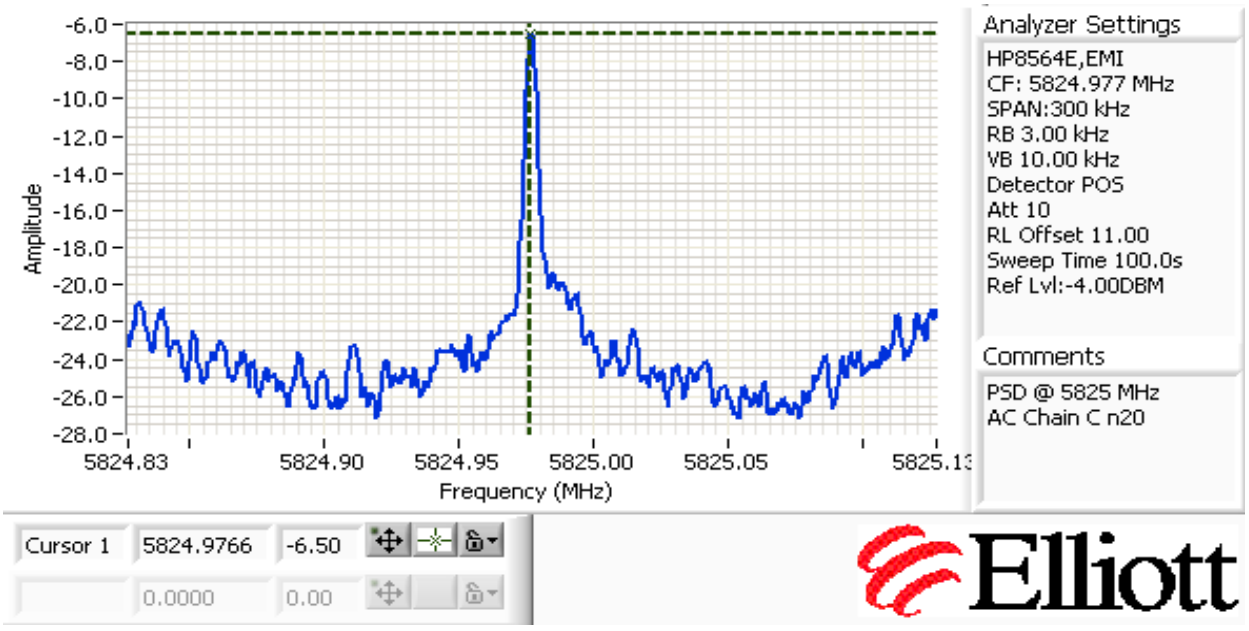
Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A





Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A





Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #5: Output Power - Dual Chain (B + C)

Operating Mode: 802.11n 20MHz

Transmitted signal on chain is coherent ? No

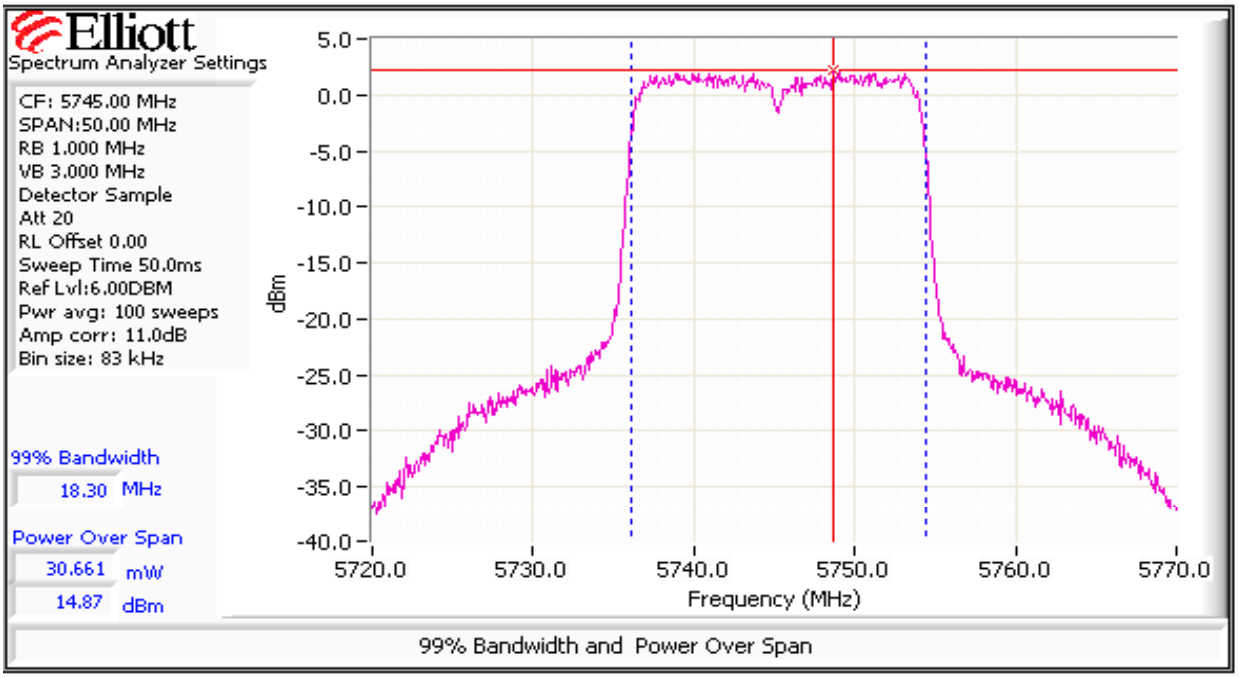
5745 MHz	Chain A	Chain B	Chain C	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3		30.5	31.0					
Output Power (dBm) Note 1		14.9	15.0		18.0 dBm	0.063 W	30.0 dBm	1.000 W
Antenna Gain (dBi) Note 2		5.0	5.0			5.0 dBi	Pass	
eirp (dBm) Note 2		19.9	20.0		23.0 dBm	0.198 W		

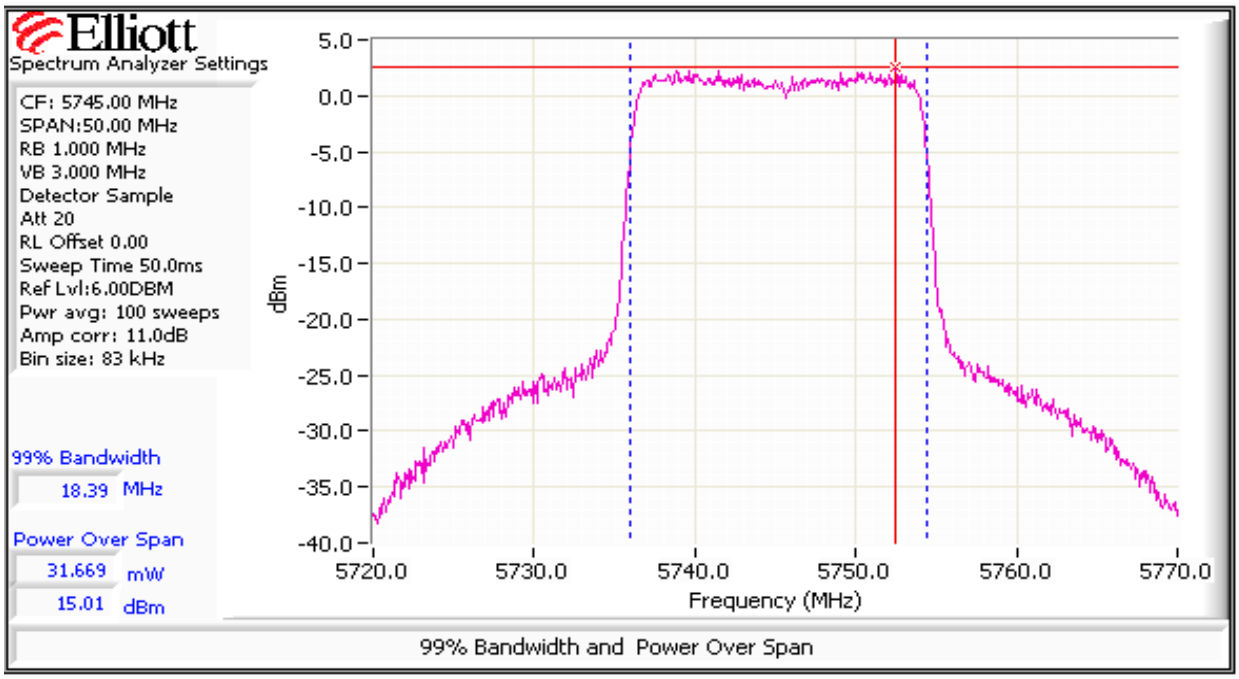
5785 MHz	Chain A	Chain B	Chain C	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3		30.5	31.0					
Output Power (dBm) Note 1		14.8	14.8		17.8 dBm	0.060 W	30.0 dBm	1.000 W
Antenna Gain (dBi) Note 2		5.0	5.0			5.0 dBi	Pass	
eirp (dBm) Note 2		19.8	19.8		22.8 dBm	0.191 W		

5825 MHz	Chain A	Chain B	Chain C	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3		31.0	31.5					
Output Power (dBm) Note 1		14.8	15.1		18.0 dBm	0.063 W	30.0 dBm	1.000 W
Antenna Gain (dBi) Note 2		5.0	5.0			5.0 dBi	Pass	
eirp (dBm) Note 2		19.8	20.1		23.0 dBm	0.198 W		

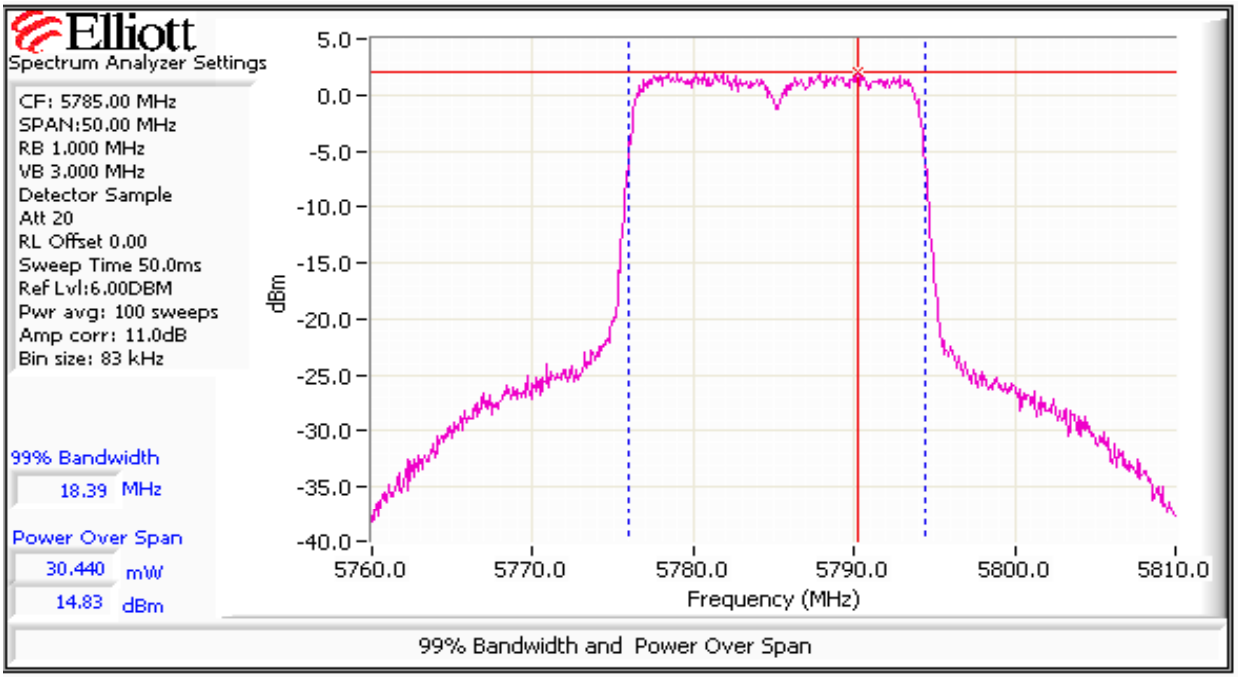
Note 1:	Output power measured using a spectrum analyzer (see plots below) with RBW=1MHz, VB=3 MHz, sample detector, power averaging on (transmitted signal was continuous) and power integration over ??? MHz (reference method 1 of FCC DA 02-2138 for U-NII devices, August 30, 2002). Spurious limit becomes -30dBc.
Note 2:	As there is no coherency between chains the total EIRP is the sum of the individual EIRPs and effective antenna gain equals the eirp divide by the sum of the power on each chain.

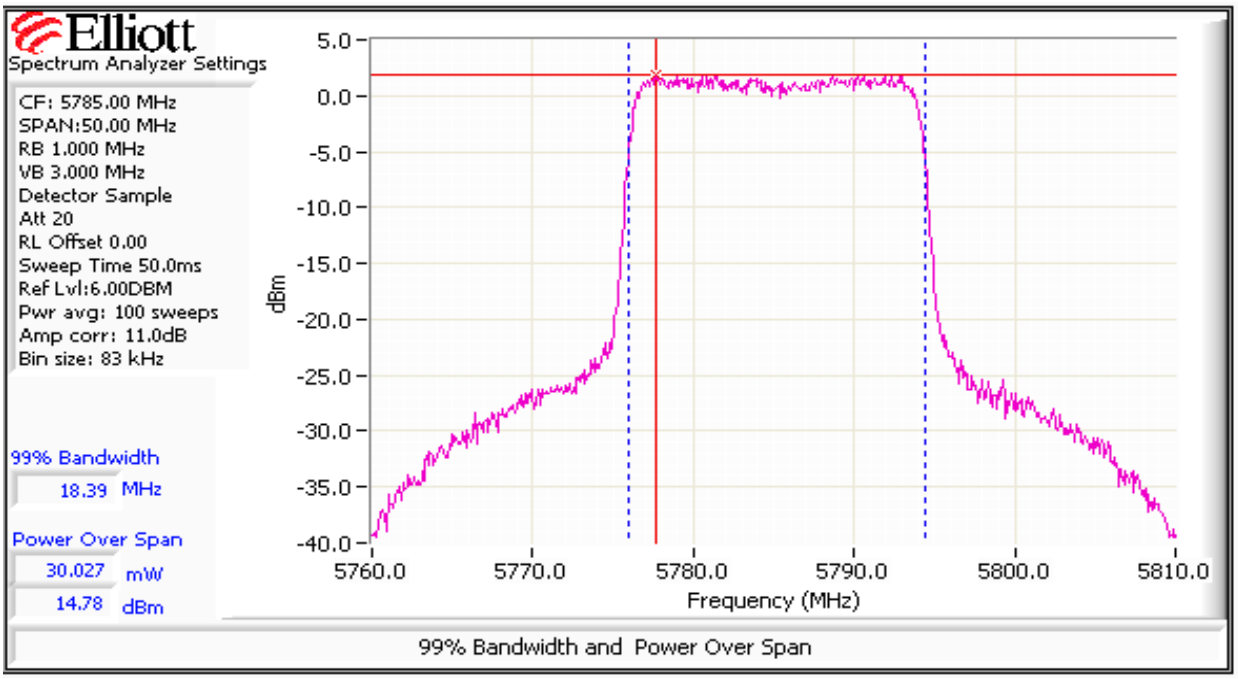
Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A



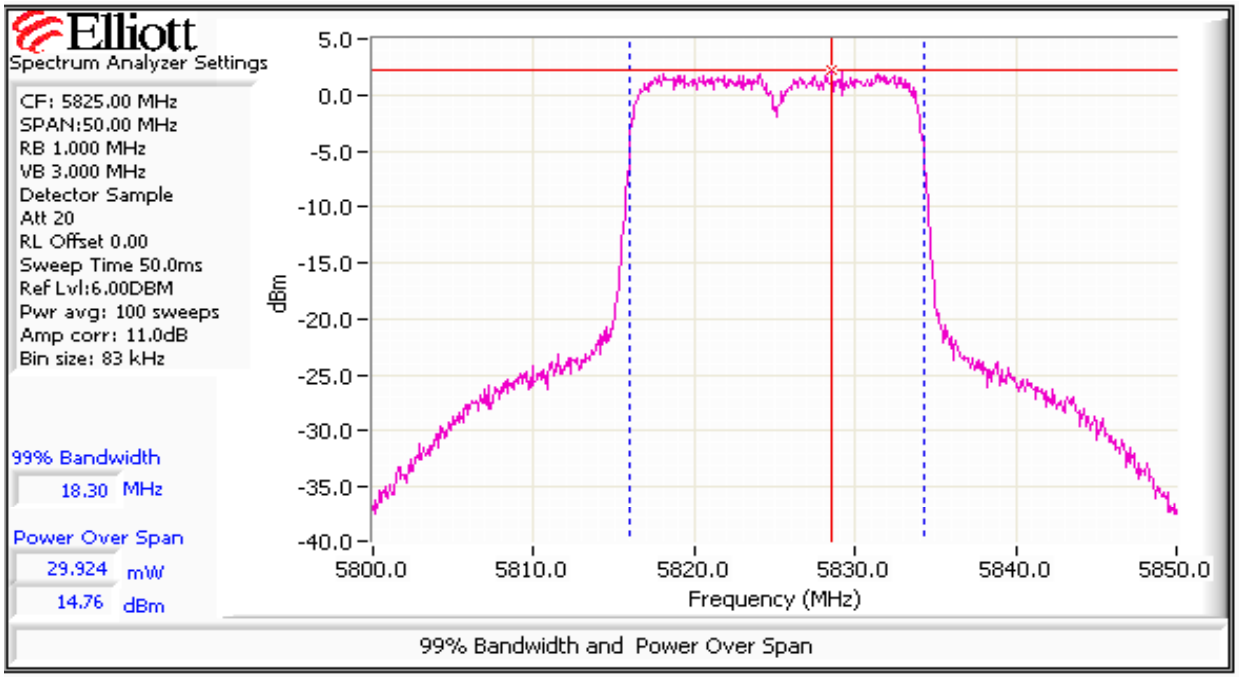


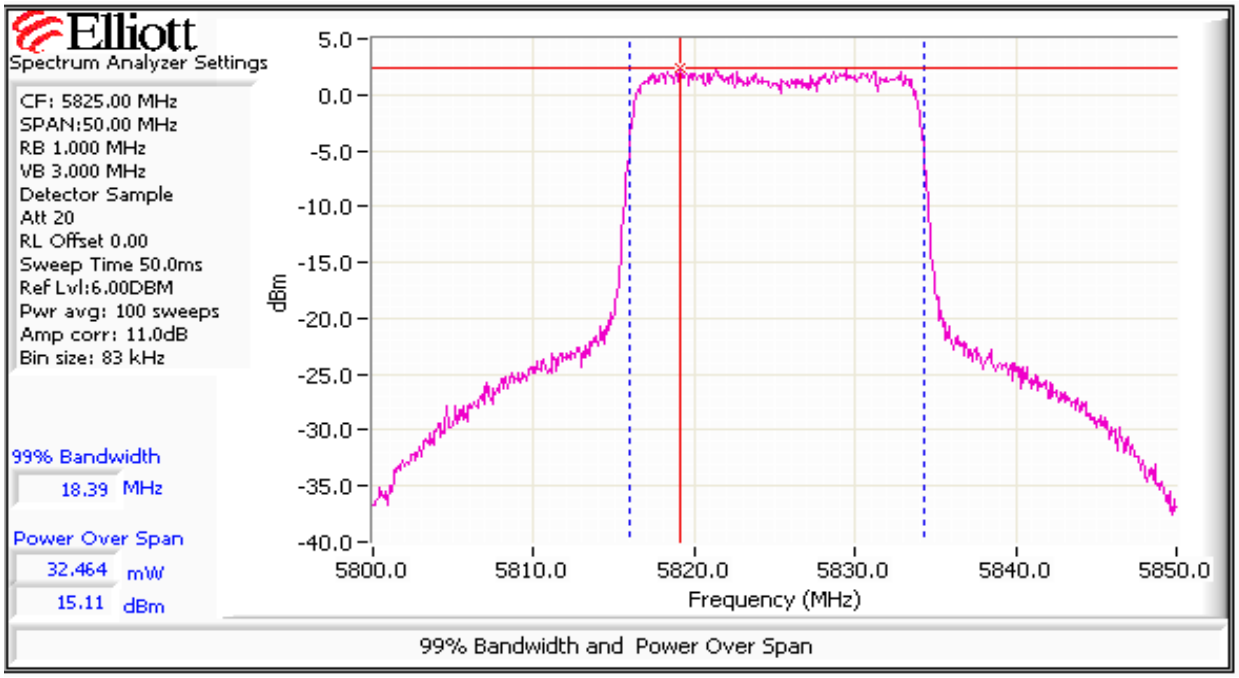
Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A





Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A





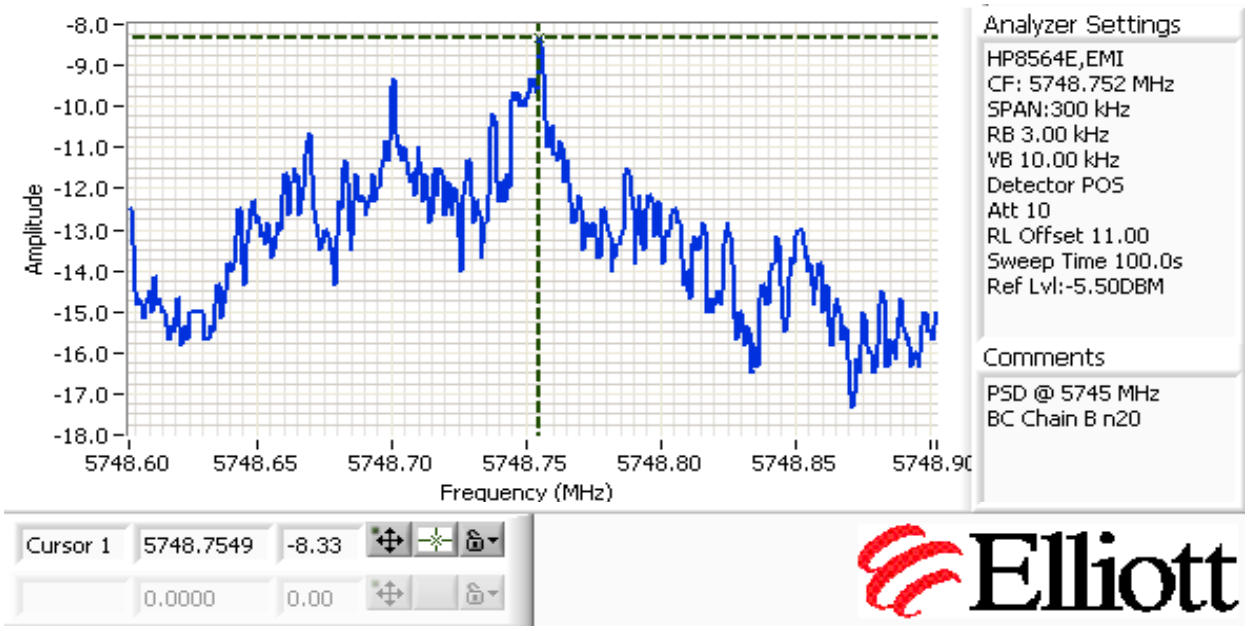
Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

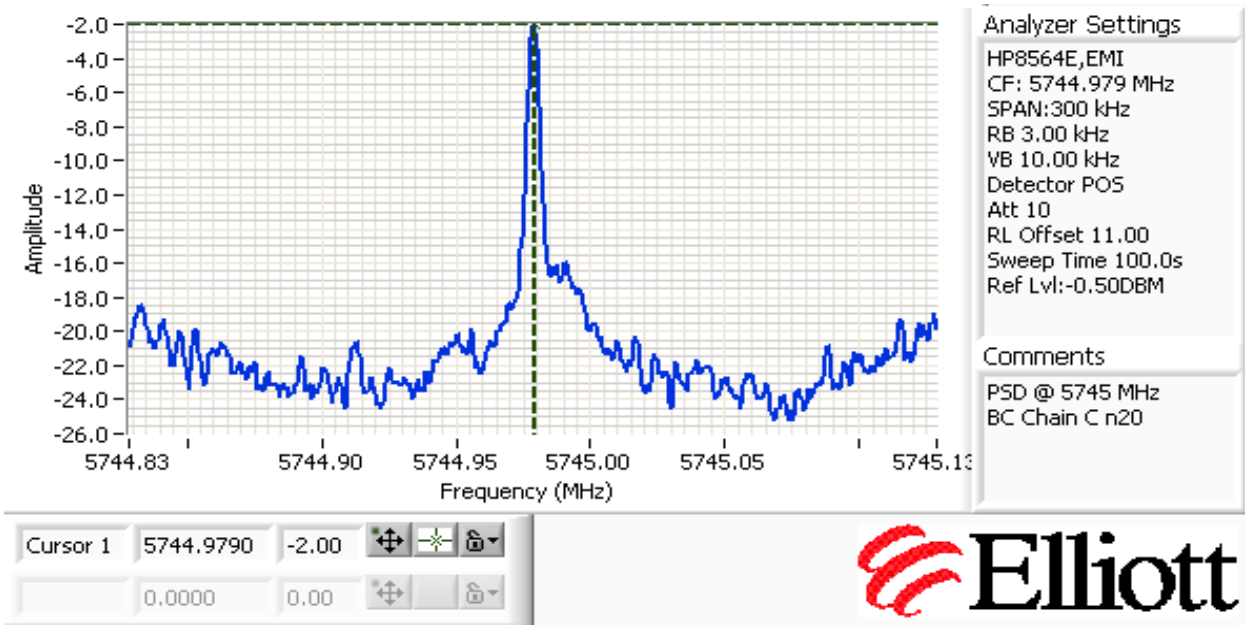
Run #6: Power spectral Density - Chain B + C

Power Setting	Frequency (MHz)	PSD (dBm/3kHz) Note 1					Limit dBm/3kHz	Result
		Chain A	Chain B	Chain C	Chain 4	Total		
30.5/31.0	5745		-8.3	-2.0		-1.1	8.0	Pass
30.5/31.0	5785		-9.2	-2.2		-1.4	8.0	Pass
31.0/31.5	5825		-8.7	-2.9		-1.9	8.0	Pass

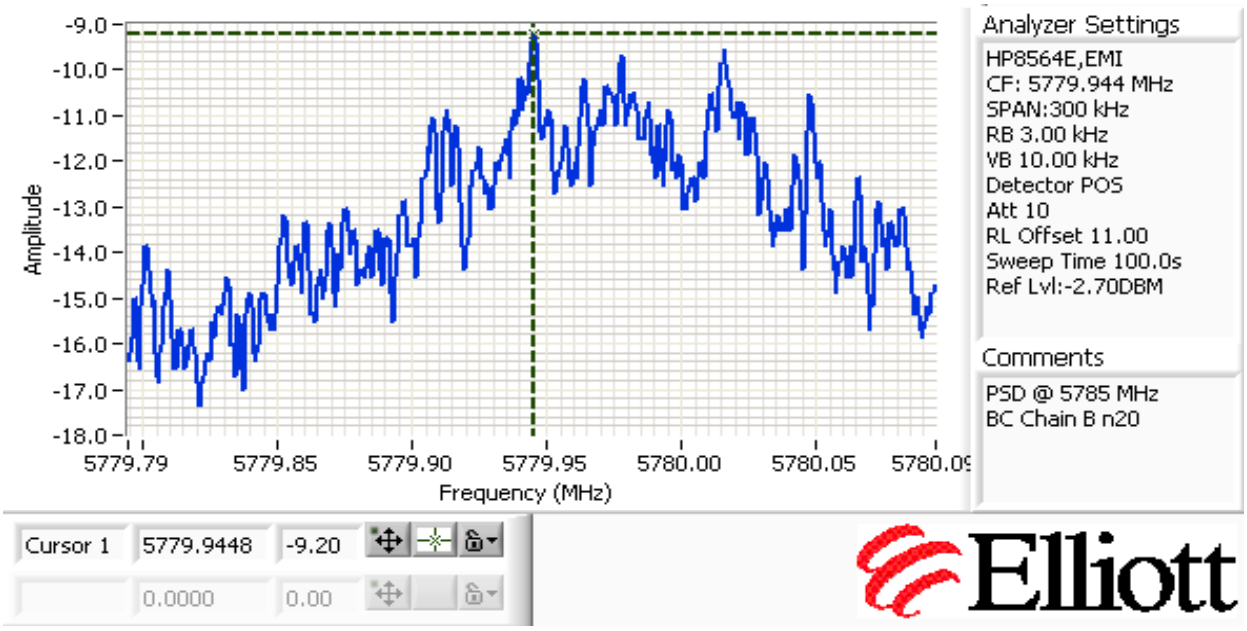
Note 1:	Power spectral density measured using RB=3 kHz, VB=10kHz, analyzer with peak detector and with a sweep time set to ensure a dwell time of at least 1 second per 3kHz. The measurement is made at the frequency of PPSD determined from preliminary scans using RB=3kHz using multiple sweeps at a faster rate over the 6dB bandwidth of the signal.
Note 2:	Power setting - if a single number the same power setting was used for each chain. If multiple numbers the power setting for each chain is separated by a comma (e.g. x,y would indicate power setting x for Chain A, power setting y for Chain B.

