

Customer: **Digital Path**

Specification: 15.247(d) Conducted Spurious Emissions

Work Order #: 94341 Date: 6/20/2013
Test Type: Conducted Emissions Time: 9:05:50 AM

Equipment: **GEN6 CPE** Sequence#: 14

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x 120V 60Hz

S/N: 004

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP05411	Attenuator	54A-10	1/26/2012	1/26/2014
T2	ANP06125	Cable	32022-29094K-	5/6/2013	5/6/2015
			29094K-72TC		
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

	,			
Function	Manufacturer	Model #	S/N	
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None	
GEN6 CPE*	Digital Path	2x	004	

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for laptop	HP	Series PPP012H-S	F12941126327228
Laptop	HP	Probook 6565b	None

Test Conditions / Notes:

Conducted Spurious Emission

Frequency Range: 1000MHz to 10000MHz

Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

RBW=100kHz VBW=300kHz

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

The EUT is on the table and connected to the Spectrum Analyzer.

Note: Low Channel at Span 5MHz

Data rate =19.5Mbps

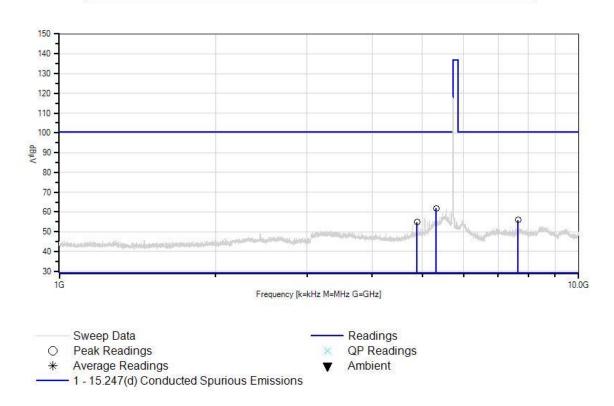
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Ext Attn: 0 dB

Meas	urement Data:	Re	eading lis	ted by ma	argin.			Test Lead	l: None		
#	Freq	Rdng	T1	T2			Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dΒμV	dΒμV	dB	Ant
1	1 5319.569M	51.0	+9.4	+1.5			+0.0	61.9	100.5	-38.6	None
2	2 7639.517M	44.5	+9.4	+2.1			+0.0	56.0	100.5	-44.5	None
3	3 4879.761M	43.9	+9.3	+1.6			+0.0	54.8	100.5	-45.7	None

CKC Laboratories, Inc. Date: 6/20/2013 Time: 9:05:50 AM Digital Path WO#: 94341 Test Lead: None 120V 60Hz Sequence#: 14





Customer: **Digital Path**

Specification: 15.247(d) Conducted Spurious Emissions

Work Order #: 94341 Date: 6/20/2013
Test Type: Conducted Emissions Time: 9:19:51 AM

Equipment: **GEN6 CPE** Sequence#: 16

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

2x 120V 60Hz

S/N: 004

Test Equipment:

Model:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP05411	Attenuator	54A-10	1/26/2012	1/26/2014
T2	ANP06125	Cable	32022-29094K-	5/6/2013	5/6/2015
			29094K-72TC		
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

1 1	,			
Function	Manufacturer	Model #	S/N	
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None	
GEN6 CPE*	Digital Path	2x	004	·

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

Test Conditions / Notes:

Conducted Spurious Emission

Frequency Range: 1000MHz to 10000MHz

Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

RBW=100kHz VBW=300kHz

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

The EUT is on the table and connected to the Spectrum Analyzer.

Note: Middle Channel at Span 5MHz

Data rate =19.5Mbps

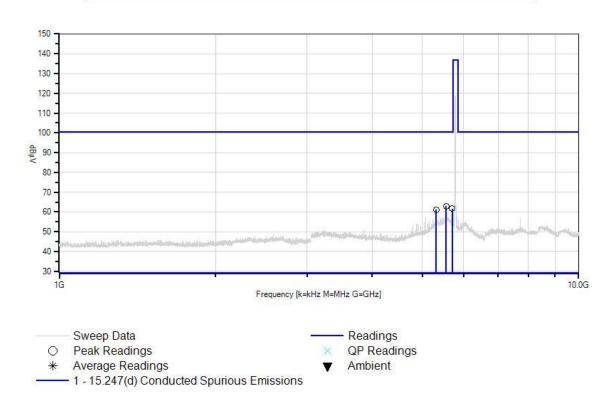
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Ext Attn: 0 dB

Meas	surement Data:	Re	eading lis	ted by ma	argin.			Test Lead	l: None		
#	Freq	Rdng	T1	T2			Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dΒμV	dΒμV	dB	Ant
	1 5560.448M	52.0	+9.4	+1.6			+0.0	63.0	100.5	-37.5	None
	2 5706.599M	50.6	+9.4	+1.6			+0.0	61.6	100.5	-38.9	None
3	3 5319.569M	50.3	+9.4	+1.5			+0.0	61.2	100.5	-39.3	None

CKC Laboratories, Inc. Date: 6/20/2013 Time: 9:19:51 AM Digital Path WO#: 94341 Test Lead: None 120V 60Hz Sequence#: 16





Customer: **Digital Path**

Specification: 15.247(d) Conducted Spurious Emissions

Work Order #: 94341 Date: 6/20/2013
Test Type: Conducted Emissions Time: 9:35:08 AM

Equipment: **GEN6 CPE** Sequence#: 18

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x 120V 60Hz

S/N: 004

Test Equipment:

	ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	T1	ANP05411	Attenuator	54A-10	1/26/2012	1/26/2014
	T2	ANP06125	Cable	32022-29094K-	5/6/2013	5/6/2015
				29094K-72TC		
Ī		AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None
GEN6 CPE*	Digital Path	2x	004

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

Test Conditions / Notes:

Conducted Spurious Emission

Frequency Range: 1000MHz to 10000MHz

Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

RBW=100kHz VBW=300kHz

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

The EUT is on the table and connected to the Spectrum Analyzer.

Note: High Channel at Span 5MHz

Data rate =19.5Mbps

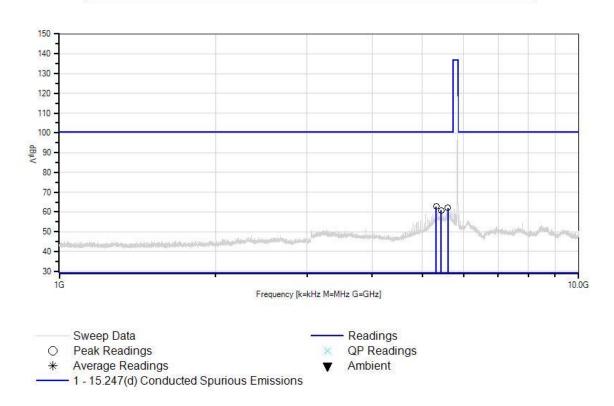
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Ext Attn: 0 dB

Meas	urement Data:	Re	eading lis	ted by ma	argin.			Test Lead	d: None		
#	Freq	Rdng	T1	T2			Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dΒμV	dΒμV	dB	Ant
1	1 5319.569M	51.8	+9.4	+1.5			+0.0	62.7	100.4	-37.7	None
2	2 5599.692M	51.1	+9.4	+1.6			+0.0	62.1	100.4	-38.3	None
3	3 5440.008M	49.7	+9.4	+1.6			+0.0	60.7	100.4	-39.7	None

CKC Laboratories, Inc. Date: 6/20/2013 Time: 9:35:08 AM Digital Path WO#: 94341 Test Lead: None 120V 60Hz Sequence#: 18





Customer: **Digital Path**

Specification: 15.247(d) Conducted Spurious Emissions

Work Order #: 94341 Date: 6/20/2013
Test Type: Conducted Emissions Time: 9:11:28 AM

Equipment: **GEN6 CPE** Sequence#: 15

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

120V 60Hz

Model: 2x S/N: 004

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP05411	Attenuator	54A-10	1/26/2012	1/26/2014
T2	ANP06125	Cable	32022-29094K-	5/6/2013	5/6/2015
			29094K-72TC		
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N	
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None	
GEN6 CPE*	Digital Path	2x	004	

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

Test Conditions / Notes:

Conducted Spurious Emission

Frequency Range: 1000MHz to 40000MHz

Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

RBW=100kHz VBW=300kHz

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

The EUT is on the table and connected to the Spectrum Analyzer.

Note: Low Channel at Span 5MHz

Data rate =19.5Mbps

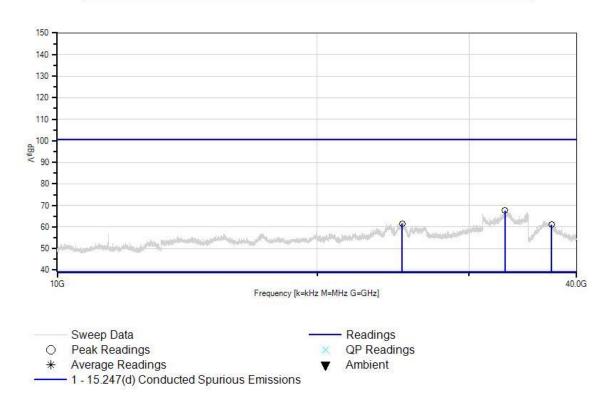
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Ext Attn: 0 dB

Measi	ırement Data:	Re	eading lis	ted by ma	argin.			Test Lead	d: None		
#	Freq	Rdng	T1	T2			Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dΒμV	dΒμV	dB	Ant
1	33027.961 M	52.1	+10.8	+4.7			+0.0	67.6	100.5	-32.9	None
2	25102.254 M	47.0	+10.4	+4.2			+0.0	61.6	100.5	-38.9	None
3	37406.500 M	56.2	+0.0	+4.9			+0.0	61.1	100.5	-39.4	None

CKC Laboratories, Inc. Date: 6/20/2013 Time: 9:11:28 AM Digital Path WO#: 94341 Test Lead: None 120V 60Hz Sequence#: 15





Customer: **Digital Path**

Specification: 15.247(d) Conducted Spurious Emissions

Work Order #: 94341 Date: 6/20/2013
Test Type: Conducted Emissions Time: 9:28:29 AM

Equipment: **GEN6 CPE** Sequence#: 17

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x 120V 60Hz

S/N: 004

Test Equipment:

	ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	T1	ANP05411	Attenuator	54A-10	1/26/2012	1/26/2014
	T2	ANP06125	Cable	32022-29094K-	5/6/2013	5/6/2015
				29094K-72TC		
Ī		AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N	
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None	
GEN6 CPE*	Digital Path	2x	004	

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

Test Conditions / Notes:

Conducted Spurious Emission

Frequency Range: 10000MHz to 40000MHz

Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

RBW=100kHz VBW=300kHz

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

The EUT is on the table and connected to the Spectrum Analyzer.

Note: Middle Channel at Span 5MHz

Data rate =19.5Mbps

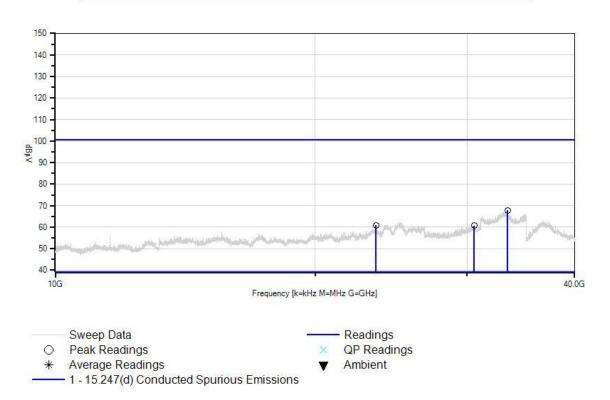
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Ext Attn: 0 dB

Measi	urement Data:	Re	eading lis	ted by ma	argin.			Test Lead	d: None		
#	Freq	Rdng	T1	T2			Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dΒμV	dΒμV	dB	Ant
1	33433.654 M	52.5	+10.8	+4.6			+0.0	67.9	100.5	-32.6	None
2	23544.471 M	46.2	+10.3	+4.4			+0.0	60.9	100.5	-39.6	None
3	30589.300 M	45.1	+10.8	+4.9			+0.0	60.8	100.5	-39.7	None

CKC Laboratories, Inc Date: 6/20/2013 Time: 9:28:29 AM Digital Path WO#: 94341 Test Lead: None 120V 60Hz Sequence#: 17





Customer: **Digital Path**

Specification: 15.247(d) Conducted Spurious Emissions

Work Order #: 94341 Date: 6/20/2013
Test Type: Conducted Emissions Time: 9:40:01 AM

Equipment: **GEN6 CPE** Sequence#: 19

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

120V 60Hz

S/N: 004

Test Equipment:

Model:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP05411	Attenuator	54A-10	1/26/2012	1/26/2014
T2	ANP06125	Cable	32022-29094K-	5/6/2013	5/6/2015
			29094K-72TC		
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

2x

Function	Manufacturer	Model #	S/N	
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None	
GEN6 CPE*	Digital Path	2x	004	

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

Test Conditions / Notes:

Conducted Spurious Emission

Frequency Range: 10000MHz to 40000MHz

Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

RBW=100kHz VBW=300kHz

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

The EUT is on the table and connected to the Spectrum Analyzer.

Note: High Channel at Span 5MHz

Data rate =19.5Mbps

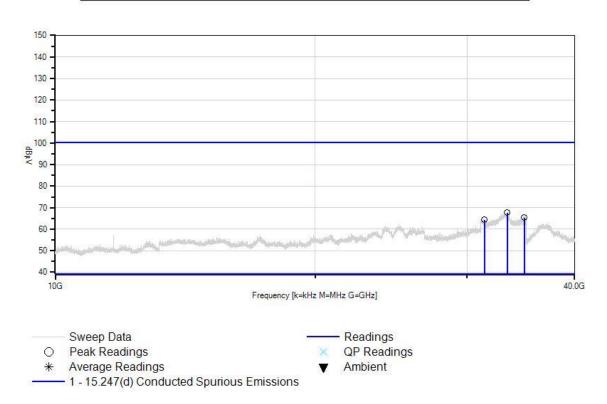
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Ext Attn: 0 dB

Measu	irement Data:	Re	eading lis	ted by ma	argin.			Test Lead	d: None		
#	Freq	Rdng	T1	T2			Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dΒμV	dΒμV	dB	Ant
1	33424.638 M	52.3	+10.8	+4.6			+0.0	67.7	100.4	-32.7	None
2	34975.935 M	49.4	+10.8	+5.1			+0.0	65.3	100.4	-35.1	None
3	31441.254 M	49.0	+10.6	+4.7			+0.0	64.3	100.4	-36.1	None

CKC Laboratories, Inc Date: 6/20/2013 Time: 9:40:01 AM Digital Path WO#: 94341 Test Lead: None 120V 60Hz Sequence#: 19





Customer: **Digital Path**

Specification: 15.247(d) Conducted Spurious Emissions

Work Order #: 94341 Date: 6/20/2013
Test Type: Conducted Emissions Time: 11:09:03 AM

Equipment: **GEN6 CPE** Sequence#: 26

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x 120V 60Hz

S/N: 004

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015
	ANP01211	Attenuator	PE7002-10	4/2/2013	4/2/2015
	ANP01183	Cable	CNT-195	10/24/2011	10/24/2013

Equipment Under Test (* = EUT):

() ·			
Function	Manufacturer	Model #	S/N	
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None	
GEN6 CPE*	Digital Path	2x	004	

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

Test Conditions / Notes:

Conducted Spurious Emission

Frequency Range: 9kHz to 1000MHz

Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

RBW=100kHz VBW=300kHz

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

The EUT is on the table and connected to the Spectrum Analyzer.

Note: Low Channel at Span 10MHz

Data rate =13Mbps

NO EMISSIONS FOUND.

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Customer: **Digital Path**

Specification: 15.247(d) Conducted Spurious Emissions

Work Order #: 94341 Date: 6/20/2013
Test Type: Conducted Emissions Time: 11:14:09 AM

Equipment: **GEN6 CPE** Sequence#: 27

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x 120V 60Hz

S/N: 004

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015
	ANP01211	Attenuator	PE7002-10	4/2/2013	4/2/2015
	ANP01183	Cable	CNT-195	10/24/2011	10/24/2013

Equipment Under Test (* = EUT):

(
Function	Manufacturer	Model #	S/N
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None
GEN6 CPE*	Digital Path	2x	004

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

Test Conditions / Notes:

Conducted Spurious Emission

Frequency Range: 9kHz to 1000MHz

Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

RBW=100kHz VBW=300kHz

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

The EUT is on the table and connected to the Spectrum Analyzer.

Note: Middle Channel at Span 10MHz

Data rate =13Mbps

NO EMISSIONS FOUND.

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Customer: **Digital Path**

Specification: 15.247(d) Conducted Spurious Emissions

Work Order #: 94341 Date: 6/20/2013 Test Type: **Conducted Emissions** Time: 11:20:45 AM

Equipment: **GEN6 CPE** Sequence#: 28

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

120V 60Hz

2xS/N: 004

Test Equipment:

Model:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015
	ANP01211	Attenuator	PE7002-10	4/2/2013	4/2/2015
	ANP01183	Cable	CNT-195	10/24/2011	10/24/2013

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N	
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None	
GEN6 CPE*	Digital Path	2x	004	

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

Test Conditions / Notes:

Conducted Spurious Emission

Frequency Range: 9kHz to 1000MHz

Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

RBW=100kHz VBW=300kHz

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

The EUT is on the table and connected to the Spectrum Analyzer.

Note: High Channel at Span 10MHz

Data rate =13Mbps

NO EMISSIONS FOUND.