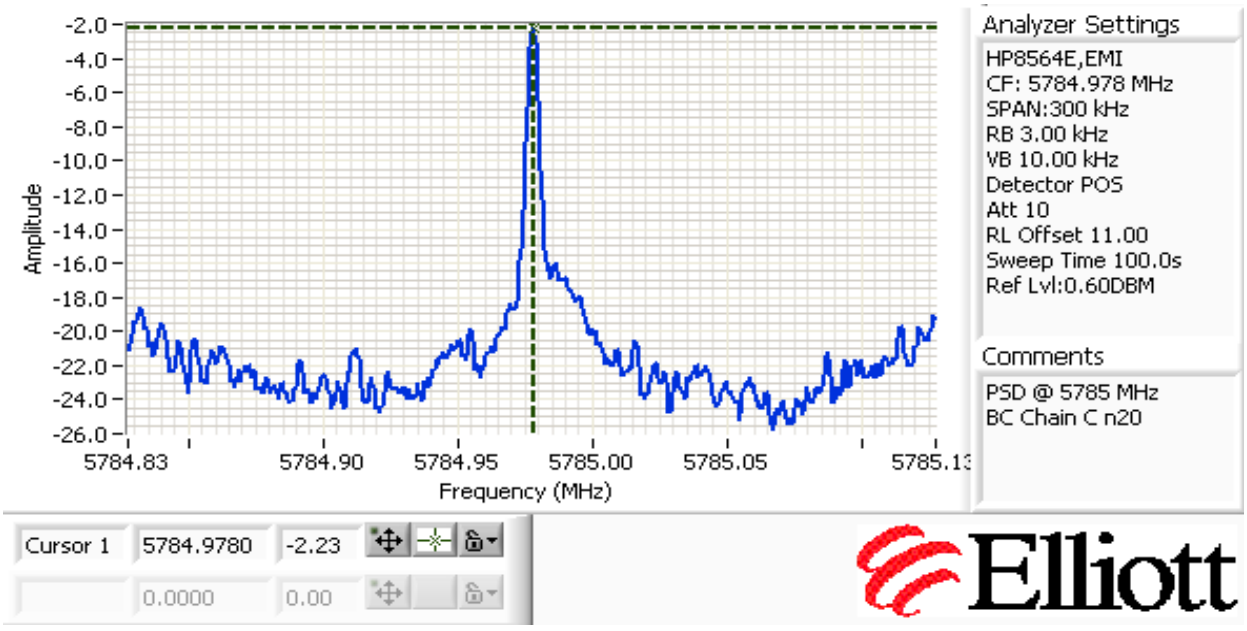
Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A



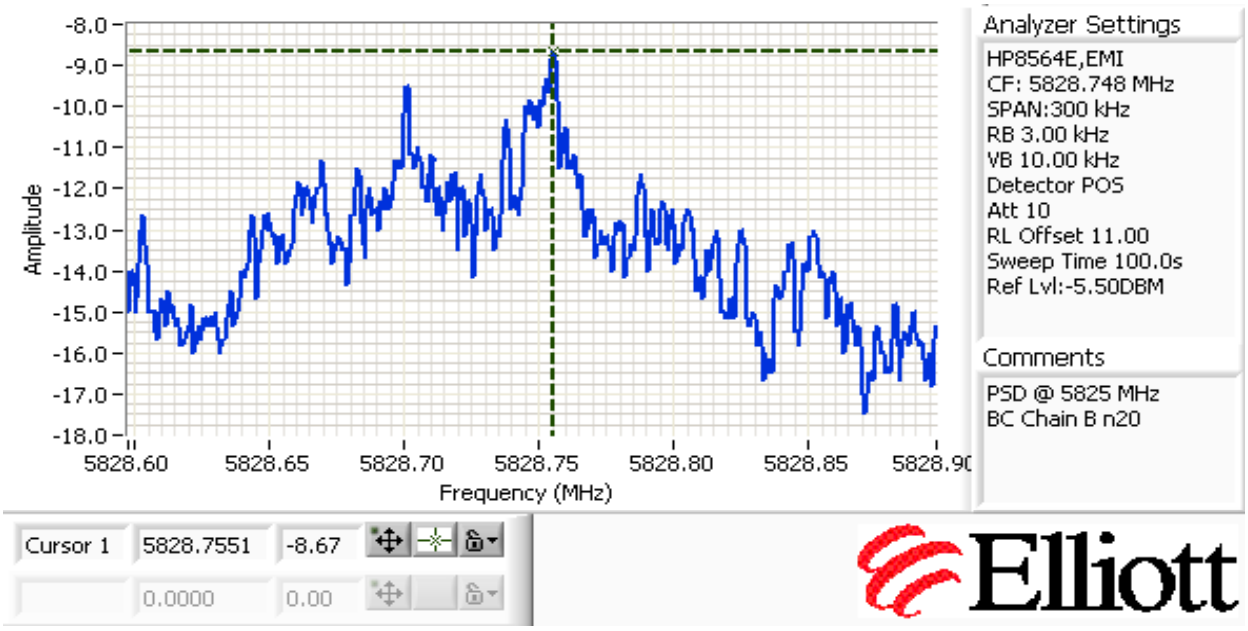


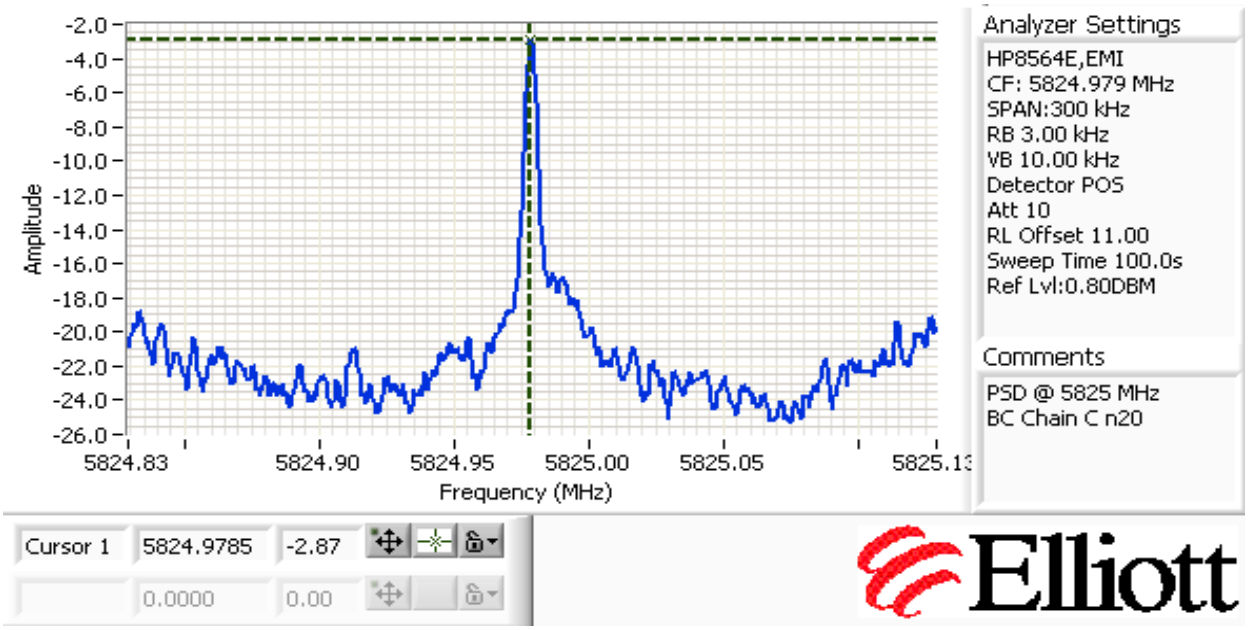
Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A





Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A





Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run # 7: Output Power - Three Chains (A + B + C)

Operating Mode: 802.11n 20MHz

Transmitted signal on chain is coherent ? No

5745 MHz	Chain A	Chain B	Chain C	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	31.5	30.5	31.0					
Output Power (dBm) Note 1	12.2	12.95	12.56		17.4 dBm	0.054 W	30.0 dBm	1.000 W
Antenna Gain (dBi) Note 2	5.0	5.0	5.0			5.0 dBi	Pass	
eirp (dBm) Note 2	17.2	17.95	17.56		22.4 dBm	0.172 W		

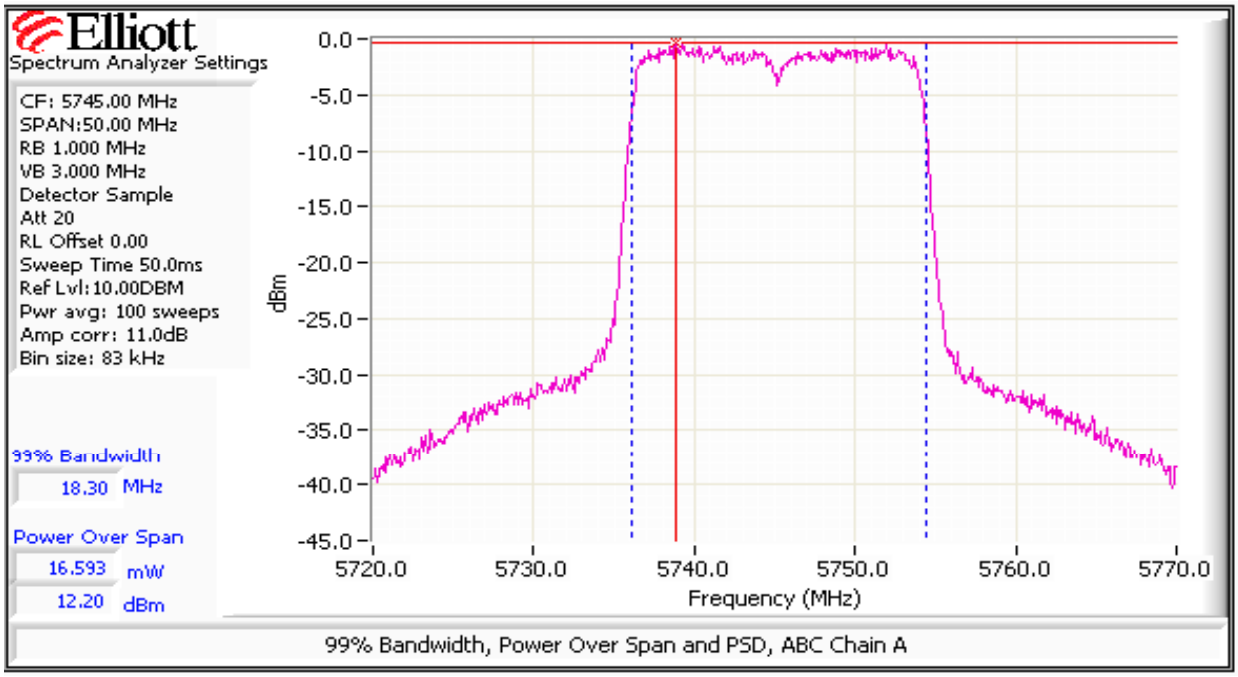
5785 MHz	Chain A	Chain B	Chain C	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	32.0	31.0	31.5					
Output Power (dBm) Note 1	13.65	13.12	12.89		18.0 dBm	0.063 W	30.0 dBm	1.000 W
Antenna Gain (dBi) Note 2	5.0	5.0	5.0			5.0 dBi	Pass	
eirp (dBm) Note 2	18.65	18.12	17.89		23.0 dBm	0.200 W		

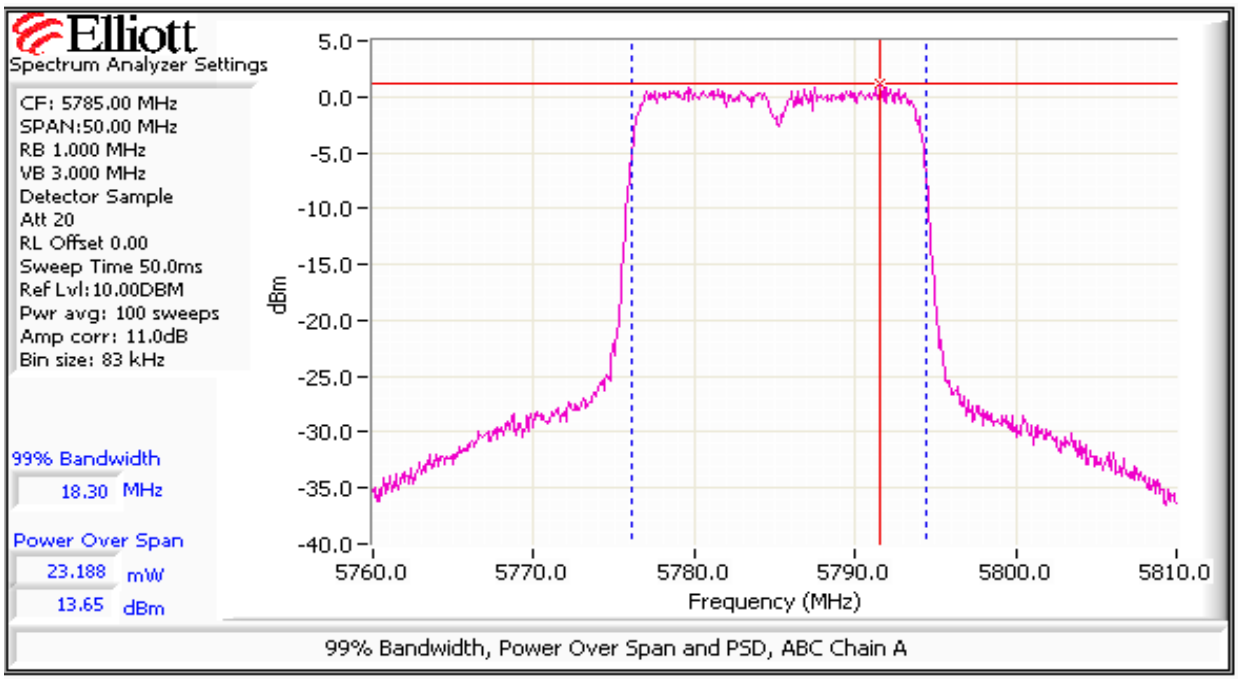
5825 MHz	Chain A	Chain B	Chain C	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	32.5	31.0	32.0					
Output Power (dBm) Note 1	13.24	13.02	13.38		18.0 dBm	0.063 W	30.0 dBm	1.000 W
Antenna Gain (dBi) Note 2	5.0	5.0	5.0			5.0 dBi	Pass	
eirp (dBm) Note 2	18.24	18.02	18.38		23.0 dBm	0.199 W		

Note 1:	Output power measured using a spectrum analyzer (see plots below) with RBW=1MHz, VB=3 MHz, sample detector, power averaging on (transmitted signal was continuous) and power integration over 50 MHz (reference method 1 of FCC DA 02-2138 for U-NII devices, August 30, 2002). Spurious limit becomes -30dBc.
Note 2:	As there is no coherency between chains the total EIRP is the sum of the individual EIRPs and effective antenna gain equals the eirp divide by the sum of the power on each chain.

Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

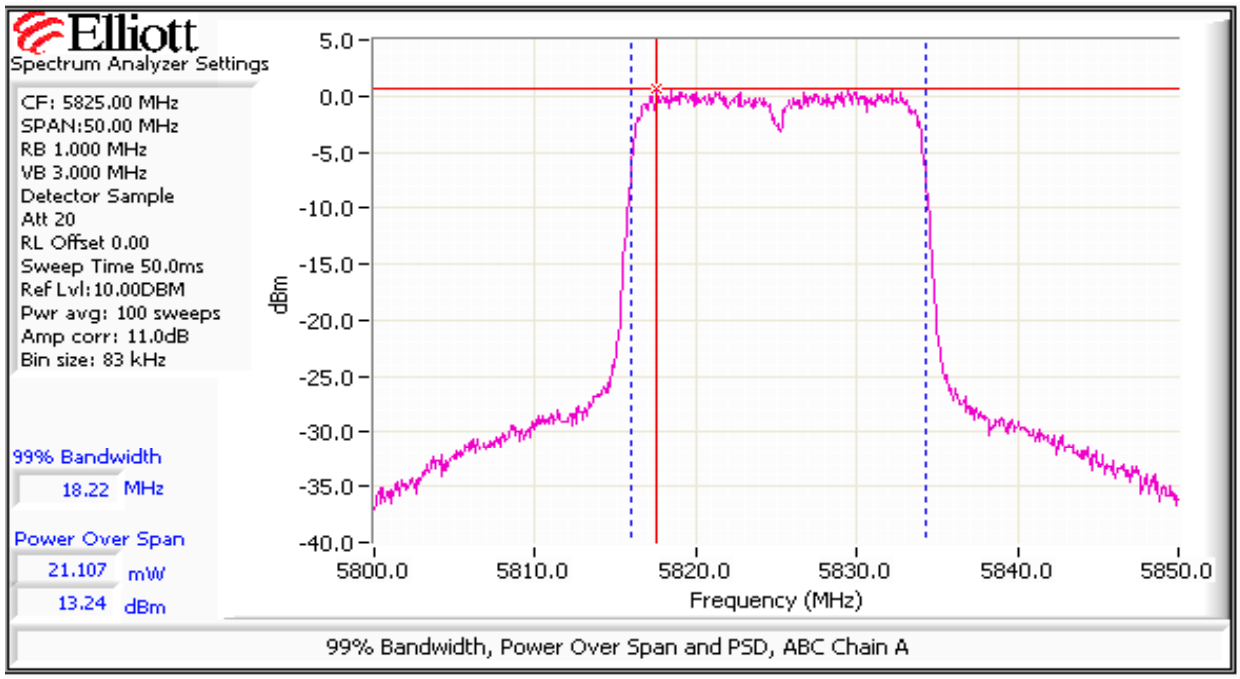
Run # 7: Output Power - Three Chains (A + B + C)

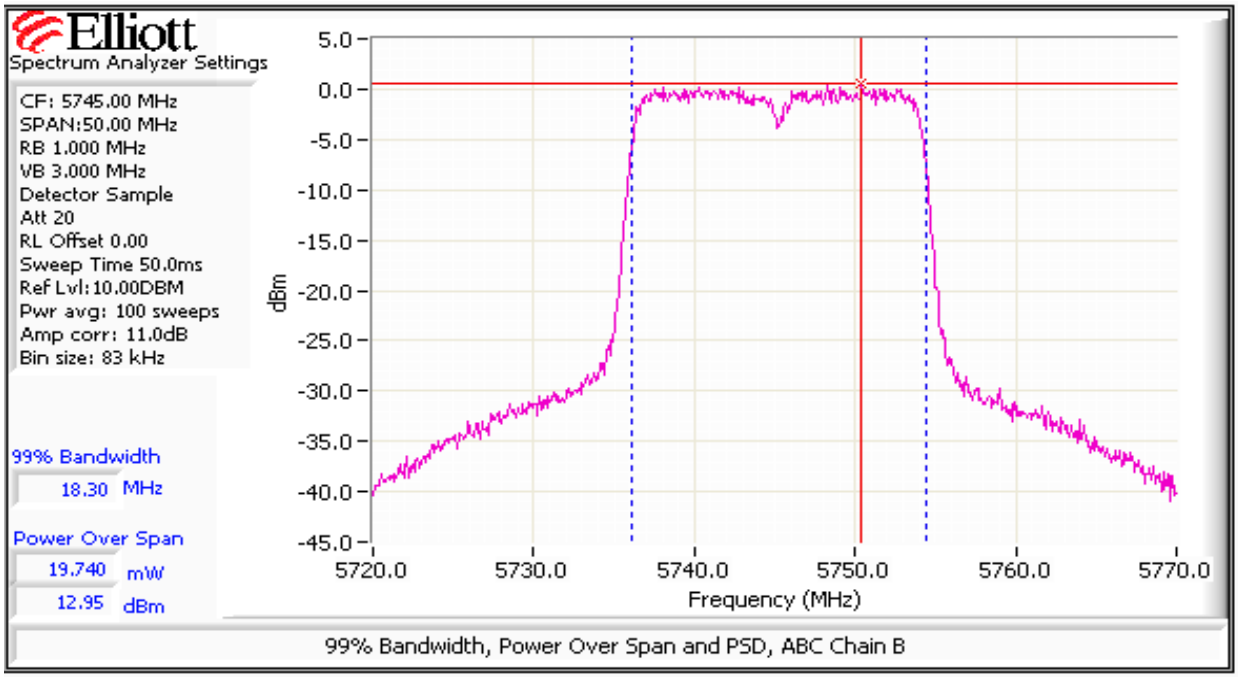




Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

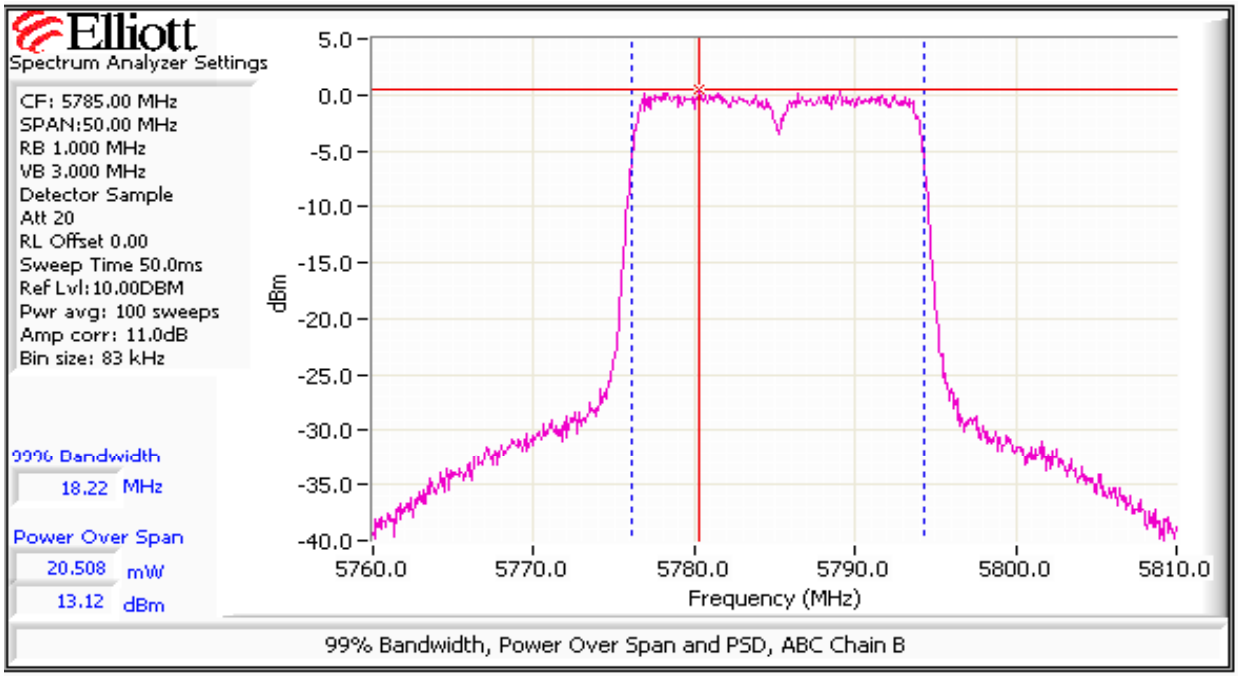
Run # 7: Output Power - Three Chains (A + B + C)

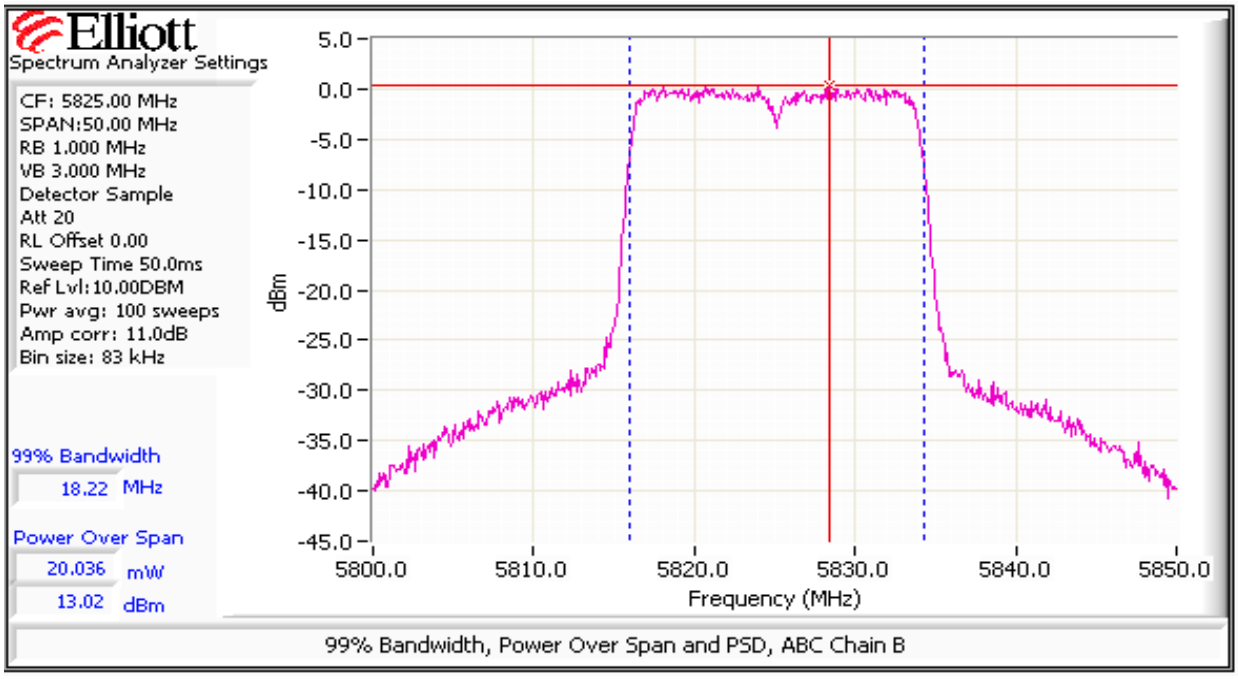




Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

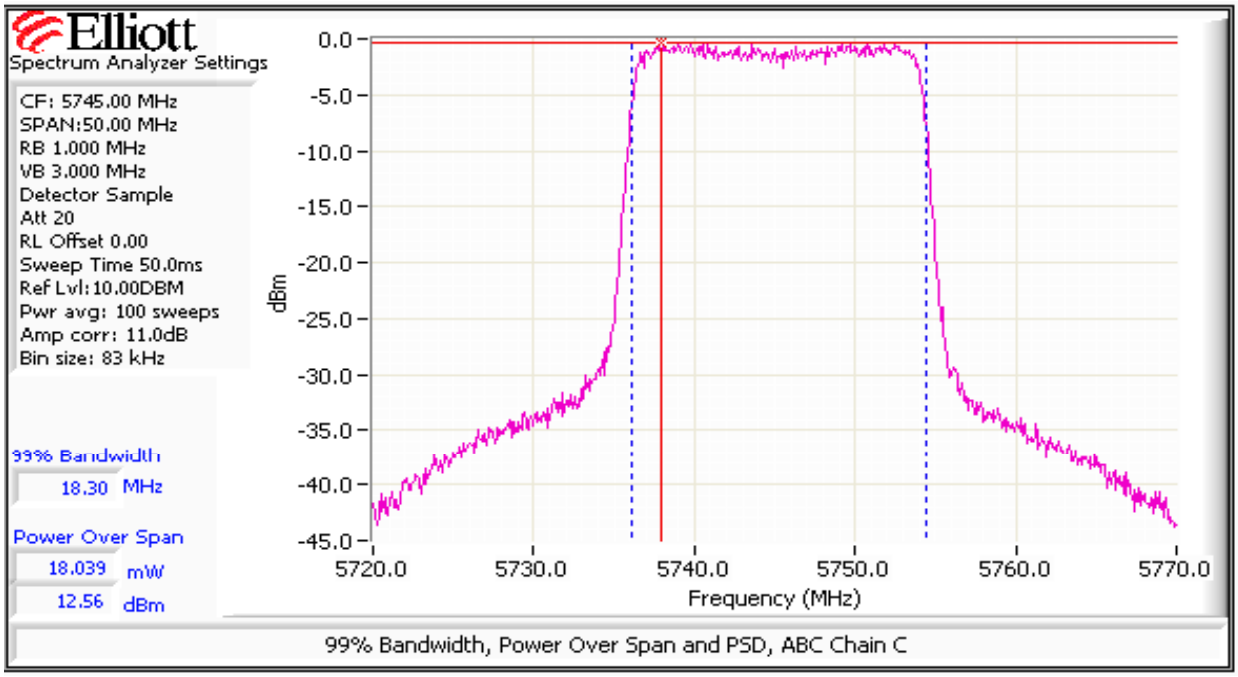
Run # 7: Output Power - Three Chains (A + B + C)

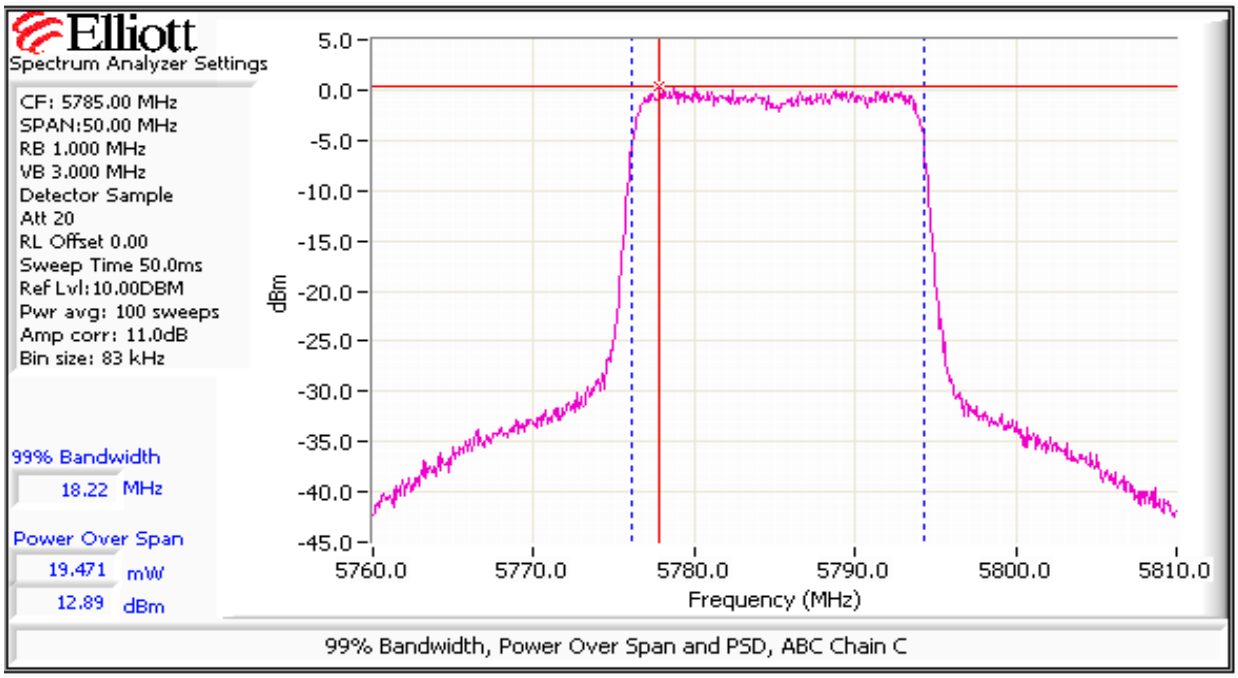




Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

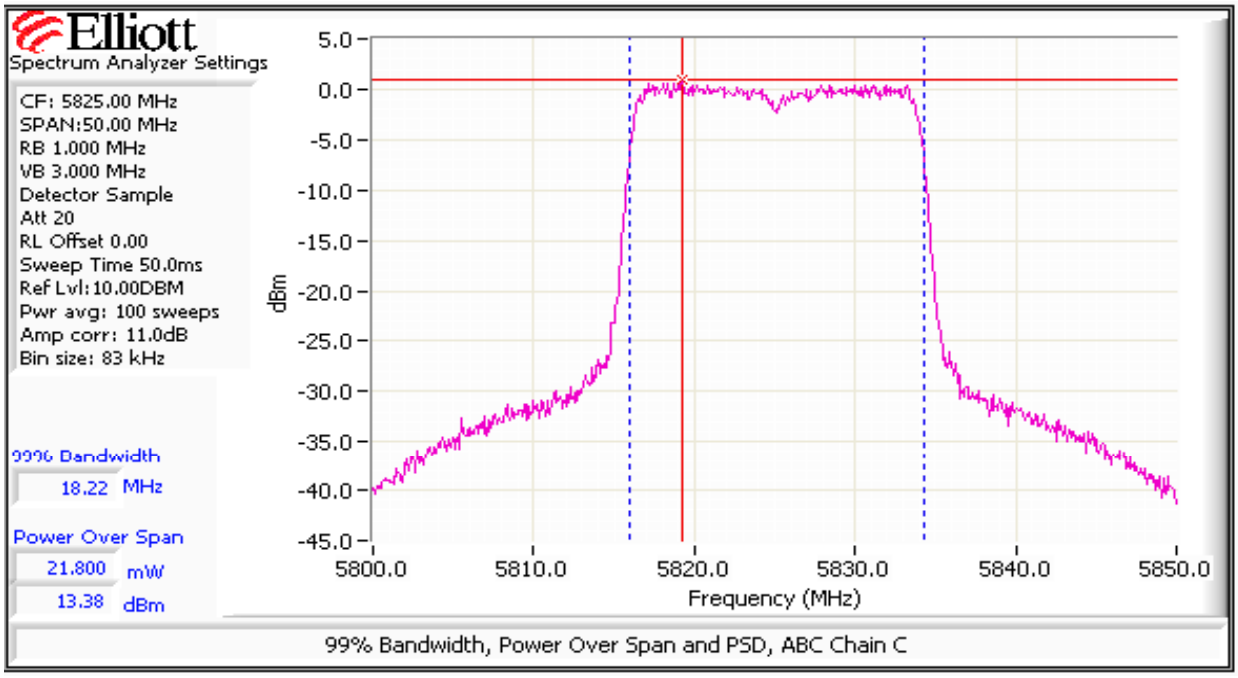
Run # 7: Output Power - Three Chains (A + B + C)





Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run # 7: Output Power - Three Chains (A + B + C)

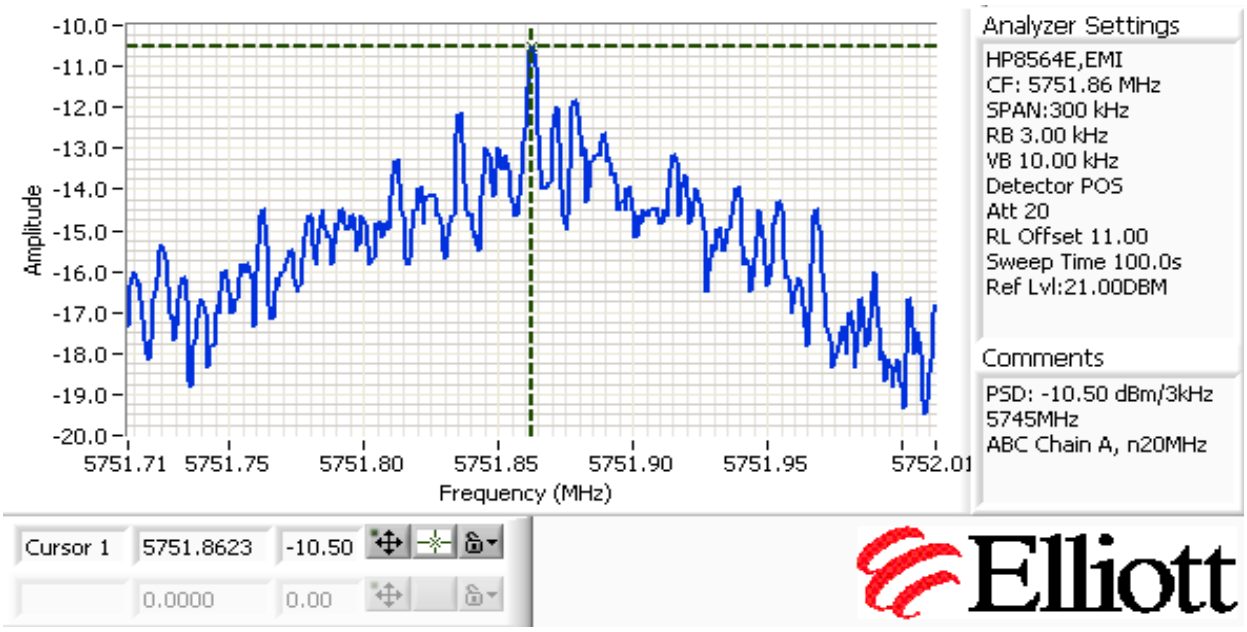


Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run # 8: Power spectral Density - Chain A + B + C

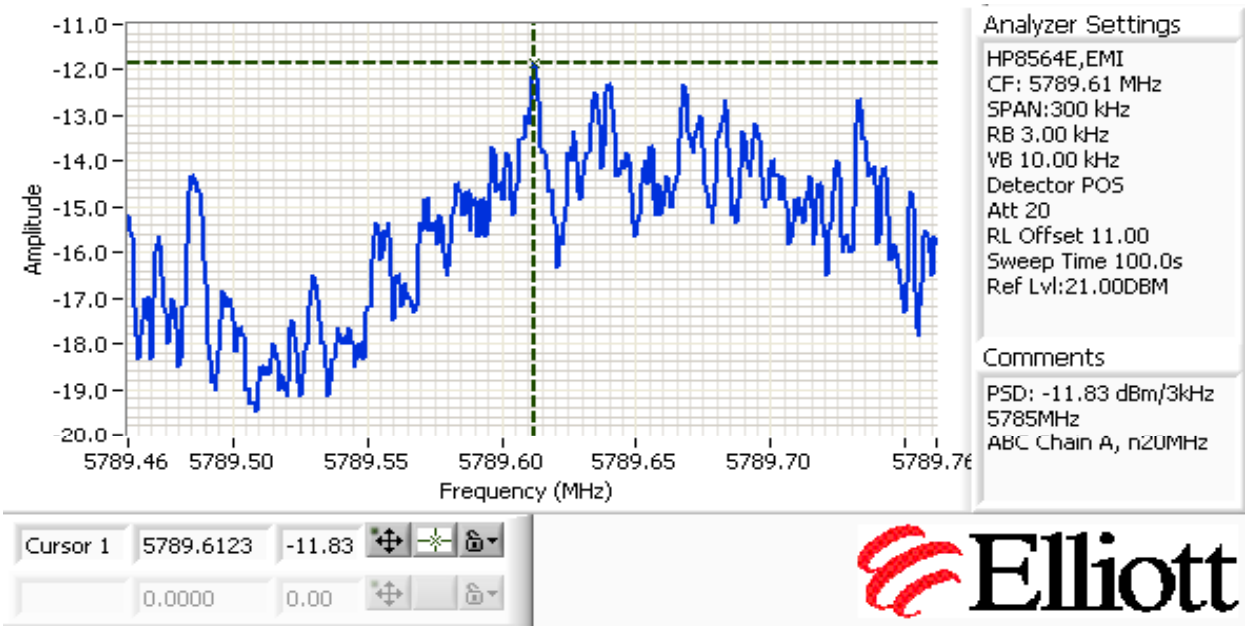
Power Setting	Frequency (MHz)	PSD (dBm/3kHz) Note 1					Limit dBm/3kHz	Result
		Chain A	Chain B	Chain C	Chain 4	Total		
31.5,30.5,31	5745	-10.5	-11.0	-12.8		-6.6	8.0	Pass
32,31,31.5	5785	-11.8	-9.0	-10.3		-5.5	8.0	Pass
32.5,31,32	5825	-10.5	-11.5	-10.7		-6.1	8.0	Pass

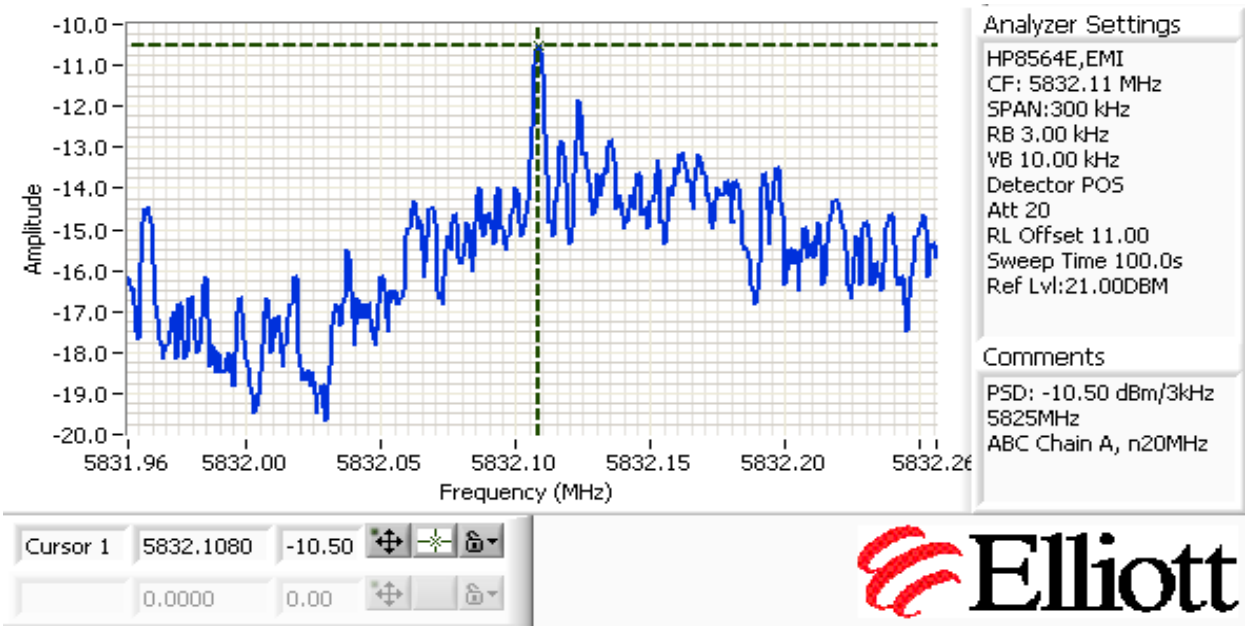
Note 1:	Power spectral density measured using RB=3 kHz, VB=10kHz, analyzer with peak detector and with a sweep time set to ensure a dwell time of at least 1 second per 3kHz. The measurement is made at the frequency of PPSD determined from preliminary scans using RB=3kHz using multiple sweeps at a faster rate over the 6dB bandwidth of the signal.
Note 2:	Power setting - if a single number the same power setting was used for each chain. If multiple numbers the power setting for each chain is separated by a comma (e.g. x,y would indicate power setting x for Chain A, power setting y for Chain B.



Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

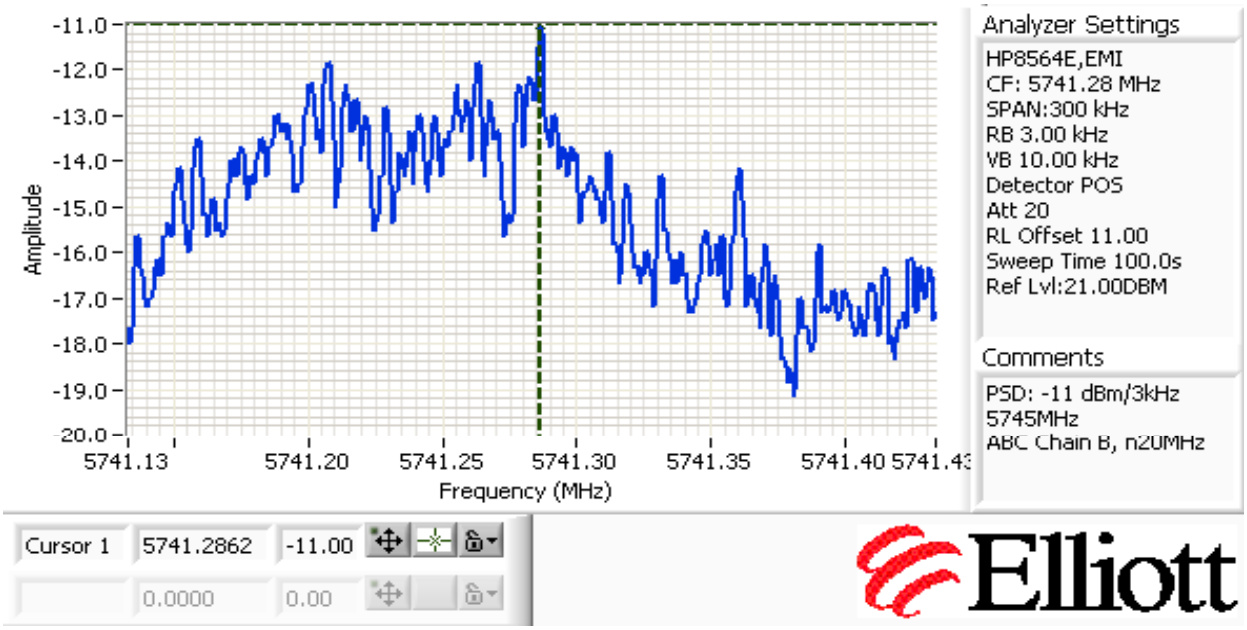
Run # 8: Power spectral Density - Chain A + B + C

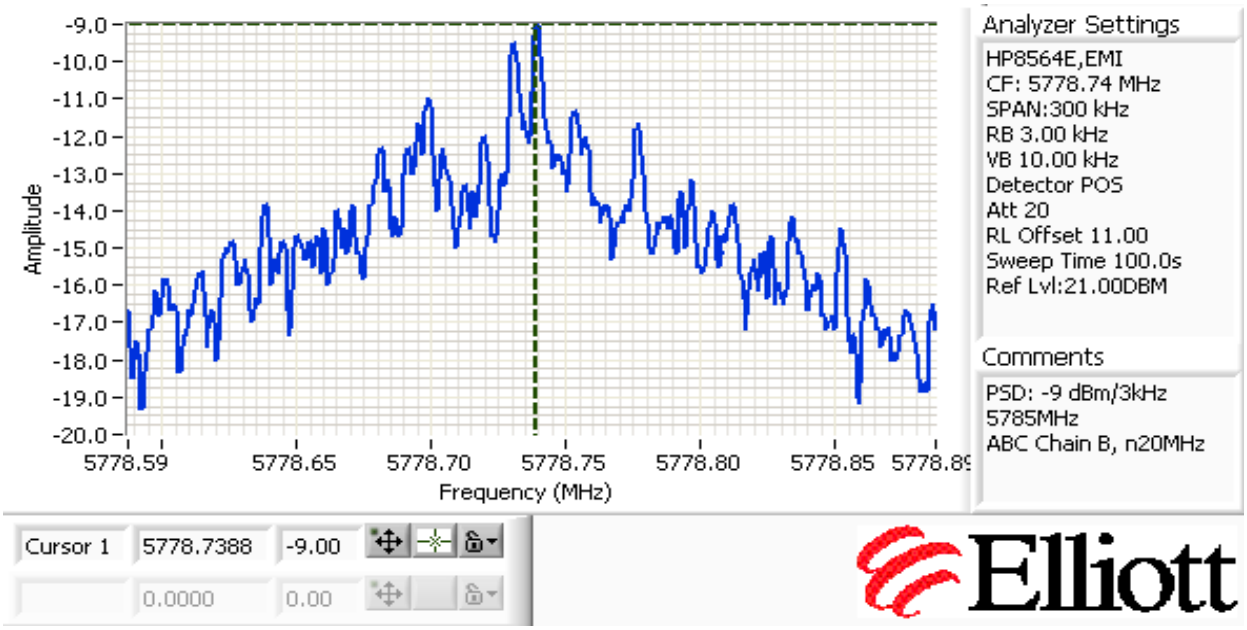




Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

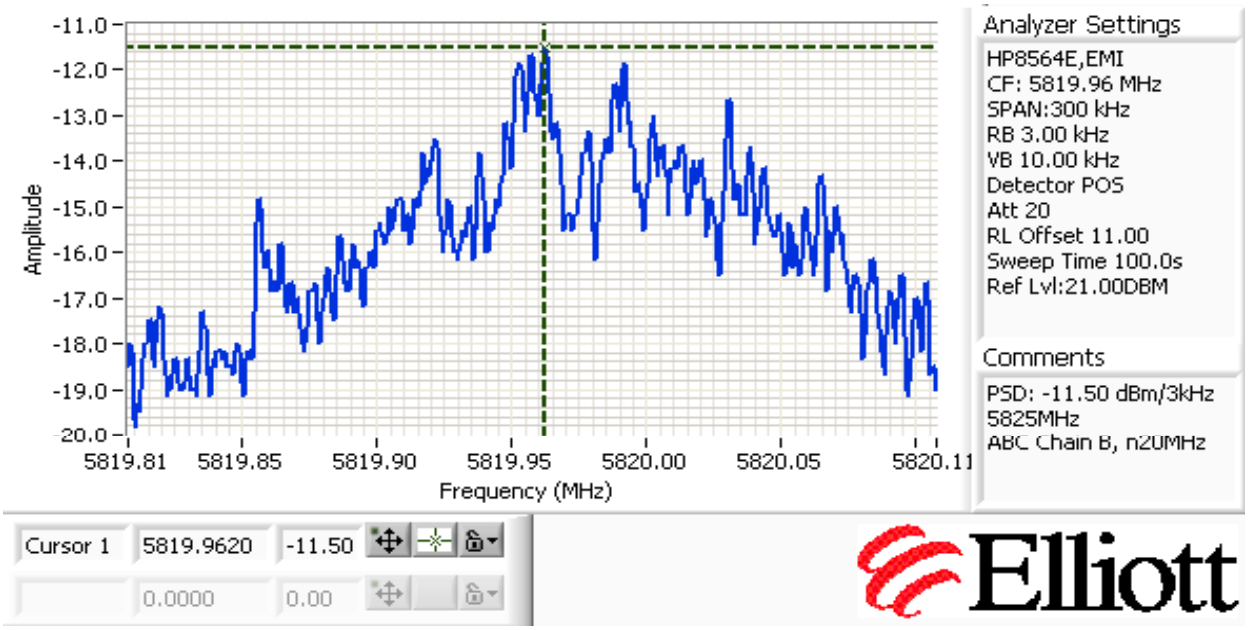
Run # 8: Power spectral Density - Chain A + B + C

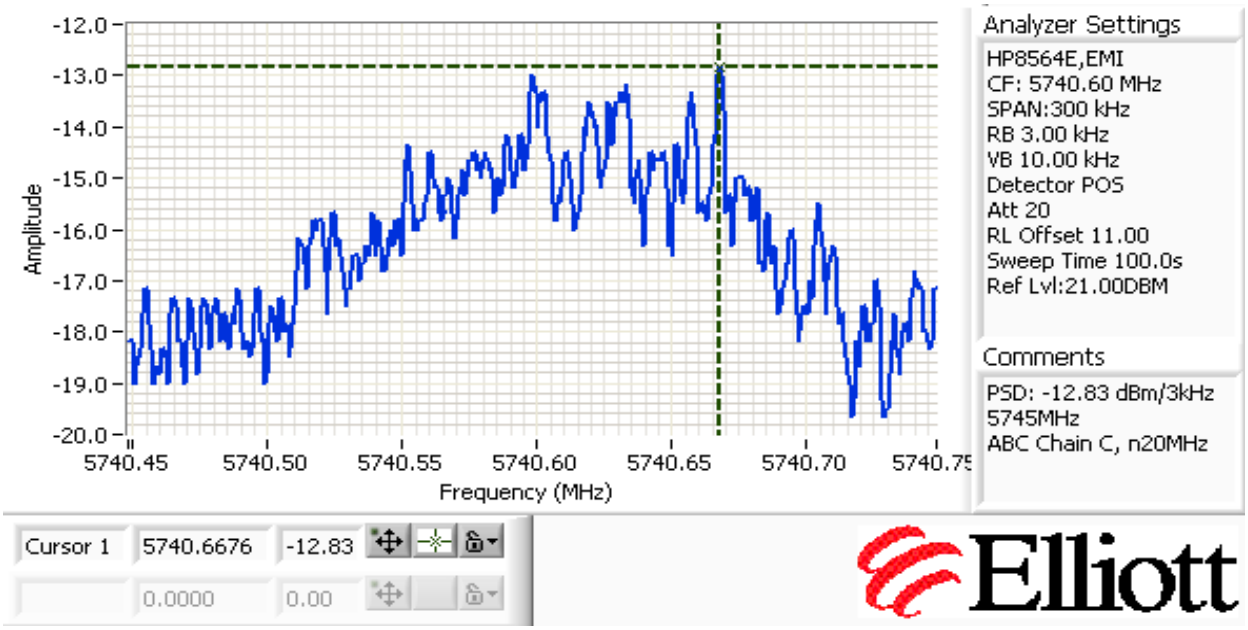




Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

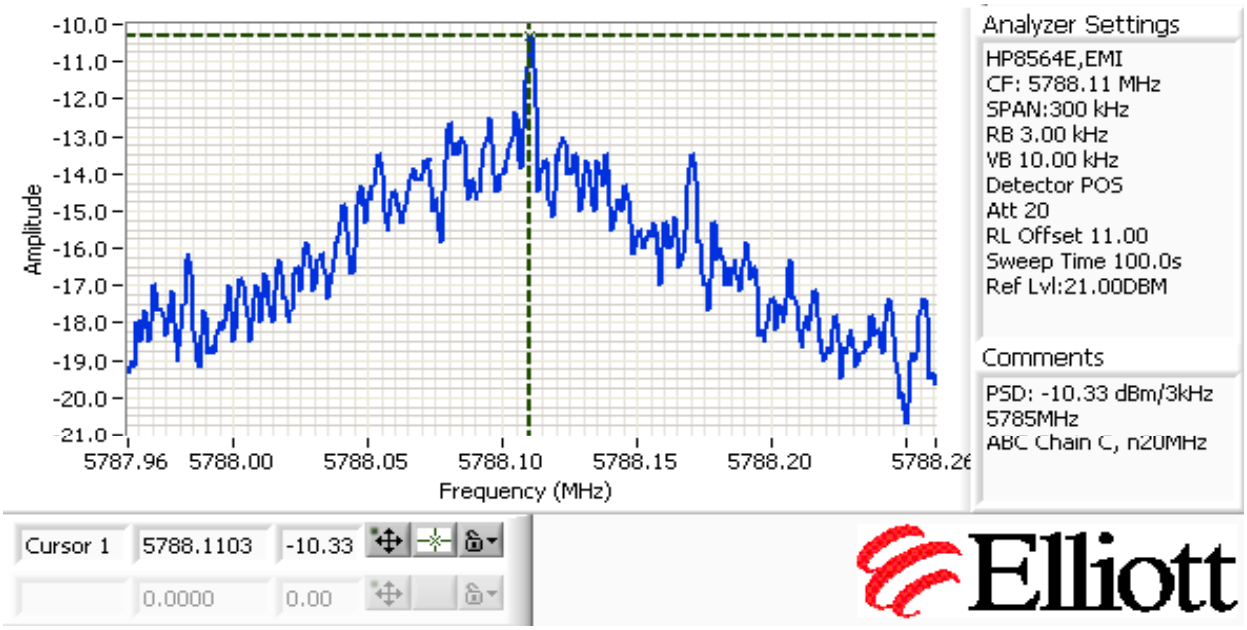
Run # 8: Power spectral Density - Chain A + B + C

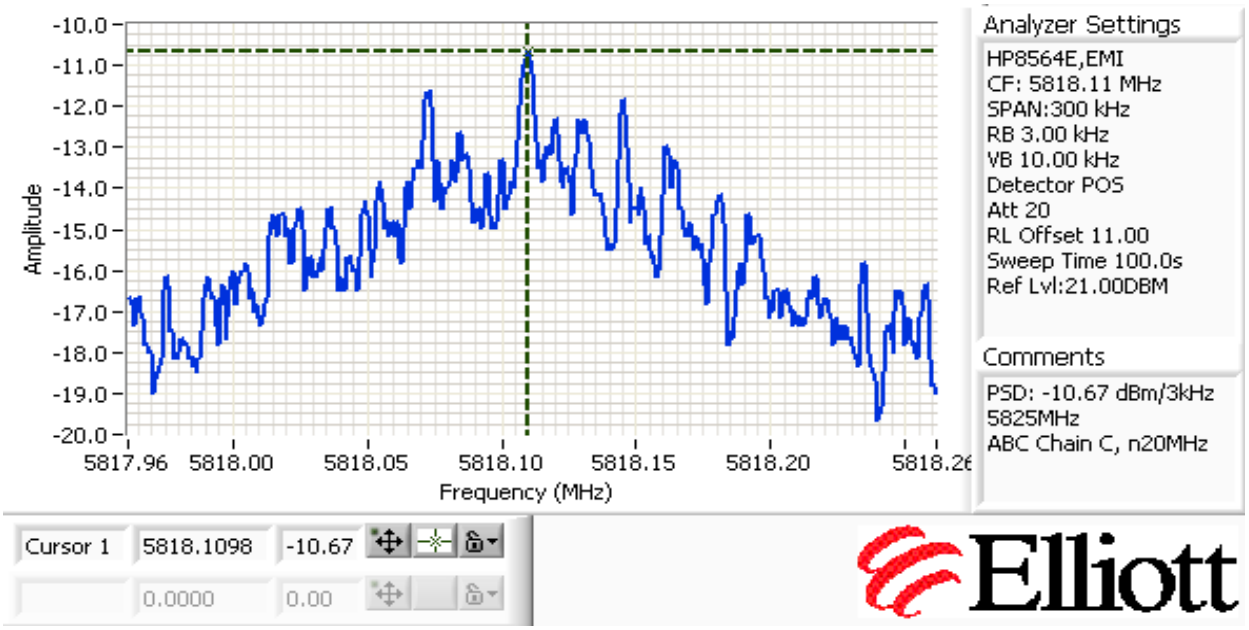




Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run # 8: Power spectral Density - Chain A + B + C





Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

RSS 210 and FCC 15.247 (DTS) Antenna Port Measurements
\802.11n 40MHz Single Chain

Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

Date of Test: 5/7/2008
Test Engineer: Rafael Varelas
Test Location: FT Chamber #4

Config. Used: 1
Config Change: None
EUT Voltage: Powered From Host System(3.3V DC)

General Test Configuration

The EUT was connected to the spectrum analyzer or power meter via a suitable attenuator. All measurements were made on a single chain.

All measurements have been corrected to allow for the external attenuators used.

Ambient Conditions:

Temperature: 20.3 °C
Rel. Humidity: 35 %

Summary of Results

Run #	Test Performed	Limit	Pass / Fail	Result / Margin
1	Output Power	15.247(b)	Pass	15dBm (31.6mW)
2	Power spectral Density (PSD)	15.247(d)	Pass	-10.9 dBm/3kHz
3	6dB Bandwidth	15.247(a)	Pass	35.8 MHz
3	99% Bandwidth	RSS GEN	-	36.6 MHz

Modifications Made During Testing

No modifications were made to the EUT during testing

Deviations From The Standard

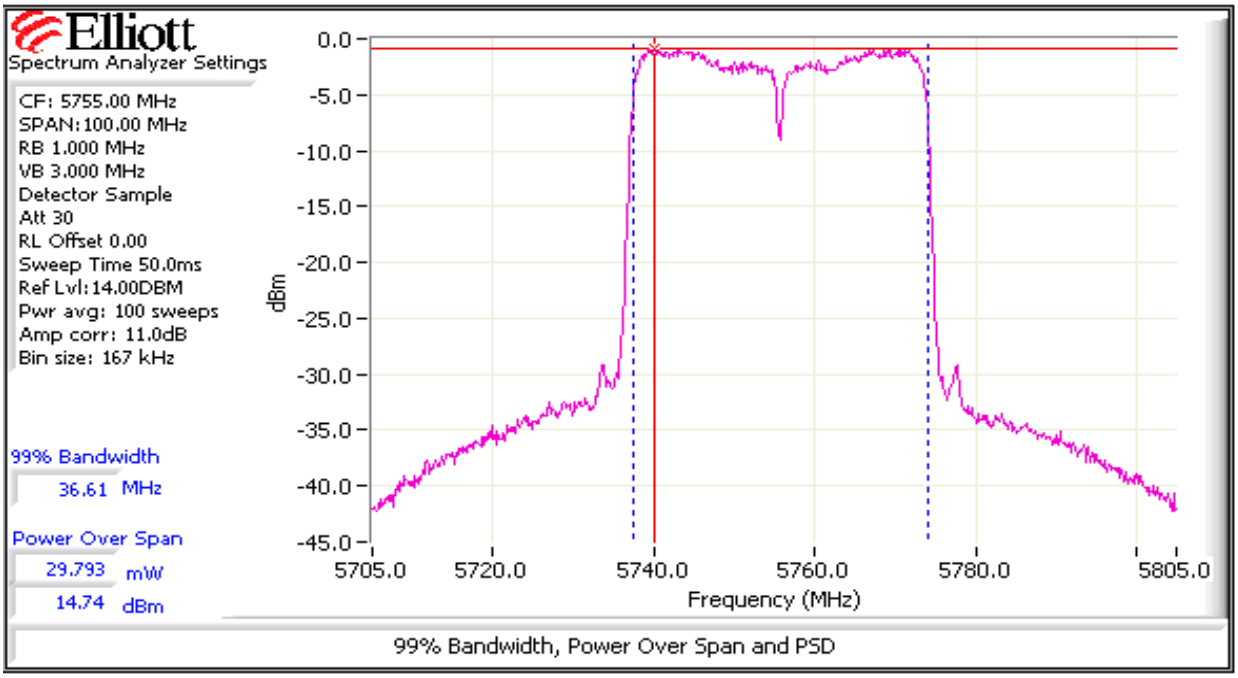
No deviations were made from the requirements of the standard.

Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

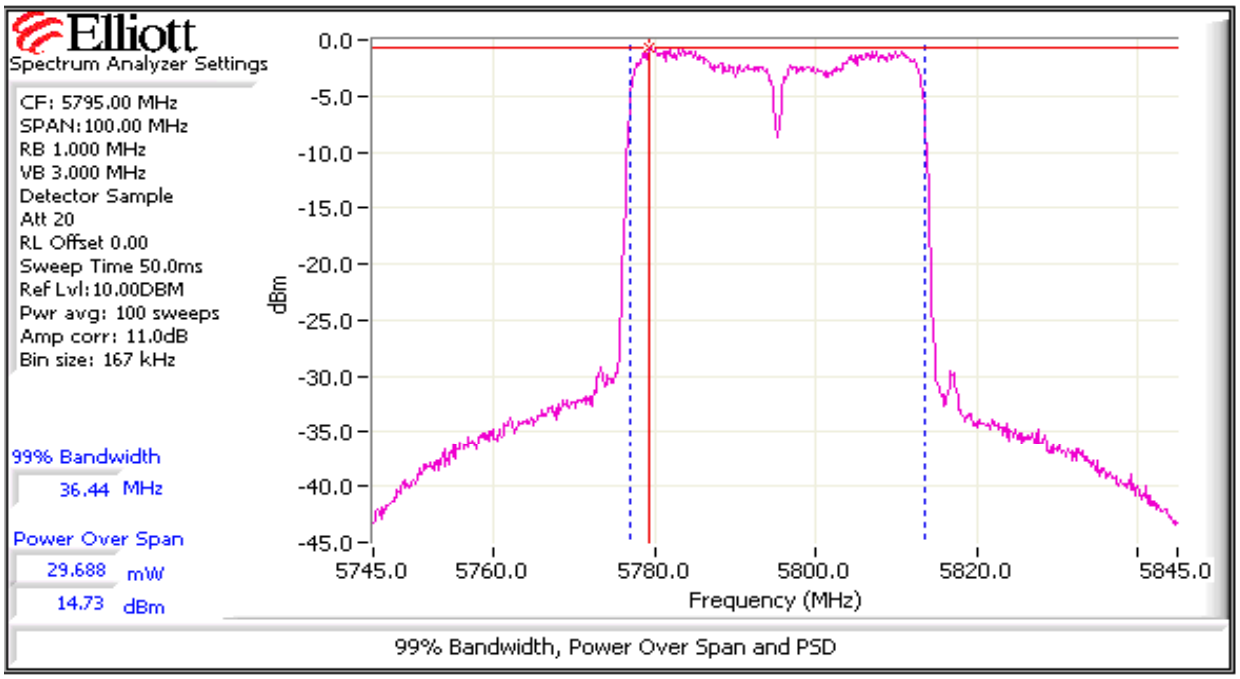
Run #1: Output Power

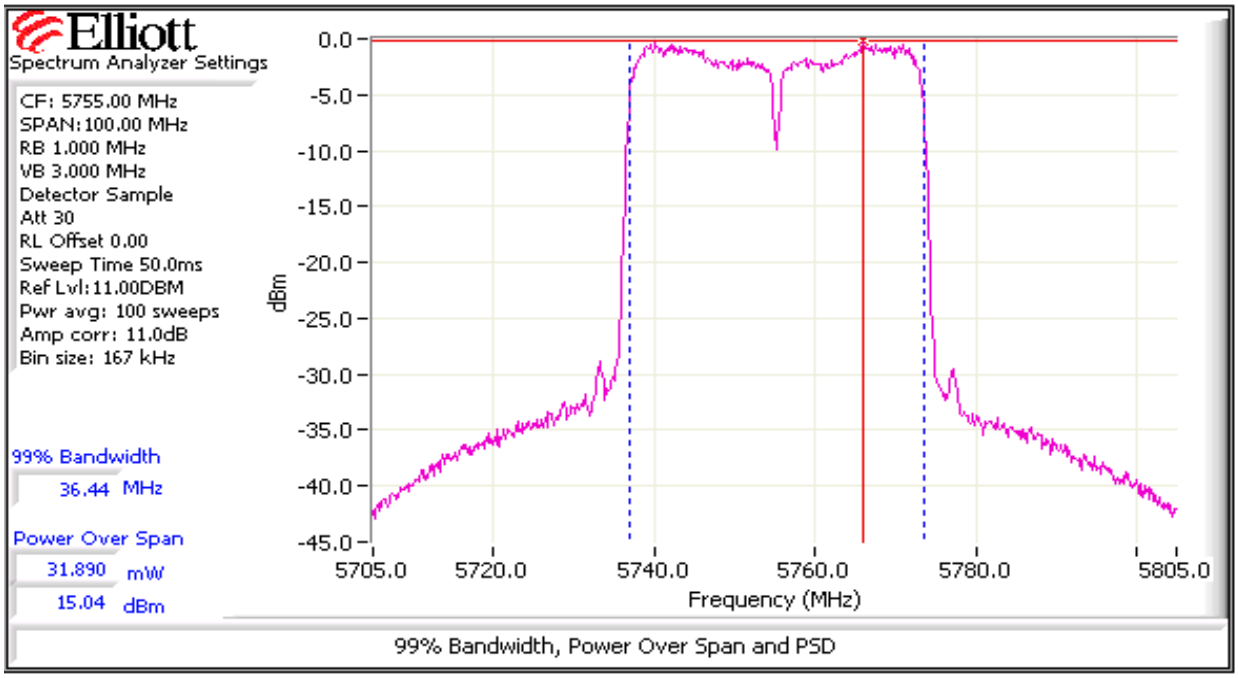
Power Setting[2]	Frequency (MHz)	Output Power (dBm)[1]	Output Power mW	Antenna Gain (dBi)	Result	EIRP[Note 2] dBm	EIRP[Note 2] W	Output Power (dBm)[3]	Output Power mW
26.0	5755, Chain A	14.7	29.8	5.0	Pass	19.7	0.094	16.8	47.9
26.0	5795, Chain A	14.7	29.5	5.0	Pass	19.7	0.093	16.6	45.7
25.5	5755, Chain B	15.0	31.6	5.0	Pass	20.0	0.100	16.8	47.9
25.5	5795, Chain B	14.5	28.2	5.0	Pass	19.5	0.089	16.6	45.7
26.0	5755, Chain C	14.8	29.9	5.0	Pass	19.8	0.094	16.9	49.0
26.0	5795, Chain C	14.5	28.2	5.0	Pass	19.5	0.089	16.6	45.7

Note 1:	Output power measured using a spectrum analyzer (see plots below): RBW=1MHz, VB=3 MHz, sample detector, power averaging on (transmitted signal was continuous) and power integration over ??? MHz. Spurious limit is -30dBc because this method was used. The output power limit is 30dBm.
Note 2:	Power setting - the software power setting used during testing, included for reference only.
Note 3:	Power measured using average power sensor and is included for manufacturer's reference only.