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Customer: **Digital Path**

Specification: 15.247(d) Conducted Spurious Emissions

Work Order #: 94341 Date: 6/20/2013
Test Type: Conducted Emissions Time: 10:24:34 AM

Equipment: **GEN6 CPE** Sequence#: 24

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x 120V 60Hz

S/N: 004

Test Equipment:

	ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	T1	ANP05411	Attenuator	54A-10	1/26/2012	1/26/2014
	T2	ANP06125	Cable	32022-29094K-	5/6/2013	5/6/2015
				29094K-72TC		
Ī		AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None
GEN6 CPE*	Digital Path	2x	004

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

Test Conditions / Notes:

Conducted Spurious Emission

Frequency Range: 1000MHz to 10000MHz

Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

RBW=100kHz VBW=300kHz

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

The EUT is on the table and connected to the Spectrum Analyzer.

Note: Low Channel at Span 10MHz

Data rate =13Mbps

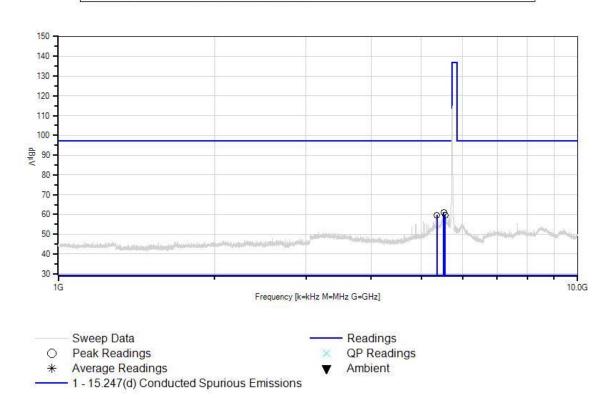
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Ext Attn: 0 dB

Med	asurement Data:	Reading listed by margin.			Test Lead: None						
#	Freq	Rdng	T1	T2			Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dΒμV	dΒμV	dB	Ant
	1 5519.850M	50.1	+9.4	+1.6			+0.0	61.1	97.4	-36.3	None
	2 5560.448M	48.7	+9.4	+1.6			+0.0	59.7	97.4	-37.7	None
	3 5360.167M	48.7	+9.4	+1.6			+0.0	59.7	97.4	-37.7	None

CKC Laboratories, Inc. Date: 6/20/2013 Time: 10:24:34 AM Digital Path WO#: 94341 Test Lead: None 120V 60Hz Sequence#: 24





Customer: **Digital Path**

Specification: 15.247(d) Conducted Spurious Emissions

Work Order #: 94341 Date: 6/20/2013
Test Type: Conducted Emissions Time: 10:05:59 AM

Equipment: **GEN6 CPE** Sequence#: 22

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x 120V 60Hz

S/N: 004

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP05411	Attenuator	54A-10	1/26/2012	1/26/2014
T2	ANP06125	Cable	32022-29094K-	5/6/2013	5/6/2015
			29094K-72TC		
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N	
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None	
GEN6 CPE*	Digital Path	2x	004	

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

Test Conditions / Notes:

Conducted Spurious Emission

Frequency Range: 1000MHz to 10000MHz

Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

RBW=100kHz VBW=300kHz

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

The EUT is on the table and connected to the Spectrum Analyzer.

Note: Middle Channel at Span 10MHz

Data rate =13Mbps

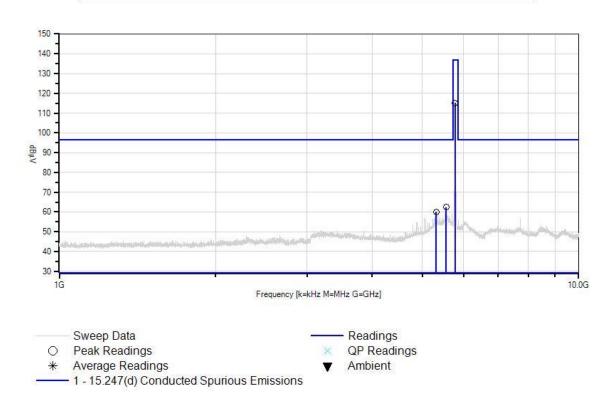
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Ext Attn: 0 dB

Mea	surement Data:	Reading listed by margin.			Test Lead: None						
#	Freq	Rdng	T1	T2			Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dΒμV	dΒμV	dB	Ant
	1 5782.382M	104.1	+9.4	+1.6			+0.0	115.1	137.0	-21.9	None
	2 5560.448M	51.4	+9.4	+1.6			+0.0	62.4	96.7	-34.3	None
	3 5319.569M	49.1	+9.4	+1.5			+0.0	60.0	96.7	-36.7	None

CKC Laboratories, Inc. Date: 6/20/2013 Time: 10:05:59 AM Digital Path WO#: 94341 Test Lead: None 120V 60Hz Sequence#: 22





Customer: **Digital Path**

Specification: 15.247(d) Conducted Spurious Emissions

Work Order #: 94341 Date: 6/20/2013
Test Type: Conducted Emissions Time: 9:48:30 AM

Equipment: **GEN6 CPE** Sequence#: 20

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x 120V 60Hz

S/N: 004

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP05411	Attenuator	54A-10	1/26/2012	1/26/2014
T2	ANP06125	Cable	32022-29094K-	5/6/2013	5/6/2015
			29094K-72TC		
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N	
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None	
GEN6 CPE*	Digital Path	2x	004	

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

Test Conditions / Notes:

Conducted Spurious Emission

Frequency Range: 1000MHz to 10000MHz

Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

RBW=100kHz VBW=300kHz

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

The EUT is on the table and connected to the Spectrum Analyzer.

Note: High Channel at Span 10MHz

Data rate =13Mbps

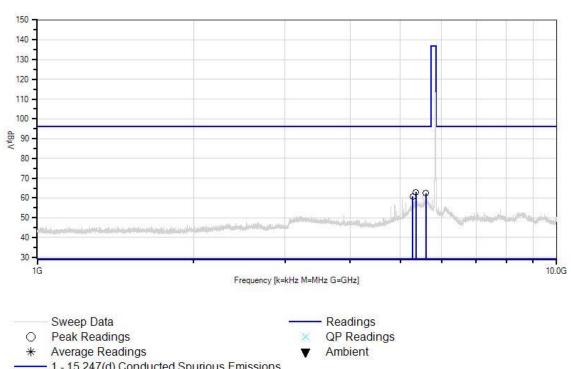
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Ext Attn: 0 dB

Meas	Measurement Data:		Reading listed by margin.				Test Lead: None				
#	Freq	Rdng	T1	T2			Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dΒμV	dΒμV	dB	Ant
1	5360.167M	52.0	+9.4	+1.6			+0.0	63.0	96.3	-33.3	None
2	2 5599.692M	51.4	+9.4	+1.6			+0.0	62.4	96.3	-33.9	None
3	3 5280.325M	49.8	+9.4	+1.5		•	+0.0	60.7	96.3	-35.6	None

CKC Laboratories, Inc. Date: 6/20/2013 Time: 9:48:30 AM Digital Path WO#: 94341 Test Lead: None 120V 60Hz Sequence#: 20



- 1 - 15.247(d) Conducted Spurious Emissions



Customer: **Digital Path**

Specification: 15.247(d) Conducted Spurious Emissions

Work Order #: 94341 Date: 6/20/2013
Test Type: Conducted Emissions Time: 10:36:07 AM

Equipment: **GEN6 CPE** Sequence#: 25

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x 120V 60Hz

S/N: 004

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP05411	Attenuator	54A-10	1/26/2012	1/26/2014
T2	ANP06125	Cable	32022-29094K-	5/6/2013	5/6/2015
			29094K-72TC		
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N	
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None	
GEN6 CPE*	Digital Path	2x	004	

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

Test Conditions / Notes:

Conducted Spurious Emission

Frequency Range: 10000MHz to 40000MHz

Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

RBW=100kHz VBW=300kHz

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

The EUT is on the table and connected to the Spectrum Analyzer.

Note: Low Channel at Span 10MHz

Data rate =13Mbps

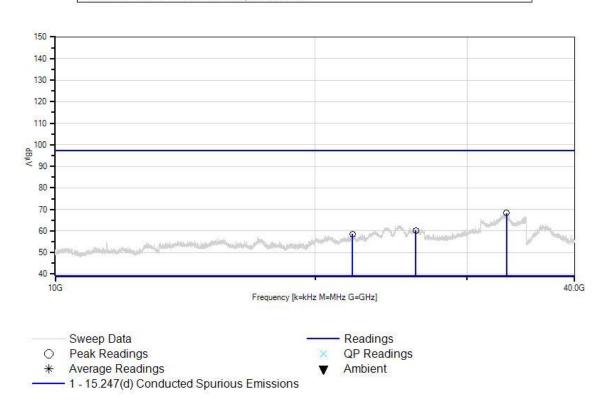
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Ext Attn: 0 dB

Measi	urement Data:	Reading listed by margin.						Test Lead	d: None		
#	Freq	Rdng	T1	T2			Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dΒμV	dΒμV	dB	Ant
1	33338.992 M	53.0	+10.8	+4.6			+0.0	68.4	97.4	-29.0	None
2	26185.187 M	45.5	+10.4	+4.4			+0.0	60.3	97.4	-37.1	None
3	22111.517 M	44.0	+10.2	+4.4			+0.0	58.6	97.4	-38.8	None

CKC Laboratories, Inc. Date: 6/20/2013 Time: 10:36:07 AM Digital Path WO#: 94341 Test Lead: None 120V 60Hz Sequence#: 25





Customer: **Digital Path**

Specification: 15.247(d) Conducted Spurious Emissions

Work Order #: 94341 Date: 6/20/2013
Test Type: Conducted Emissions Time: 10:10:29 AM

Equipment: **GEN6 CPE** Sequence#: 23

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x 120V 60Hz

S/N: 004

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP05411	Attenuator	54A-10	1/26/2012	1/26/2014
T2	ANP06125	Cable	32022-29094K-	5/6/2013	5/6/2015
			29094K-72TC		
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

1 1	,			
Function	Manufacturer	Model #	S/N	
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None	
GEN6 CPE*	Digital Path	2x	004	·

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

Test Conditions / Notes:

Conducted Spurious Emission

Frequency Range: 10000MHz to 40000MHz

Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

RBW=100kHz VBW=300kHz

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

The EUT is on the table and connected to the Spectrum Analyzer.

Note: Middle Channel at Span 10MHz

Data rate =13Mbps

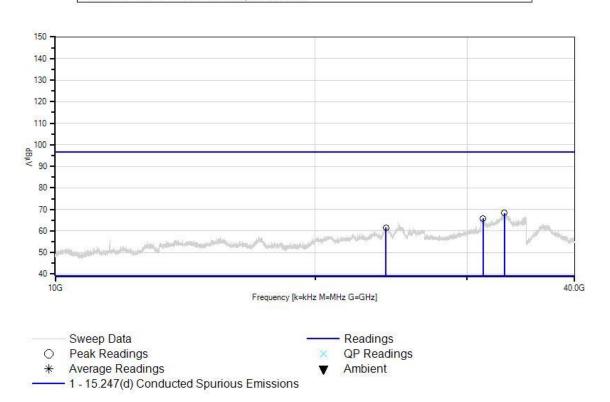
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Ext Attn: 0 dB

Measi	ırement Data:	Re	eading lis	ted by ma	argin.			Test Lead	d: None		
#	Freq	Rdng	T1	T2			Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dΒμV	dΒμV	dB	Ant
1	33172.208 M	52.8	+10.8	+4.7			+0.0	68.3	96.7	-28.4	None
2	31315.039 M	50.4	+10.6	+4.8			+0.0	65.8	96.7	-30.9	None
3	24176.466 M	46.8	+10.4	+4.4			+0.0	61.6	96.7	-35.1	None

CKC Laboratories, Inc. Date: 6/20/2013 Time: 10:10:29 AM Digital Path WO#: 94341 Test Lead: None 120V 60Hz Sequence#: 23





Customer: **Digital Path**

Specification: 15.247(d) Conducted Spurious Emissions

Work Order #: 94341 Date: 6/20/2013
Test Type: Conducted Emissions Time: 9:52:56 AM

Equipment: **GEN6 CPE** Sequence#: 21

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x 120V 60Hz

S/N: 004

Test Equipment:

]	(D	Asset #	Description	Model	Calibration Date	Cal Due Date
-	Γ1	ANP05411	Attenuator	54A-10	1/26/2012	1/26/2014
	Γ2	ANP06125	Cable	32022-29094K-	5/6/2013	5/6/2015
				29094K-72TC		
		AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

1 1	,			
Function	Manufacturer	Model #	S/N	
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None	
GEN6 CPE*	Digital Path	2x	004	·

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

Test Conditions / Notes:

Conducted Spurious Emission

Frequency Range: 10000MHz to 40000MHz

Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

RBW=100kHz VBW=300kHz

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

The EUT is on the table and connected to the Spectrum Analyzer.

Note: High Channel at Span 10MHz

Data rate =13Mbps

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Ext Attn: 0 dB

Attn: 0 dB	ъ		40d 1 ·-				Tast I	4. N		
			•	argın.		D'at			Marrin	D-1
				JD.	ענ					Polar
33158.684 M	52.2	+10.8	+4.7	dВ	ав	+0.0	67.7	96.3	-28.6	Ant None
33203.761 M	51.9	+10.8	+4.7			+0.0	67.4	96.3	-28.9	None
34986.842 M	50.6	+10.8	+5.1			+0.0	66.5	96.3	-29.8	None
35094.399 M	50.3	+10.8	+5.2			+0.0	66.3	96.3	-30.0	None
32789.054 M	50.7	+10.8	+4.7			+0.0	66.2	96.3	-30.1	None
35076.524 M	50.2	+10.8	+5.2			+0.0	66.2	96.3	-30.1	None
32780.038 M	50.6	+10.8	+4.7			+0.0	66.1	96.3	-30.2	None
35113.487 M	50.0	+10.8	+5.2			+0.0	66.0	96.3	-30.3	None
35117.123 M	50.0	+10.8	+5.2			+0.0	66.0	96.3	-30.3	None
35051.982 M	50.0	+10.8	+5.1			+0.0	65.9	96.3	-30.4	None
35102.277 M	49.9	+10.8	+5.2			+0.0	65.9	96.3	-30.4	None
34908.068 M	49.9	+10.8	+5.1			+0.0	65.8	96.3	-30.5	None
32892.731 M	50.3	+10.8	+4.7			+0.0	65.8	96.3	-30.5	None
35083.492 M	49.8	+10.8	+5.2			+0.0	65.8	96.3	-30.5	None
35022.594 M	49.9	+10.8	+5.1			+0.0	65.8	96.3	-30.5	None
34878.073 M	49.8	+10.8	+5.1			+0.0	65.7	96.3	-30.6	None
	Freq MHz 33158.684 M 33203.761 M 34986.842 M 35094.399 M 32789.054 M 35076.524 M 32780.038 M 35113.487 M 35117.123 M 35051.982 M 34908.068 M 32892.731 M 35083.492 M 35022.594 M 34878.073	rement Data: Red Rdng ABμV 33158.684 M 52.2 M 33203.761 M 51.9 M 34986.842 M 50.6 M 35094.399 M 50.3 M 32789.054 M 50.7 M 35076.524 M 50.2 M 35113.487 M 50.0 M 35117.123 M 50.0 M 35051.982 M 50.0 M 35102.277 M 49.9 M 34908.068 M 49.9 M 35083.492 M 49.8 M 35022.594 M 49.9 M 34878.073 49.8	rement Data: Reading lis Freq MHz MHz dB μV dB Reading T1 dB μV dB 33158.684 M 52.2 +10.8 33203.761 M 51.9 +10.8 34986.842 M 50.6 +10.8 35094.399 M 50.3 +10.8 32789.054 M 50.7 +10.8 32780.038 M 50.6 +10.8 35113.487 M 50.0 +10.8 35117.123 M 50.0 +10.8 35102.277 M 49.9 +10.8 34908.068 M 49.9 +10.8 35083.492 M 49.8 +10.8 35022.594 M 49.9 +10.8 34878.073 49.8 +10.8	rement Data: Reading listed by maxing Freq Rdng T1 T2 MB dB MHz dB μV dB dB dB 33158.684 M 52.2 +10.8 +4.7 33203.761 M 51.9 +10.8 +4.7 34986.842 M 50.6 +10.8 +5.1 35094.399 M 50.3 +10.8 +5.2 32789.054 M 50.7 +10.8 +4.7 32780.038 M 50.6 +10.8 +5.2 32780.038 M 50.6 +10.8 +5.2 35113.487 M 50.0 +10.8 +5.2 35051.982 M 50.0 +10.8 +5.1 35102.277 M 49.9 +10.8 +5.1 34908.068 M 49.9 +10.8 +5.1 35083.492 M 49.8 +10.8 +5.1 35022.594 M 49.9 +10.8 +5.1	rement Data: Reading listed by margin. Freq MHz MHz Rdng MB W dB dB dB dB dB dB dB 33158.684 M 52.2 +10.8 +4.7 +4.7 34986.842 M 50.6 +10.8 +5.1 +5.1 35094.399 M 50.3 +10.8 +5.2 +4.7 32789.054 M 50.7 +10.8 +4.7 +4.7 35076.524 M 50.2 +10.8 +5.2 +5.2 32780.038 M 50.6 +10.8 +4.7 +4.7 35113.487 M 50.0 +10.8 +5.2 +5.2 35051.982 M 50.0 +10.8 +5.1 +5.1 34908.068 M 49.9 +10.8 +5.1 +5.1 34908.068 M 49.9 +10.8 +5.1 +4.7 35083.492 M 49.8 +10.8 +5.1 +5.1 34878.073 M 49.8 +10.8 +5.1 +5.1	rement Data: Reading listed by margin. Freq MHz MHz dB µV Reading dB µV T1 dB µdB dB dB dB dB dB dB dB <	rement Data: Reading listed by margin. Freq MHz MBµV Rdng dBµV T1 dB dB T2 dB dB Dist dB 33158.684 52.2 +10.8 +4.7 +0.0 33203.761 MM 51.9 +10.8 +4.7 +0.0 34986.842 MM 50.6 +10.8 +5.1 +0.0 35094.399 MM 50.3 +10.8 +5.2 +0.0 32789.054 MM 50.7 +10.8 +4.7 +0.0 32780.038 MM 50.6 +10.8 +5.2 +0.0 35113.487 MM 50.0 +10.8 +5.2 +0.0 35117.123 MM 50.0 +10.8 +5.2 +0.0 35051.982 MM 50.0 +10.8 +5.1 +0.0 34908.068 MM 49.9 +10.8 +5.1 +0.0 35083.492 MM 49.8 +10.8 +5.1 +0.0 35022.594 MM 49.9 +10.8 +5.1 +0.0 34878.073 49.8 +10.8 +10.8 +5.1 +0.0	rement Data: Reading listed by margin. Test Lead Freq MHz dBng T1 T2 Dist Corr MHz dBμV dB dB dB dB Table dBμV 33158.684 52.2 +10.8 +4.7 +0.0 67.7 33203.761 M 51.9 +10.8 +4.7 +0.0 67.4 34986.842 M 50.6 +10.8 +5.1 +0.0 66.5 35094.399 M 50.3 +10.8 +5.2 +0.0 66.3 35076.524 M 50.2 +10.8 +5.2 +0.0 66.2 35113.487 M 50.0 +10.8 +4.7 +0.0 66.1 35117.123 M 50.0 +10.8 +5.2 +0.0 66.0 35102.277 M 49.9 +10.8 +5.1 +0.0 65.9 34908.068 M 49.9 +10.8 +5.1 +0.0 65.8 35083.492 M 49.8 +10.8 +5.2 +0.0 65.8 34878.073 49.8 +10.8 +10.8 +5.1 +0.0 65.8	rement Data: Reading listed by margin. Test Lead: None Freq MHz Albµ V alb dB dB dB dB dB Table dBµ V albµ V 33158.684 M 52.2 +10.8 +4.7 +0.0 67.7 96.3 33203.761 M Signal M	Previous Previous