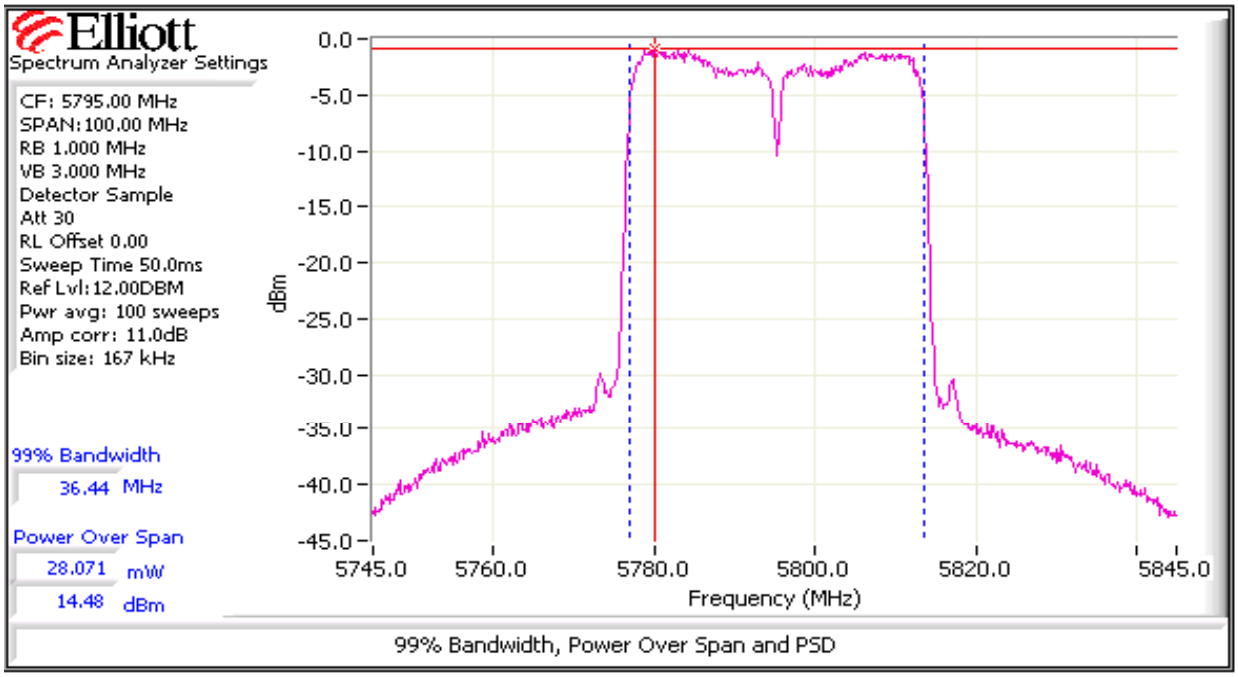


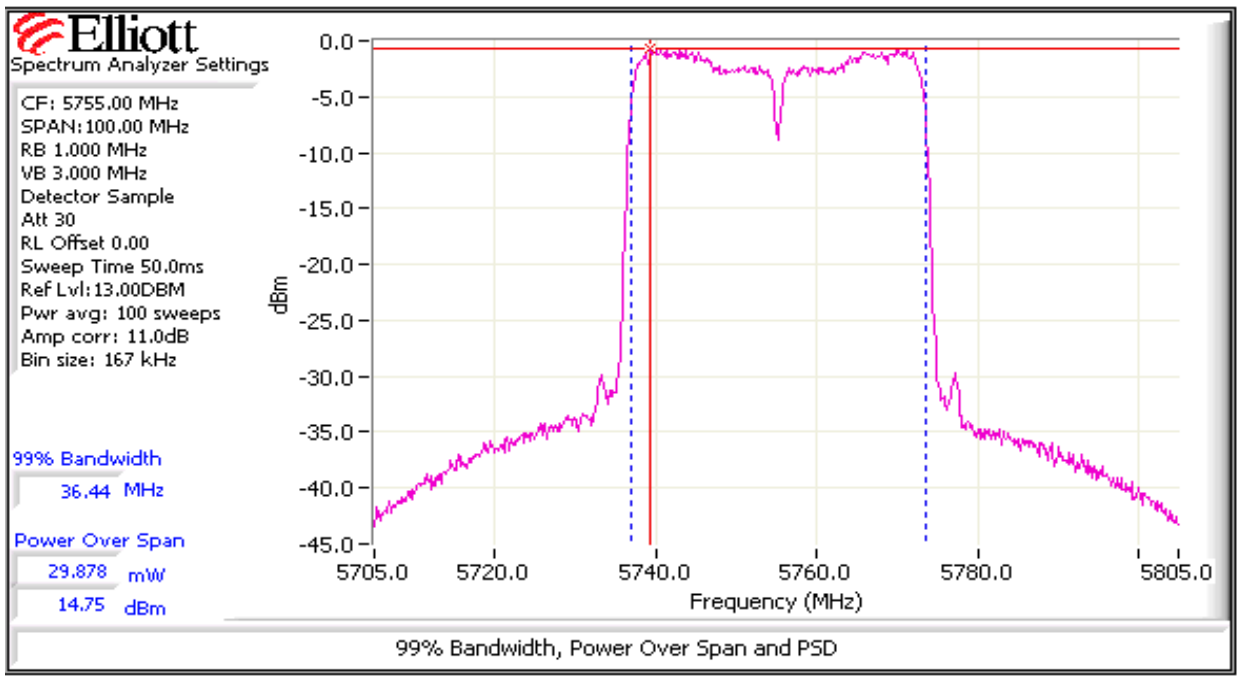
Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A



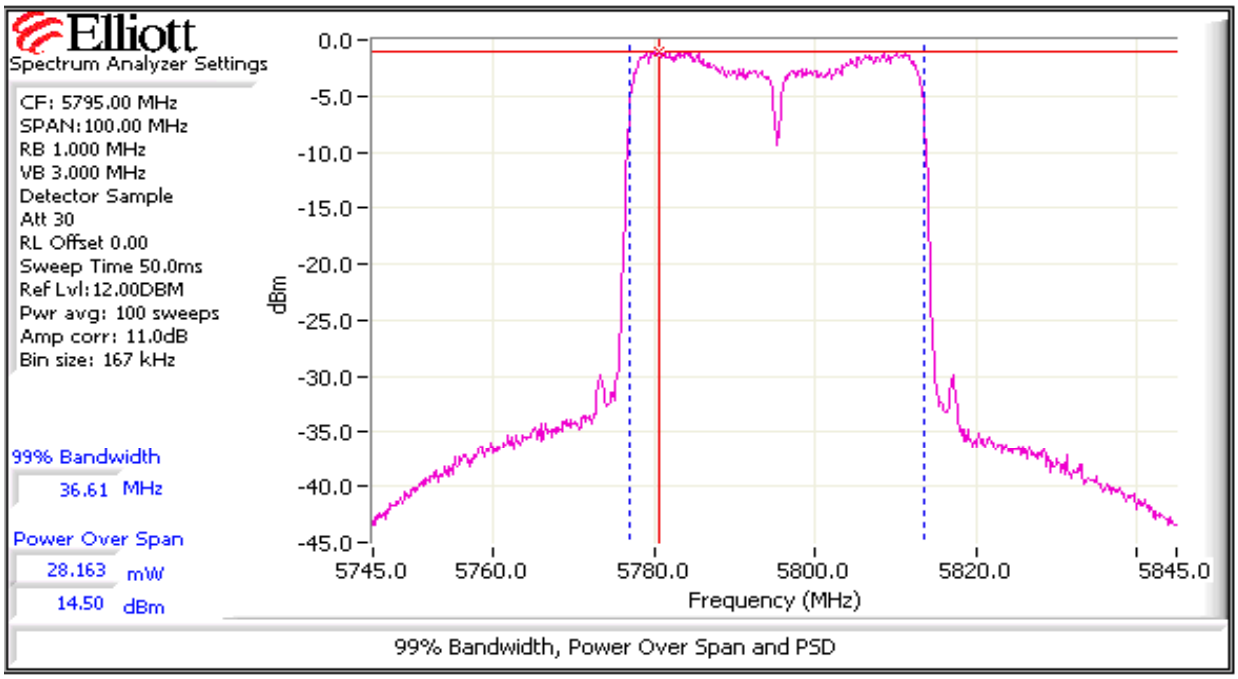


Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A





Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

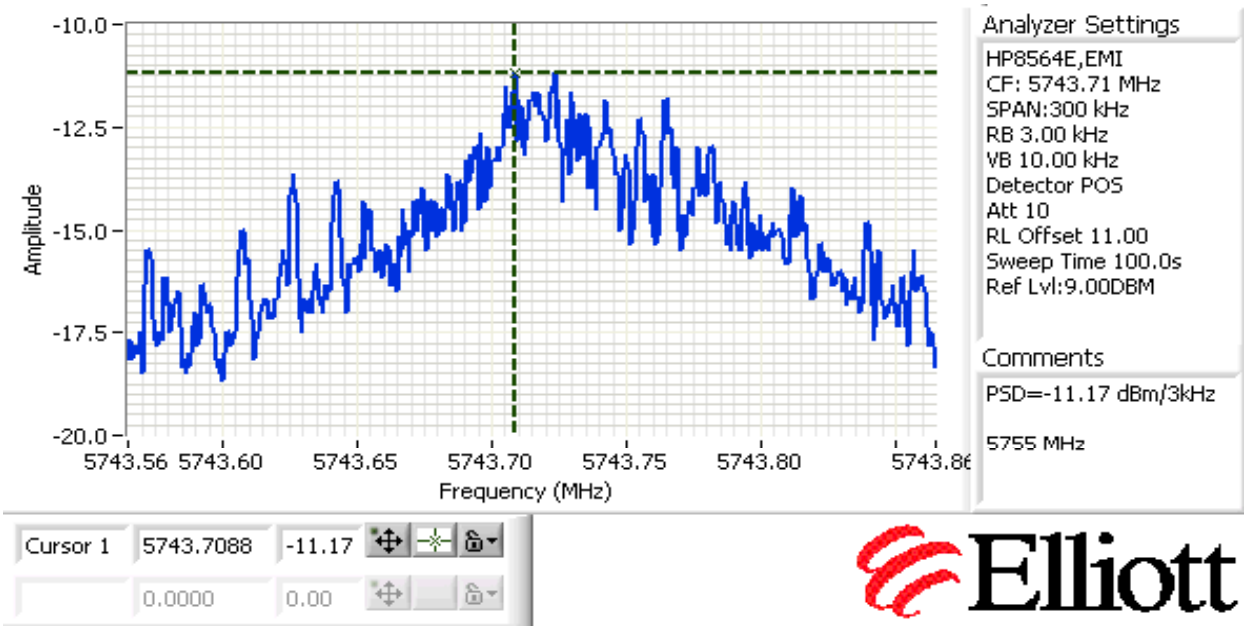


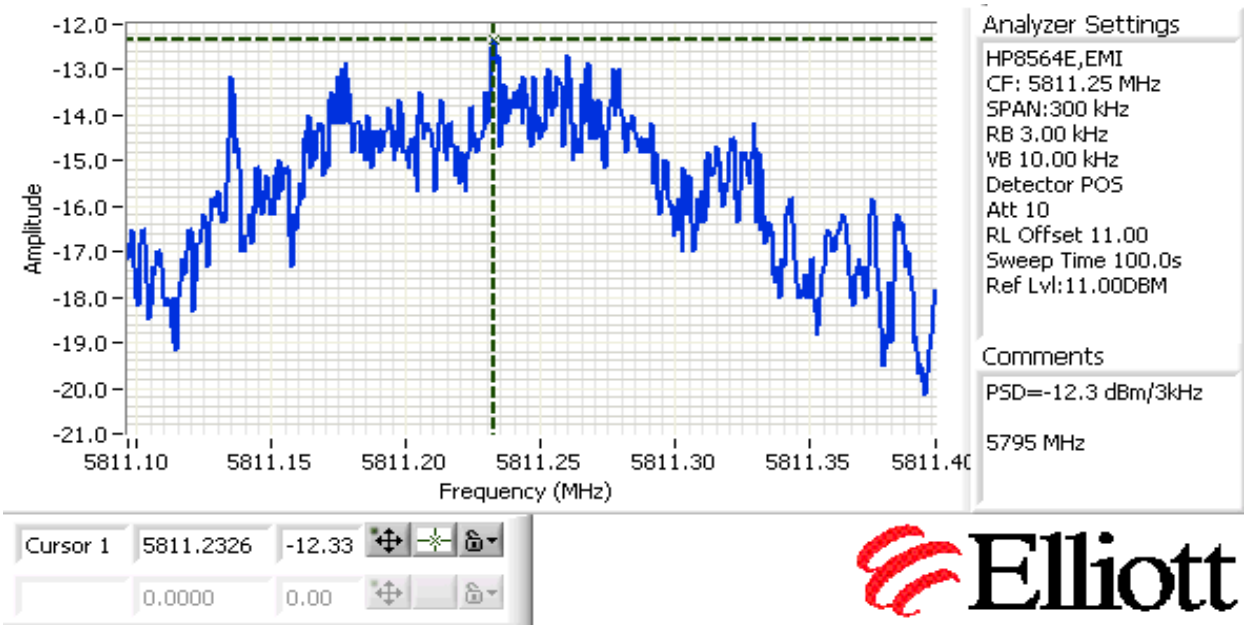
Run #2: Power spectral Density

Power Setting	Frequency (MHz)	PSD (dBm/3kHz) Note 1	Limit dBm/3kHz	Result
26	5755, Chain A	-11.2	8.0	Pass
26	5795, Chain A	-12.3	8.0	Pass
25.5	5755, Chain B	-10.9	8.0	Pass
25.5	5795, Chain B	-12.3	8.0	Pass
26	5755, Chain C	-12.4	8.0	Pass
26	5795, Chain C	-11.2	8.0	Pass

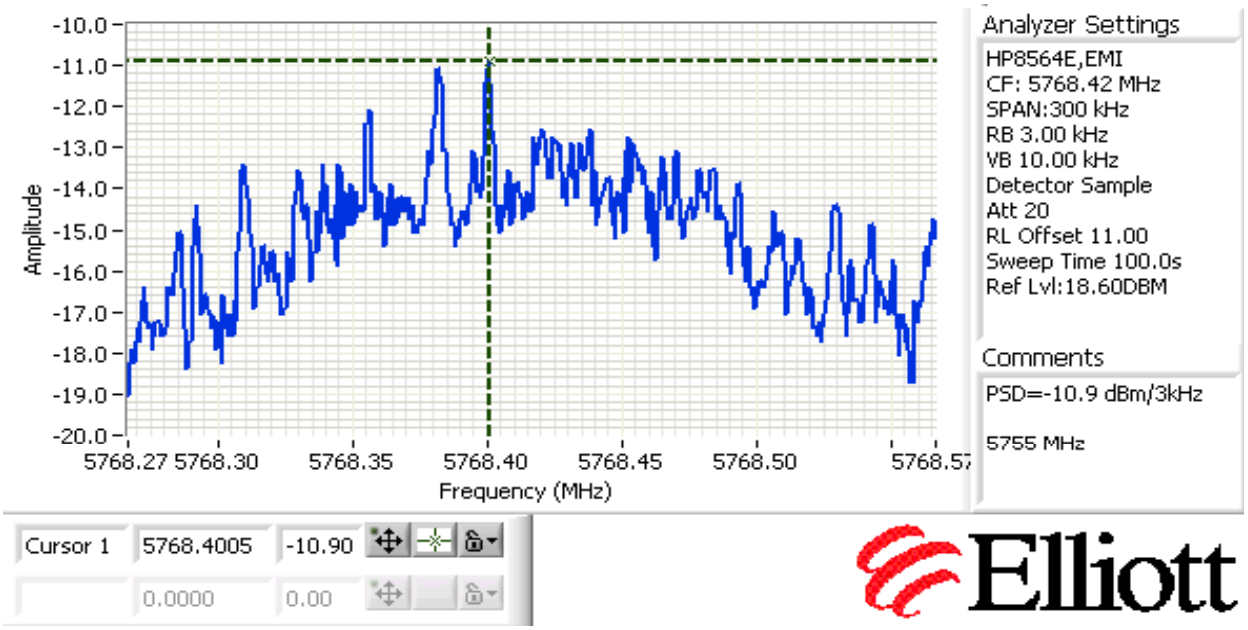
Note 1:	Power spectral density measured using RB=3 kHz, VB=10kHz, analyzer with peak detector and with a sweep time set to ensure a dwell time of at least 1 second per 3kHz. The measurement is made at the frequency of PPSD determined from preliminary scans using RB=3kHz using multiple sweeps at a faster rate over the 6dB bandwidth of the signal.

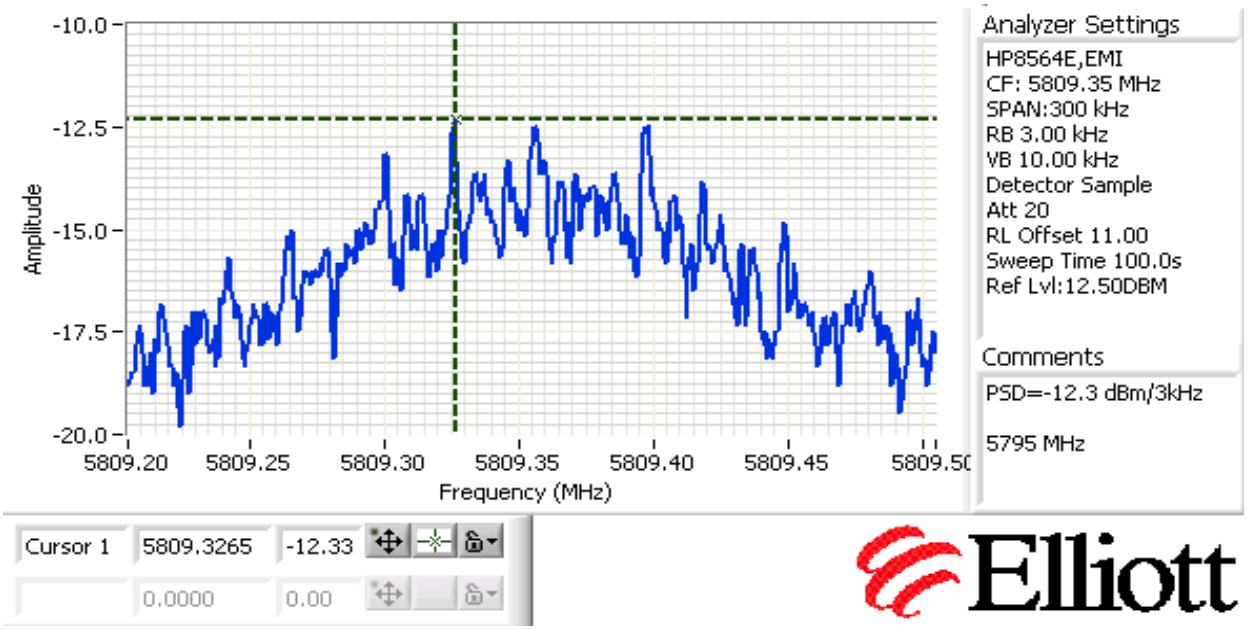
Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A



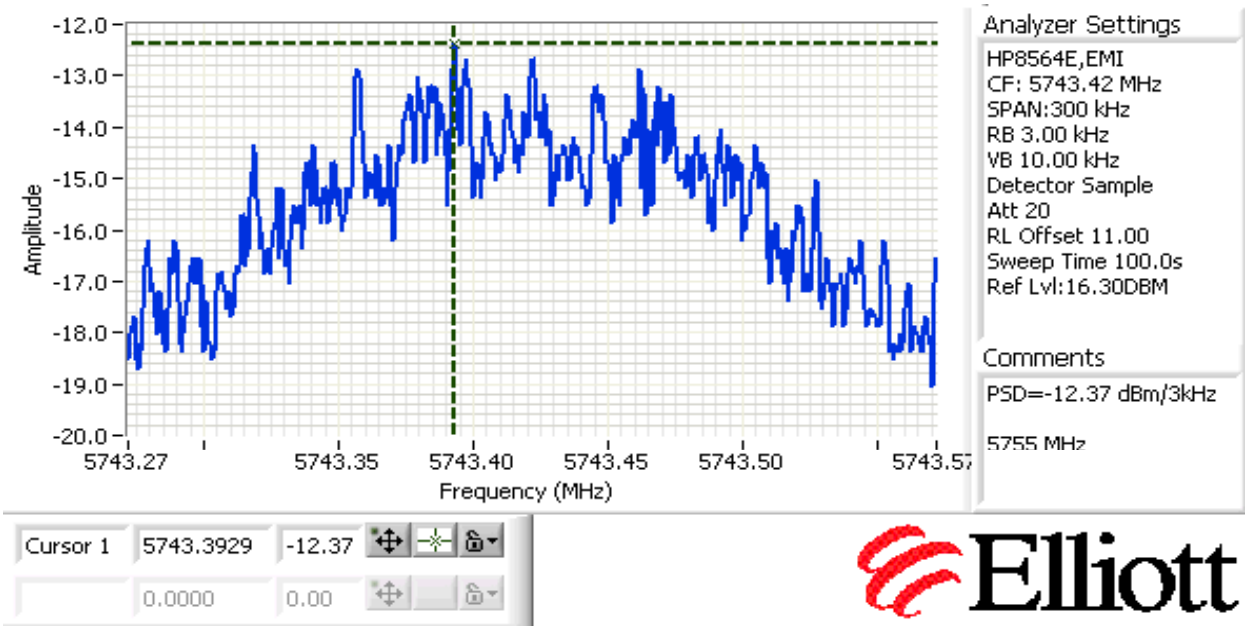


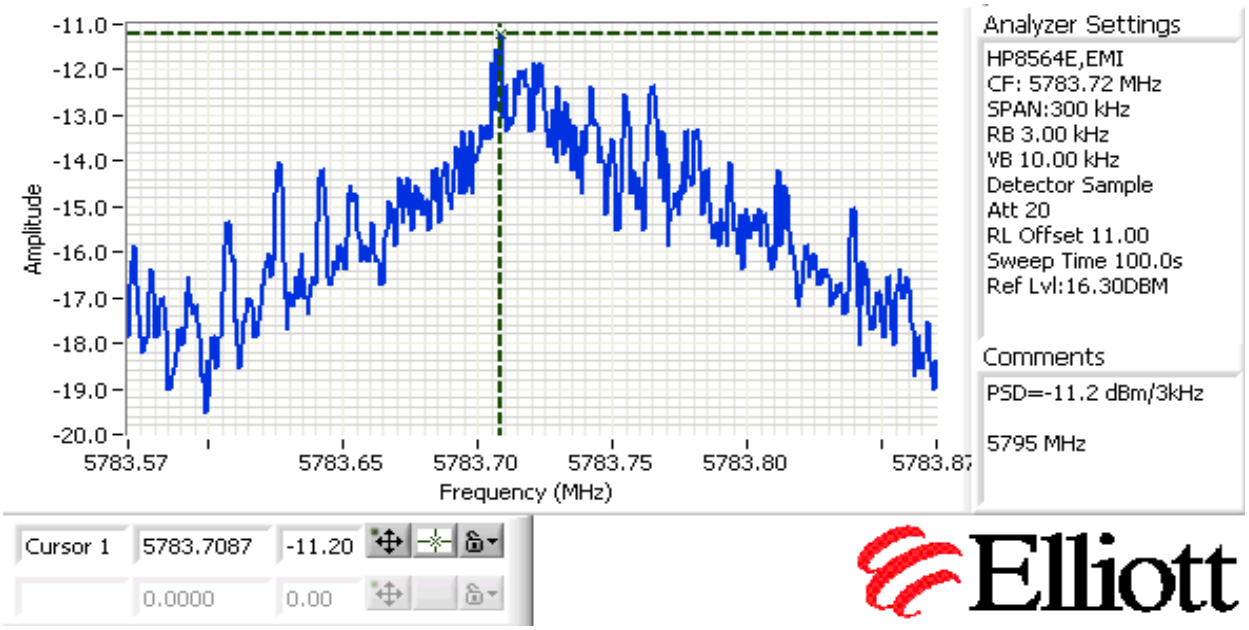
Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A





Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A



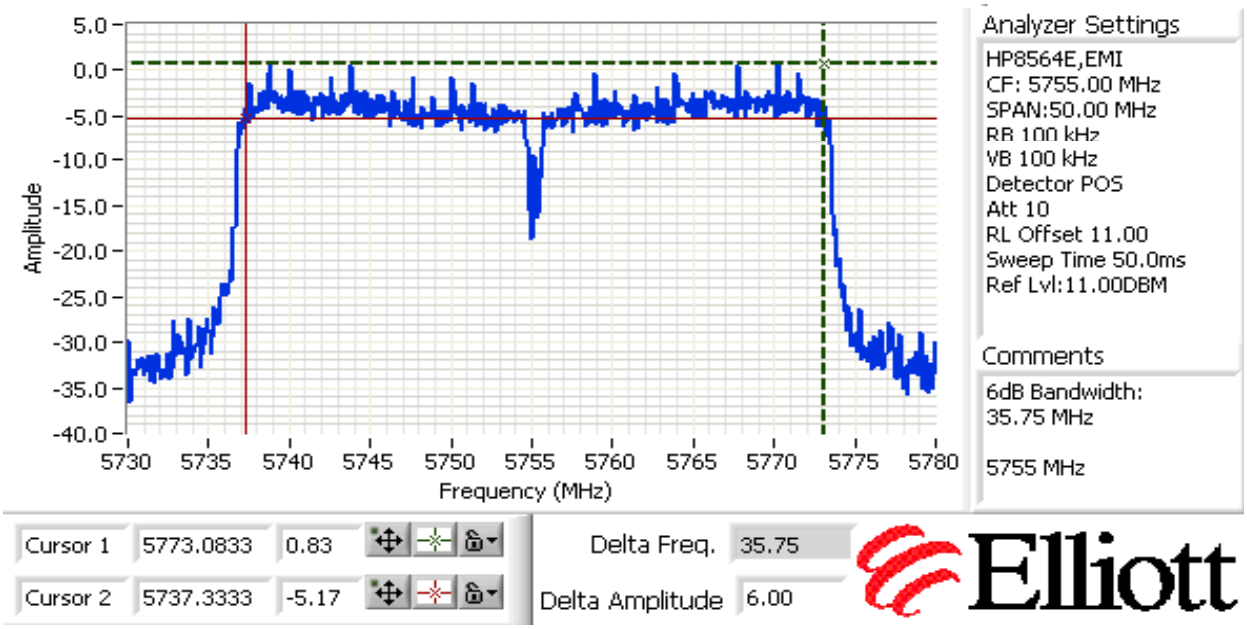


Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

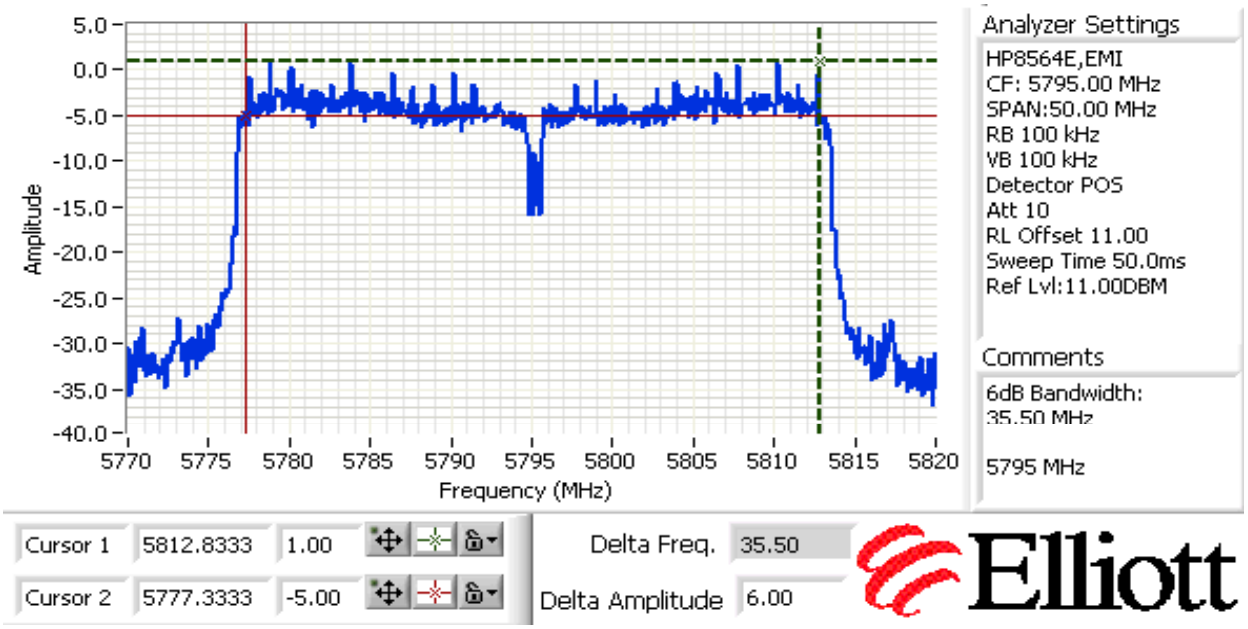
Run #3: Signal Bandwidth

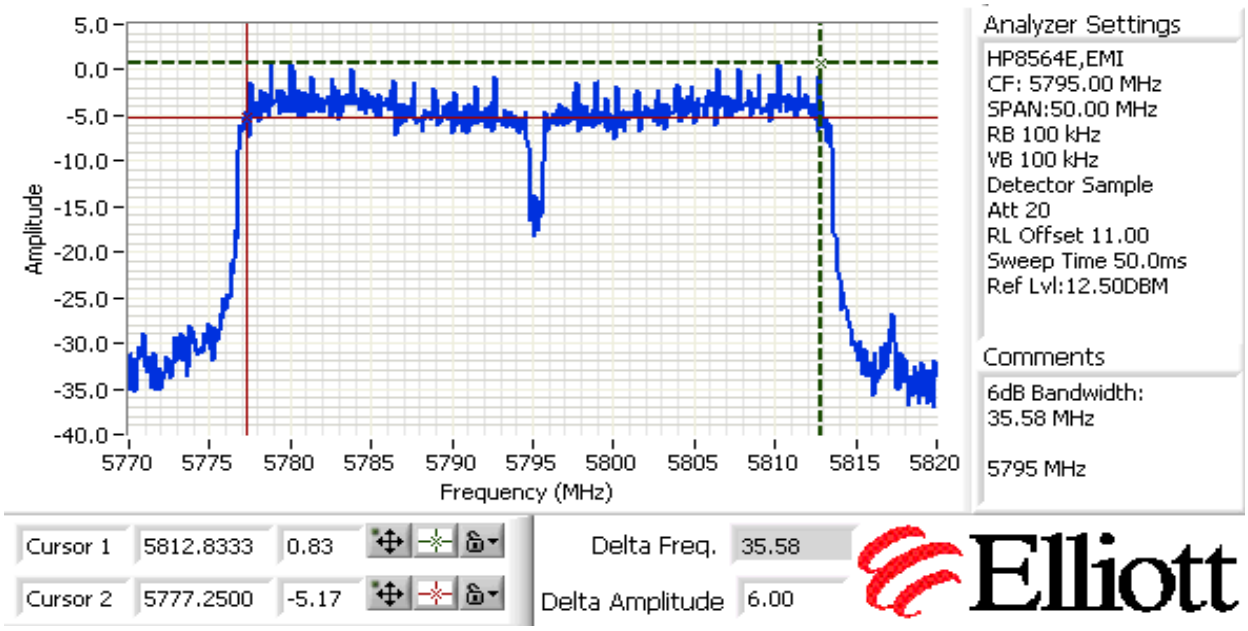
Power Setting	Frequency (MHz)	Resolution Bandwidth	Bandwidth (MHz) 6dB	99%
26	5755, Chain A	100kHz	35.75	36.6
26	5795, Chain A	100kHz	35.5	36.4
25.5	5795, Chain B	100kHz	35.58	36.4
26	5795, Chain C	100kHz	35.67	36.6

Note 1:	99% bandwidth measured in accordance with RSS GEN, with RB > 1% of the span and VB > 3xRB
Note 2:	Center channel of Chains B and C measured to verify no significant difference in signal bandwidth from Chain A.