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17	34954.121 M	49.7	+10.8	+5.1	+(0.0	65.6	96.3	-30.7	None
18	35046.832 M	49.6	+10.8	+5.1	+(0.0	65.5	96.3	-30.8	None
19	35036.531 M	49.6	+10.8	+5.1	+(0.0	65.5	96.3	-30.8	None
20	35061.678 M	49.5	+10.8	+5.2	+(0.0	65.5	96.3	-30.8	None
21	35118.637 M	49.5	+10.8	+5.2	+(0.0	65.5	96.3	-30.8	None
22	35067.434 M	49.5	+10.8	+5.2	+(0.0	65.5	96.3	-30.8	None
23	31242.916 M	50.0	+10.6	+4.8	+(0.0	65.4	96.3	-30.9	None
24	35088.037 M	49.4	+10.8	+5.2	+(0.0	65.4	96.3	-30.9	None
25	34955.333 M	49.4	+10.8	+5.1	+(0.0	65.3	96.3	-31.0	None
26	35005.627 M	49.4	+10.8	+5.1	+(0.0	65.3	96.3	-31.0	None
27	33622.977 M	49.9	+10.8	+4.6	+(0.0	65.3	96.3	-31.0	None
28	34886.557 M	49.4	+10.8	+5.1	+(0.0	65.3	96.3	-31.0	None
29	35040.469 M	49.4	+10.8	+5.1	+(0.0	65.3	96.3	-31.0	None
30	35053.497 M	49.4	+10.8	+5.1	+(0.0	65.3	96.3	-31.0	None
31	35018.049 M	49.4	+10.8	+5.1	+(0.0	65.3	96.3	-31.0	None
32	35029.562 M	49.4	+10.8	+5.1	+(0.0	65.3	96.3	-31.0	None
33	34948.061 M	49.3	+10.8	+5.1	+(0.0	65.2	96.3	-31.1	None



34	34869.287 M	49.3	+10.8	+5.1	+0.0	65.2	96.3	-31.1	None
35	35104.398 M	49.2	+10.8	+5.2	+0.0	65.2	96.3	-31.1	None
36	35056.527 M	49.3	+10.8	+5.1	+0.0	65.2	96.3	-31.1	None
37	34906.856 M	49.2	+10.8	+5.1	+0.0	65.1	96.3	-31.2	None
38	35013.201 M	49.2	+10.8	+5.1	+0.0	65.1	96.3	-31.2	None
39	33699.607 M	49.7	+10.8	+4.5	+0.0	65.0	96.3	-31.3	None
40	34984.721 M	49.1	+10.8	+5.1	+0.0	65.0	96.3	-31.3	None
41	35008.051 M	49.1	+10.8	+5.1	+0.0	65.0	96.3	-31.3	None
42	34968.664 M	49.0	+10.8	+5.1	+0.0	64.9	96.3	-31.4	None
43	34840.807 M	48.9	+10.8	+5.1	+0.0	64.8	96.3	-31.5	None
44	34851.108 M	48.8	+10.8	+5.1	+0.0	64.7	96.3	-31.6	None
45	34861.107 M	48.8	+10.8	+5.1	+0.0	64.7	96.3	-31.6	None
46	34936.548 M	48.8	+10.8	+5.1	+0.0	64.7	96.3	-31.6	None
47	34858.077 M	48.7	+10.8	+5.1	+0.0	64.6	96.3	-31.7	None
48	34848.382 M	48.7	+10.8	+5.1	+0.0	64.6	96.3	-31.7	None
49	35125.000 M	48.6	+10.8	+5.2	+0.0	64.6	96.3	-31.7	None
50	34959.877 M	48.7	+10.8	+5.1	+0.0	64.6	96.3	-31.7	None



51	31319.546 M	49.2	+10.6	+4.8		+0.0	64.6	96.3	-31.7	None
52	34781.453 M	48.6	+10.8	+5.1		+0.0	64.5	96.3	-31.8	None
53	34745.392 M	48.6	+10.8	+5.1		+0.0	64.5	96.3	-31.8	None
54	34844.746 M	48.6	+10.8	+5.1		+0.0	64.5	96.3	-31.8	None
55	34973.511 M	48.6	+10.8	+5.1		+0.0	64.5	96.3	-31.8	None
56	34848.988 M	48.6	+10.8	+5.1		+0.0	64.5	96.3	-31.8	None
57	34799.484 M	48.5	+10.8	+5.1		+0.0	64.4	96.3	-31.9	None
58	34695.807 M	48.6	+10.8	+5.0		+0.0	64.4	96.3	-31.9	None
59	34637.207 M	48.5	+10.9	+5.0		+0.0	64.4	96.3	-31.9	None
60	34944.728 M	48.5	+10.8	+5.1		+0.0	64.4	96.3	-31.9	None
61	34933.215 M	48.5	+10.8	+5.1		+0.0	64.4	96.3	-31.9	None
62	34853.229 M	48.5	+10.8	+5.1		+0.0	64.4	96.3	-31.9	None
63	31292.500 M	48.9	+10.6	+4.8		+0.0	64.3	96.3	-32.0	None
64	34871.408 M	48.4	+10.8	+5.1		+0.0	64.3	96.3	-32.0	None
65	34876.861 M	48.4	+10.8	+5.1		+0.0	64.3	96.3	-32.0	None
66	32590.715 M	48.7	+10.8	+4.7		+0.0	64.2	96.3	-32.1	None
67	31531.408 M	48.8	+10.6	+4.7		+0.0	64.1	96.3	-32.2	None
	· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			·	·	



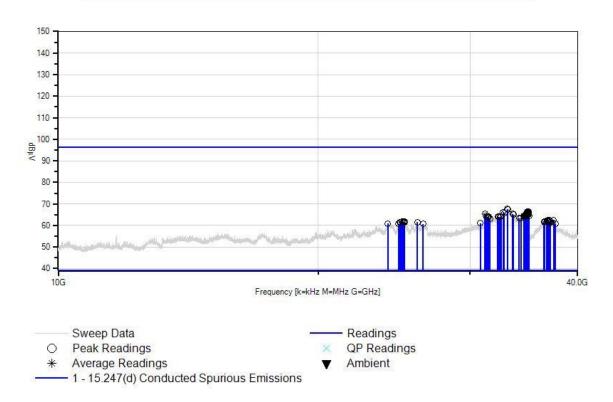
68	32324.762 M	48.6	+10.7	+4.7	+0.0	64.0	96.3	-32.3	None
69	31436.746 M	48.7	+10.6	+4.7	+0.0	64.0	96.3	-32.3	None
70	32491.546 M	48.6	+10.7	+4.7	+0.0	64.0	96.3	-32.3	None
71	32423.931 M	48.6	+10.7	+4.7	+0.0	64.0	96.3	-32.3	None
72	31459.285 M	48.6	+10.6	+4.7	+0.0	63.9	96.3	-32.4	None
73	34384.776 M	47.9	+10.9	+4.8	+0.0	63.6	96.3	-32.7	None
74	34217.992 M	47.7	+10.9	+4.7	+0.0	63.3	96.3	-33.0	None
75	31657.623 M	47.8	+10.7	+4.6	+0.0	63.1	96.3	-33.2	None
76	36938.500 M	57.5	+0.0	+5.0	+0.0	62.5	96.3	-33.8	None
77	37533.250 M	57.6	+0.0	+4.9	+0.0	62.5	96.3	-33.8	None
78	37167.625 M	57.4	+0.0	+5.0	+0.0	62.4	96.3	-33.9	None
79	36831.250 M	57.1	+0.0	+5.1	+0.0	62.2	96.3	-34.1	None
80	36928.750 M	57.2	+0.0	+5.0	+0.0	62.2	96.3	-34.1	None
81	36982.375 M	57.2	+0.0	+5.0	+0.0	62.2	96.3	-34.1	None
82	36558.250 M	56.9	+0.0	+5.0	+0.0	61.9	96.3	-34.4	None
83	37089.625 M	56.9	+0.0	+5.0	+0.0	61.9	96.3	-34.4	None
84	25013.433 M	47.2	+10.4	+4.2	+0.0	61.8	96.3	-34.5	None



85	25133.000 M	47.1	+10.4	+4.2	+0.0	61.7	96.3	-34.6	None
86	25201.324 M	47.2	+10.4	+4.1	+0.0	61.7	96.3	-34.6	None
87	36641.125 M	56.7	+0.0	+5.0	+0.0	61.7	96.3	-34.6	None
88	24934.861 M	46.9	+10.4	+4.3	+0.0	61.6	96.3	-34.7	None
89	26082.701 M	46.8	+10.4	+4.4	+0.0	61.6	96.3	-34.7	None
90	24890.450 M	46.8	+10.4	+4.3	+0.0	61.5	96.3	-34.8	None
91	37114.000 M	56.5	+0.0	+5.0	+0.0	61.5	96.3	-34.8	None
92	36597.250 M	56.4	+0.0	+5.0	+0.0+	61.4	96.3	-34.9	None
93	25112.503 M	46.7	+10.4	+4.2	+0.0+	61.3	96.3	-35.0	None
94	25194.491 M	46.8	+10.4	+4.1	+0.0+	61.3	96.3	-35.0	None
95	37148.125 M	56.2	+0.0	+5.0	+0.0	61.2	96.3	-35.1	None
96	30841.731 M	45.5	+10.7	+4.9	+0.0	61.1	96.3	-35.2	None
97	24097.894 M	46.2	+10.3	+4.4	+0.0	60.9	96.3	-35.4	None
98	37689.250 M	56.1	+0.0	+4.8	+0.0	60.9	96.3	-35.4	None
99	24791.381 M	46.0	+10.4	+4.4	+0.0+	60.8	96.3	-35.5	None
100	26468.642 M	46.0	+10.4	+4.4	+0.0	60.8	96.3	-35.5	None



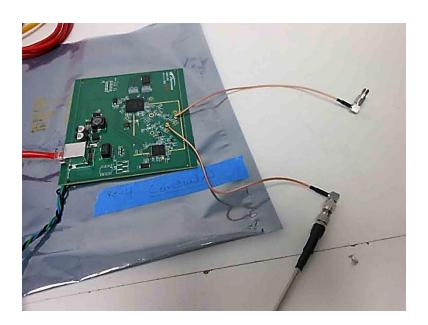
CKC Laboratories, Inc. Date: 6/20/2013 Time: 9:52:56 AM Digital Path WO#: 94341 Test Lead: None 120V 60Hz Sequence#: 21





Test Setup Photos







Bandedge

Test Conditions / Setup

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170

Customer: Digital Path
Specification: Bandedge

 Work Order #:
 94341
 Date:
 6/19/2013

 Test Type:
 Conducted
 Time:
 6:13:43 PM

Equipment: **GEN6 CPE** Sequence#: 1

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x S/N: 004

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	ANP05411	Attenuator	54A-10	1/26/2012	1/26/2014
	ANP06125	Cable	32022-29094K-29094K-72TC	5/6/2013	5/6/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None
GEN6 CPE*	Digital Path	2x	004

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for laptop	HP	Series PPP012H-S	F12941126327228
Laptop	HP	Probook 6565b	None

Test Conditions / Notes:

Band edge -Setup

Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

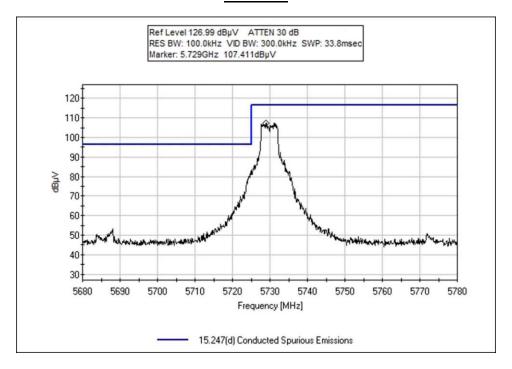
Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

The EUT is on the table and connected to the Spectrum Analyzer.

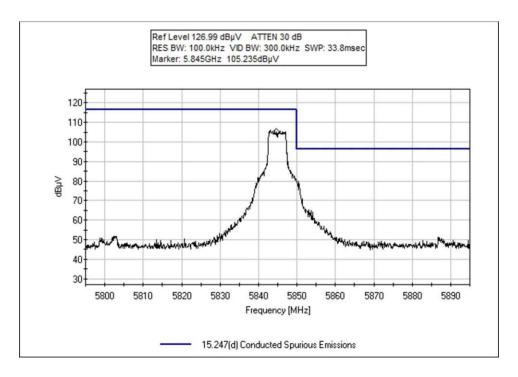
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<u>Chain 0 - 5MHz</u> Test Plots



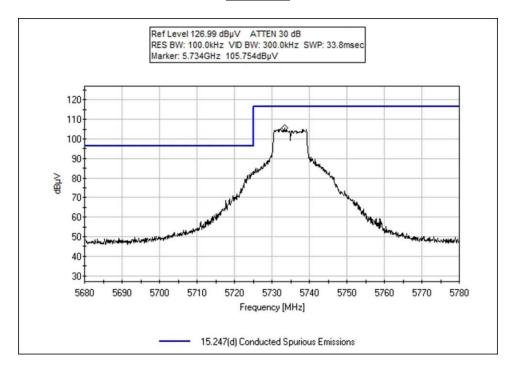
Low Channel 19.5Mbps



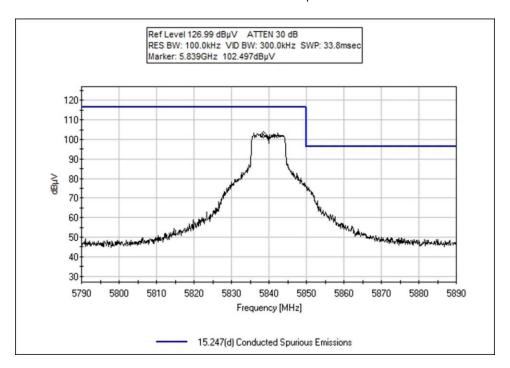
High Channel 19.5Mbps



<u>Chain 0 - 10MHz</u> Test Plots



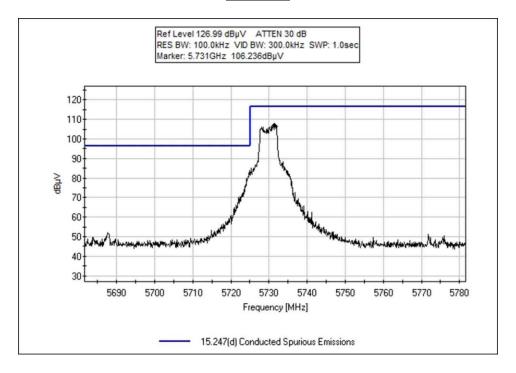
Low Channel 13.0Mbps



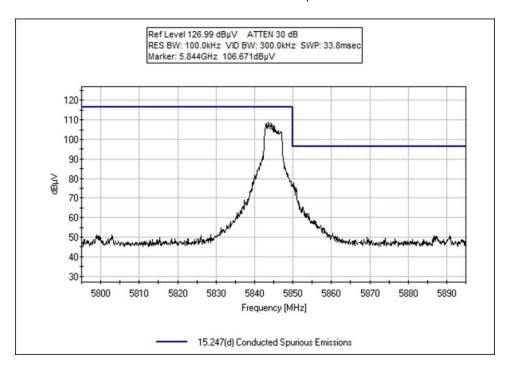
High Channel 13.0Mbps



<u>Chain 1 - 5MHz</u> Test Plots



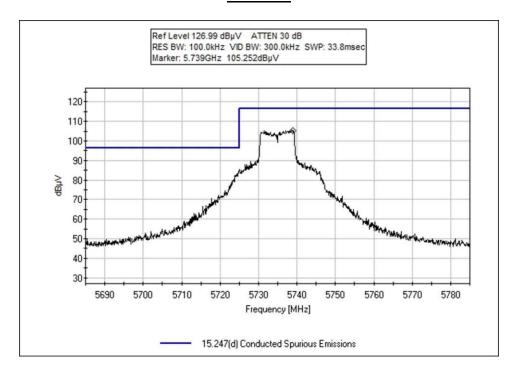
Low Channel 19.5Mbps



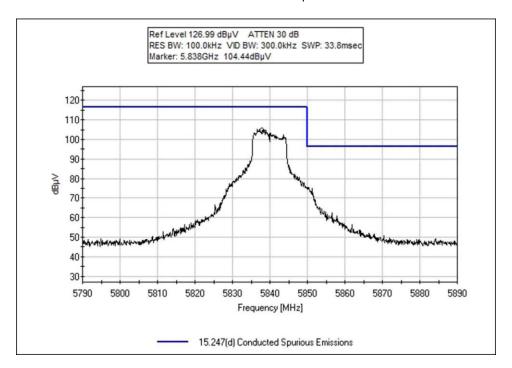
High Channel 19.5Mbps



<u>Chain 1 - 10MHz</u> Test Plots



Low Channel 13Mbps

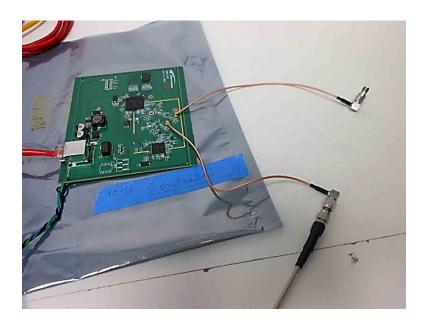


High Channel 13Mbps



Test Setup Photos







15.247(d) Radiated Spurious Emissions

Test Data

Reference Power Measurement in 100kHz: 15.247, 5MHz			
Channel	802.11n (dBm)		
Channel	Chain 0	Chain 1	
LO	13.28	13.54	
MID	12.28	13.49	
HI	12.13	13.48	

Maximum Power Input 24 dBm . Worst Case 802.11a data rate is MCS2=19.5Mbps

Reference Power Measurement in 100kHz: 15.247, 10MHz			
Channal	802.11n (dBm)		
Channel	Chain 0	Chain 1	
LO	8.57	10.54	
MID	8.48	9.71	
HI	8.21	9.39	

Maximum Power Input 25 dBm .Worst Case 802.11a data rate is MCS1=13Mbps

Reference Level Measurement: 15.247, 5MHz				
Channel	802.11n (dBuV)			
Channel	Chain 0	Chain 1		
LO	78.5	78.7		
MID	77.5	78.7		
HI	77.3	78.7		

Maximum Power Input 24 dBm . Worst Case 802.11a data rate is MCS2=19.5Mbps

Reference Level Measurement: 15.247, 10MHz				
802.11n (dBuV)				
Channel	Chain 0	Chain 1		
LO	74.0	75.7		
MID	73.7	74.9		
HI	73.4	74.6		

Maximum Power Input 25 dBm .Worst Case 802.11a data rate is MCS1=13Mbps

The Reference level measurement for Emission is non-restricted frequency bands were made using the methods set out in KDB "558704 D01 DTS Meas Guidance v03r01", Section 11 Emissions in non-restricted frequency band. NOTE: The Reference Level is the limit line for Radiated Spurious Emission. Choose the worst reference level for the limit line

LO = LO Channel
MID = MID Channel
HI = HI Channel
n = 802.11n
5MHz = System 5MHz Channel Width
10MHz = System 10MHz Channel Width

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Seq. #	Frequency Range Tested / Test conditions						
	5MHz						
61	9kHz-30MHz Low Channel						
64	9kHz-30MHz Mid Channel						
67	9kHz-30MHz High Channel						
40	30MHz-1GHz Low Channel						
43	30MHz-1GHz Mid Channel						
46	30MHz-1GHz High Channel						
84	1-40GHz-Low, Middle, High-5MHz-Restricted Band						
86	1-40GHz -Low, Middle, High-5MHz-Non Restricted Band						
	10MHz						
70	9kHz-30MHz Low Channel						
73	9kHz-30MHz Mid Channel						
76	9kHz-30MHz High Channel						
49	30MHz-1GHz Low Channel						
52	30MHz-1GHz Mid Channel						
55	30MHz-1GHz High Channel						
85	1-40GHz-Low, Middle, High-10MHz-Restricted Band						
87	1-40GHz -Low, Middle, High-10MHz-Non Restricted Band						

Test Data Sheets

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170

Customer: **Digital Path**

Specification: 15.247(d) / 15.209 Radiated Spurious Emissions

Work Order #: 94341 Date: 6/20/2013
Test Type: Radiated Scan Time: 18:22:15
Equipment: GEN6 CPE Sequence#: 61

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x S/N: 004

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015
T1	AN00432	Loop Antenna	6502	4/2/2013	4/2/2015
T2	ANP00880	Cable	RG214U	7/30/2012	7/30/2014
T3	ANP05300	Cable	RG214/U	3/25/2013	3/25/2015

Equipment Under Test (* = EUT):

	,			
Function	Manufacturer	Model #	S/N	
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None	
GEN6 CPE*	Digital Path	2x	004	

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Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

Test Conditions / Notes:

Radiated Spurious Emission Frequency Range: 9kHz to 30MHz Software Used: art2 ver2 28 6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

9 kHz -150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

Antenna Gain=24dBi

The EUT installed on a metal pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop which is outside of the chamber.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is active.

Vertical polarity of the antenna is connected to Chain 1 Horizontal polarity of the antenna is connected to Chain 0

Note: Low Channel at Span 5MHz

Data rate =19.5Mbps C0 and C1 at the same time

Adding one ferrite (Steward 28A 2024-0A0) with one pass through on RJ45 Data cables.

Ext Attn: 0 dB

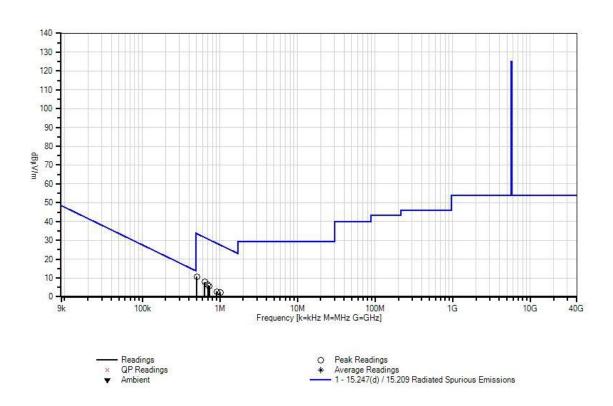
Measurement Data:		· Re	Reading listed by margin.			Test Distance: 3 Meters					
#	Freq	Rdng	T1	T2	T3		Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m$	dB	Ant
1	504.332k	40.7	+9.8	+0.1	+0.0		-40.0	10.6	33.6	-23.0	Perpe
2	2 634.979k	38.0	+9.8	+0.1	+0.0		-40.0	7.9	31.6	-23.7	Paral
3	3 701.293k	36.4	+9.9	+0.1	+0.0		-40.0	6.4	30.7	-24.3	Perpe

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4	733.955k	35.9	+9.7	+0.1	+0.0	-40.0	5.7	30.3	-24.6	Paral
5	1.018M	32.5	+9.7	+0.1	+0.0	-40.0	2.3	27.5	-25.2	Paral
6	911.121k	33.1	+9.5	+0.1	+0.0	-40.0	2.7	28.4	-25.7	Perpe

CKC Laboratories, Inc. Date: 6/20/2013 Time: 18:22:15 Digital Path WO#: 94341 Test Distance: 3 Meters Sequence#: 61





Customer: **Digital Path**

Specification: 15.247(d) / 15.209 Radiated Spurious Emissions

Work Order #: 94341 Date: 6/20/2013
Test Type: Radiated Scan Time: 18:34:46
Equipment: GEN6 CPE Sequence#: 64

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x S/N: 004

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015
T1	AN00432	Loop Antenna	6502	4/2/2013	4/2/2015
T2	ANP00880	Cable	RG214U	7/30/2012	7/30/2014
Т3	ANP05300	Cable	RG214/U	3/25/2013	3/25/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None
GEN6 CPE*	Digital Path	2x	004

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

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Radiated Spurious Emission Frequency Range: 9kHz to 30MHz Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

9 kHz-150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm Antenna Gain=24dBi

The EUT installed on a metal pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop which is outside of the chamber.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is active.

Vertical polarity of the antenna is connected to Chain 1 Horizontal polarity of the antenna is connected to Chain 0

Note: Middle Channel at Span 5MHz

Data rate =19.5Mbps C0 and C1 at the same time

Adding one ferrite (Steward 28A 2024-0A0) with one pass through on RJ45 Data cables

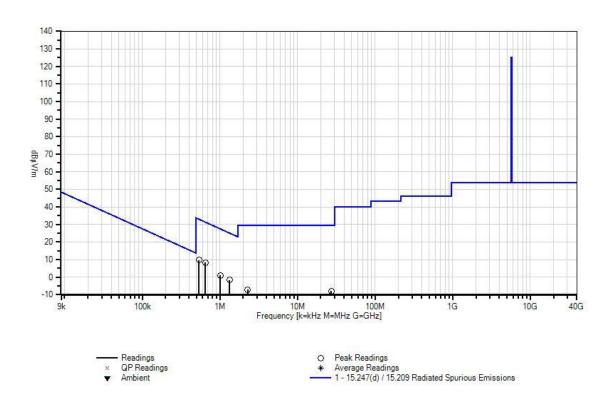
Ext Attn: 0 dB

Measur	ement Data:	Re	eading lis	ted by ma	argin.		Τe	est Distance	e: 3 Meters		
#	Freq	Rdng	T1	T2	T3		Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m$	dB	Ant
1	651.768k	38.4	+9.9	+0.1	+0.0		-40.0	8.4	31.3	-22.9	Paral
2	538.973k	39.8	+9.8	+0.1	+0.0		-40.0	9.7	33.0	-23.3	Perpe
3	1.012M	31.3	+9.7	+0.1	+0.0		-40.0	1.1	27.5	-26.4	Perpe
4	1.335M	28.6	+9.8	+0.1	+0.0		-40.0	-1.5	25.1	-26.6	Paral
5	2.283M	23.0	+9.9	+0.1	+0.0		-40.0	-7.0	29.5	-36.5	Perpe
6	27.335M	25.6	+5.9	+0.5	+0.1		-40.0	-7.9	29.5	-37.4	Paral

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CKC Laboratories, Inc. Date: 6/20/2013 Time: 18:34:46 Digital Path WO#: 94341 Test Distance: 3 Meters. Sequence#: 64





Customer: **Digital Path**

Specification: 15.247(d) / 15.209 Radiated Spurious Emissions

 Work Order #:
 94341
 Date: 6/20/2013

 Test Type:
 Radiated Scan
 Time: 18:46:35

 Equipment:
 GEN6 CPE
 Sequence#: 67

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x S/N: 004

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date	
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015	
T1	AN00432	Loop Antenna	6502	4/2/2013	4/2/2015	
T2	ANP00880	Cable	RG214U	7/30/2012	7/30/2014	
Т3	ANP05300	Cable	RG214/U	3/25/2013	3/25/2015	

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None
GEN6 CPE*	Digital Path	2x	004

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

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Radiated Spurious Emission Frequency Range: 9kHz to 30MHz Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

9 kHz -150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

Antenna Gain=24dBi

The EUT installed on a metal pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop which is outside of the chamber.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is active.

Vertical polarity of the antenna is connected to Chain 1

Horizontal polarity of the antenna is connected to Chain 0

Note: High Channel at Span 5MHz

Data rate =19.5Mbps C0 and C1 at the same time

Adding one ferrite (Steward 28A 2024-0A0) with one pass through on RJ45 Data cables.

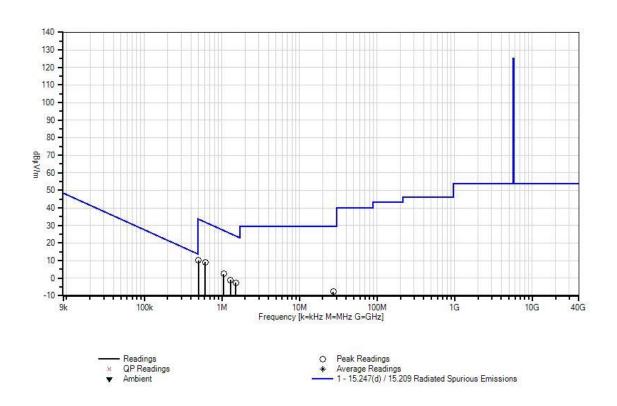
Ext Attn: 0 dB

Measur	ement Data:	Re	ading list	ted by ma	argin.		Τe	est Distance	e: 3 Meters		
#	Freq	Rdng	T1	T2	T3		Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m$	dB	Ant
1	607.864k	39.2	+9.8	+0.1	+0.0		-40.0	9.1	31.9	-22.8	Paral
2	499.147k	40.2	+9.8	+0.1	+0.0		-40.0	10.1	33.6	-23.5	Perpe
3	1.055M	32.6	+9.7	+0.1	+0.0		-40.0	2.4	27.2	-24.8	Perpe
4	1.296M	29.2	+9.8	+0.1	+0.0		-40.0	-0.9	25.4	-26.3	Paral
5	1.515M	27.4	+9.8	+0.1	+0.0		-40.0	-2.7	24.0	-26.7	Perpe
6	27.335M	25.8	+5.9	+0.5	+0.1		-40.0	-7.7	29.5	-37.2	Paral

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CKC Laboratories, Inc. Date: 6/20/2013 Time: 18:46:35 Digital Path WO#: 94341 Test Distance: 3 Meters. Sequence#: 67





Customer: **Digital Path**

Specification: 15.247(d) / 15.209 Radiated Spurious Emissions

Work Order #: 94341 Date: 6/20/2013
Test Type: Radiated Scan
Equipment: GEN6 CPE Sequence#: 40

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x S/N: 004

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN00730	Preamp	8447D	1/17/2013	1/17/2015
T2	AN00852	Biconilog Antenna	CBL 6111C	11/28/2012	11/28/2014
Т3	ANP00880	Cable	RG214U	7/30/2012	7/30/2014
T4	ANP01183	Cable	CNT-195	10/24/2011	10/24/2013
T5	ANP05300	Cable	RG214/U	3/25/2013	3/25/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None
GEN6 CPE*	Digital Path	2x	004

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

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Radiated Spurious Emission

Frequency Range: 30MHz to 1000MHz Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

MHz

9 kHz -150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz,

1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

Antenna Gain=24dBi

The EUT installed on a metal pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop which is outside of the chamber.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is active.

Vertical polarity of the antenna is connected to Chain 1

Horizontal polarity of the antenna is connected to Chain 0

Note: Low Channel at Span 5MHz

Data rate =19.5 Mbps C0 and C1 at the same time

Adding one ferrite (Steward 28A 2024-0A0) with one pass through on RJ45 Data cables.

Ext Attn: 0 dB

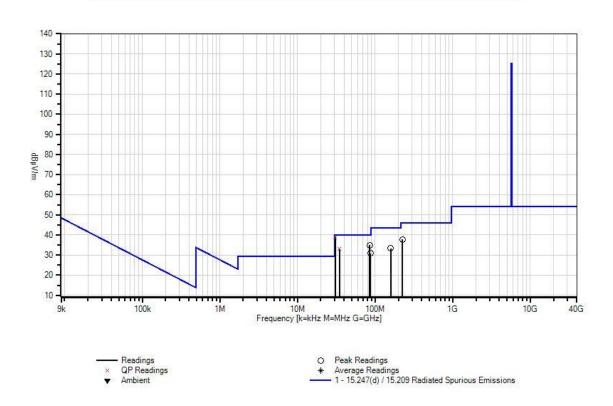
Measur	rement Data:	Re	eading lis	ted by ma	argin.		Тє	est Distance	e: 3 Meters		
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			T5								
	MHz	dΒμV	dB	dB	dB	dB	Table	dBμV/m	dBµV/m	dB	Ant
1	30.615M	47.0	-27.1	+18.1	+0.5	+0.2	+0.0	38.8	40.0	-1.2	Vert
(QP		+0.1								
^	30.615M	49.2	-27.1	+18.1	+0.5	+0.2	+0.0	41.0	40.0	+1.0	Vert
			+0.1								
^	30.615M	49.0	-27.1	+18.1	+0.5	+0.2	+0.0	40.8	40.0	+0.8	Vert
			+0.1								
4	85.331M	52.3	-27.0	+8.3	+0.9	+0.1	+0.0	34.9	40.0	-5.1	Vert
			+0.3								
5	34.633M	43.3	-27.0	+16.0	+0.5	+0.1	+0.0	33.0	40.0	-7.0	Vert
(QP		+0.1								
^	34.633M	46.5	-27.0	+16.0	+0.5	+0.1	+0.0	36.2	40.0	-3.8	Vert
			+0.1								

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^	34.633M	46.0	-27.0	+16.0	+0.5	+0.1	+0.0	35.7	40.0	-4.3	Vert
			+0.1								
8	224.959M	53.0	-27.0	+9.5	+1.5	+0.3	+0.0	37.7	46.0	-8.3	Horiz
			+0.4								
9	87.455M	48.0	-27.0	+8.6	+0.9	+0.1	+0.0	30.9	40.0	-9.1	Horiz
			+0.3								
10	159.958M	48.2	-27.0	+10.4	+1.2	+0.2	+0.0	33.4	43.5	-10.1	Horiz
			+0.4								

CKC Laboratories, Inc. Date: 6/20/2013 Time: 15:13:55 Digital Path WO#: 94341 Test Distance: 3 Meters. Sequence#: 40





Customer: **Digital Path**

Specification: 15.247(d) / 15.209 Radiated Spurious Emissions

Work Order #: 94341 Date: 6/20/2013
Test Type: Radiated Scan Time: 15:41:16
Equipment: GEN6 CPE Sequence#: 43

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x S/N: 004

Test Equipment:

	T				
ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN00730	Preamp	8447D	1/17/2013	1/17/2015
T2	AN00852	Biconilog Antenna	CBL 6111C	11/28/2012	11/28/2014
Т3	ANP00880	Cable	RG214U	7/30/2012	7/30/2014
T4	ANP01183	Cable	CNT-195	10/24/2011	10/24/2013
T5	ANP05300	Cable	RG214/U	3/25/2013	3/25/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None
GEN6 CPE*	Digital Path	2x	004

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

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Radiated Spurious Emission

Frequency Range: 30MHz to 1000MHz Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

MHz

9 kHz -150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band

Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

Antenna Gain=24dBi

The EUT installed on a metal pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop which is outside of the chamber.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is active.