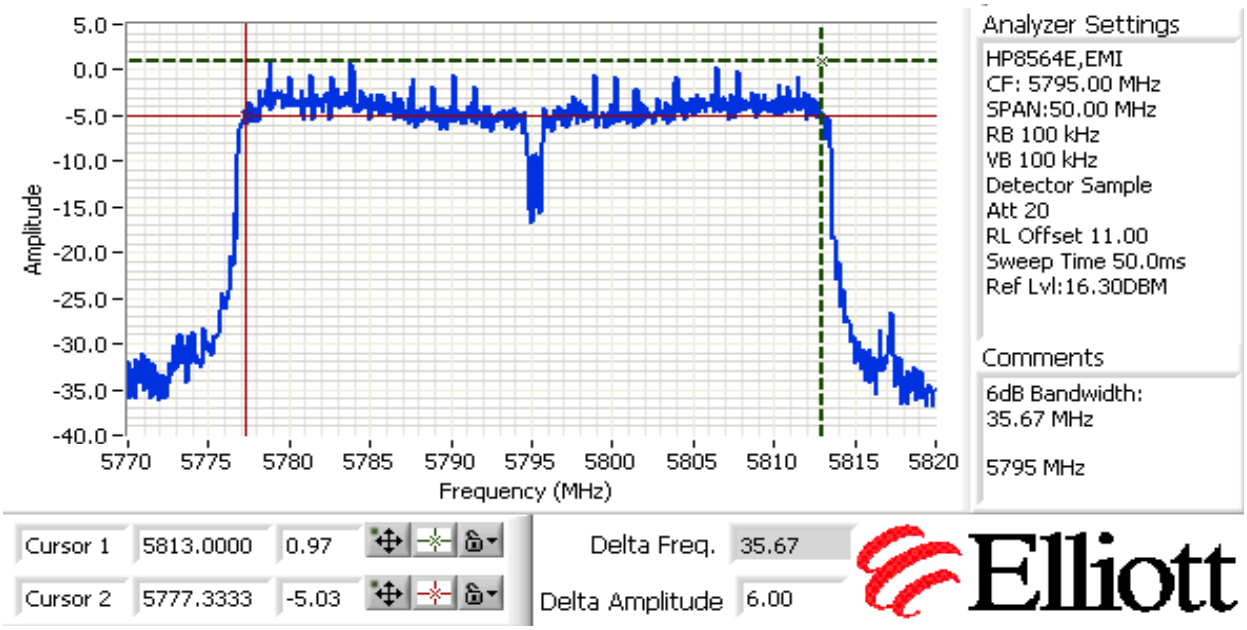


Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A





Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A



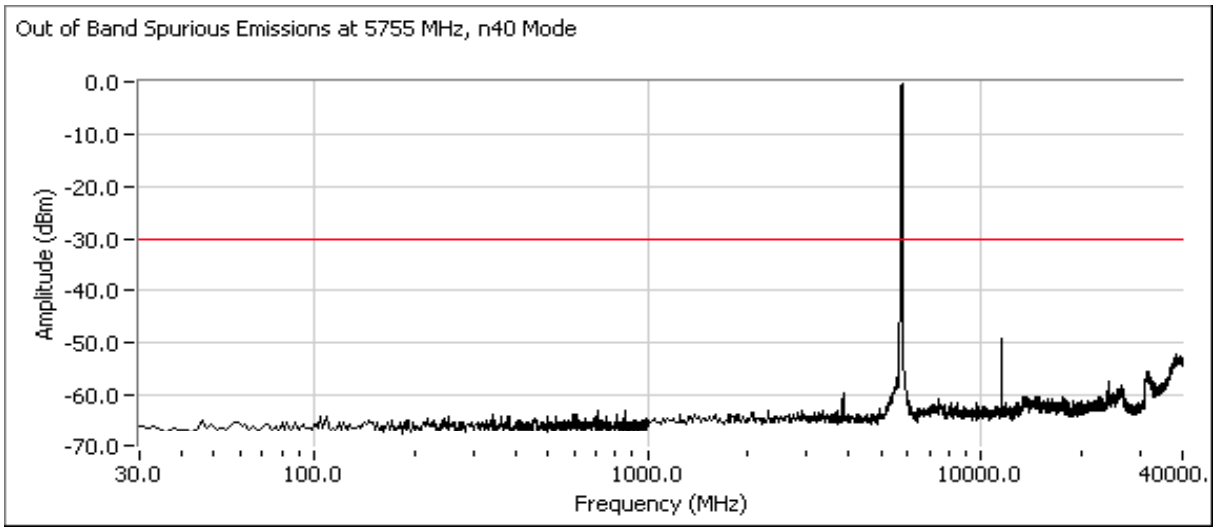
Run #4: Out of Band Spurious Emissions

All measured using RB = 100kHz, VB = 300kHz.

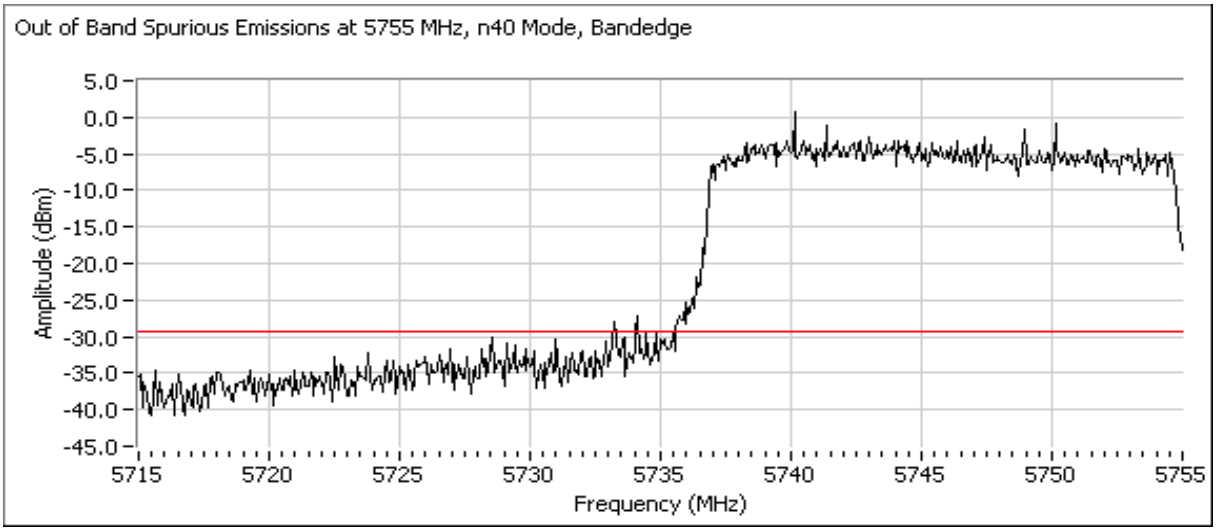
Frequency (MHz)	Limit	Result
5755, Chain A	-30dBc	Pass
5795, Chain A	-30dBc	Pass
5755, Chain B	-30dBc	Pass
5795, Chain B	-30dBc	Pass
5755, Chain C	-30dBc	Pass
5795, Chain C	-30dBc	Pass

Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Plots for low channel, Chain A power setting(s) = 26.0

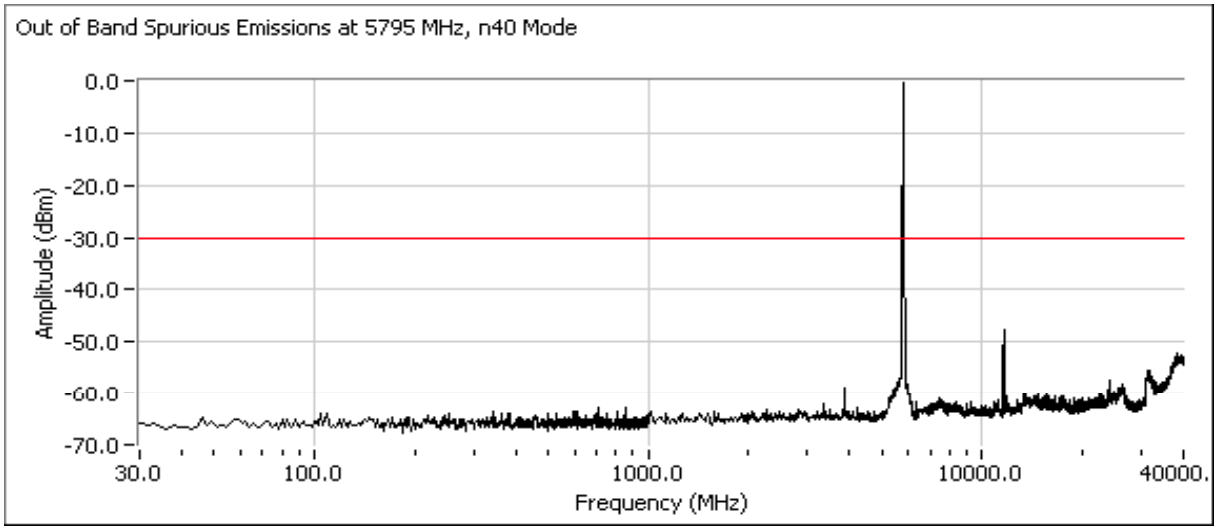


Additional plot from 5715 - 5755 MHz showing compliance with -30dBc at the band edge.

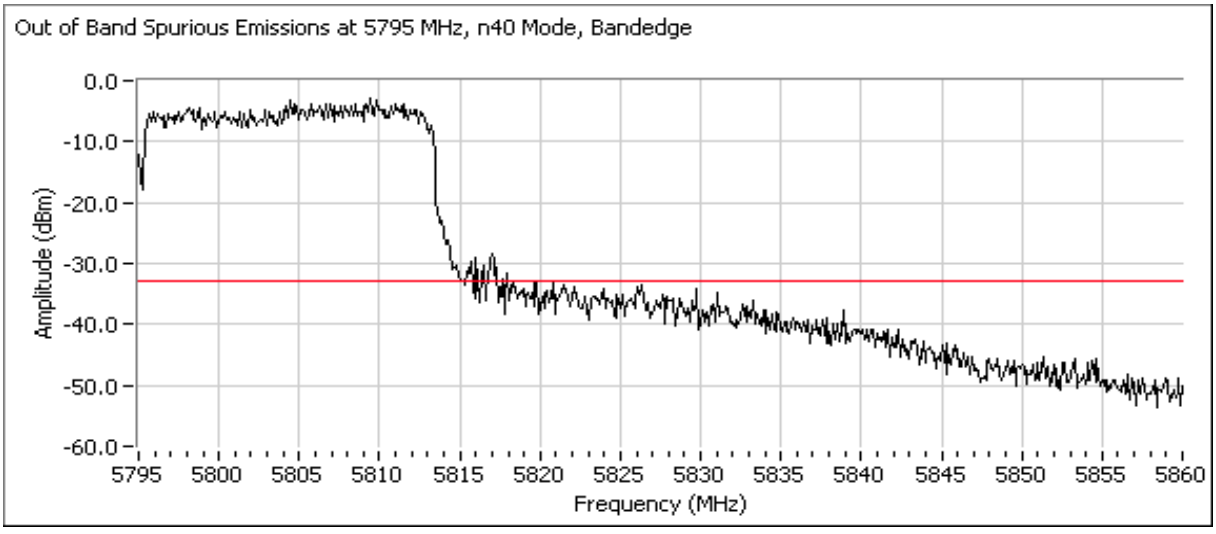


Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Plots for high channel, Chain A power setting(s) = 26.0

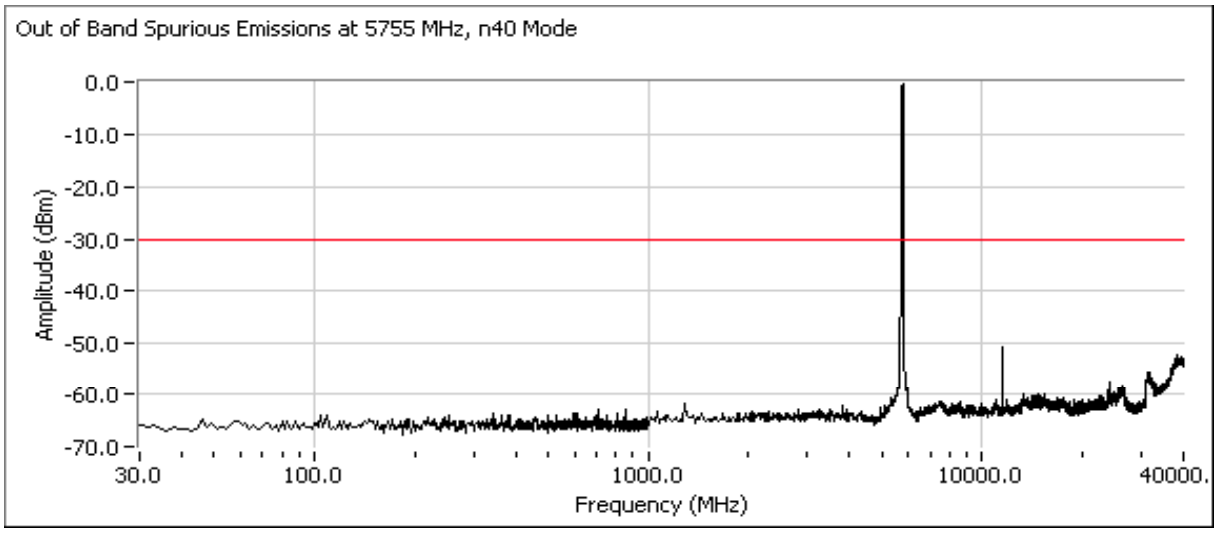


Additional plot from 5820 - 5860 MHz showing compliance with -30dBc at the band edge.

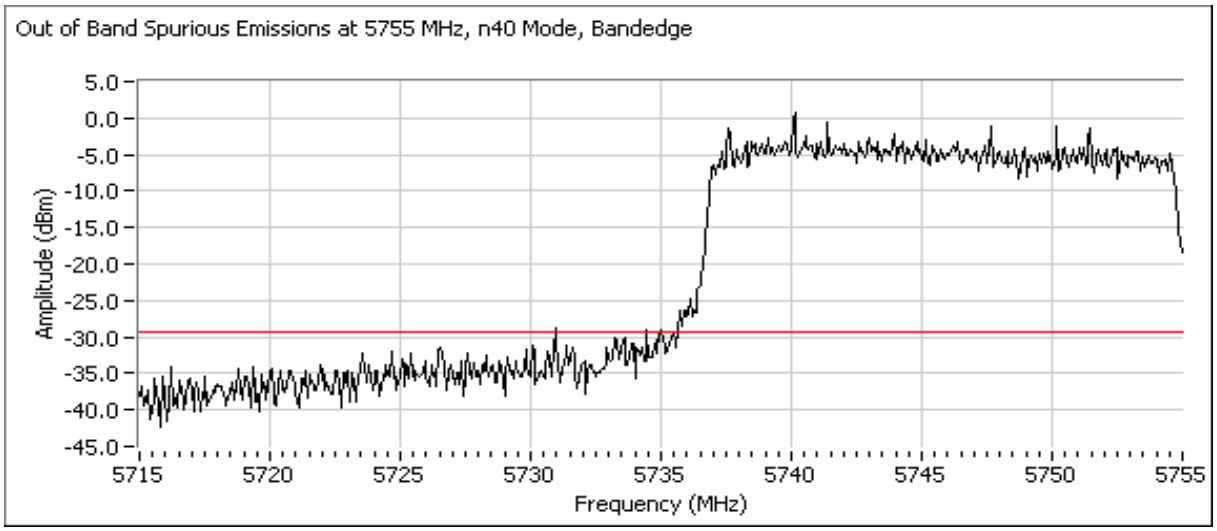


Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Plots for low channel, Chain B power setting(s) = 25.5

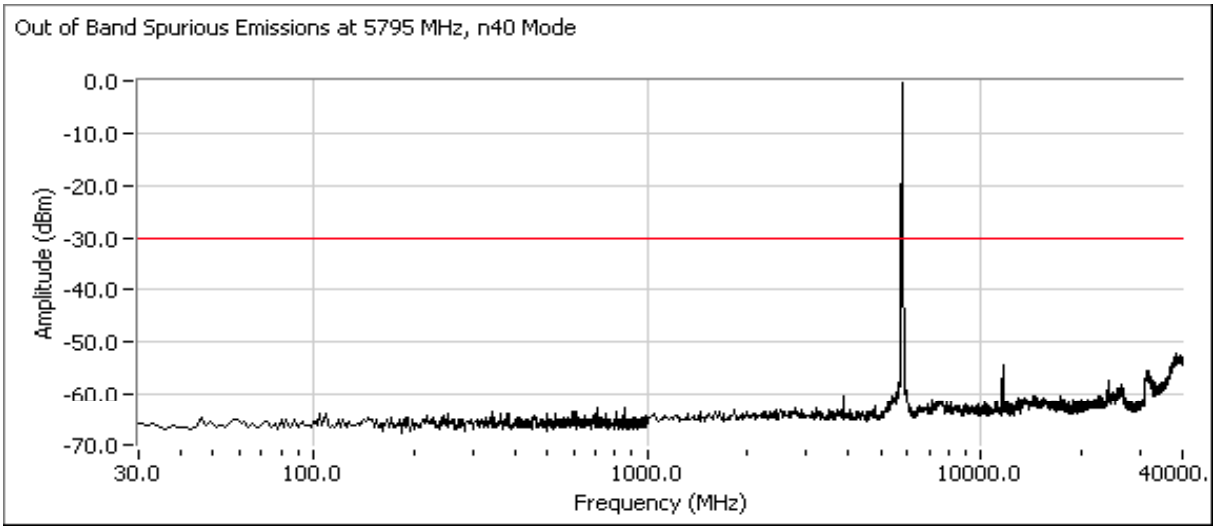


Additional plot from 5715 - 5755 MHz showing compliance with -30dBc at the band edge.

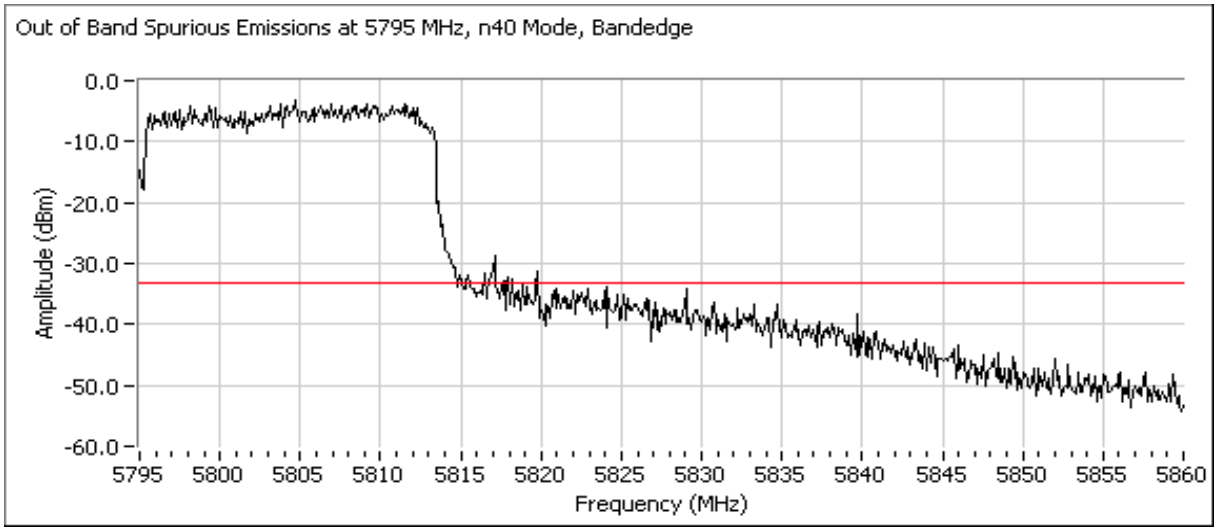


Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Plots for high channel, Chain B power setting(s) = 25.5

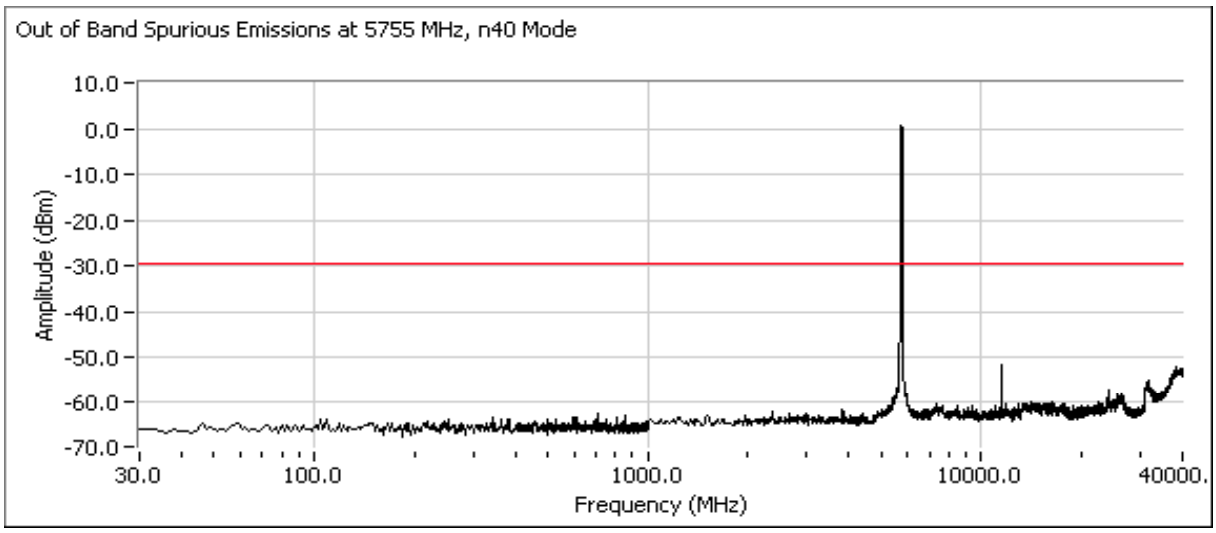


Additional plot from 5820 - 5860 MHz showing compliance with -30dBc at the band edge.

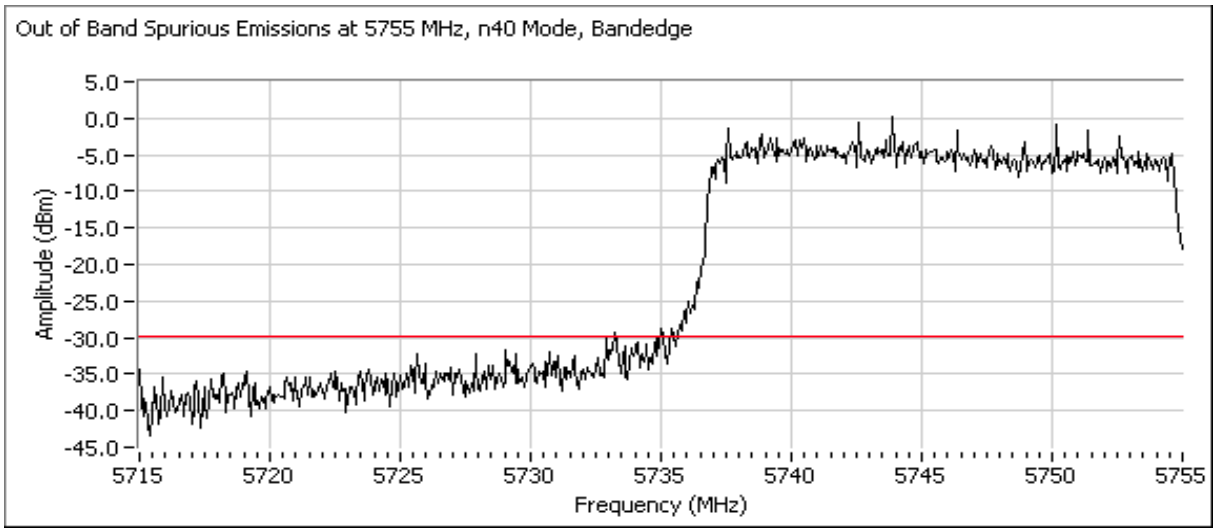


Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Plots for low channel, Chain C power setting(s) = 26.0

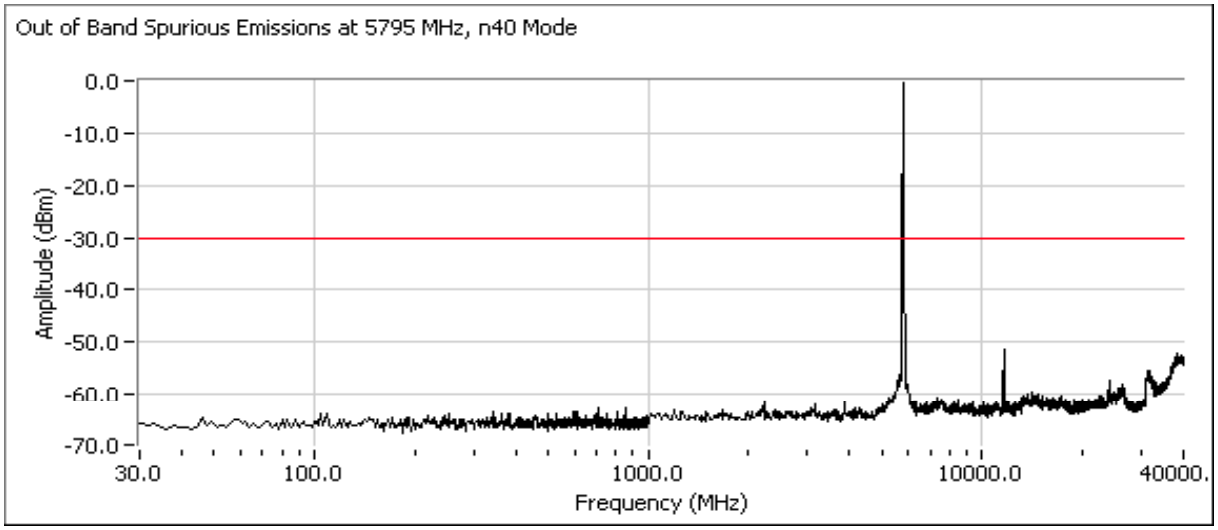


Additional plot from 5715 - 5755 MHz showing compliance with -30dBc at the band edge.

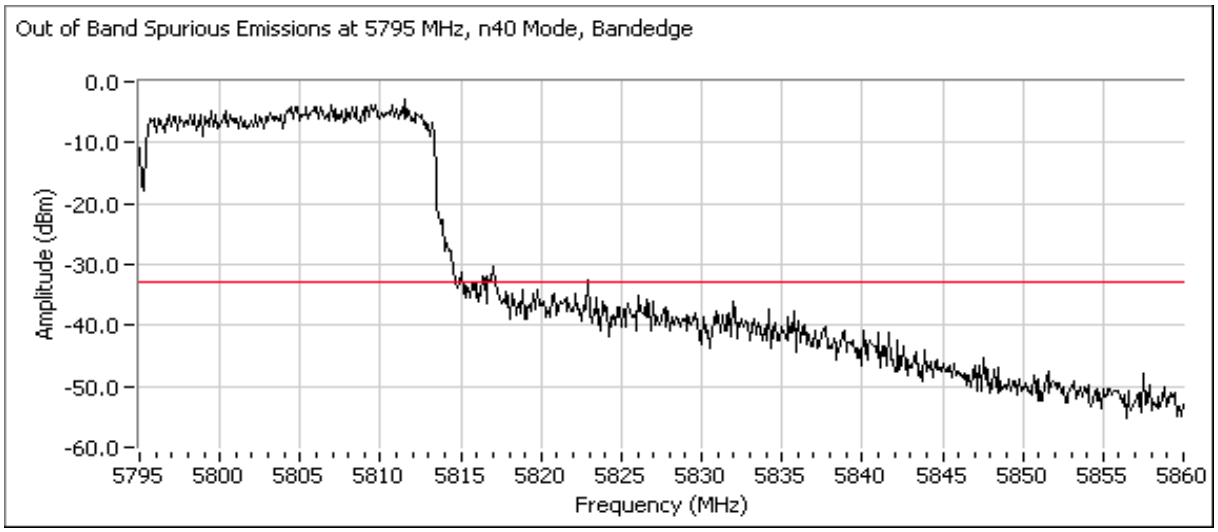


Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Plots for high channel, Chain C power setting(s) = 26.0



Additional plot from 5820 - 5860 MHz showing compliance with -30dBc at the band edge.



Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

RSS 210 and FCC 15.247 (DTS) Antenna Port Measurements
MIMO and Smart Antenna Systems, 5725 - 5850 MHz
Power, PSD, Bandwidth and Spurious Emissions - 802.11n 40MHz

Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

Date of Test: 5/7/2008
Test Engineer: Rafael Varelas
Test Location: FT Chamber #4

Config. Used: 1
Config Change: None
EUT Voltage: Powered From Host System(3.3V DC)

General Test Configuration

The EUT was connected to the spectrum analyzer or power meter via a suitable attenuator. All measurements were made on each chain separately. All measurements have been corrected to allow for the external attenuators used.

Ambient Conditions:

Temperature: 20.3 °C
Rel. Humidity: 35 %

Summary of Results

Run #	Test Performed	Limit	Pass / Fail	Result / Margin
1	Output Power Chain A + B	15.247(b)	Pass	17.9dBm (61mW)
2	Power spectral Density (PSD) Chain A + B	15.247(d)	Pass	-8.5 dBm/3kHz
3	Output Power Chain A + C	15.247(b)	Pass	16.1dBm
4	PSD Chain A + C	15.247(d)	Pass	-11.0 dBm/3kHz
5	Output Power Chain B + C	15.247(b)	Pass	15.5dBm
6	PSD Chain B + C	15.247(d)	Pass	-11.5 dBm/3kHz
7	Output Power Chain A+B+C	15.247(b)	Pass	18.3dBm
8	PSD Chain A+B+C	15.247(d)	Pass	-9.7 dBm/3kHz
-	6dB Bandwidth	15.247(a)		Covered by single-chain measurements
-	99% Bandwidth	RSS GEN	-	
-	Spurious emissions	15.247(b)		

Modifications Made During Testing

No modifications were made to the EUT during testing

Deviations From The Standard

No deviations were made from the requirements of the standard.

Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #1: Output Power - Dual Chain (A + B)

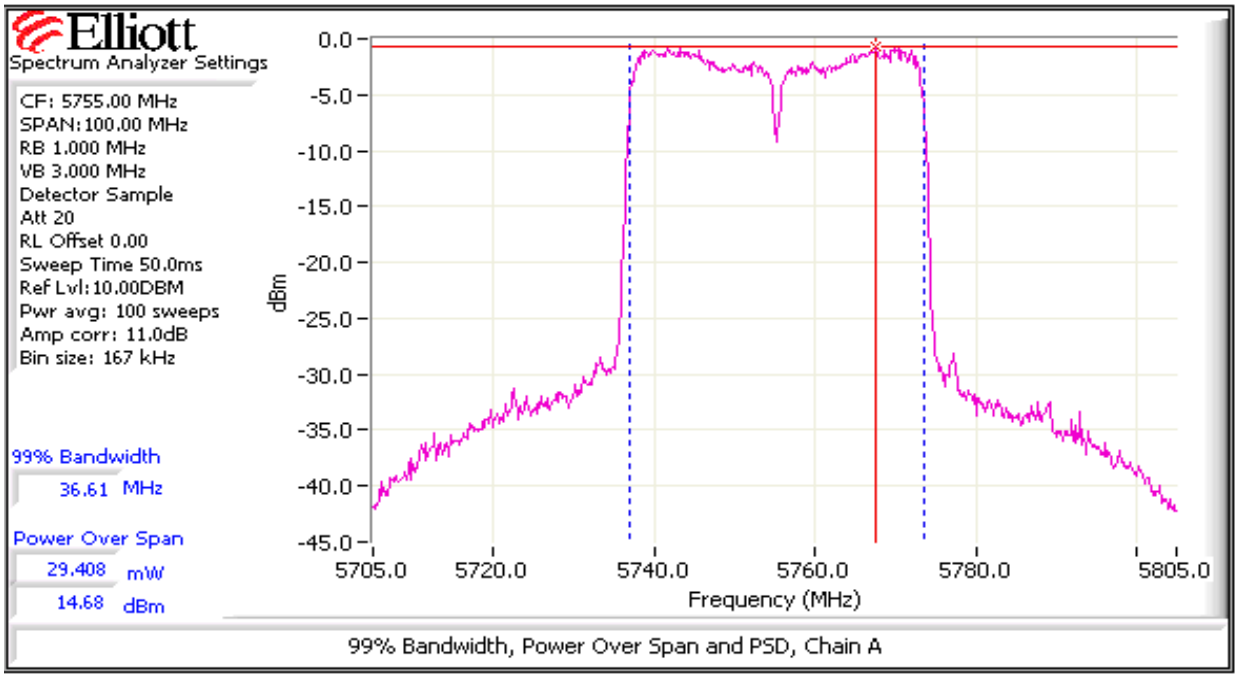
Operating Mode: 802.11n 20MHz

Transmitted signal on chain is coherent ? no

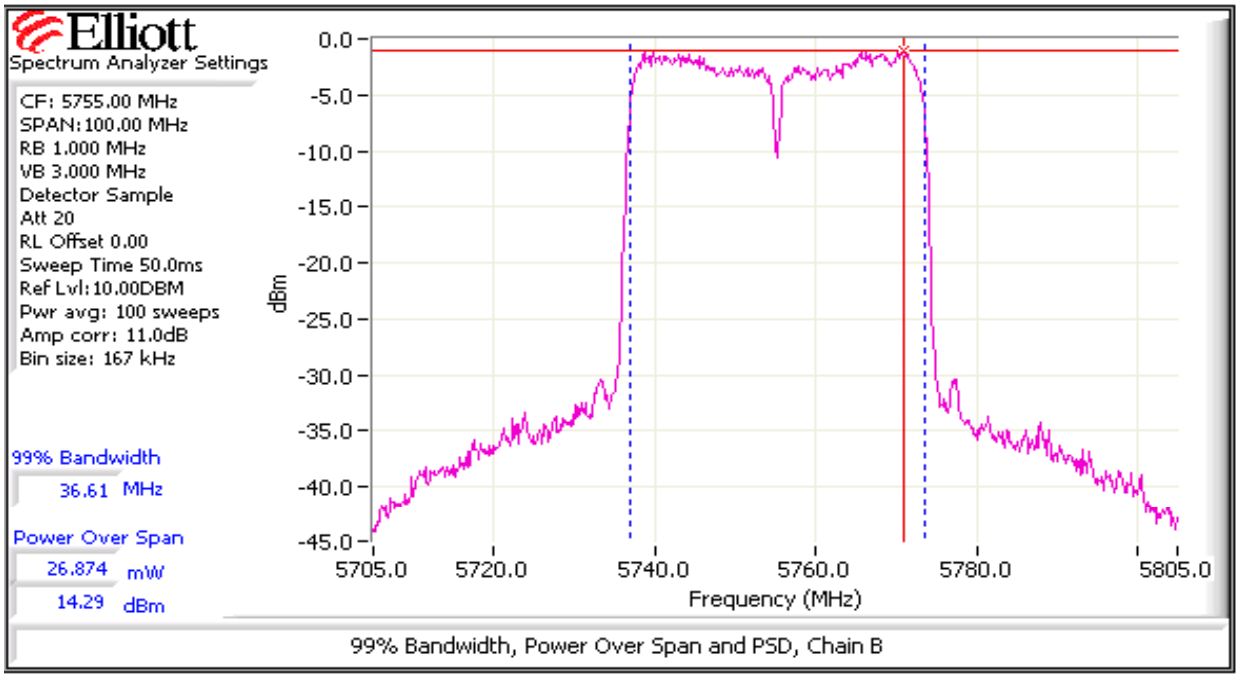
5755 MHz	Chain A	Chain B	Chain C	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	28.0	27.0						
Output Power (dBm) Note 1	14.7	14.3			17.5 dBm	0.056 W	30.0 dBm	1.000 W
Antenna Gain (dBi) Note 2	5	5				5.0 dBi	Pass	
eirp (dBm) Note 2	19.7	19.3			22.5 dBm	0.178 W		

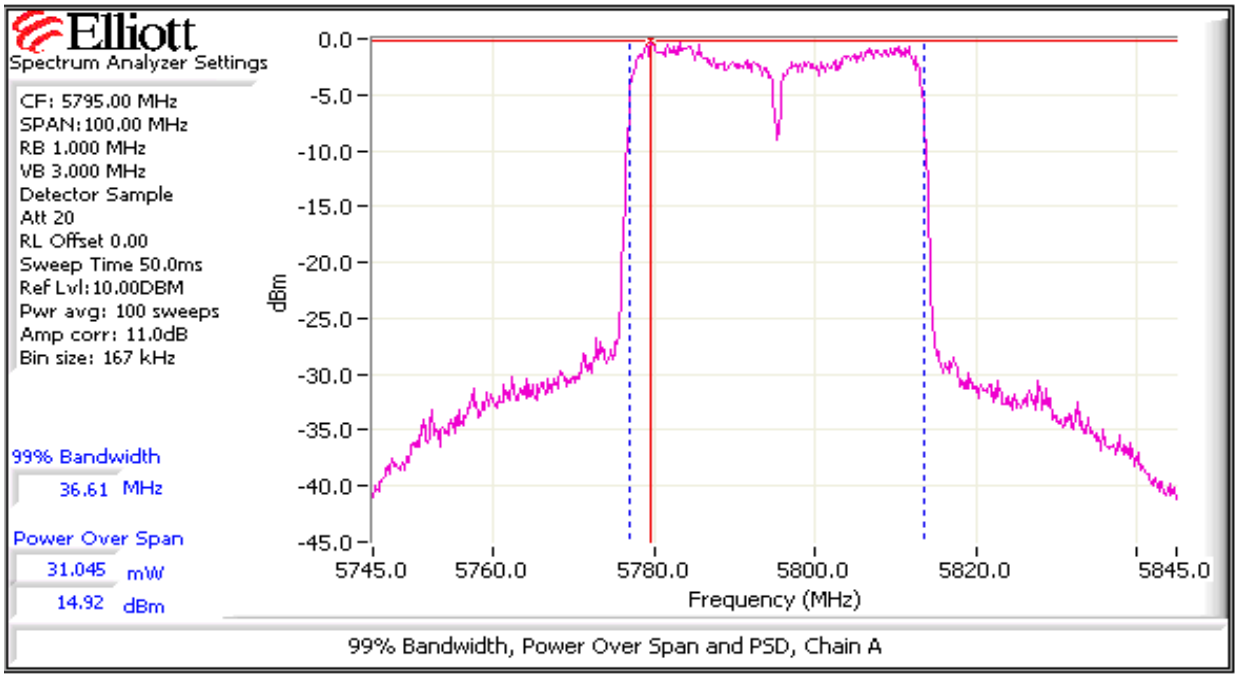
5795 MHz	Chain A	Chain B	Chain C	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	28.5	27.5						
Output Power (dBm) Note 1	14.9	14.8			17.9 dBm	0.061 W	30.0 dBm	1.000 W
Antenna Gain (dBi) Note 2	5	5				5.0 dBi	Pass	
eirp (dBm) Note 2	19.9	19.8			22.9 dBm	0.193 W		

Note 1:	Output power measured using a spectrum analyzer (see plots below) with RBW=1MHz, VB=3 MHz, sample detector, power averaging on (transmitted signal was continuous) and power integration over ??? MHz (reference method 1 of FCC DA 02-2138 for U-NII devices, August 30, 2002). Spurious limit becomes -30dBc.
Note 2:	As there is no coherency between chains the total EIRP is the sum of the individual EIRPs and effective antenna gain equals the eirp divide by the sum of the power on each chain.

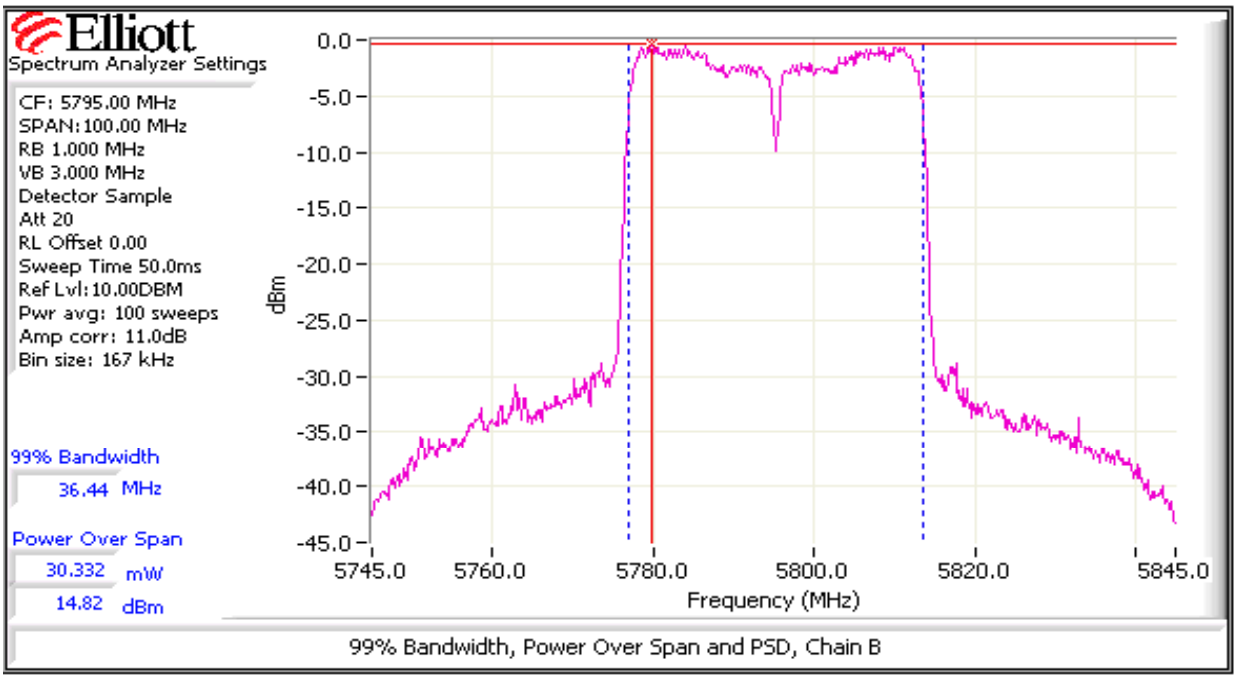


Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A





Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

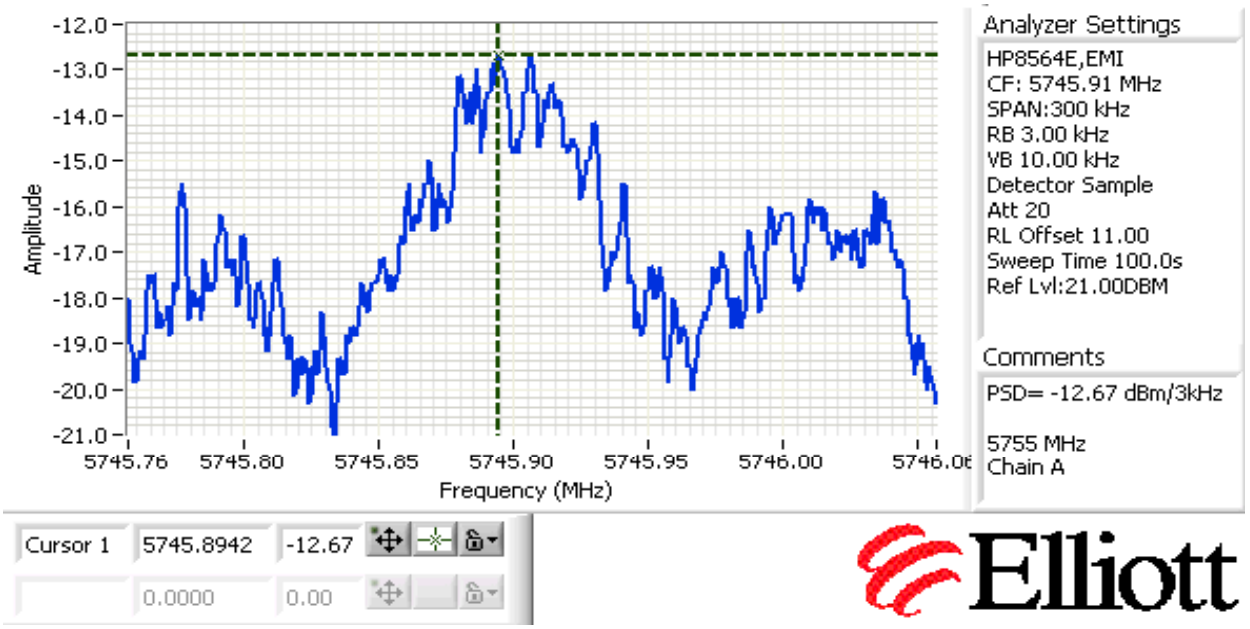


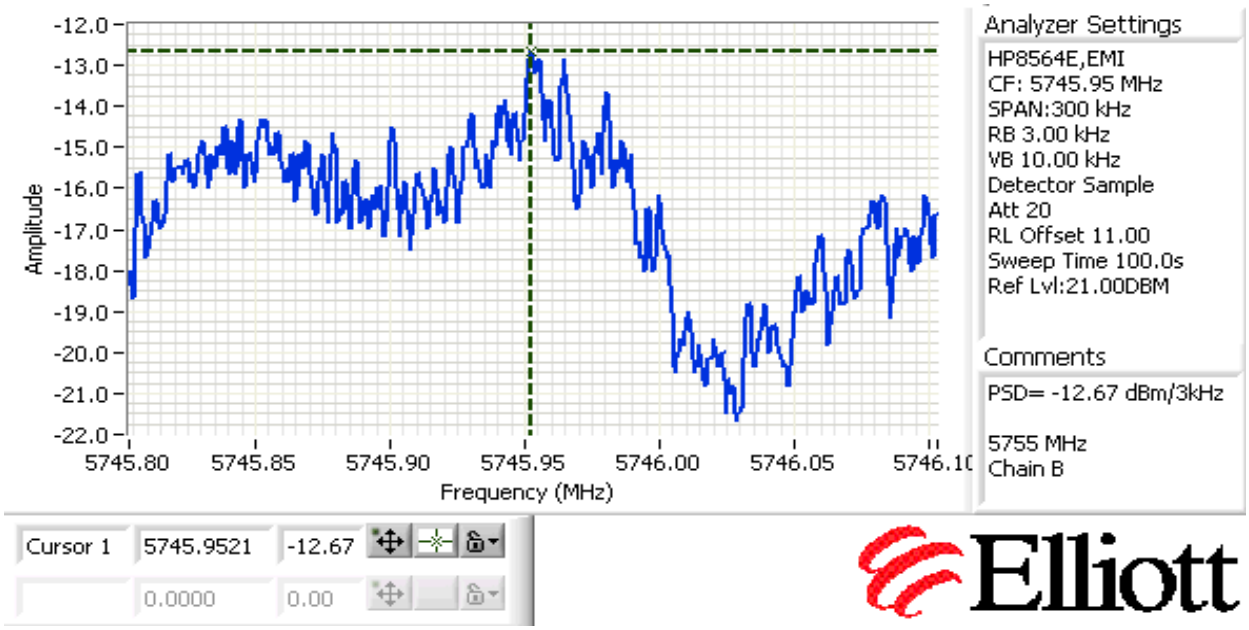
Run #2: Power spectral Density - Chain A + B

Power Setting	Frequency (MHz)	PSD (dBm/3kHz) Note 1 Chain A	Chain B	Chain C	Chain 4	Total	Limit dBm/3kHz	Result
28,27	5755	-12.7	-12.7			-9.7	8.0	Pass
28.5,27.5	5795	-12.0	-11.0			-8.5	8.0	Pass

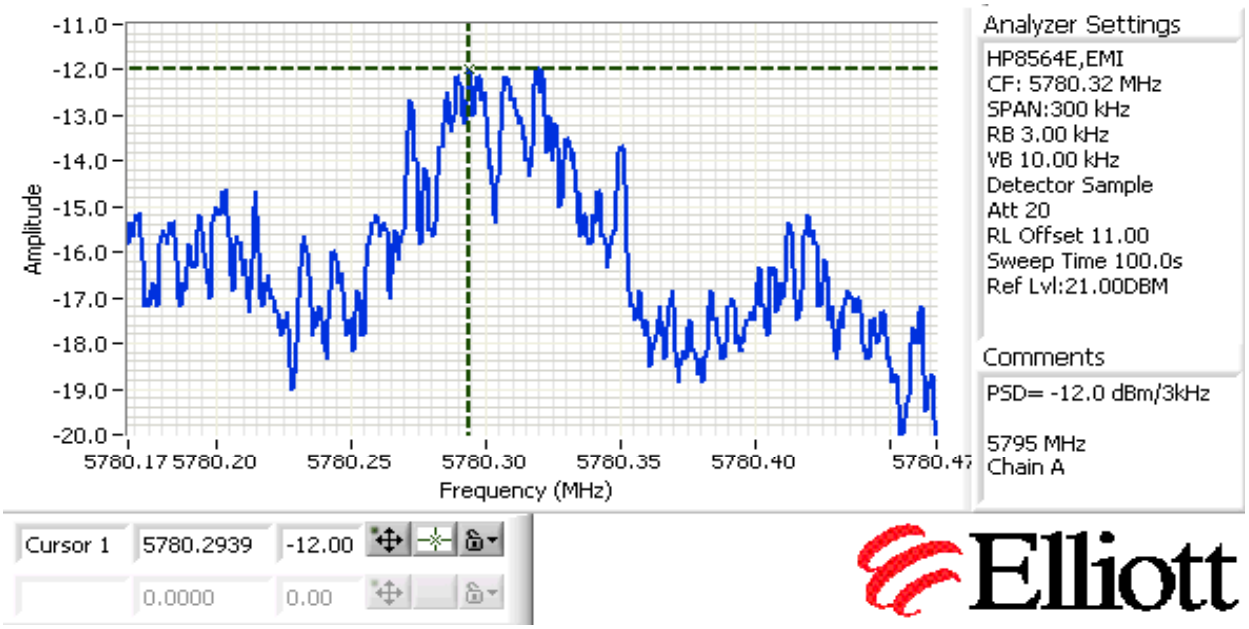
Note 1:	Power spectral density measured using RB=3 kHz, VB=10kHz, analyzer with peak detector and with a sweep time set to ensure a dwell time of at least 1 second per 3kHz. The measurement is made at the frequency of PPSD determined from preliminary scans using RB=3kHz using multiple sweeps at a faster rate over the 6dB bandwidth of the signal.
Note 2:	Power setting - if a single number the same power setting was used for each chain. If multiple numbers the power setting for each chain is separated by a comma (e.g. x,y would indicate power setting x for Chain A, power setting y for Chain B.

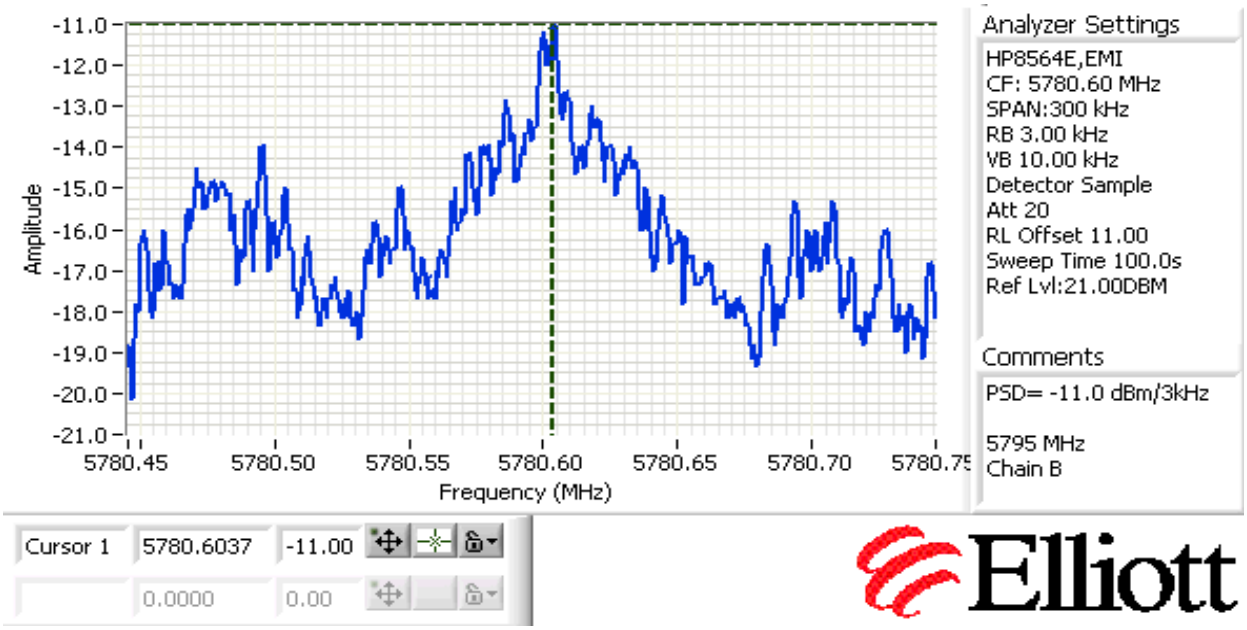
Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A





Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A





Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #3: Output Power - Dual Chain A + C

Operating Mode: 802.11n 40MHz

Transmitted signal on chain is coherent ? No

Date of Test: 5/8/2008
Test Engineer: Suhaila Khushzad
Test Location: FT Radio Lab

Config. Used: 1
Config Change: None
EUT Voltage: Powered From Host System(3.3V DC)

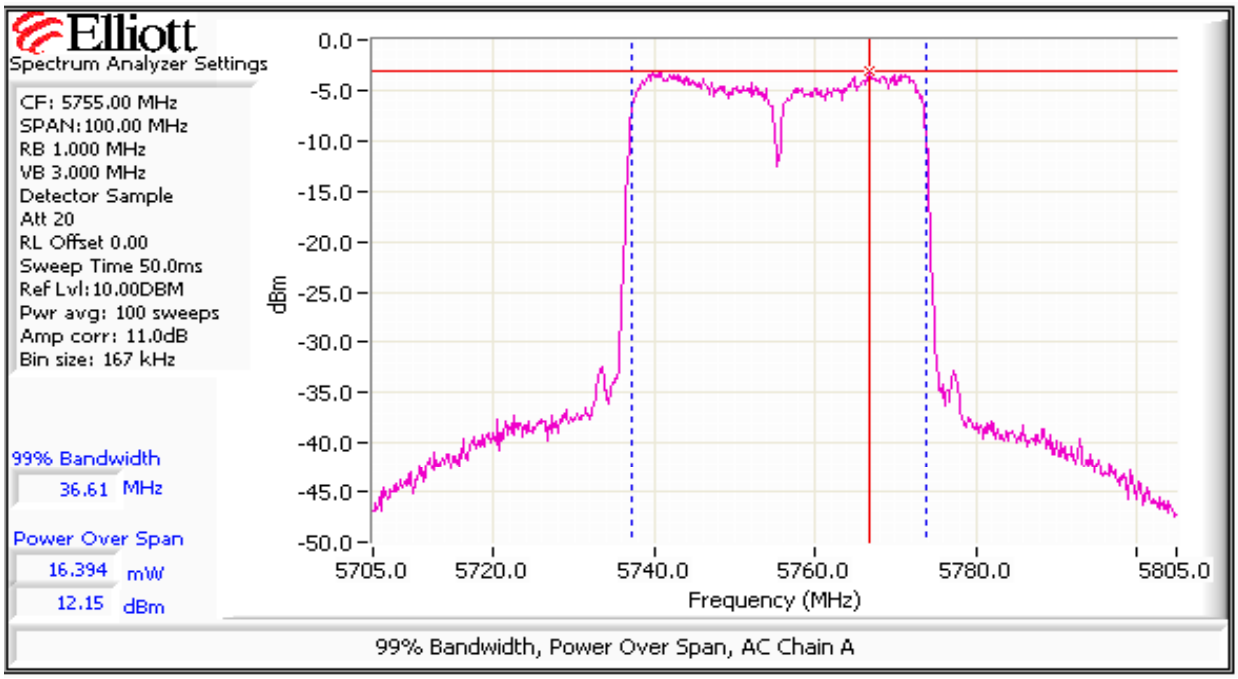
5755 MHz	Chain A	Chain B	Chain C	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	26.5		26.5					
Output Power (dBm) Note 1	12.15		12.54		15.4 dBm	0.034 W	30.0 dBm	1.000 W
Antenna Gain (dBi) Note 2	5		5			5.0 dBi	Pass	
eirp (dBm) Note 2	17.15		17.54		20.4 dBm	0.109 W		

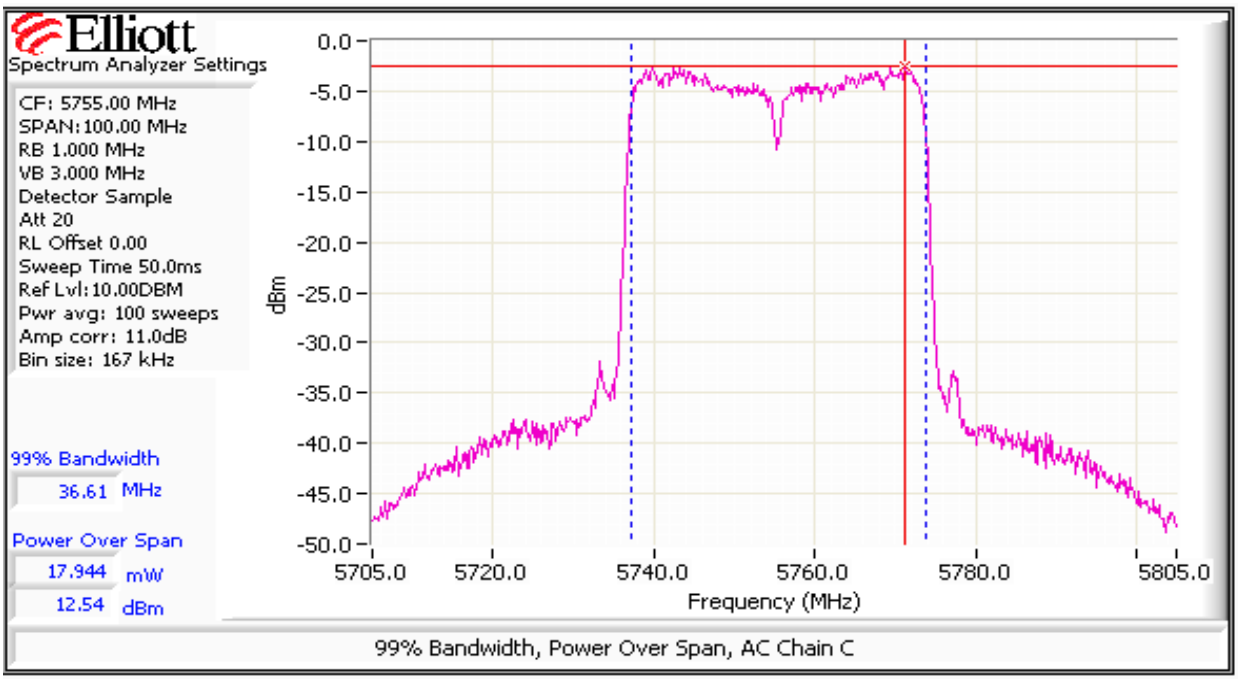
5795 MHz	Chain A	Chain B	Chain C	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	27.5		27.0					
Output Power (dBm) Note 1	13.51		12.64		16.1 dBm	0.041 W	30.0 dBm	1.000 W
Antenna Gain (dBi) Note 2	5		5			5.0 dBi	Pass	
eirp (dBm) Note 2	18.51		17.64		21.1 dBm	0.129 W		

Note 1:	Output power measured using a spectrum analyzer (see plots below) with RBW=1MHz, VB=3 MHz, sample detector, power averaging on (transmitted signal was continuous) and power integration over 100 MHz (reference method 1 of FCC DA 02-2138 for U-NII devices, August 30, 2002). Spurious limit becomes -30dBc.
Note 2:	As there is no coherency between chains the total EIRP is the sum of the individual EIRPs and effective antenna gain equals the eirp divide by the sum of the power on each chain.

Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

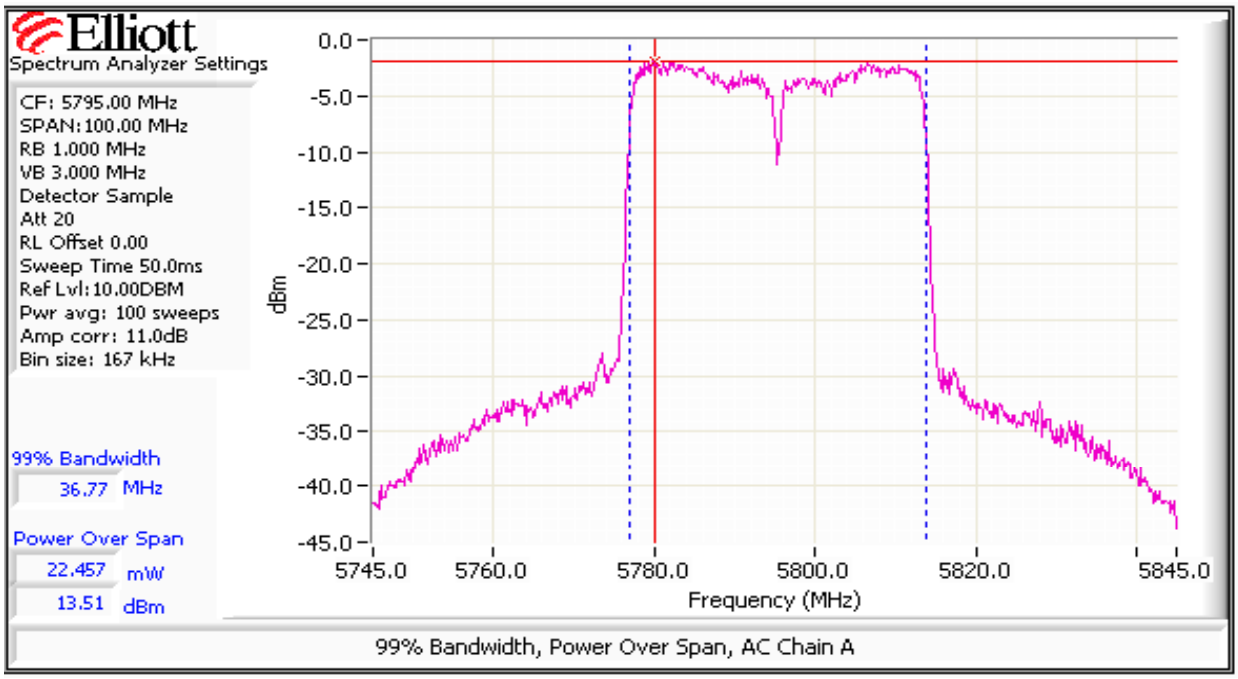
Run #3: Output Power - Dual Chain A + C

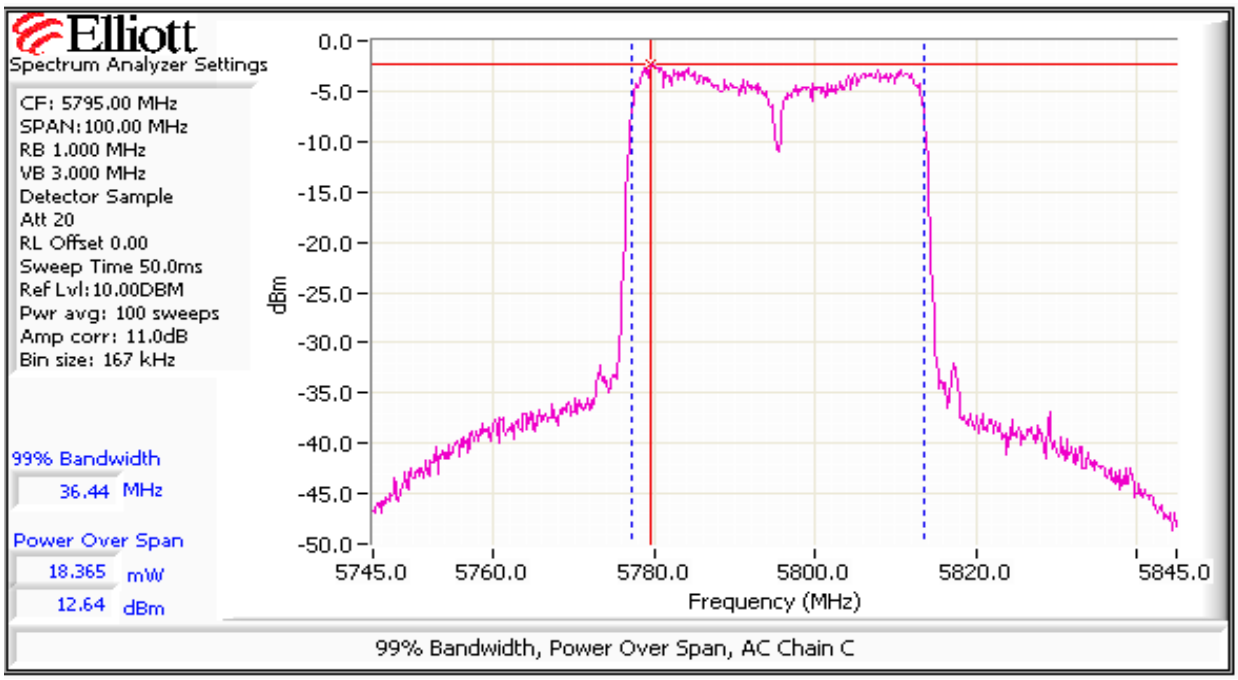




Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #3: Output Power - Dual Chain A + C



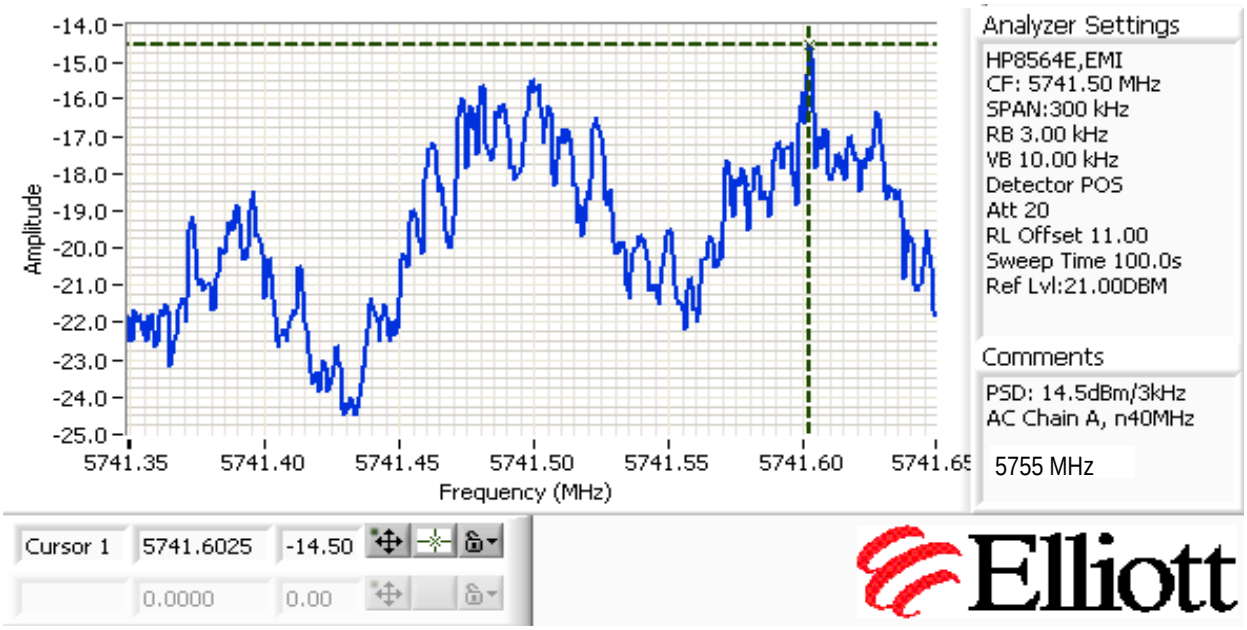


Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #4: Power spectral Density - Chain A + C

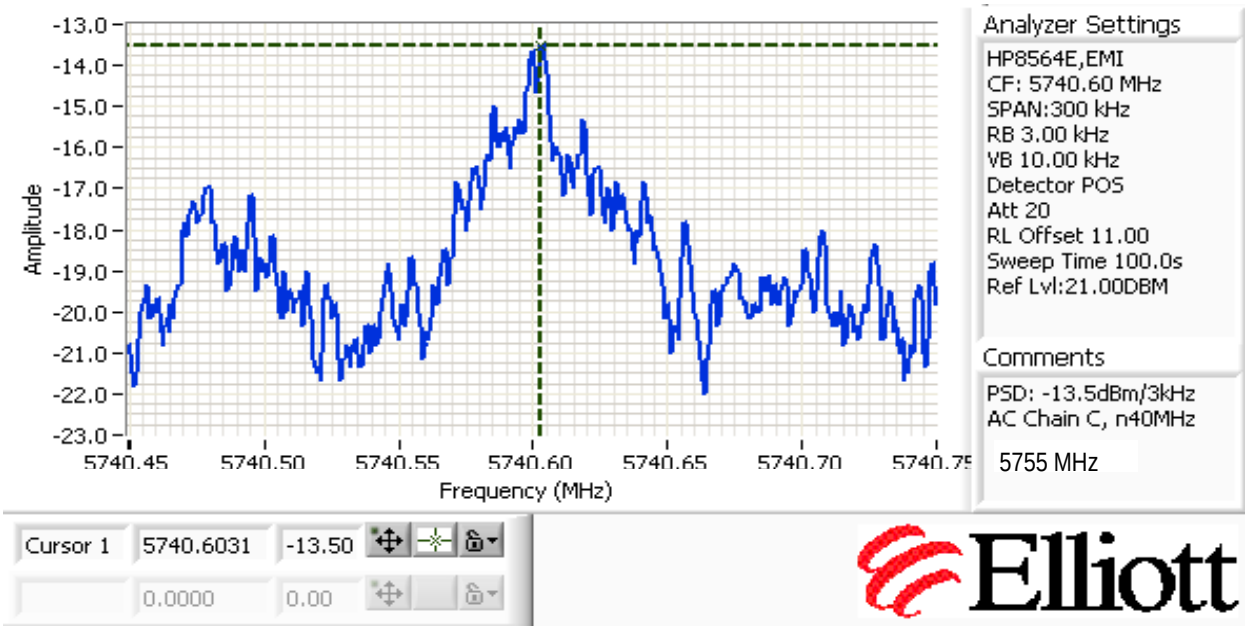
Power Setting	Frequency (MHz)	PSD (dBm/3kHz) Note 1					Limit dBm/3kHz	Result
		Chain A	Chain B	Chain C	Chain 4	Total		
26.5, 26.5	5755	-14.5		-13.5		-11.0	8.0	Pass
27.5, 27	5795	-14.2		-14.7		-11.4	8.0	Pass

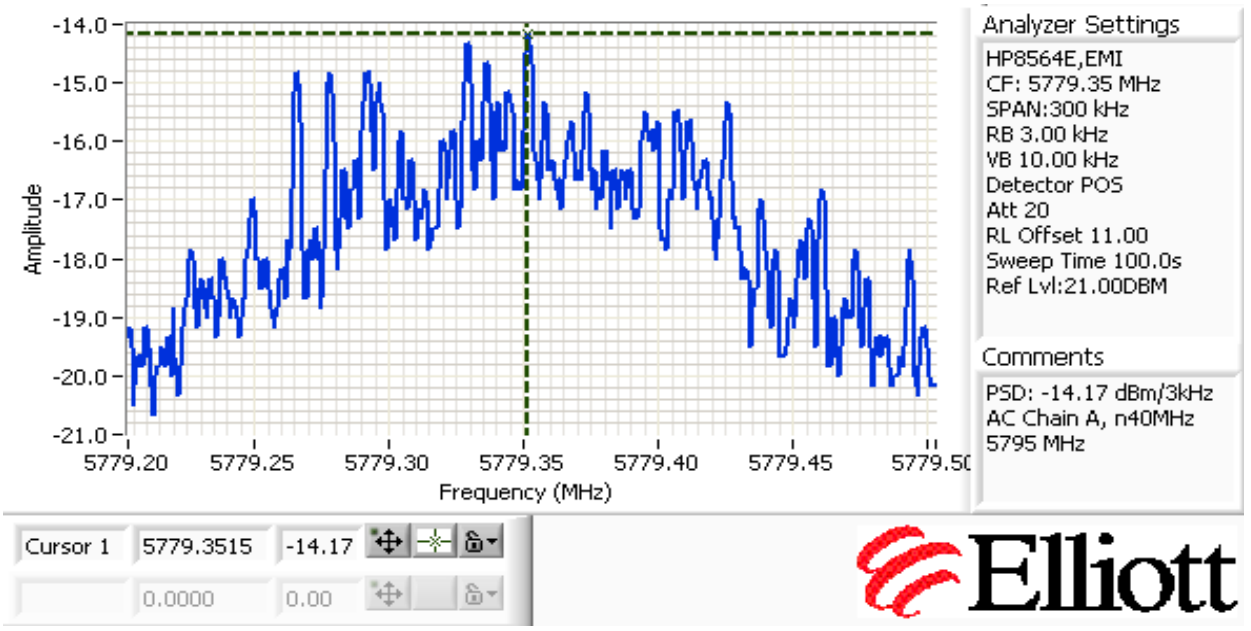
Note 1:	Power spectral density measured using RB=3 kHz, VB=10kHz, analyzer with peak detector and with a sweep time set to ensure a dwell time of at least 1 second per 3kHz. The measurement is made at the frequency of PPSD determined from preliminary scans using RB=3kHz using multiple sweeps at a faster rate over the 6dB bandwidth of the signal.
Note 2:	Power setting - if a single number the same power setting was used for each chain. If multiple numbers the power setting for each chain is separated by a comma (e.g. x,y would indicate power setting x for Chain A, power setting y for Chain B.



Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

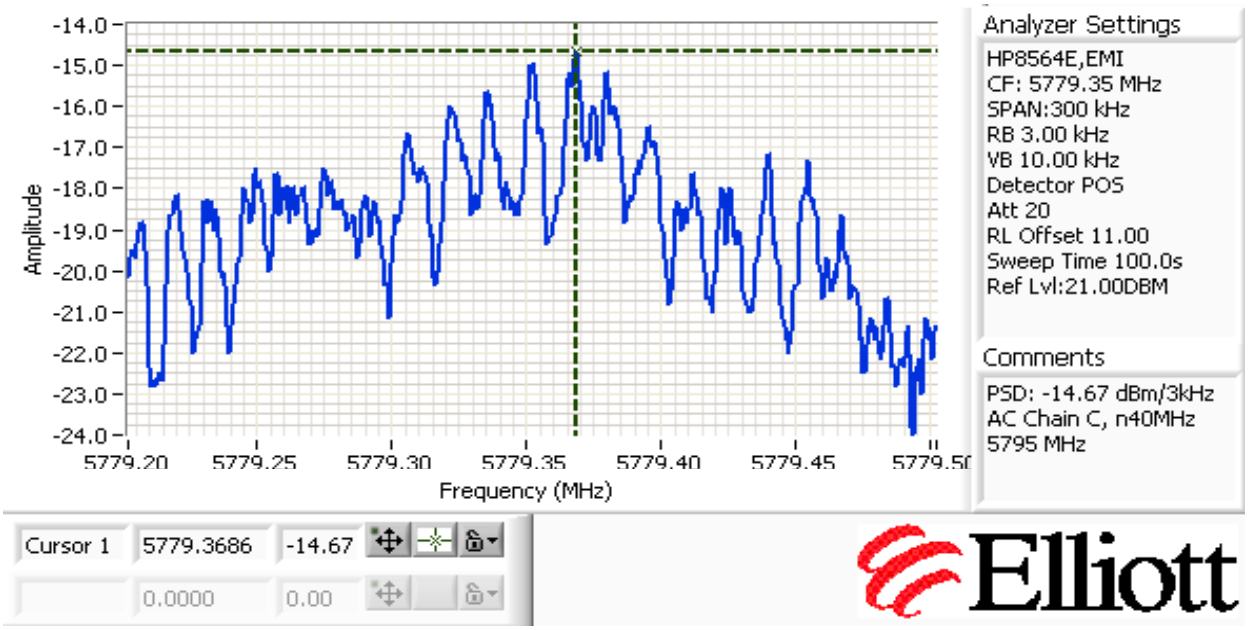
Run #4: Power spectral Density - Chain A + C





Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #4: Power spectral Density - Chain A + C



Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #5: Output Power - Dual Chain (B + C)

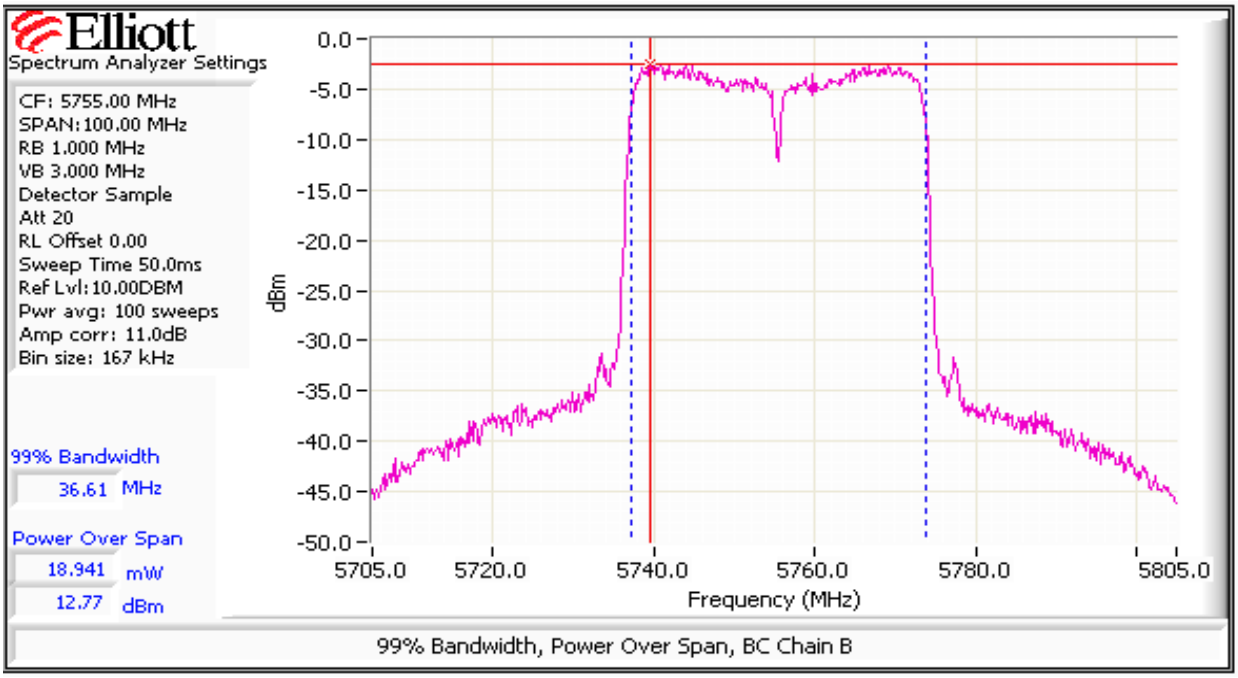
Operating Mode: 802.11n 40MHz

Transmitted signal on chain is coherent ? No

5755 MHz	Chain A	Chain B	Chain C	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3		26.5	26.5					
Output Power (dBm) Note 1		12.77	12.16		15.5 dBm	0.035 W	30.0 dBm	1.000 W
Antenna Gain (dBi) Note 2		5	5			5.0 dBi	Pass	
eirp (dBm) Note 2		17.77	17.16		20.5 dBm	0.112 W		

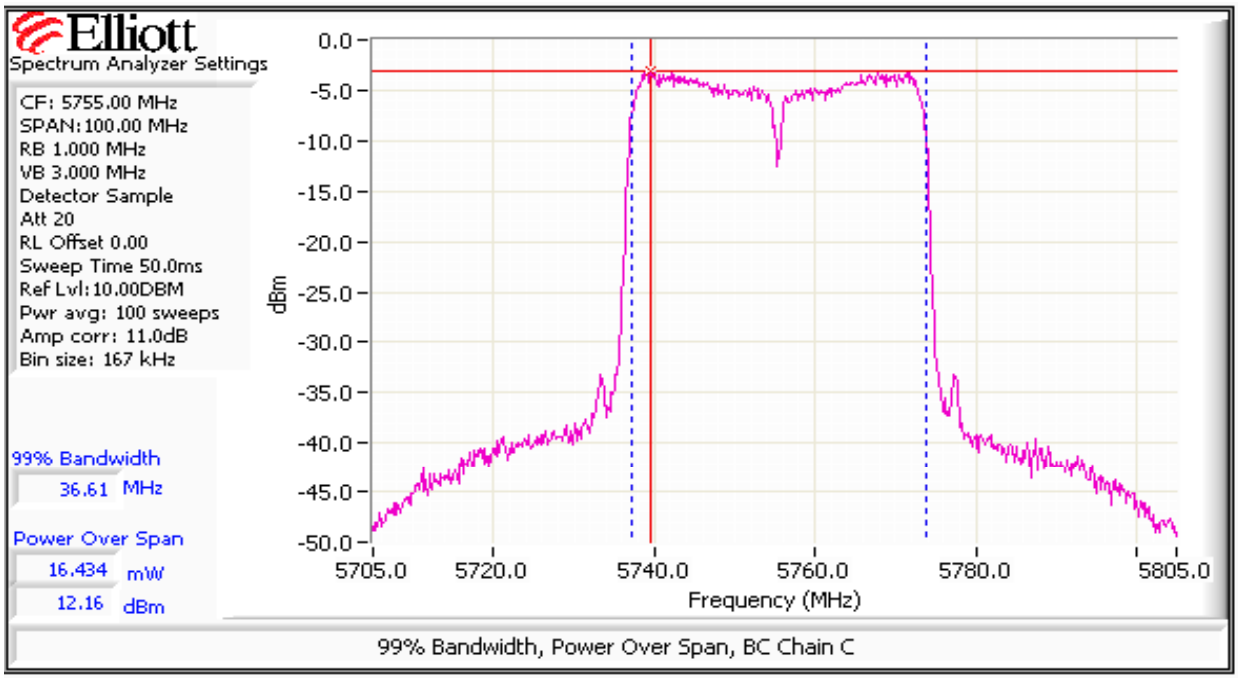
5795 MHz	Chain A	Chain B	Chain C	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3		26.5	27.0					
Output Power (dBm) Note 1		12.49	12.12		15.3 dBm	0.034 W	30.0 dBm	1.000 W
Antenna Gain (dBi) Note 2		5	5			5.0 dBi	Pass	
eirp (dBm) Note 2		17.49	17.12		20.3 dBm	0.108 W		

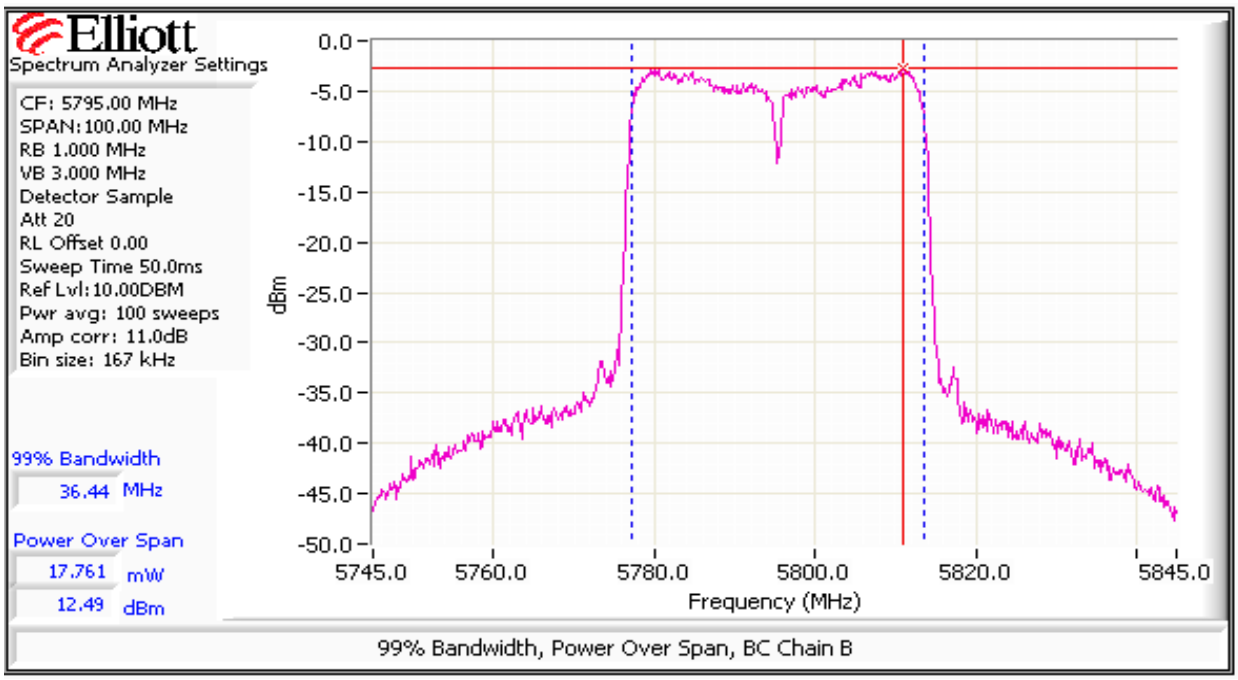
Note 1:	Output power measured using a spectrum analyzer (see plots below) with RBW=1MHz, VB=3 MHz, sample detector, power averaging on (transmitted signal was continuous) and power integration over100 MHz (reference method 1 of FCC DA 02-2138 for U-NII devices, August 30, 2002). Spurious limit becomes -30dBc.
Note 2:	As there is no coherency between chains the total EIRP is the sum of the individual EIRPs and effective antenna gain equals the eirp divide by the sum of the power on each chain.



Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

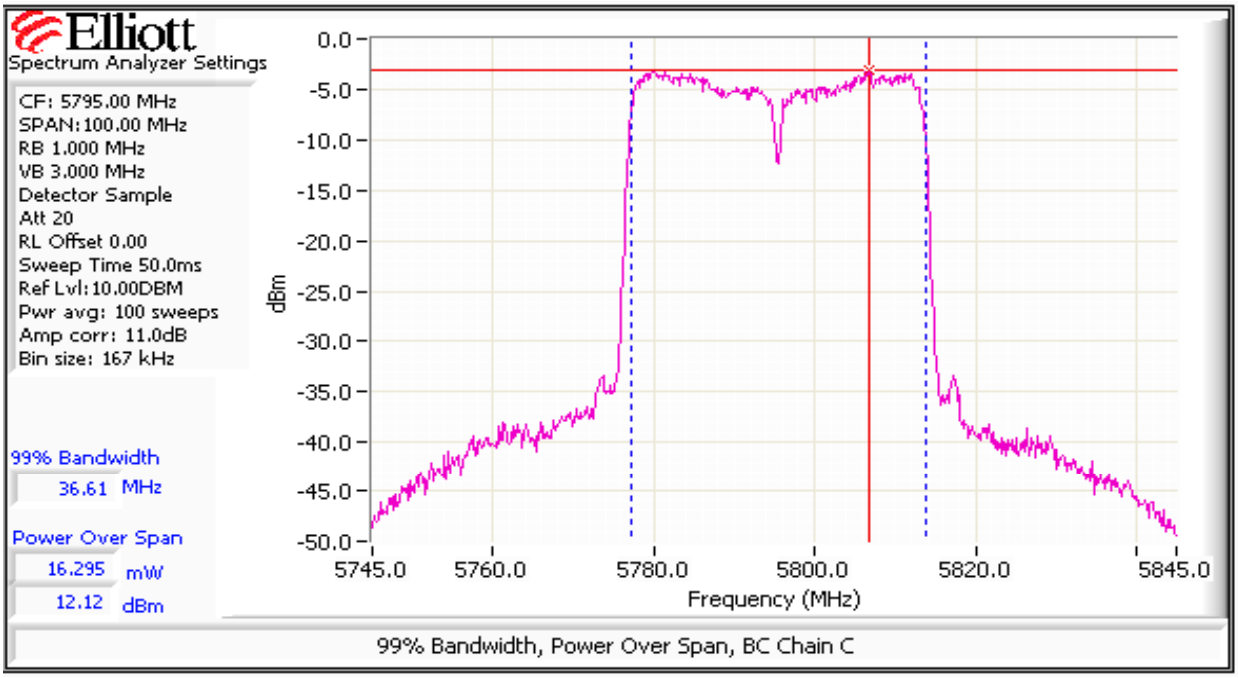
Run #5: Output Power - Dual Chain (B + C)





Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #5: Output Power - Dual Chain (B + C)

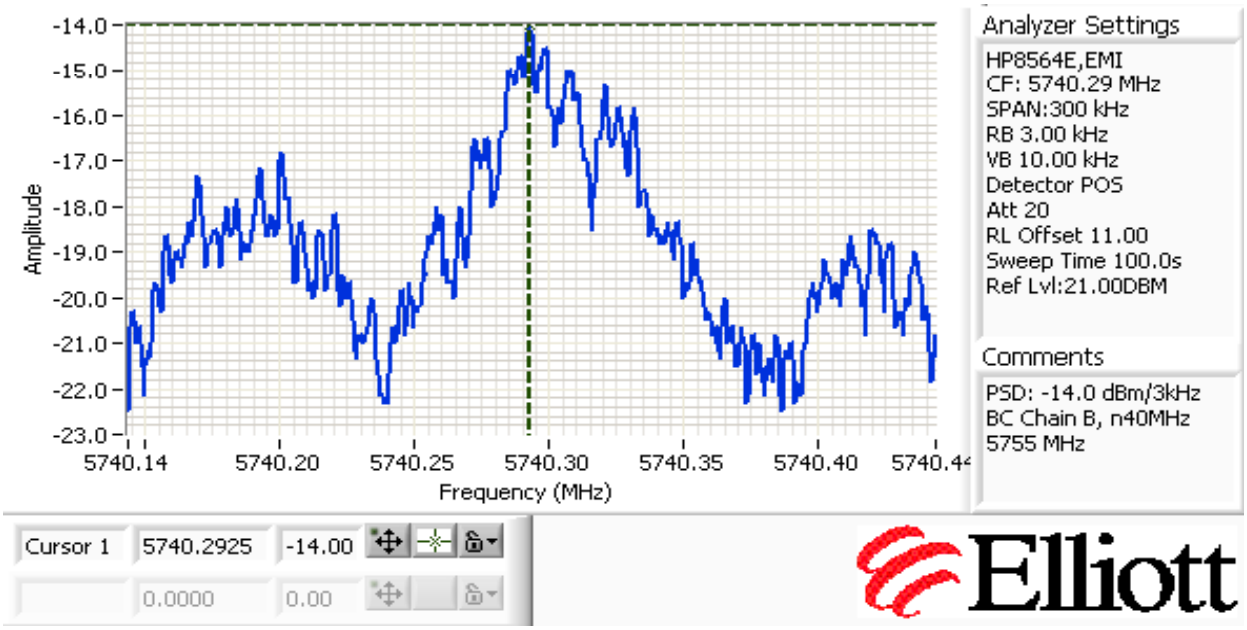


Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #6: Power spectral Density - Chain B + C

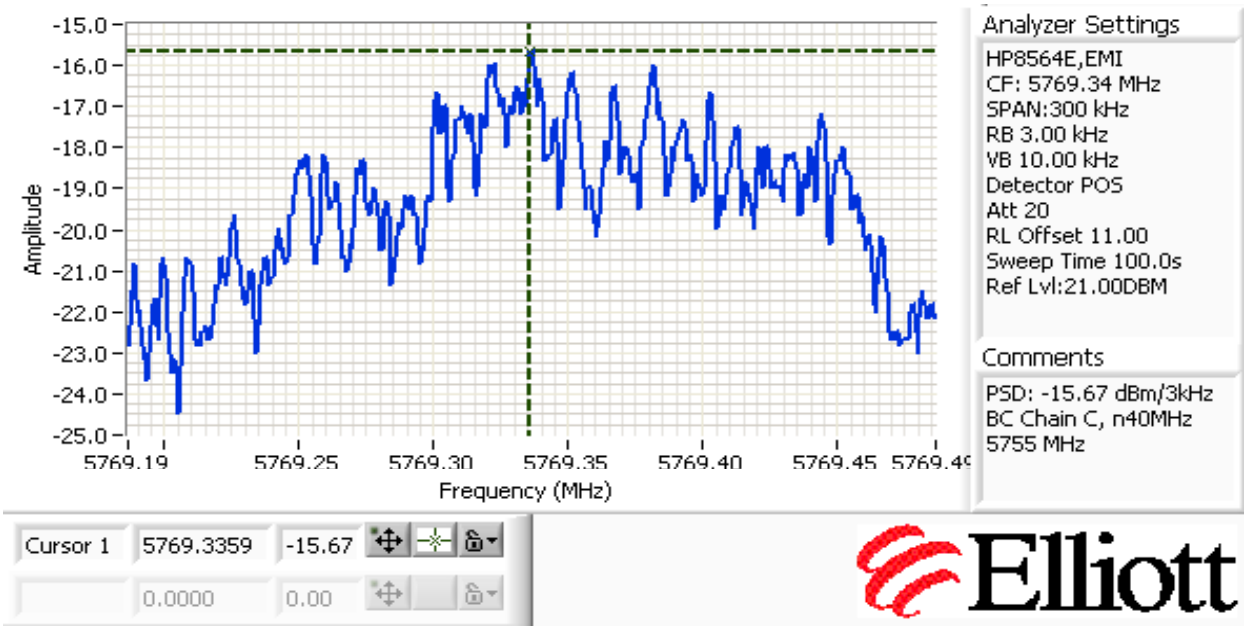
Power Setting	Frequency (MHz)	PSD (dBm/3kHz) Note 1					Limit dBm/3kHz	Result
		Chain A	Chain B	Chain C	Chain 4	Total		
26.5, 26.5	5755		-14.0	-15.7		-11.7	8.0	Pass
26.5, 27	5795		-15.0	-14.0		-11.5	8.0	Pass

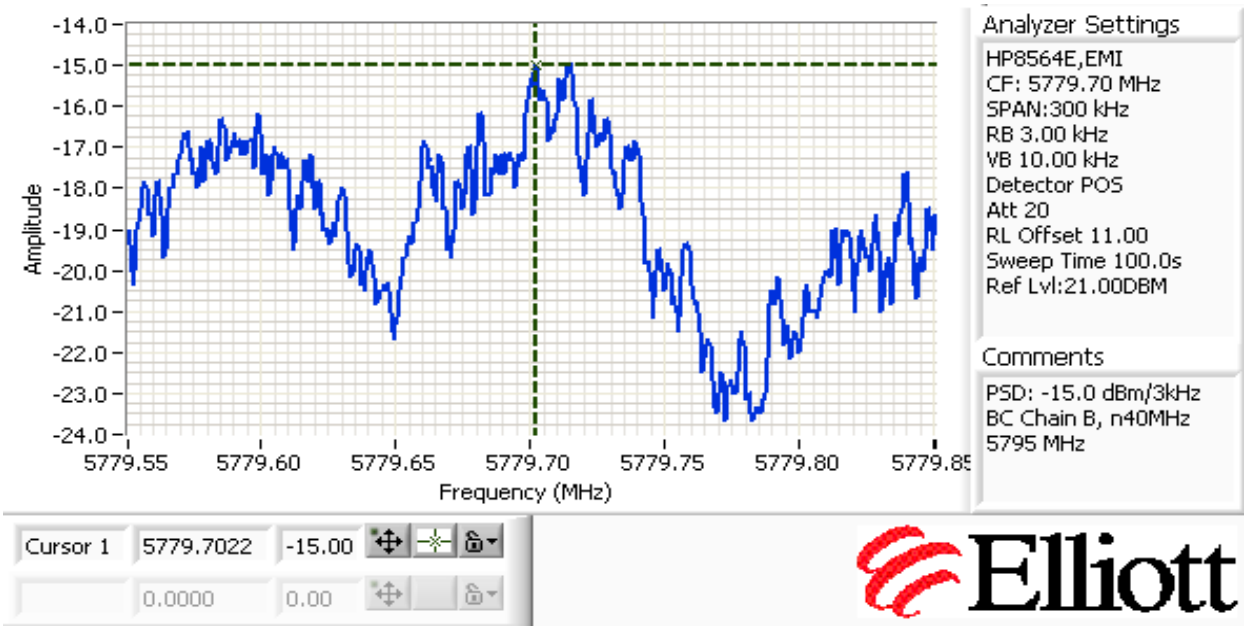
Note 1:	Power spectral density measured using RB=3 kHz, VB=10kHz, analyzer with peak detector and with a sweep time set to ensure a dwell time of at least 1 second per 3kHz. The measurement is made at the frequency of PPSD determined from preliminary scans using RB=3kHz using multiple sweeps at a faster rate over the 6dB bandwidth of the signal.
Note 2:	Power setting - if a single number the same power setting was used for each chain. If multiple numbers the power setting for each chain is separated by a comma (e.g. x,y would indicate power setting x for Chain A, power setting y for Chain B.



Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

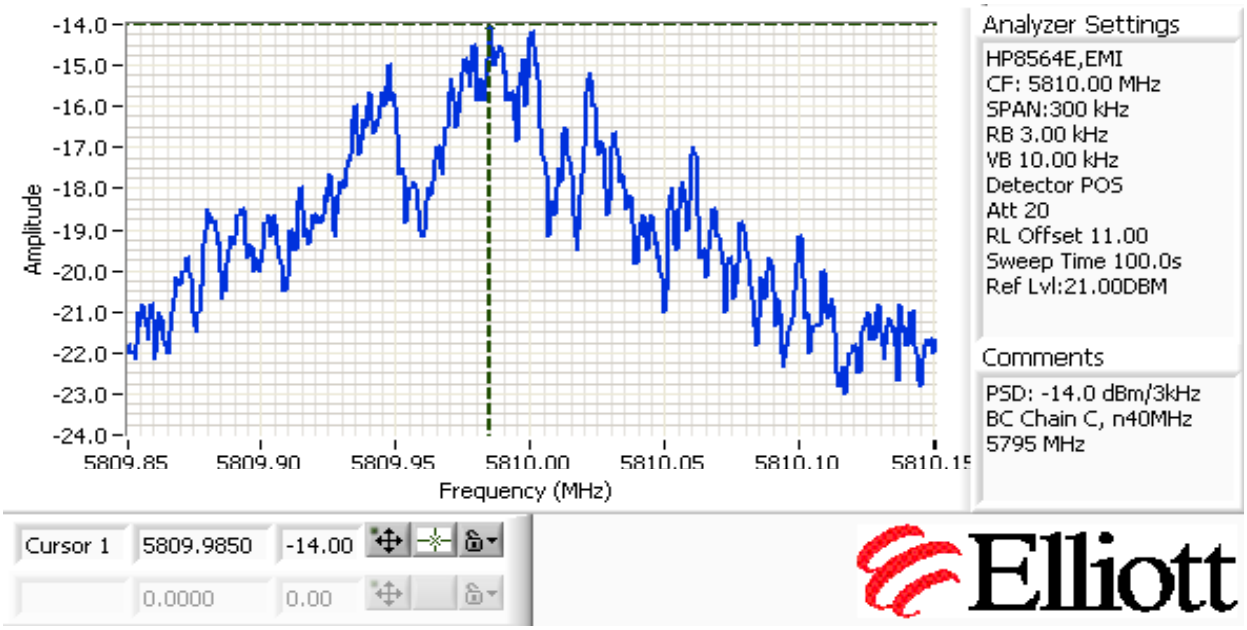
Run #6: Power spectral Density - Chain B + C





Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #6: Power spectral Density - Chain B + C



Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #7: Output Power - Three Chains (A + B + C)

Operating Mode: 802.11n 40MHz

Transmitted signal on chain is coherent ? No

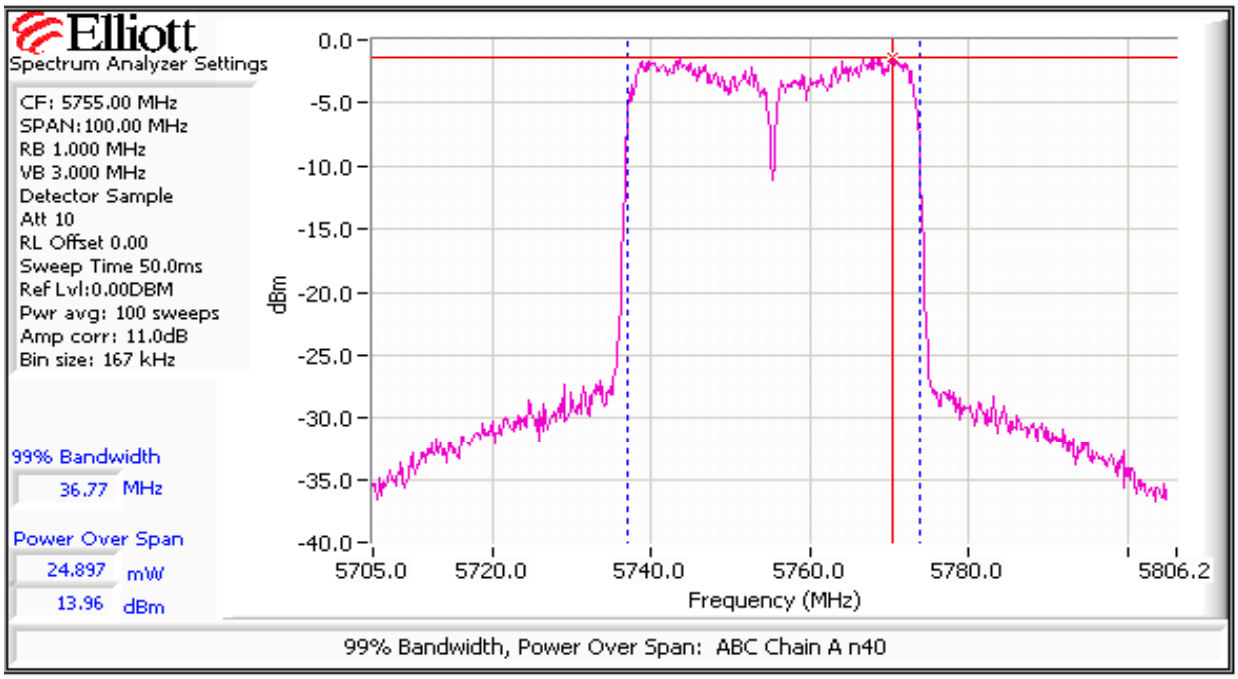
5755 MHz	Chain A	Chain B	Chain C	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	31.0	30.5	31.0					
Output Power (dBm) Note 1	13.96	13.61	13.03		18.3 dBm	0.068 W	30.0 dBm	1.000 W
Antenna Gain (dBi) Note 2	5	5	5			5.0 dBi	Pass	
eirp (dBm) Note 2	18.96	18.61	18.03		23.3 dBm	0.215 W		

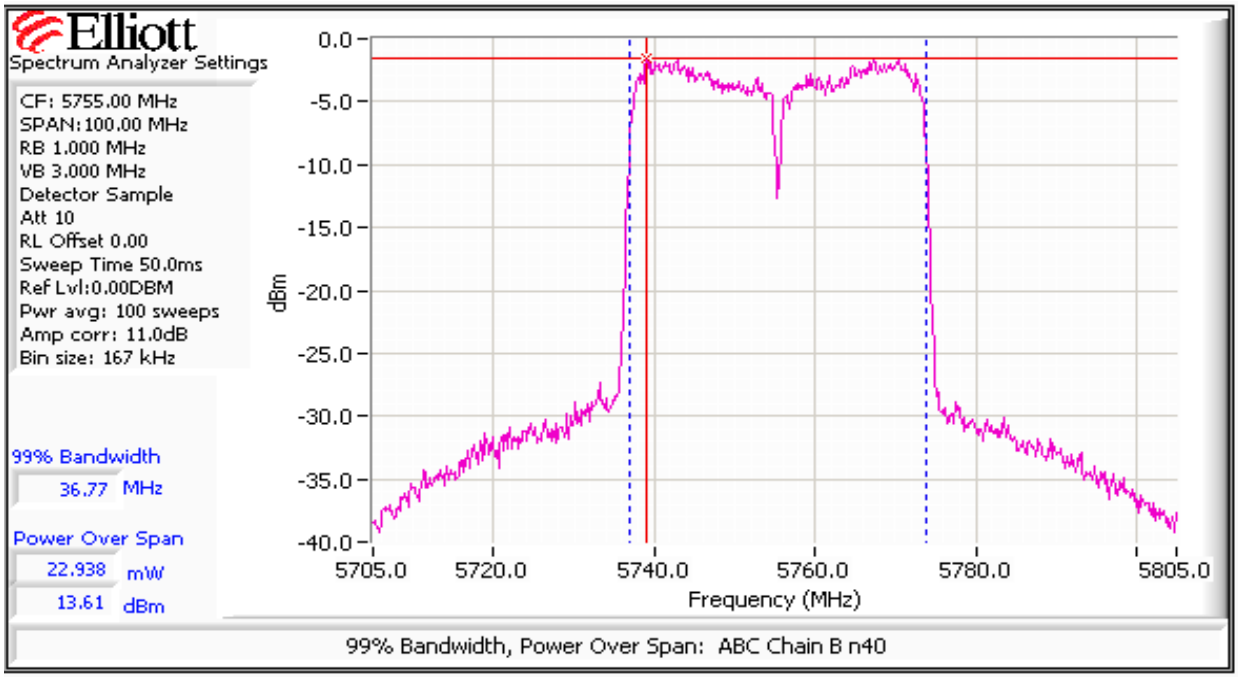
5795 MHz	Chain A	Chain B	Chain C	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	31.5	30.5	31.0					
Output Power (dBm) Note 1	13.02	12.91	12.71		17.7 dBm	0.058 W	30.0 dBm	1.000 W
Antenna Gain (dBi) Note 2	5	5	5			5.0 dBi	Pass	
eirp (dBm) Note 2	18.02	17.91	17.71		22.7 dBm	0.184 W		

Note 1:	Output power measured using a spectrum analyzer (see plots below) with RBW=1MHz, VB=3 MHz, sample detector, power averaging on (transmitted signal was continuous) and power integration over 100 MHz (reference method 1 of FCC DA 02-2138 for U-NII devices, August 30, 2002). Spurious limit becomes -30dBc.
Note 2:	As there is no coherency between chains the total EIRP is the sum of the individual EIRPs and effective antenna gain equals the eirp divide by the sum of the power on each chain.

Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

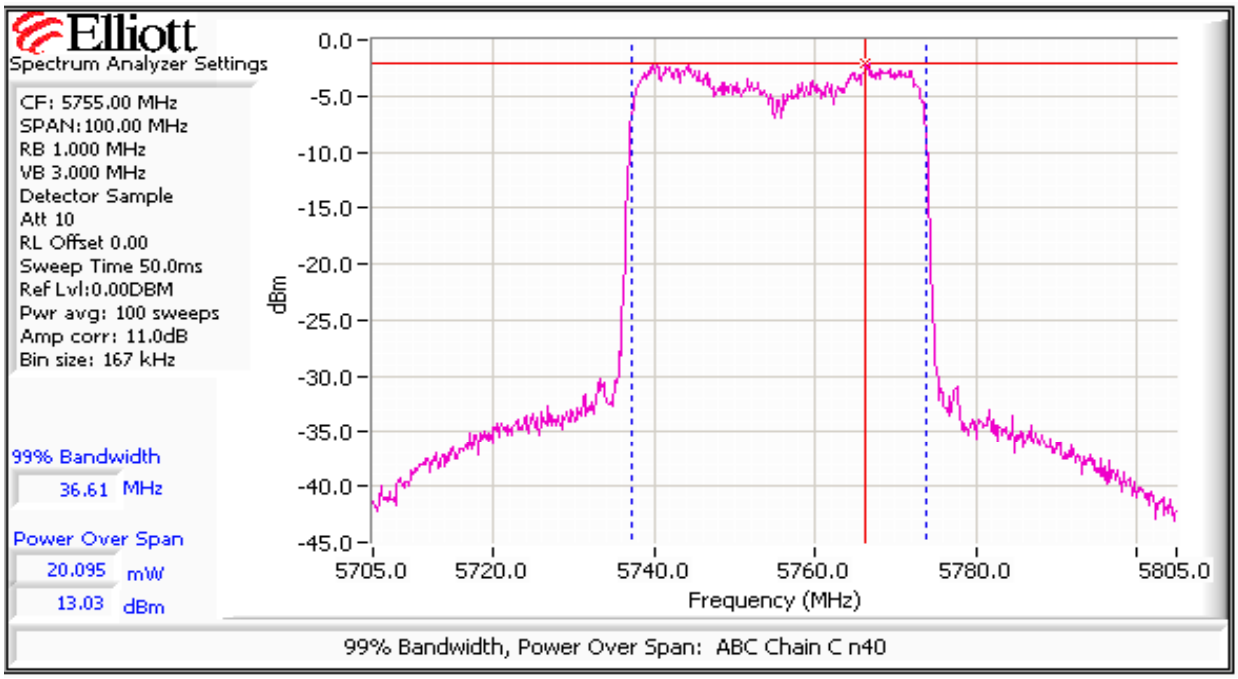
Run #7: Output Power - Three Chains (A + B + C)

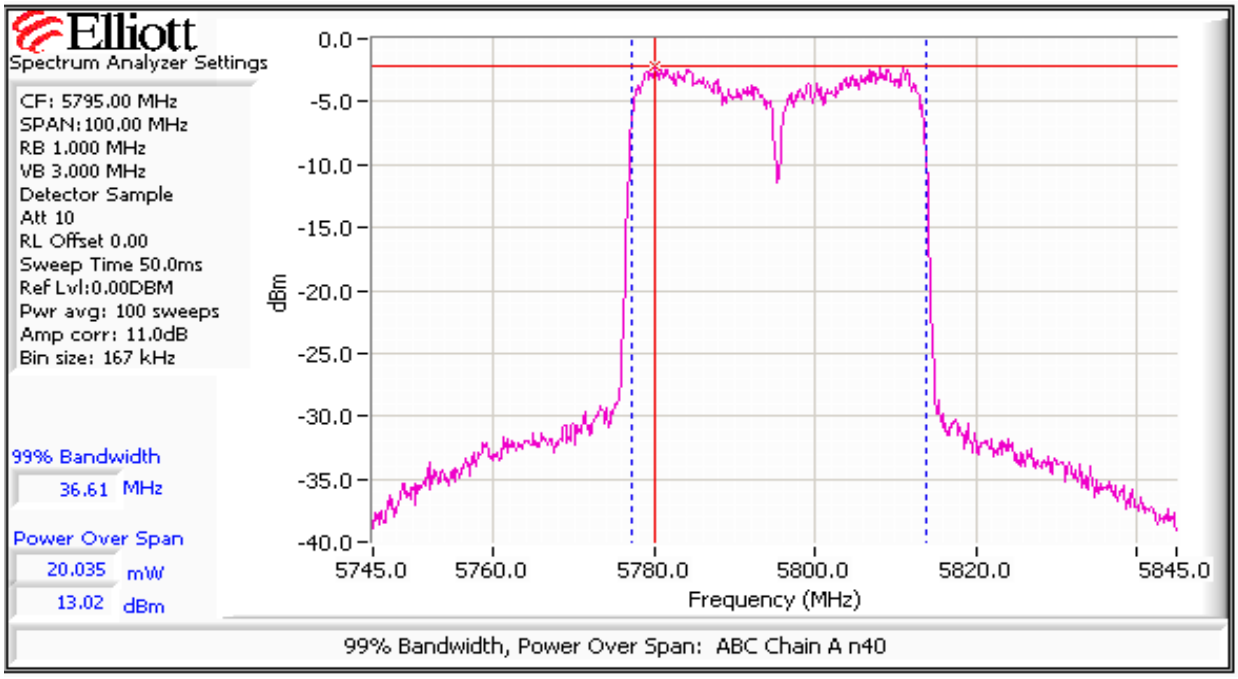




Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

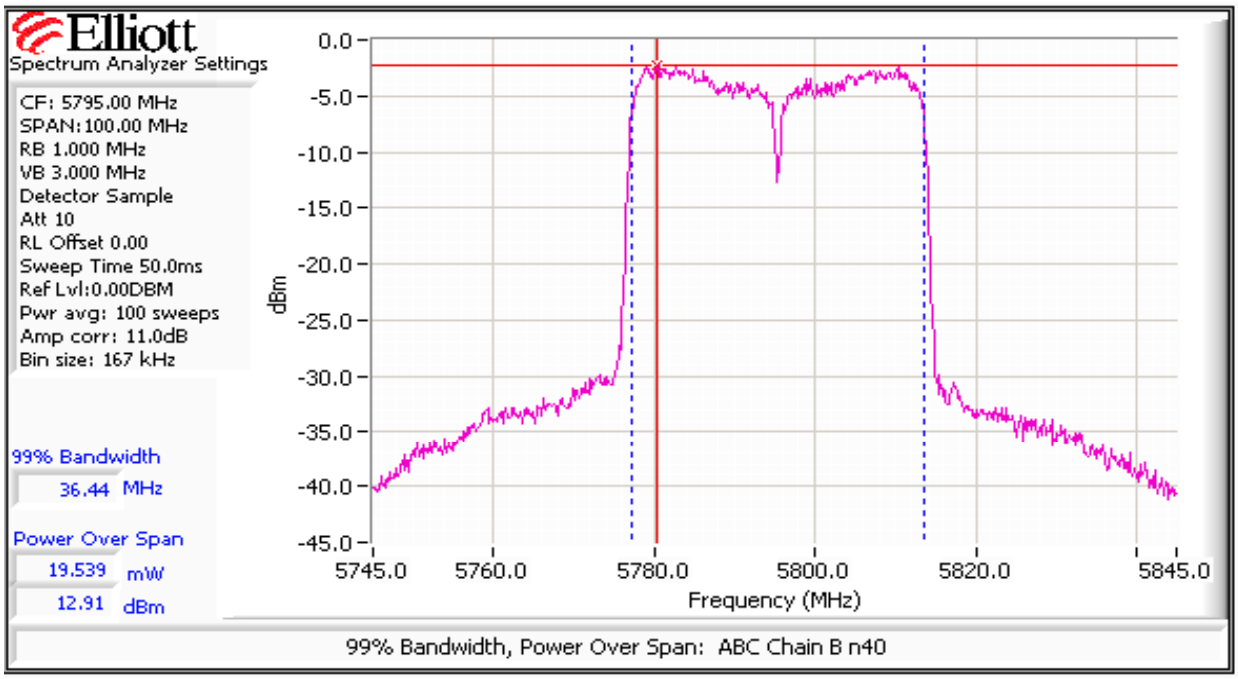
Run #7: Output Power - Three Chains (A + B + C)

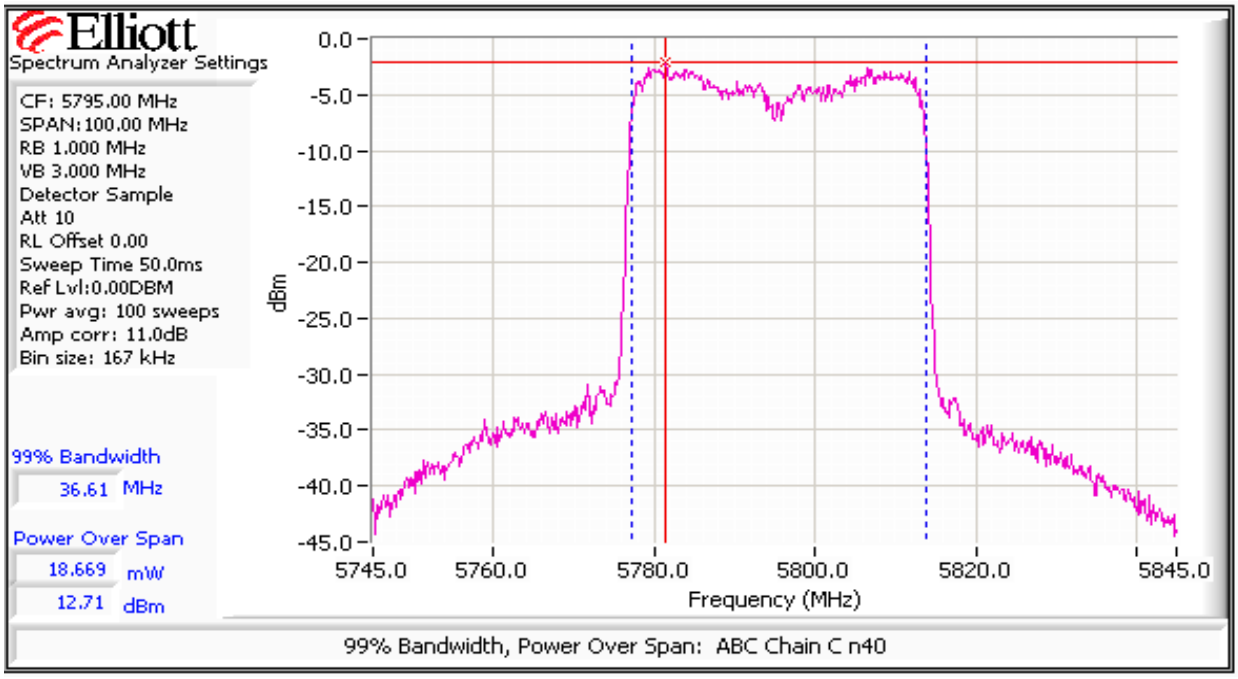




Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #7: Output Power - Three Chains (A + B + C)





Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

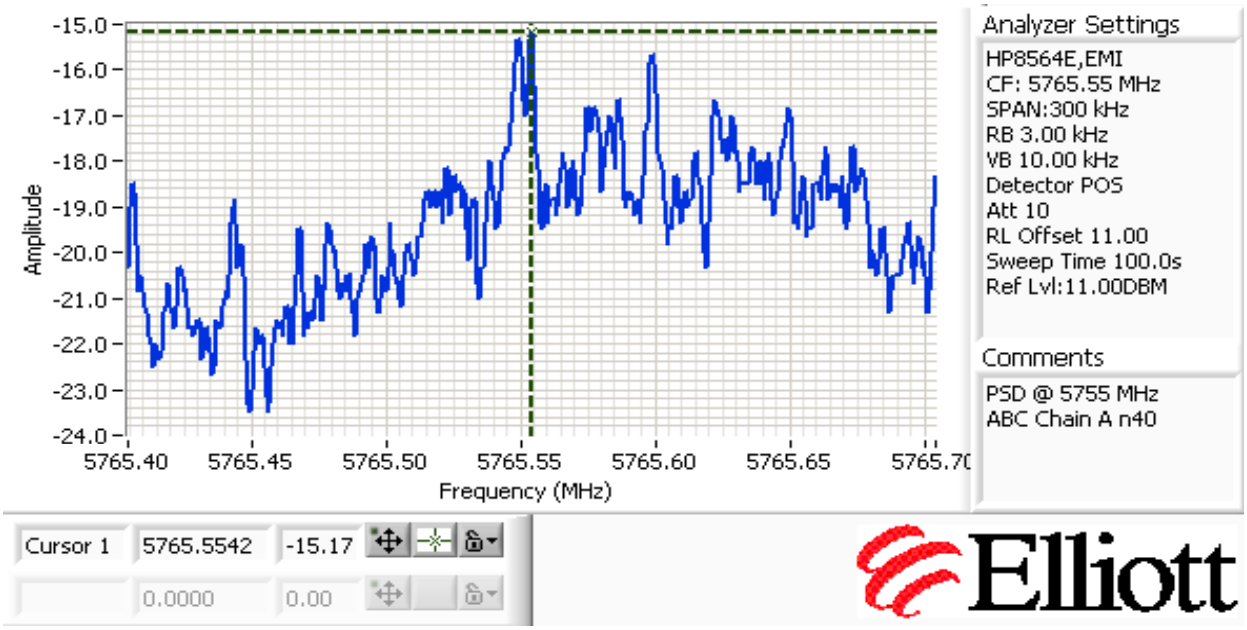
Run #8: Power spectral Density - Chain A + B + C

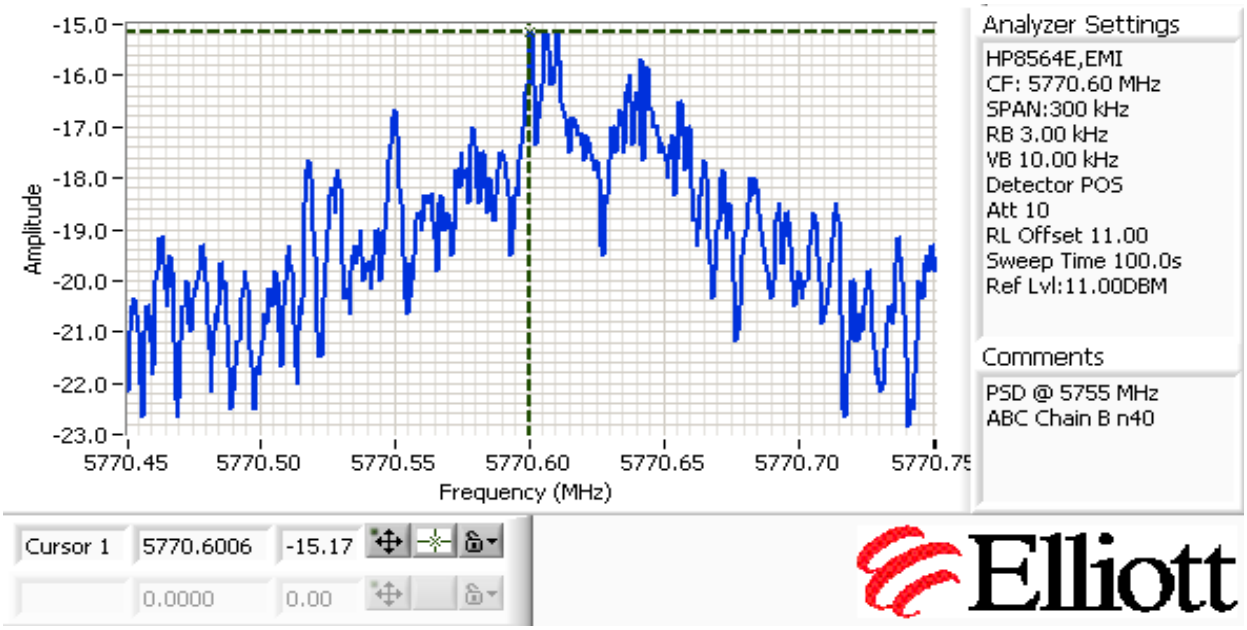
Power Setting	Frequency (MHz)	PSD (dBm/3kHz) Note 1					Limit dBm/3kHz	Result
		Chain A	Chain B	Chain C	Chain 4	Total		
31/30.5/31	5755	-15.2	-15.2	-15.3		-10.5	8.0	Pass
31.5/30.5/31	5795	-14.8	-15.3	-13.5		-9.7	8.0	Pass

Note 1:	Power spectral density measured using RB=3 kHz, VB=10kHz, analyzer with peak detector and with a sweep time set to ensure a dwell time of at least 1 second per 3kHz. The measurement is made at the frequency of PPSD determined from preliminary scans using RB=3kHz using multiple sweeps at a faster rate over the 6dB bandwidth of the signal.
Note 2:	Power setting - if a single number the same power setting was used for each chain. If multiple numbers the power setting for each chain is separated by a comma (e.g. x,y would indicate power setting x for Chain A, power setting y for Chain B.

Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

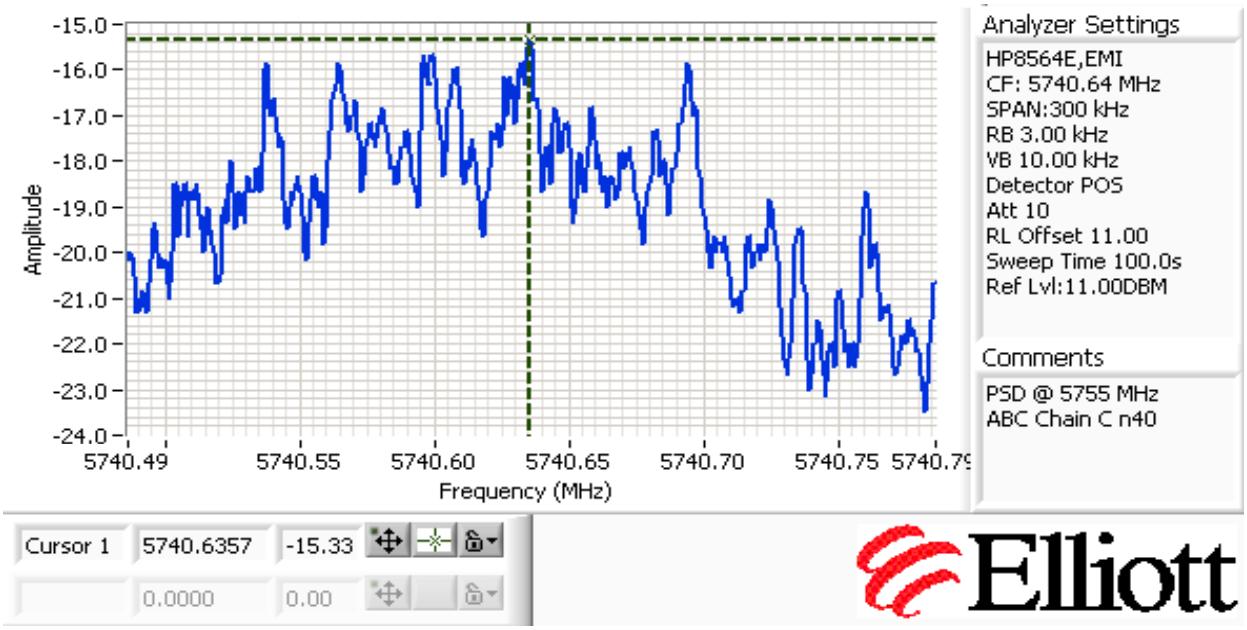
Run #8: Power spectral Density - Chain A + B + C

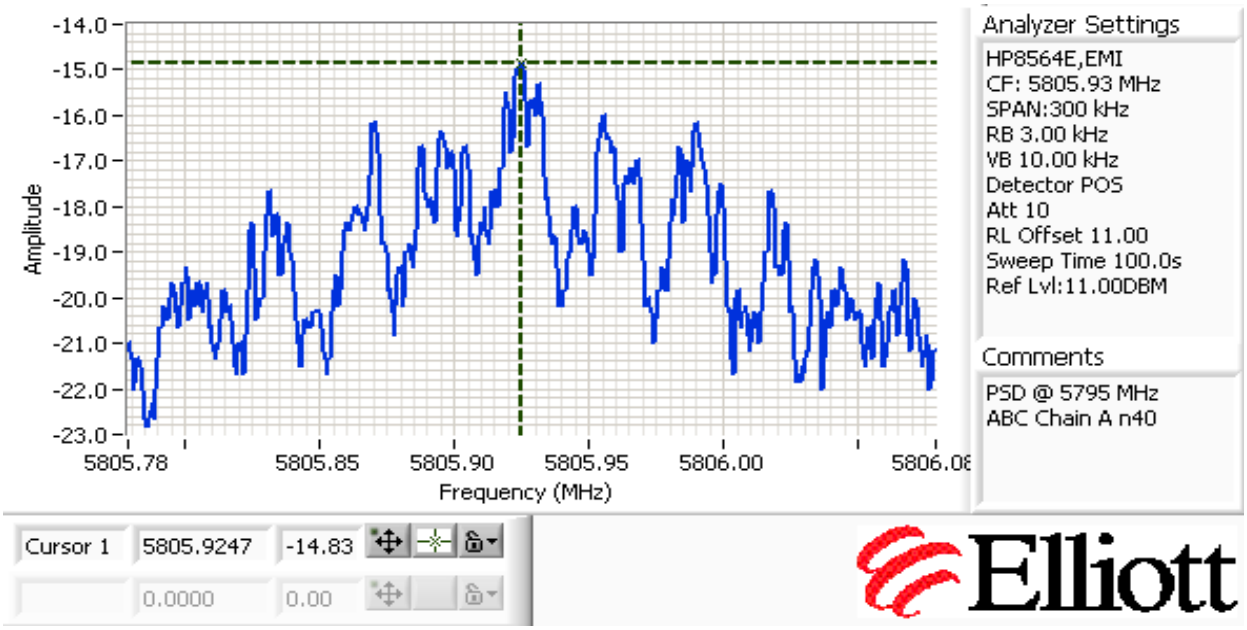




Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #8: Power spectral Density - Chain A + B + C





Client:	Intel	Job Number:	J70796
Model:	533-agn MMW	T-Log Number:	T71053
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC 15.247 / RSS -210	Class:	N/A

Run #8: Power spectral Density - Chain A + B + C