Vertical polarity of the antenna is connected to Chain 1 Horizontal polarity of the antenna is connected to Chain 0

Note: Middle Channel at Span 5MHz

Data rate =19.5 Mbps C0 and C1 at the same time

Adding one ferrite (Steward 28A 2024-0A0) with one pass through on RJ45 Data cables

Ext Attn: 0 dB

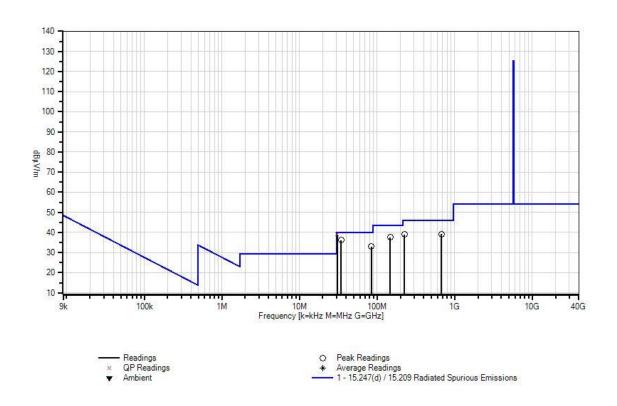
Measur	rement Data:	Re	ading lis	ted by ma	argin.		Τe	est Distance	e: 3 Meters		
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			T5								
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m$	dB	Ant
1	30.631M	47.3	-27.1	+18.0	+0.5	+0.2	+0.0	39.0	40.0	-1.0	Vert
(QP		+0.1								
٨	30.631M	48.9	-27.1	+18.0	+0.5	+0.2	+0.0	40.6	40.0	+0.6	Vert
			+0.1								
٨	30.631M	48.6	-27.1	+18.0	+0.5	+0.2	+0.0	40.3	40.0	+0.3	Vert
			+0.1								
4	34.629M	46.5	-27.0	+16.0	+0.5	+0.1	+0.0	36.2	40.0	-3.8	Vert
			+0.1								
5	148.127M	51.7	-26.9	+11.0	+1.2	+0.3	+0.0	37.6	43.5	-5.9	Horiz
			+0.3								

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6	674.812M	41.5	-26.8	+20.1	+2.9	+0.7	+0.0	39.1	46.0	-6.9	Vert
			+0.7								
7	224.959M	54.3	-27.0	+9.5	+1.5	+0.3	+0.0	39.0	46.0	-7.0	Horiz
			+0.4								
8	84.623M	50.3	-27.0	+8.3	+0.9	+0.1	+0.0	32.9	40.0	-7.1	Horiz
			+0.3								

CKC Laboratories, Inc. Date: 6/20/2013 Time: 15:41:16 Digital Path WO#: 94341 Test Distance: 3 Meters Sequence#: 43





Customer: **Digital Path**

Specification: 15.247(d) / 15.209 Radiated Spurious Emissions

Work Order #: 94341 Date: 6/20/2013
Test Type: Radiated Scan
Equipment: GEN6 CPE Sequence#: 46

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x S/N: 004

Test Equipment:

	T				
ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN00730	Preamp	8447D	1/17/2013	1/17/2015
T2	AN00852	Biconilog Antenna	CBL 6111C	11/28/2012	11/28/2014
Т3	ANP00880	Cable	RG214U	7/30/2012	7/30/2014
T4	ANP01183	Cable	CNT-195	10/24/2011	10/24/2013
T5	ANP05300	Cable	RG214/U	3/25/2013	3/25/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None
GEN6 CPE*	Digital Path	2x	004

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

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Radiated Spurious Emission

Frequency Range: 30MHz to 1000MHz Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

9 kHz -150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band

Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

Antenna Gain=24dBi

The EUT installed on a metal pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop which is outside of the chamber

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is active.

Vertical polarity of the antenna is connected to Chain 1

Horizontal polarity of the antenna is connected to Chain 0

Note: High Channel at Span 5MHz

Data rate =19.5 Mbps C0 and C1 at the same time

Adding one ferrite (Steward 28A 2024-0A0) with one pass through on RJ45 Data cables

Ext Attn: 0 dB

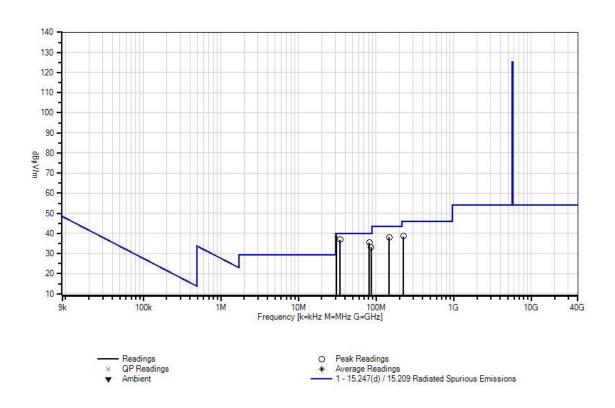
Measu	rement Data:	Re	ading lis	ted by ma	argin.		Тє	est Distance	e: 3 Meters		
#	Freq	Rdng	T1	T2	Т3	T4	Dist	Corr	Spec	Margin	Polar
			T5								
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m$	dB	Ant
1	30.618M	47.3	-27.1	+18.1	+0.5	+0.2	+0.0	39.1	40.0	-0.9	Vert
	QP		+0.1								
^	30.618M	49.3	-27.1	+18.1	+0.5	+0.2	+0.0	41.1	40.0	+1.1	Vert
			+0.1								
^	30.618M	49.1	-27.1	+18.1	+0.5	+0.2	+0.0	40.9	40.0	+0.9	Vert
			+0.1								
4	34.629M	47.2	-27.0	+16.0	+0.5	+0.1	+0.0	36.9	40.0	-3.1	Vert
			+0.1								
5	81.489M	53.3	-27.0	+7.9	+0.8	+0.1	+0.0	35.4	40.0	-4.6	Vert
			+0.3								

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6	148.127M	52.3		+11.0	+1.2	+0.3	+0.0	38.2	43.5	-5.3	Horiz
7	86.140M	50.3	+0.3	+8.5	+0.9	+0.1	+0.0	33.1	40.0	-6.9	Horiz
,	00.14011	30.3	+0.3	10.5	10.5	10.1	10.0	33.1	40.0	0.7	HOHZ
8	224.959M	53.9	-27.0 +0.4	+9.5	+1.5	+0.3	+0.0	38.6	46.0	-7.4	Horiz

CKC Laboratories, Inc. Date: 6/20/2013 Time: 16:04:39 Digital Path WO#: 94341 Test Distance: 3 Meters Sequence#: 46





Customer: **Digital Path**

Specification: 15.247(d) / 15.209 Radiated Spurious Emissions

Work Order #: 94341 Date: 6/23/2013
Test Type: Radiated Scan
Equipment: GEN6 CPE Sequence#: 84

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x S/N: 004

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02157	Horn Antenna-ANSI C63.5	3115	1/23/2013	1/23/2015
	AN03302	Cable	32026-29094K- 29094K-72TC	3/21/2012	3/21/2014
	ANP01210	Cable	FSJ1P-50A-4A	2/19/2013	2/19/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015
	AN03114	Preamp	AMF-7D- 00101800-30-10P	4/11/2013	4/11/2015
	AN01417	High Pass Filter	84300-80039	2/9/2012	2/9/2014
	AN03015	Cable	32022-2-29094K- 24TC	5/6/2013	5/6/2015
T1	ANANT- AN02693- 20130221	Active Horn Antenna	AMFW-5F- 18002650-20-10P	2/21/2013	2/21/2015
T2	AN03143	Cable	32022-29094K- 144TC	8/30/2011	8/30/2013
	ANP00928	Cable	various	2/10/2012	2/10/2014
Т3	ANP06138	Cable	32022-29094K- 29094K-72TC	9/1/2011	9/1/2013
T4	AN02694	Horn Antenna-ANSI C63.5 Antenna Factors (dB)	AMFW-5F- 18002650-20-10P	2/4/2013	2/4/2015
T5	ANP00929	Cable	various	2/16/2012	2/16/2014
	AN02695	Active Horn Antenna	AMFW-5F- 260400-33-8P	12/18/2012	12/18/2014
	ANP00930	Cable	various	2/16/2012	2/16/2014

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None
GEN6 CPE*	Digital Path	2x	004

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

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Radiated Spurious Emission

Frequency Range: 1000MHz to 40000MHz Software Used: art2 ver2 28 6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

MHz

9 kHz -150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =24dBm

Antenna Gain=24dBi

The EUT installed on a metal pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop which is outside of the chamber.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is active.

Vertical polarity of the antenna is connected to Chain 1

Horizontal polarity of the antenna is connected to Chain 0

Note: Span 5MHz
Data rate =19.5 Mbps
C0 and C1 at the same time
Low, Middle and High Channel

Adding one ferrite (Steward 28A 2024-0A0) with one pass through on RJ45 Data cables.

Scans were performed with the RBW reduced as needed. Data all taken at the proper RBW setting. Above 11GHz, hand scan the unit at a 1 meter distance to determine if there are any signals. Any signals found are hand maximized at a 1 meter distance to ensure the maximum signal is found.

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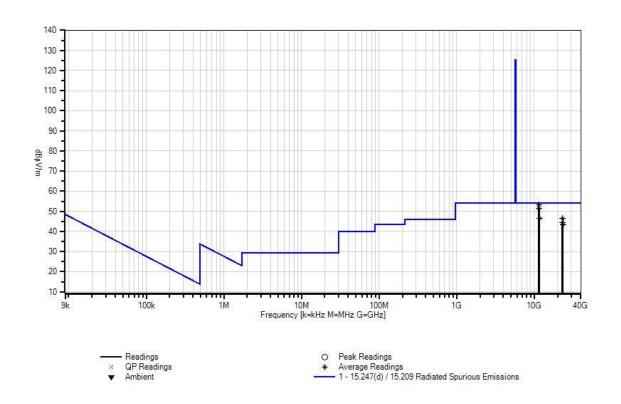
Ext Attn: 0 dB

Measu	attii: 0 ab arement Data:	Re	eading lis	ted by ma	argin.						
#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	•	$dB\mu V/m \\$	dB	Ant
1	11461.417 M	71.7	-13.8 +0.0	+4.8	+0.0	+0.0	-9.5	53.2	54.0	-0.8	Horiz
	Ave								Low Chan		
									24dBm-R	estricted	
٨	11461.417	86.4	-13.8	+4.8	+0.0	+0.0	-9.5	67.9	Band 54.0	+13.9	Horiz
	M	00.4	+0.0	± 4. 6	+0.0	+0.0	-9.3	07.9	34.0	+13.9	110112
	111		. 0.0						Low Chan	nel-	
									24dBm-R	estricted	
									Band		
3		70.3	-14.0	+4.8	+0.0	+0.0	-9.5	51.6	54.0	-2.4	Horiz
	M Ave		+0.0						Middle Ch	annel-	
	7100								24dBm ou		
									Restricted		
٨	115/11/00	83.1	-14.0	+4.8	+0.0	+0.0	-9.5	64.4	54.0	+10.4	Horiz
	M		+0.0						MC 141. CL	1	
									Middle Ch 24dBm ou		
									Restricted		
5	23141.409	60.8	+0.0	+7.0	+3.3	-17.8	-9.5	46.7	54.0	-7.3	Horiz
	M		+2.9								
	Ave								Middle Ch		
									24dBm ou Restricted		
٨	23141.409	77.7	+0.0	+7.0	+3.3	-17.8	-9.5	63.6	54.0	+9.6	Horiz
	M		+2.9								
									Middle Ch		
									24dBm ou		
7	11690.390	65.4	-14.2	+4.8	+0.0	+0.0	-9.5	46.5	Restricted 54.0	-7.5	Horiz
,	M	05.4	+0.0	17.0	10.0	10.0	-7.5	70.5	54.0	-7.5	HOHZ
	Ave								High Chan	inel-	
									24dBm ou	-	
	11.000.200	02.2	112	4.0	0.0	0.0	0.5	62.2	Restricted		** '
٨	11690.390 M	82.2	-14.2 +0.0	+4.8	+0.0	+0.0	-9.5	63.3	54.0	+9.3	Horiz
	141		10.0						High Chan	inel-	
									24dBm ou		
									Restricted	Band	
9	22916.198 M	58.4	+0.0 +2.9	+7.1	+3.4	-17.8	-9.5	44.5	54.0	-9.5	Horiz
	Ave								Low Chan		
									24dBm ou		
									Restricted	Band	



^ 22916.198 M	72.7	+0.0 +2.9	+7.1	+3.4	-17.8	-9.5	58.8	54.0	+4.8	Horiz
								Low Chann	iel-	
								24dBm out	put-	
								Restricted 1	Band	
11 23380.098	57.4	+0.0	+7.0	+3.3	-17.8	-9.5	43.3	54.0	-10.7	Horiz
M		+2.9								
Ave								High Chan	nel-	
								24dBm-Res	stricted	
								Band		
^ 23380.098	75.4	+0.0	+7.0	+3.3	-17.8	-9.5	61.3	54.0	+7.3	Horiz
M		+2.9								
								High Chan	nel-	
								24dBm-Res	stricted	
								Band		

CKC Laboratories, Inc. Date: 6/23/2013 Time: 09:22:27 Digital Path WO#: 94341 Test Distance: 1 Meter. Sequence#: 84





Customer: **Digital Path**

Specification: 15.247(d) Radiated Spurious Emissions-Non Restricted Band

 Work Order #:
 94341
 Date:
 6/24/2013

 Test Type:
 Radiated Scan
 Time:
 09:30:26

 Equipment:
 GEN6 CPE
 Sequence#:
 86

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x S/N: 004

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02157	Horn Antenna-ANSI C63.5	3115	1/23/2013	1/23/2015
	AN03302	Cable	32026-29094K- 29094K-72TC	3/21/2012	3/21/2014
	ANP01210	Cable	FSJ1P-50A-4A	2/19/2013	2/19/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015
	AN03114	Preamp	AMF-7D- 00101800-30-10P	4/11/2013	4/11/2015
	AN01417	High Pass Filter	84300-80039	2/9/2012	2/9/2014
	AN03015	Cable	32022-2-29094K- 24TC	5/6/2013	5/6/2015
T1	ANANT- AN02693- 20130221	Active Horn Antenna	AMFW-5F- 18002650-20-10P	2/21/2013	2/21/2015
T2	AN03143	Cable	32022-29094K- 144TC	8/30/2011	8/30/2013
Т3	ANP00928	Cable	various	2/10/2012	2/10/2014
T4	ANP06138	Cable	32022-29094K- 29094K-72TC	9/1/2011	9/1/2013
	AN02694	Horn Antenna-ANSI C63.5 Antenna Factors (dB)	AMFW-5F- 18002650-20-10P	2/4/2013	2/4/2015
	ANP00929	Cable	various	2/16/2012	2/16/2014
	AN02695	Active Horn Antenna	AMFW-5F- 260400-33-8P	12/18/2012	12/18/2014
	ANP00930	Cable	various	2/16/2012	2/16/2014

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None
GEN6 CPE*	Digital Path	2x	004

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

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Radiated Spurious Emission

Frequency Range: 1000MHz to 40000MHz Software Used: art2 ver2 28 6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

MHz

RBW=100kHz VBW=300kHz

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =24dBm

Antenna Gain=24dBi

The EUT installed on a metal pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop which is outside of the chamber.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is active.

Vertical polarity of the antenna is connected to Chain 1

Horizontal polarity of the antenna is connected to Chain 0

Note: Span 5MHz
Data rate =19.5 Mbps
C0 and C1 at the same time
Low, Middle and High Channel

Adding one ferrite (Steward 28A 2024-0A0) with one pass through on RJ45 Data cables.

Scans were performed with the RBW reduced as needed. Data all taken at the proper RBW setting. Above 11GHz, hand scan the unit at a 1 meter distance to determine if there are any signals. Any signals found are hand maximized at a 1 meter distance to ensure the maximum signal is found.

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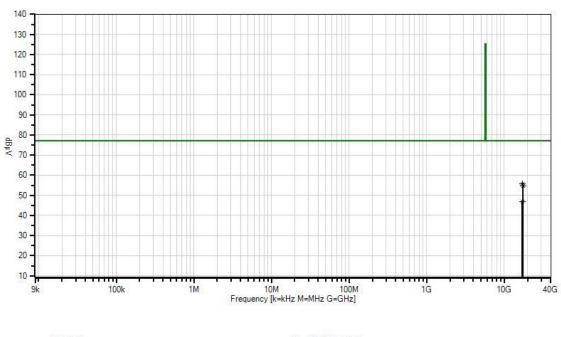


Ext Attn: 0 dB

Measi	rement Data:	Re	eading lis	ted by ma	argin.		Te	st Distan	ce: 1 Meter		
#	Freq	Rdng	T1	T2	Т3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dΒμV	dΒμV	dB	Ant
1	17352.690 M	70.1	-14.6	+6.0	+0.8	+2.9	-9.5	55.7	77.3	-21.6	Vert
	Ave								Middle Cl	nannel	
									with 24dB	m output-	
									Not in Res	stricted	
									Band		
^	17352.690 M	82.2	-14.6	+6.0	+0.8	+2.9	-9.5	67.8	77.3	-9.5	Vert
									Middle Ch	nannel	
									with 24dB	m output-	
									Not in Res	stricted	
									Band		
3	17533.919 M	68.7	-14.2	+6.1	+0.8	+2.9	-9.5	54.8	77.3	-22.5	Vert
	Ave								High Char	nnel with	
									24dBm ou	tput- Not	
									in Restrict	ed Band	
^	17533.919 M	80.3	-14.2	+6.1	+0.8	+2.9	-9.5	66.4	77.3	-10.9	Vert
									High Char		
									24dBm ou		
									in Restrict		
5	17187.600 M	61.4	-14.8	+6.0	+0.8	+2.9	-9.5	46.8	77.3	-30.5	Horiz
	Ave								Low Chan	nel with	
									24dBm ou		
									in Restrict	ed Band	
^	17187.600 M	75.7	-14.8	+6.0	+0.8	+2.9	-9.5	61.1	77.3	-16.2	Horiz
									Low Chan		
									24dBm ou		
									in Restrict	ed Band	



CKC Laboratories, Inc. Date: 6/24/2013 Time: 09:30:26 Digital Path WO#: 94341 Test Distance: 1 Meter. Sequence#: 86



Peak Readings
 Average Readings
 1 - 15.247(d) Radiated Spurious Emissions-Non Restricted Band



Customer: **Digital Path**

Specification: 15.247(d) / 15.209 Radiated Spurious Emissions

Work Order #: 94341 Date: 6/20/2013
Test Type: Radiated Scan
Equipment: GEN6 CPE Sequence#: 70

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x S/N: 004

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015
T1	AN00432	Loop Antenna	6502	4/2/2013	4/2/2015
T2	ANP00880	Cable	RG214U	7/30/2012	7/30/2014
Т3	ANP05300	Cable	RG214/U	3/25/2013	3/25/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None
GEN6 CPE*	Digital Path	2x	004

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

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Radiated Spurious Emission Frequency Range: 9kHz to 30MHz Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

MHz

9 kHz -150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

Antenna Gain=24dBi

The EUT installed on a metal pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop which is outside of the chamber.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is active.

Vertical polarity of the antenna is connected to Chain 1

Horizontal polarity of the antenna is connected to Chain 0

Note: Low Channel at Span 10MHz

Data rate =13.0 Mbps C0 and C1 at the same time

Adding one ferrite (Steward 28A 2024-0A0) with one pass through on RJ45 Data cables.

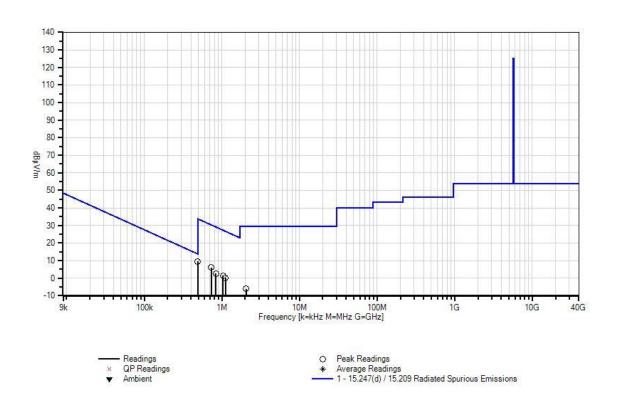
Ext Attn: 0 dB

Measur	rement Data:	Re	ading list	ted by ma	argin.		Τe	est Distance	e: 3 Meters		
#	Freq	Rdng	T1	T2	T3		Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m$	dB	Ant
1	490.784k	39.7	+9.8	+0.1	+0.0		-40.0	9.6	33.8	-24.2	Paral
2	729.124k	36.3	+9.7	+0.1	+0.0		-40.0	6.1	30.4	-24.3	Perpe
3	1.034M	31.6	+9.7	+0.1	+0.0		-40.0	1.4	27.3	-25.9	Paral
4	839.932k	33.1	+9.4	+0.1	+0.0		-40.0	2.6	29.1	-26.5	Paral
5	1.114M	30.2	+9.7	+0.1	+0.0		-40.0	0.0	26.7	-26.7	Perpe
6	2.050M	23.9	+9.9	+0.1	+0.0		-40.0	-6.1	29.5	-35.6	Perpe

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CKC Laboratories, Inc. Date: 6/20/2013 Time: 19:01:26 Digital Path WO#: 94341 Test Distance: 3 Meters. Sequence#: 70





Customer: **Digital Path**

Specification: 15.247(d) / 15.209 Radiated Spurious Emissions

Work Order #: 94341 Date: 6/20/2013
Test Type: Radiated Scan
Equipment: GEN6 CPE Sequence#: 73

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x S/N: 004

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015
T1	AN00432	Loop Antenna	6502	4/2/2013	4/2/2015
T2	ANP00880	Cable	RG214U	7/30/2012	7/30/2014
Т3	ANP05300	Cable	RG214/U	3/25/2013	3/25/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None
GEN6 CPE*	Digital Path	2x	004

Support Devices:

Function	Manufacturer	Model #	S/N		
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228		
laptop					
Laptop	HP	Probook 6565b	None		

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Radiated Spurious Emission Frequency Range: 9kHz to 30MHz Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

MHz

9 kHz -150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

Antenna Gain=24dBi

The EUT installed on a metal pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop which is outside of the chamber.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is active.

Vertical polarity of the antenna is connected to Chain 1

Horizontal polarity of the antenna is connected to Chain 0

Note: Middle Channel at Span 10MHz

Data rate =13.0 Mbps C0 and C1 at the same time

Adding one ferrite (Steward 28A 2024-0A0) with one pass through on RJ45 Data cables.

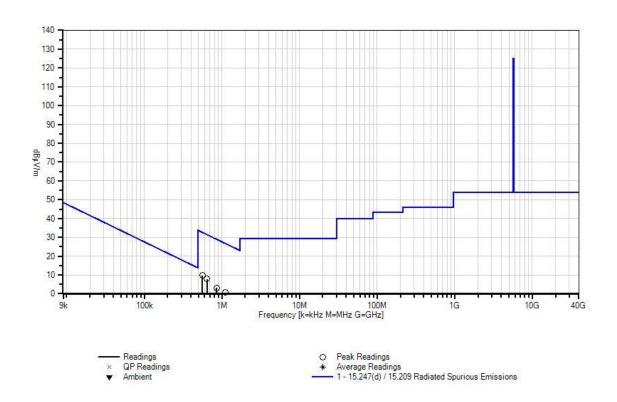
Ext Attn: 0 dB

Measur	ement Data:	Re	ading list	ted by ma	argin.		Τe	est Distance	e: 3 Meters		
#	Freq	Rdng	T1	T2	T3		Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\mu V/m \\$	$dB\mu V/m$	dB	Ant
1	563.959k	39.8	+9.8	+0.1	+0.0		-40.0	9.7	32.6	-22.9	Perpe
2	641.315k	37.9	+9.8	+0.1	+0.0		-40.0	7.8	31.5	-23.7	Paral
3	856.657k	33.5	+9.5	+0.1	+0.0		-40.0	3.1	29.0	-25.9	Paral
4	1.099M	30.9	+9.7	+0.1	+0.0		-40.0	0.7	26.8	-26.1	Perpe
5	1.306M	29.2	+9.8	+0.1	+0.0		-40.0	-0.9	25.3	-26.2	Perpe
6	1.143M	29.4	+9.7	+0.1	+0.0		-40.0	-0.8	26.5	-27.3	Paral

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CKC Laboratories, Inc. Date: 6/20/2013 Time: 19:10:53 Digital Path WO#: 94341 Test Distance: 3 Meters. Sequence#: 73





Customer: **Digital Path**

Specification: 15.247(d) / 15.209 Radiated Spurious Emissions

Work Order #: 94341 Date: 6/20/2013
Test Type: Radiated Scan
Equipment: GEN6 CPE Sequence#: 76

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x S/N: 004

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015
T1	AN00432	Loop Antenna	6502	4/2/2013	4/2/2015
T2	ANP00880	Cable	RG214U	7/30/2012	7/30/2014
Т3	ANP05300	Cable	RG214/U	3/25/2013	3/25/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None
GEN6 CPE*	Digital Path	2x	004

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

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Radiated Spurious Emission Frequency Range: 9kHz to 30MHz Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

MHz

9 kHz -150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

Antenna Gain=24dBi

The EUT installed on a metal pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop which is outside of the chamber.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is active.

Vertical polarity of the antenna is connected to Chain 1

Horizontal polarity of the antenna is connected to Chain 0

Note: High Channel at Span 10MHz

Data rate =13.0 Mbps C0 and C1 at the same time

Adding one ferrite (Steward 28A 2024-0A0) with one pass through on RJ45 Data cables.

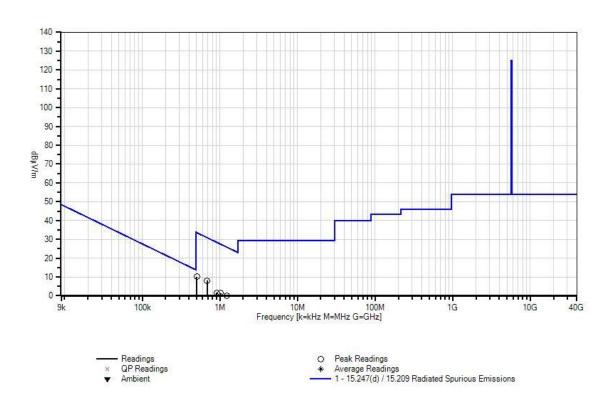
Ext Attn: 0 dB

Measur	rement Data:	Re	eading lis	ted by ma	argin.		Τe	est Distance	e: 3 Meters		
#	Freq	Rdng	T1	T2	T3		Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m$	dB	Ant
1	687.310k	38.1	+9.9	+0.1	+0.0		-40.0	8.1	30.9	-22.8	Paral
2	503.329k	40.3	+9.8	+0.1	+0.0		-40.0	10.2	33.6	-23.4	Perpe
3	1.223M	30.2	+9.8	+0.1	+0.0		-40.0	0.1	25.9	-25.8	Perpe
4	1.024M	31.6	+9.7	+0.1	+0.0		-40.0	1.4	27.4	-26.0	Paral
5	1.411M	28.0	+9.8	+0.1	+0.0		-40.0	-2.1	24.6	-26.7	Paral
6	913.106k	32.1	+9.5	+0.1	+0.0		-40.0	1.7	28.4	-26.7	Perpe

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CKC Laboratories, Inc. Date: 6/20/2013 Time: 19:22:59 Digital Path WO#: 94341 Test Distance: 3 Meters. Sequence#: 76





Customer: **Digital Path**

Specification: 15.247(d) / 15.209 Radiated Spurious Emissions

Work Order #: 94341 Date: 6/20/2013
Test Type: Radiated Scan
Equipment: GEN6 CPE Sequence#: 49

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x S/N: 004

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN00730	Preamp	8447D	1/17/2013	1/17/2015
T2	AN00852	Biconilog Antenna	CBL 6111C	11/28/2012	11/28/2014
Т3	ANP00880	Cable	RG214U	7/30/2012	7/30/2014
T4	ANP01183	Cable	CNT-195	10/24/2011	10/24/2013
T5	ANP05300	Cable	RG214/U	3/25/2013	3/25/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None
GEN6 CPE*	Digital Path	2x	004

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

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Radiated Spurious Emission

Frequency Range: 30MHz to 1000MHz Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

MHz

9 kHz -150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

Antenna Gain=24dBi

The EUT installed on a metal pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop which is outside of the chamber.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is active.

Vertical polarity of the antenna is connected to Chain 1

Horizontal polarity of the antenna is connected to Chain 0

Note: Low Channel at Span 10MHz

Data rate =13 Mbps C0 and C1 at the same time

Adding one ferrite (Steward 28A 2024-0A0) with one pass through on RJ45 Data cables.

Ext Attn: 0 dB

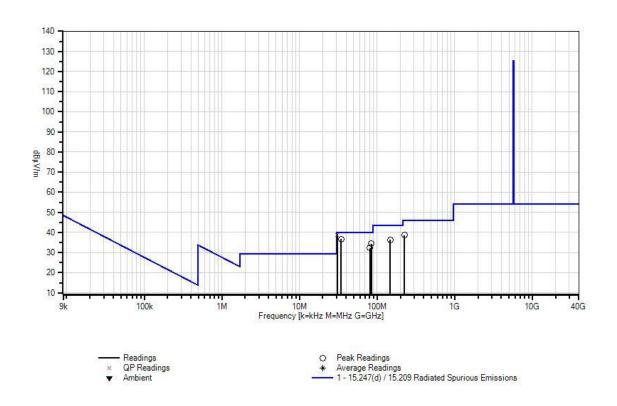
Measur	ement Data:	Re	ading list	ted by ma	ırgin.		Тє	est Distance	e: 3 Meters		
#	Freq	Rdng	T1	T2	Т3	T4	Dist	Corr	Spec	Margin	Polar
			T5								
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m$	dB	Ant
1	30.631M	47.2	-27.1	+18.0	+0.5	+0.2	+0.0	38.9	40.0	-1.1	Vert
	QP		+0.1								
٨	30.631M	48.6	-27.1	+18.0	+0.5	+0.2	+0.0	40.3	40.0	+0.3	Vert
			+0.1								
٨	30.631M	48.6	-27.1	+18.0	+0.5	+0.2	+0.0	40.3	40.0	+0.3	Vert
			+0.1								
4	34.629M	47.0	-27.0	+16.0	+0.5	+0.1	+0.0	36.7	40.0	-3.3	Vert
			+0.1								
5	84.724M	51.8	-27.0	+8.3	+0.9	+0.1	+0.0	34.4	40.0	-5.6	Vert
			+0.3								

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6	148.127M	50.5		+11.0	+1.2	+0.3	+0.0	36.4	43.5	-7.1	Horiz
			+0.3								
7	224.959M	53.9	-27.0	+9.5	+1.5	+0.3	+0.0	38.6	46.0	-7.4	Horiz
			+0.4								
8	81.185M	50.3	-27.0	+7.8	+0.8	+0.1	+0.0	32.3	40.0	-7.7	Horiz
			+0.3								

CKC Laboratories, Inc. Date: 6/20/2013 Time: 16:23:22 Digital Path WO#: 94341 Test Distance: 3 Meters Sequence#: 49





Customer: **Digital Path**

Specification: 15.247(d) / 15.209 Radiated Spurious Emissions

Work Order #: 94341 Date: 6/20/2013
Test Type: Radiated Scan
Equipment: GEN6 CPE Sequence#: 52

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x S/N: 004

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN00730	Preamp	8447D	1/17/2013	1/17/2015
T2	AN00852	Biconilog Antenna	CBL 6111C	11/28/2012	11/28/2014
T3	ANP00880	Cable	RG214U	7/30/2012	7/30/2014
T4	ANP01183	Cable	CNT-195	10/24/2011	10/24/2013
T5	ANP05300	Cable	RG214/U	3/25/2013	3/25/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None
GEN6 CPE*	Digital Path	2x	004

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

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Radiated Spurious Emission

Frequency Range: 30MHz to 1000MHz Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

MHz

9 kHz -150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz,

1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

Antenna Gain=24dBi

The EUT installed on a metal pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop which is outside of the chamber.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is active.

Vertical polarity of the antenna is connected to Chain 1

Horizontal polarity of the antenna is connected to Chain 0

Note: Middle Channel at Span 10MHz

Data rate =13 Mbps C0 and C1 at the same time

Adding one ferrite (Steward 28A 2024-0A0) with one pass through on RJ45 Data cables.

Ext Attn: 0 dB

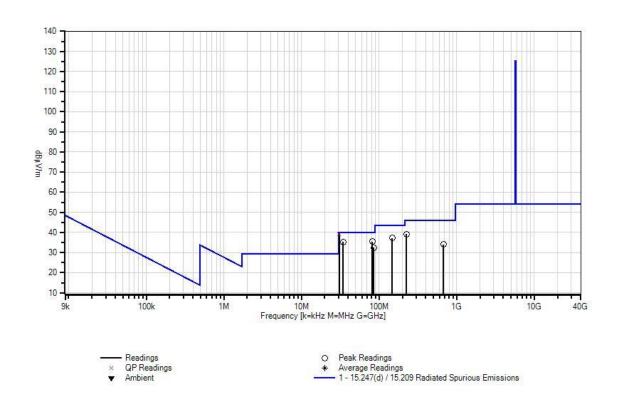
Measur	rement Data:	Re	eading lis	ted by ma	argin.		Te	est Distance	e: 3 Meters		
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			T5								
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m$	dB	Ant
1	30.615M	47.4	-27.1	+18.1	+0.5	+0.2	+0.0	39.2	40.0	-0.8	Vert
(QP		+0.1								
٨	30.615M	49.3	-27.1	+18.1	+0.5	+0.2	+0.0	41.1	40.0	+1.1	Vert
			+0.1								
٨	30.615M	49.0	-27.1	+18.1	+0.5	+0.2	+0.0	40.8	40.0	+0.8	Vert
			+0.1								
4	81.489M	53.4	-27.0	+7.9	+0.8	+0.1	+0.0	35.5	40.0	-4.5	Vert
			+0.3								
5	34.629M	45.5	-27.0	+16.0	+0.5	+0.1	+0.0	35.2	40.0	-4.8	Vert
			+0.1								
6	148.127M	51.3	-26.9	+11.0	+1.2	+0.3	+0.0	37.2	43.5	-6.3	Horiz
			+0.3								

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7	224.959M	54.5	-27.0	+9.5	+1.5	+0.3	+0.0	39.2	46.0	-6.8	Horiz
			+0.4								
8	85.736M	49.8	-27.0	+8.4	+0.9	+0.1	+0.0	32.5	40.0	-7.5	Horiz
			+0.3								
9	674.812M	36.5	-26.8	+20.1	+2.9	+0.7	+0.0	34.1	46.0	-11.9	Vert
			+0.7								

CKC Laboratories, Inc. Date: 6/20/2013 Time: 16:38:09 Digital Path WO#: 94341 Test Distance: 3 Meters Sequence#: 52





Customer: **Digital Path**

Specification: 15.247(d) / 15.209 Radiated Spurious Emissions

Work Order #: 94341 Date: 6/20/2013
Test Type: Radiated Scan
Equipment: GEN6 CPE Sequence#: 55

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x S/N: 004

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN00730	Preamp	8447D	1/17/2013	1/17/2015
T2	AN00852	Biconilog Antenna	CBL 6111C	11/28/2012	11/28/2014
T3	ANP00880	Cable	RG214U	7/30/2012	7/30/2014
T4	ANP01183	Cable	CNT-195	10/24/2011	10/24/2013
T5	ANP05300	Cable	RG214/U	3/25/2013	3/25/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None
GEN6 CPE*	Digital Path	2x	004

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

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Radiated Spurious Emission

Frequency Range: 30MHz to 1000MHz Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

MHz

9 kHz-150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

Antenna Gain=24dBi

The EUT installed on a metal pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop which is outside of the chamber.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is active.

Vertical polarity of the antenna is connected to Chain 1

Horizontal polarity of the antenna is connected to Chain 0

Note: High Channel at Span 10MHz

Data rate =13 Mbps C0 and C1 at the same time

Adding one ferrite (Steward 28A 2024-0A0) with one pass through on RJ45 Data cables.

Ext Attn: 0 dB

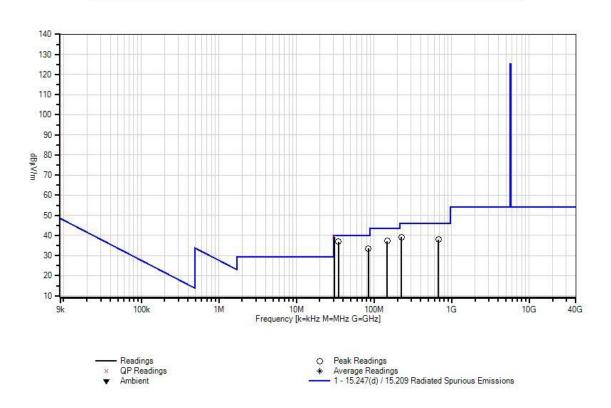
Measur	ement Data:	Re	ading list	ted by ma	ırgin.		Тє	est Distance	e: 3 Meters		
#	Freq	Rdng	T1	T2	Т3	T4	Dist	Corr	Spec	Margin	Polar
			T5								
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m$	dB	Ant
1	30.619M	47.5	-27.1	+18.1	+0.5	+0.2	+0.0	39.3	40.0	-0.7	Vert
(QΡ		+0.1								
٨	30.619M	49.0	-27.1	+18.1	+0.5	+0.2	+0.0	40.8	40.0	+0.8	Vert
			+0.1								
٨	30.619M	48.6	-27.1	+18.1	+0.5	+0.2	+0.0	40.4	40.0	+0.4	Vert
			+0.1								
4	34.671M	47.1	-27.0	+16.0	+0.5	+0.1	+0.0	36.8	40.0	-3.2	Vert
			+0.1								
5	148.127M	51.3	-26.9	+11.0	+1.2	+0.3	+0.0	37.2	43.5	-6.3	Horiz
			+0.3								

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6	84.623M	50.9	-27.0	+8.3	+0.9	+0.1	+0.0	33.5	40.0	-6.5	Vert
			+0.3								
7	224.959M	54.5	-27.0	+9.5	+1.5	+0.3	+0.0	39.2	46.0	-6.8	Horiz
			+0.4								
8	674.812M	40.4	-26.8	+20.1	+2.9	+0.7	+0.0	38.0	46.0	-8.0	Horiz
			+0.7								

CKC Laboratories, Inc. Date: 6/20/2013 Time: 16:52:33 Digital Path WO#: 94341 Test Distance: 3 Meters Sequence#: 55





Customer: **Digital Path**

Specification: 15.247(d) / 15.209 Radiated Spurious Emissions

Work Order #: 94341 Date: 6/23/2013
Test Type: Radiated Scan Time: 09:56:05
Equipment: GEN6 CPE Sequence#: 85

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x S/N: 004

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02157	Horn Antenna-ANSI C63.5	3115	1/23/2013	1/23/2015
	AN03302	Cable	32026-29094K- 29094K-72TC	3/21/2012	3/21/2014
	ANP01210	Cable	FSJ1P-50A-4A	2/19/2013	2/19/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015
	AN03114	Preamp	AMF-7D- 00101800-30-10P	4/11/2013	4/11/2015
	AN01417	High Pass Filter	84300-80039	2/9/2012	2/9/2014
	AN03015	Cable	32022-2-29094K- 24TC	5/6/2013	5/6/2015
T1	ANANT- AN02693- 20130221	Active Horn Antenna	AMFW-5F- 18002650-20-10P	2/21/2013	2/21/2015
Т2	AN03143	Cable	32022-29094K- 144TC	8/30/2011	8/30/2013
Т3	ANP00928	Cable	various	2/10/2012	2/10/2014
Т4	ANP06138	Cable	32022-29094K- 29094K-72TC	9/1/2011	9/1/2013
T5	AN02694	Horn Antenna-ANSI C63.5 Antenna Factors (dB)	AMFW-5F- 18002650-20-10P	2/4/2013	2/4/2015
T6	ANP00929	Cable	various	2/16/2012	2/16/2014
	AN02695	Active Horn Antenna	AMFW-5F- 260400-33-8P	12/18/2012	12/18/2014
	ANP00930	Cable	various	2/16/2012	2/16/2014

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None
GEN6 CPE*	Digital Path	2x	004

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

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Radiated Spurious Emission

Frequency Range: 1000MHz to 40000MHz Software Used: art2 ver2 28 6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

MHz

9 kHz -150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

Antenna Gain=24dBi

The EUT installed on a metal pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop which is outside of the chamber.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is active.

Vertical polarity of the antenna is connected to Chain 1

Horizontal polarity of the antenna is connected to Chain 0

Note: Span 10MHz
Data rate =13Mbps
C0 and C1 at the same time
Low, Middle and High Channel

Adding one ferrite (Steward 28A 2024-0A0) with one pass through on RJ45 Data cables.

Scans were performed with the RBW reduced as needed. Data all taken at the proper RBW setting. Above 11GHz, hand scan the unit at a 1 meter distance to determine if there are any signals. Any signals found are hand maximized at a 1 meter distance to ensure the maximum signal is found.

Ext Attn: 0 dB

Measu	rement Data:	Re	eading list	ted by ma	ırgin.	Test Distance: 1 Meter					
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			T5	T6							
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m$	dB	Ant
1	17517.180	67.5	-14.3	+6.1	+0.8	+2.9	-9.5	53.5	54.0	-0.5	Vert
	M		+0.0	+0.0							
	Ave								High Chan	nel-	
									25dBm- N	ot in	
									Restricted	band	

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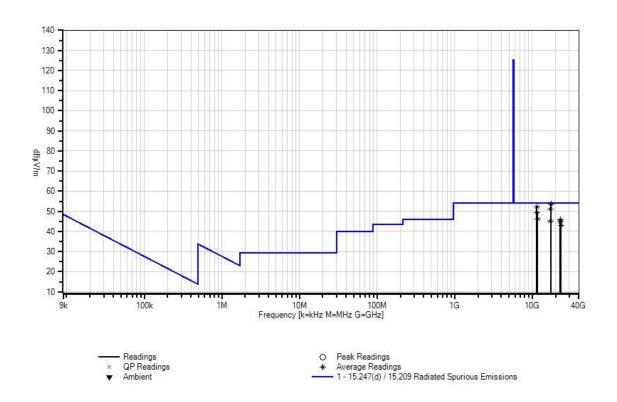
	45545 400	00.0	110		0.0	2.0	0.7		7.1.0	12.0	**	
^	17517.180 M	80.0	-14.3 +0.0	+6.1 +0.0	+0.8	+2.9	-9.5	66.0	54.0	+12.0	Vert	
	IVI		+0.0	+0.0					High Chan	nel_		
									25dBm- No			
									Restricted			
3	11472.558	70.7	-13.8	+4.8	+0.0	+0.0	-9.5	52.2	54.0	-1.8	Horiz	
	M		+0.0	+0.0								
1	Ave								Low Chann			
									25dBm out			
										Restricted Band		
^	11472.558	84.4	-13.8	+4.8	+0.0	+0.0	-9.5	65.9	54.0	+11.9	Horiz	
	M		+0.0	+0.0					r C1			
									Low Chang			
									25dBm out Restricted			
5	17349.775	65.5	-14.6	+6.0	+0.8	+2.9	-9.5	51.1	54.0	-2.9	Vert	
3	M	05.5	+0.0	+0.0	+0.6	⊤∠.9	-9.5	31.1	34.0	-2.9	VCIT	
/	Ave		10.0	10.0					Middle Cha	annel-		
									25dBm-No			
									Restricted	Band		
^	17349.775	78.9	-14.6	+6.0	+0.8	+2.9	-9.5	64.5	54.0	+10.5	Vert	
	M		+0.0	+0.0								
									Middle Ch			
									25dBm-No			
	11571 002	60.2	140	. 4.0	. 0. 0	. 0. 0	0.5	40.5	Restrict Ba			
7	11571.893	68.2	-14.0	$+4.8 \\ +0.0$	+0.0	+0.0	-9.5	49.5	54.0	-4.5	Horiz	
	M Ave		+0.0	+0.0					Middle Ch	annal		
1	AVE								25dBm out			
									Restricted 1			
٨	11571.893	81.0	-14.0	+4.8	+0.0	+0.0	-9.5	62.3	54.0	+8.3	Horiz	
	M		+0.0	+0.0								
									Middle Cha	annel-		
									25dBm out			
									Restricted			
9	11684.458	65.1	-14.2	+4.8	+0.0	+0.0	-9.5	46.2	54.0	-7.8	Horiz	
	M		+0.0	+0.0					TT: 1 ~:			
1	Ave								High Chan			
									25dBm out			
^	11684.458	79.3	-14.2	+4.8	+0.0	+0.0	-9.5	60.4	Restricted 54.0	+6.4	Horiz	
	11084.438 M	17.3	+0.0	+4.8	±0.0	+0.0	-7.3	00.4	54.0	±0.4	110112	
	171		10.0	10.0					High Chan	nel-		
									25dBm out			
									Restricted			
11	23141.751	60.0	+0.0	+7.0	+0.0	+3.3	-9.5	45.9	54.0	-8.1	Horiz	
	M		-17.8	+2.9								
1	Ave								Middle Ch			
									25dBm out			
									Restricted 1	Band		



^ 23141.751	74.0	+0.0	+7.0	+0.0	+3.3	-9.5	59.9	54.0	+5.9	Horiz
M		-17.8	+2.9					Middle Chan	nol	
								25dBm outpu		
								Restricted Ba		
13 17202.284	59.6	-14.8	+6.0	+0.8	+2.9	-9.5	45.0	54.0	-9.0	Vert
M		+0.0	+0.0							
Ave								Low Channel		
								25dBm- Not		
^ 17202 284	70.2	140		+0.8	+2.0	-9.5	557	Restricted Ba		Mont
^ 17202.284 M	70.3	-14.8 +0.0	+6.0 +0.0	+0.8	+2.9	-9.5	55.7	54.0	+1.7	Vert
IVI		+0.0	+0.0					Low Channel	 _	
								25dBm- Not		
								Restricted Ba		
15 22937.086	58.6	+0.0	+7.1	+0.0	+3.3	-9.5	44.6	54.0	-9.4	Horiz
M		-17.8	+2.9							
Ave								Low Channel		
								25dBm output Restricted Ba		
^ 22937.086	74.3	+0.0	+7.1	+0.0	+3.3	-9.5	60.3	54.0	+6.3	Horiz
M	74.3	-17.8	+2.9	+0.0	+3.3	-9.5	00.5	34.0	+0.5	110112
112		17.0	,					Low Channel	<u> </u> -	
								25dBm outpu	ıt-	
								Restricted Ba		
17 23361.443	57.1	+0.0	+7.0	+0.0	+3.3	-9.5	43.0	54.0	-11.0	Horiz
M		-17.8	+2.9					III d Chamai		
Ave								High Channe 25dBm output		
								Restricted Ba		
^ 23361.443	70.1	+0.0	+7.0	+0.0	+3.3	-9.5	56.0	54.0	+2.0	Horiz
M		-17.8	+2.9							
								High Channe		
								25dBm outpu		
								Restricted Ba	ınd	



CKC Laboratories, Inc. Date: 6/23/2013 Time: 09:56:05 Digital Path WO#: 94341 Test Distance: 1 Meter. Sequence#: 85





Customer: **Digital Path**

Specification: 15.247(d) Radiated Spurious Emissions-Non Restricted Band

Work Order #: 94341 Date: 6/24/2013
Test Type: Radiated Scan Time: 09:44:57
Equipment: GEN6 CPE Sequence#: 87

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x S/N: 004

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02157	Horn Antenna-ANSI C63.5		1/23/2013	1/23/2015
	AN03302	Cable	32026-29094K- 29094K-72TC	3/21/2012	3/21/2014
	ANP01210	Cable	FSJ1P-50A-4A	2/19/2013	2/19/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015
	AN03114	Preamp	AMF-7D- 00101800-30-10P	4/11/2013	4/11/2015
	AN01417	High Pass Filter	84300-80039	2/9/2012	2/9/2014
	AN03015	Cable	32022-2-29094K- 24TC	5/6/2013	5/6/2015
T1	ANANT- AN02693- 20130221	Active Horn Antenna	AMFW-5F- 18002650-20-10P	2/21/2013	2/21/2015
T2	AN03143	Cable	32022-29094K- 144TC	8/30/2011	8/30/2013
Т3	ANP00928	Cable	various	2/10/2012	2/10/2014
T4	ANP06138	Cable	32022-29094K- 29094K-72TC	9/1/2011	9/1/2013
	AN02694	Horn Antenna-ANSI C63.5 Antenna Factors (dB)	AMFW-5F- 18002650-20-10P	2/4/2013	2/4/2015
	ANP00929	Cable	various	2/16/2012	2/16/2014
	AN02695	Active Horn Antenna	AMFW-5F- 260400-33-8P	12/18/2012	12/18/2014
	ANP00930	Cable	various	2/16/2012	2/16/2014

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None
GEN6 CPE*	Digital Path	2x	004

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for	HP	Series PPP012H-S	F12941126327228
laptop			
Laptop	HP	Probook 6565b	None

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Radiated Spurious Emission

Frequency Range: 1000MHz to 40000MHz Software Used: art2 ver2 28 6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

MHz

RBW=100kHz VBW=300kHz

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

Antenna Gain=24dBi

The EUT installed on a metal pole as intended. DC power port is connected to a DC power supply via a CAT5 cable. The Ethernet port is connected to a remote laptop which is outside of the chamber.

The Remote laptop is running test software to exercise the intended functionalities. Receiver circuit is active.

Vertical polarity of the antenna is connected to Chain 1

Horizontal polarity of the antenna is connected to Chain 0

Note: Span 10MHz Data rate =13Mbps

C0 and C1 at the same time Low, Middle and High Channel

Adding one ferrite (Steward 28A 2024-0A0) with one pass through on RJ45 Data cables.

Scans were performed with the RBW reduced as needed. Data all taken at the proper RBW setting. Above 11GHz, hand scan the unit at a 1 meter distance to determine if there are any signals. Any signals found are hand maximized at a 1 meter distance to ensure the maximum signal is found.

Ext Attn: 0 dB

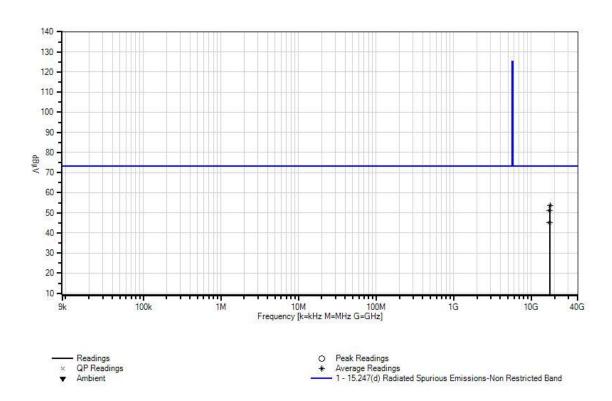
Measi	irement Data:	Re	eading lis	ted by ma	argin.		Te	st Distanc	e: 1 Meter		
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dΒμV	dΒμV	dB	Ant
1	17517.180 M	67.5	-14.3	+6.1	+0.8	+2.9	-9.5	53.5	73.4	-19.9	Vert
	Ave								High Char	nnel-	
									25dBm- N	ot in	
									Restricted	band	
٨	17517.180 M	80.0	-14.3	+6.1	+0.8	+2.9	-9.5	66.0	73.4	-7.4	Vert
									High Char	nnel-	
									25dBm- N	ot in	
									Restricted	band	

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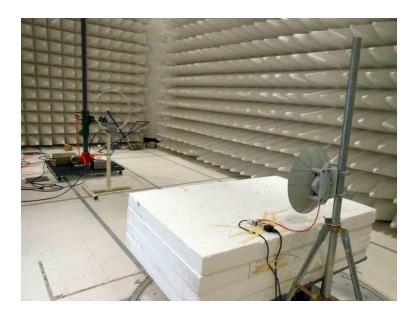
3 17349.775 M	65.5	-14.6	+6.0	+0.8	+2.9	-9.5	51.1	73.4	-22.3	Vert
Ave								Middle Cha	annel-	
								25dBm-No	t in	
								Restricted 1	Band	
^ 17349.775 M	78.9	-14.6	+6.0	+0.8	+2.9	-9.5	64.5	73.4	-8.9	Vert
								Middle Cha	annel-	
								25dBm-No	t in	
								Restrict Ba	nd	
5 17202.284 M	59.6	-14.8	+6.0	+0.8	+2.9	-9.5	45.0	73.4	-28.4	Vert
Ave								Low Chann	nel -	
								25dBm- No	ot in	
								Restricted 1	Band	
^ 17202.284 M	70.3	-14.8	+6.0	+0.8	+2.9	-9.5	55.7	73.4	-17.7	Vert
								Low Chann	nel-	
								25dBm- No	ot in	
								Restricted 1	Band	

CKC Laboratories, Inc. Date: 6/24/2013 Time: 09:44:57 Digital Path WO#: 94341 Test Distance: 1 Meter. Sequence#: 87





Test Setup Photos



9kHz-30MHz

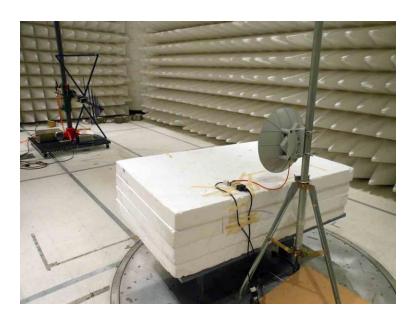


9kHz-30MHz





30MHz -1GHz

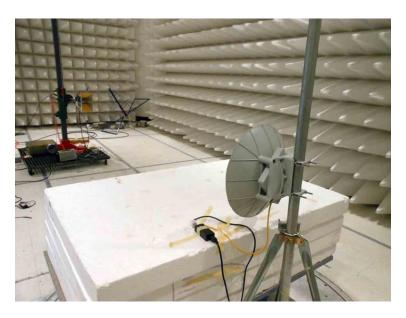


30MHz -1GHz



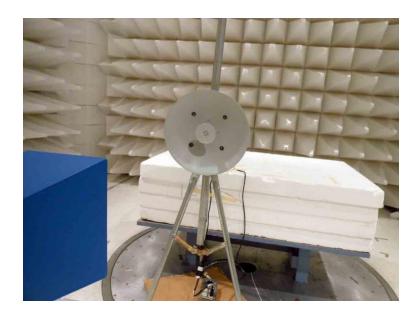


1-10GHz

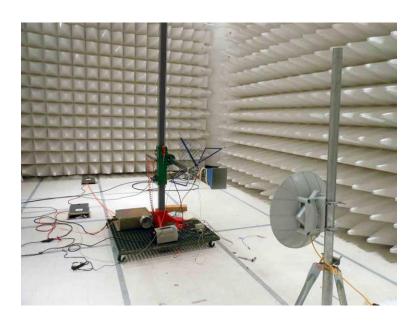


1-10GHz





10-40GHz



10-40GHz



15.247 Power Spectral Density

Test Conditions / Setup

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170

Customer: Digital Path

Specification: **OBW**

 Work Order #:
 94341
 Date:
 6/19/2013

 Test Type:
 Conducted
 Time:
 6:13:43 PM

Equipment: **GEN6 CPE** Sequence#: 1

Manufacturer: Digital Path Tested By: Hieu Song Nguyenpham

Model: 2x S/N: 004

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	ANP05411	Attenuator	54A-10	1/26/2012	1/26/2014
	ANP06125	Cable	32022-29094K-	5/6/2013	5/6/2015
			29094K-72TC		
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
POE Power Adapter	ITE Power Supply	FAS24000050-C44	None
GEN6 CPE*	Digital Path	2x	004

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC power adapter for laptop	HP	Series PPP012H-S	F12941126327228
Laptop	HP	Probook 6565b	None

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Software Used: art2_ver2_28_6BIN

Temperature: 22.3°C Humidity: 41 %

Atmospheric Pressure: 101.4 kPa

High Clock: 40 MHz clock, board runs at 560 MHz

Transmitting operating frequency= 5730-5845 MHz for 5MHz Band Transmitting operating frequency= 5735-5840 MHz for 10MHz Band

Channel Span: 5MHz to 10MHz 2 Chain: Chain 0 and Chain1 RF out power =25dBm

Cable loss = 1.56dBAttenuator=9.4dB

The EUT is on the table and connected to the Spectrum Analyzer.

Test Data

The limit is 8dBm.

Power Spectral Density: 15.247, 5MHz					
Channal	802.11n (dBm)				
Channel	Chain 0	Chain 1			
LO	6.43	7.11			
MID	6.02	7.30			
HI	5.20	6.78			

Maximum Power Input 25 dBm . Worst Case 802.11a data rate is MCS2=19.5Mbps

The Power Spectral Density measurements were made using the methods set out in KDB "558704 D01 DTS Meas Guidance v03r01", Section 10.2 Measurement Procedure PKPSD.

The offset of the analyzer was set to correct for the cable and attenuator used during measurement. The units are in dBm. The limit is 8dBm.

Cable Loss: 1.56dB Attenuator: 9.4dB

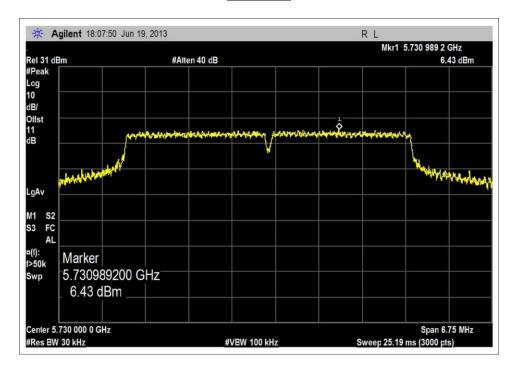
LO= LO Channel MID =MID Channel HI =HI Channel n =802.11n 5MHz =System 5MHz Channel Width

10MH= System 10MHz Channel Width

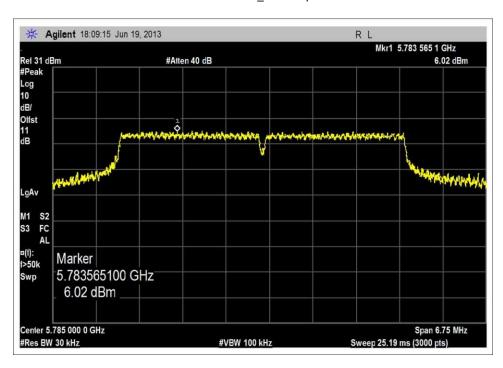
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<u>Chain 0 5MHz</u> <u>Test Plots</u>

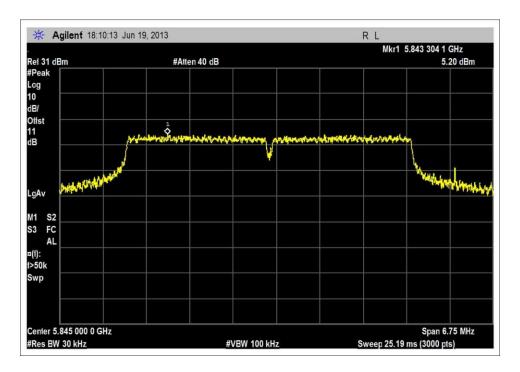


Low Channel_19.5Mbps



Mid Channel_19.5Mbps

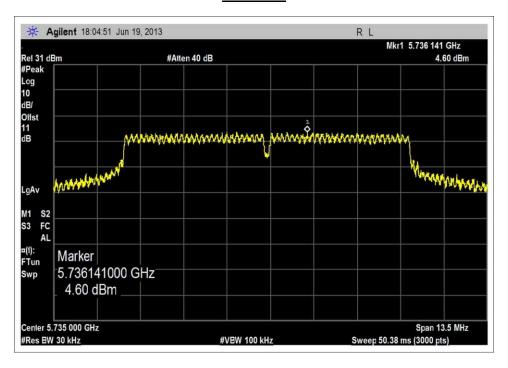




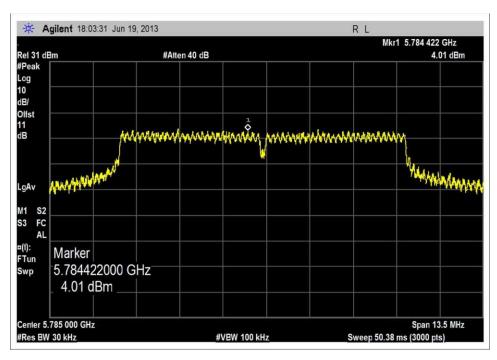
Mid Channel_19.5Mbps



<u>Chain 0 10MHz</u> <u>Test Plots</u>

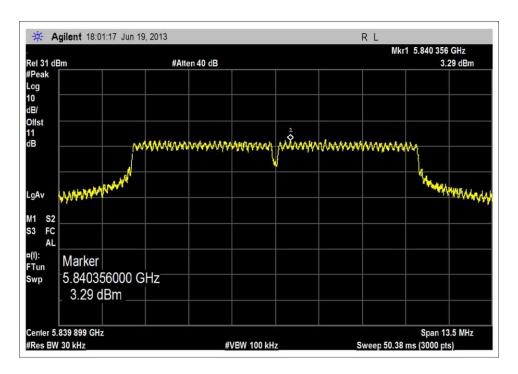


Low Channel 13.0Mbps



Mid Channel 13.0Mbps

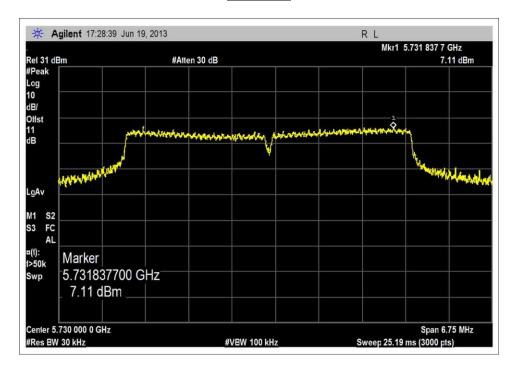




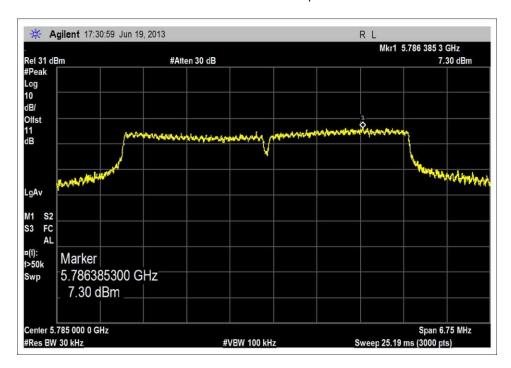
High Channel 13.0Mbps



<u>Chain 1 5MHz</u> <u>Test Plots</u>

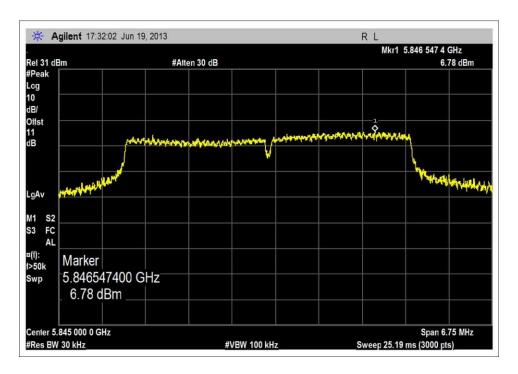


Low Channel 19.5Mbps



Mid Channel 19.5Mbps

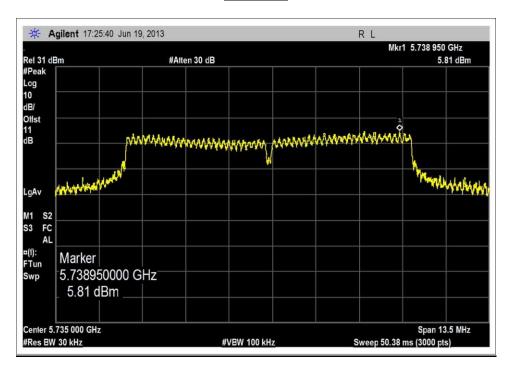




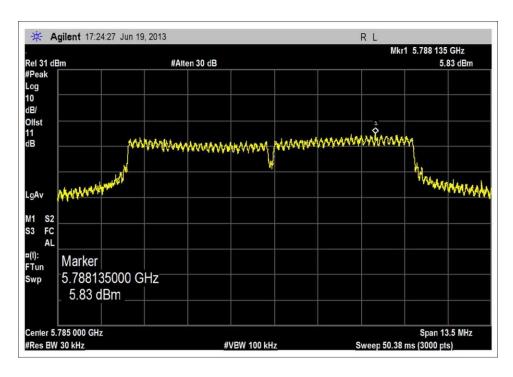
High Channel 19.5Mbps



<u>Chain 1 10MHz</u> <u>Test Plots</u>

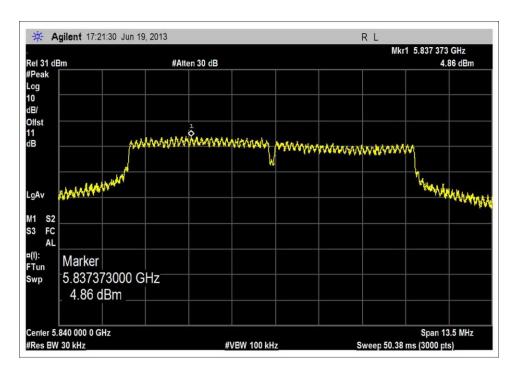


Low Channel 13.0Mbps



Mid Channel 13.0Mbps



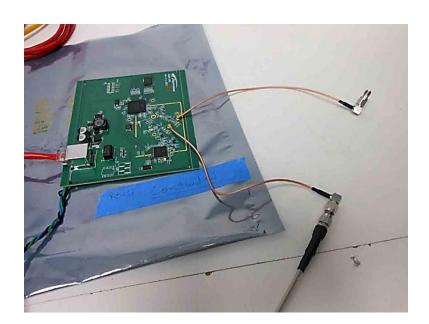


Mid Channel 13.0Mbps



Test Setup Photos







SUPPLEMENTAL INFORMATION

Measurement Uncertainty

Uncertainty Value	Parameter
4.73 dB	Radiated Emissions
3.34 dB	Mains Conducted Emissions
3.30 dB	Disturbance Power

The reported measurement uncertainties are calculated based on the worst case of all laboratory environments from CKC Laboratories, Inc. test sites. Only those parameters which require estimation of measurement uncertainty are reported. The reported worst case measurement uncertainty is less than the maximum values derived in CISPR 16-4-2. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k=2. Compliance is deemed to occur provided measurements are below the specified limits.

Emissions Test Details

TESTING PARAMETERS

Unless otherwise indicated, the following configuration parameters are used for equipment setup: The cables were routed consistent with the typical application by varying the configuration of the test sample. Interface cables were connected to the available ports of the test unit. The effect of varying the position of the cables was investigated to find the configuration that produced maximum emissions. Cables were of the type and length specified in the individual requirements. The length of cable that produced maximum emissions was selected.

The equipment under test (EUT) was set up in a manner that represented its normal use, as shown in the setup photographs. Any special conditions required for the EUT to operate normally are identified in the comments that accompany the emissions tables.

The emissions data was taken with a spectrum analyzer or receiver. Incorporating the applicable correction factors for distance, antenna, cable loss and amplifier gain, the data was reduced as shown in the table below. The corrected data was then compared to the applicable emission limits. Preliminary and final measurements were taken in order to ensure that all emissions from the EUT were found and maximized.

CORRECTION FACTORS

The basic spectrum analyzer reading was converted using correction factors as shown in the highest emissions readings in the tables. For radiated emissions in $dB\mu V/m$, the spectrum analyzer reading in $dB\mu V$ was corrected by using the following formula. This reading was then compared to the applicable specification limit.

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SAMPLE CALCULATIONS						
	Meter reading	(dBμV)				
+	Antenna Factor	(dB)				
+	Cable Loss	(dB)				
-	Distance Correction	(dB)				
-	Preamplifier Gain	(dB)				
=	Corrected Reading	(dBμV/m)				

TEST INSTRUMENTATION AND ANALYZER SETTINGS

The test instrumentation and equipment listed were used to collect the emissions data. A spectrum analyzer or receiver was used for all measurements. Unless otherwise specified, the following table shows the measuring equipment bandwidth settings that were used in designated frequency bands. For testing emissions, an appropriate reference level and a vertical scale size of 10 dB per division were used.

MEASURING EQUIPMENT BANDWIDTH SETTINGS PER FREQUENCY RANGE			
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
CONDUCTED EMISSIONS	150 kHz	30 MHz	9 kHz
RADIATED EMISSIONS	9 kHz	150 kHz	200 Hz
RADIATED EMISSIONS	150 kHz	30 MHz	9 kHz
RADIATED EMISSIONS	30 MHz	1000 MHz	120 kHz
RADIATED EMISSIONS	1000 MHz	>1 GHz	1 MHz

SPECTRUM ANALYZER/RECEIVER DETECTOR FUNCTIONS

The notes that accompany the measurements contained in the emissions tables indicate the type of detector function used to obtain the given readings. Unless otherwise noted, all readings were made in the "positive peak" detector mode. Whenever a "quasi-peak" or "average" reading was recorded, the measurement was annotated with a "QP" or an "Ave" on the appropriate rows of the data sheets. In cases where quasi-peak or average limits were employed and data exists for multiple measurement types for the same frequency then the peak measurement was retained in the report for reference, however the numbering for the affected row was removed and an arrow or carrot ("A") was placed in the far left-hand column indicating that the row above takes precedence for comparison to the limit. The following paragraphs describe in more detail the detector functions and when they were used to obtain the emissions data.

Peak

In this mode, the spectrum analyzer or receiver recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature called "peak hold," the measurement device had the ability to measure intermittent or low duty cycle transient emission peak levels. In this mode the measuring device made a slow scan across the frequency band selected and measured the peak emission value found at each frequency across the band.

Quasi-Peak

Quasi-peak measurements were taken using the quasi-peak detector when the true peak values exceeded or were within 2 dB of a quasi-peak specification limit. Additional QP measurements may have been taken at the discretion of the operator.

Average

Average measurements were taken using the average detector when the true peak values exceeded or were within 2 dB of an average specification limit. Additional average measurements may have been taken at the discretion of the operator. If the specification or test procedure requires trace averaging, then the averaging was performed using 100 samples or as required by the specification. All other average measurements are performed using video bandwidth averaging. To make these measurements, the test engineer reduces the video bandwidth on the measuring device until the modulation of the signal is filtered out. At this point the measuring device is set into the linear mode and the scan time is reduced.

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