



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch 149 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 7 (Ant. 7 Patch antenna / 2.3dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamplifier			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11489.12	35.94	54.00	-18.06	27.33	5.11	38.78	35.28	Average	100	308 HORIZONTAL
2	11493.28	50.69	74.00	-23.31	42.07	5.12	38.78	35.28	Peak	100	308 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamplifier			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11485.62	50.56	74.00	-23.44	41.95	5.11	38.78	35.28	Peak	100	325 VERTICAL
2	11491.76	35.87	54.00	-18.13	27.26	5.11	38.78	35.28	Average	100	325 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch 157 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 7 (Ant. 7 Patch antenna / 2.3dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dBuV	dB	dB/m				
1	11565.08	50.79	74.00	-23.21	42.14	5.13	38.82	35.30	Peak	100	303	HORIZONTAL
2	11574.98	36.97	54.00	-17.03	28.30	5.14	38.83	35.30	Average	100	303	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dBuV	dB	dB/m				
1	11567.00	37.44	54.00	-16.56	28.79	5.13	38.82	35.30	Average	137	357	VERTICAL
2	11569.70	51.63	74.00	-22.37	42.97	5.13	38.83	35.30	Peak	137	357	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch165 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 7 (Ant. 7 Patch antenna / 2.3dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11649.00	50.49	74.00	-23.51	41.77	5.16	38.86	35.30	Peak	100	312	HORIZONTAL
2	11653.84	36.67	54.00	-17.33	27.95	5.16	38.86	35.30	Average	100	312	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11649.82	50.89	74.00	-23.11	42.17	5.16	38.86	35.30	Peak	115	358	VERTICAL
2	11650.14	37.10	54.00	-16.90	28.38	5.16	38.86	35.30	Average	115	358	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch 149 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 7 (Ant. 7 Patch antenna / 2.3dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamplifier			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11467.50	35.55	54.00	-18.45	26.95	5.11	38.77	35.28	Average	100	242 HORIZONTAL
2	11493.60	48.89	74.00	-25.11	40.27	5.12	38.78	35.28	Peak	100	242 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamplifier			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11471.40	48.70	74.00	-25.30	40.10	5.11	38.77	35.28	Peak	100	122 VERTICAL
2	11473.10	35.51	54.00	-18.49	26.91	5.11	38.77	35.28	Average	100	122 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch157 / Chain 1+ Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 7 (Ant. 7 Patch antenna / 2.3dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	11590.00	49.86	74.00	-24.14	41.19	5.14	38.83	35.30	Peak	100	186	HORIZONTAL
2	11593.10	35.70	54.00	-18.30	27.03	5.14	38.83	35.30	Average	100	186	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	11569.00	49.71	74.00	-24.29	41.05	5.13	38.83	35.30	Peak	100	304	VERTICAL
2	11571.20	37.17	54.00	-16.83	28.50	5.14	38.83	35.30	Average	100	304	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch165 / Chain 1+ Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 7 (Ant. 7 Patch antenna / 2.3dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB		cm	deg	
1	11642.50	36.26	54.00	-17.74	27.54	5.16	38.86	35.30	Average	100	276	HORIZONTAL
2	11659.60	49.80	74.00	-24.20	41.08	5.16	38.86	35.30	Peak	100	276	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB		cm	deg	
1	11645.30	36.58	54.00	-17.42	27.86	5.16	38.86	35.30	Average	100	148	VERTICAL
2	11648.40	49.93	74.00	-24.07	41.21	5.16	38.86	35.30	Peak	100	148	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 20MHz Ch 149 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 7 (Ant. 7 Patch antenna / 2.3dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11467.40	35.65	54.00	-18.35	27.05	5.11	38.77	35.28	Average	100	339 HORIZONTAL
2	11468.00	49.01	74.00	-24.99	40.41	5.11	38.77	35.28	Peak	100	339 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11470.50	35.63	54.00	-18.37	27.03	5.11	38.77	35.28	Average	100	237 VERTICAL
2	11477.60	48.69	74.00	-25.31	40.09	5.11	38.77	35.28	Peak	100	237 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 20MHz Ch 157 / Chain 1+ Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 7 (Ant. 7 Patch antenna / 2.3dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11549.40	49.20	74.00	-24.80	40.56	5.13	38.81	35.30	Peak	100	215	HORIZONTAL
2	11593.90	35.72	54.00	-18.28	27.05	5.14	38.83	35.30	Average	100	215	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11552.90	49.49	74.00	-24.51	40.84	5.13	38.82	35.30	Peak	100	115	VERTICAL
2	11567.70	35.87	54.00	-18.13	27.21	5.13	38.83	35.30	Average	100	115	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 20MHz Ch165 / Chain 1+ Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 7 (Ant. 7 Patch antenna / 2.3dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11630.00	49.71	74.00	-24.29	41.00	5.16	38.85	35.30	Peak	100	313 HORIZONTAL
2	11656.00	36.30	54.00	-17.70	27.58	5.16	38.86	35.30	Average	100	313 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11651.60	36.35	54.00	-17.65	27.63	5.16	38.86	35.30	Average	100	154 VERTICAL
2	11657.40	50.77	74.00	-23.23	42.05	5.16	38.86	35.30	Peak	100	154 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch 149 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 7 (Ant. 7 Patch antenna / 2.3dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11470.40	50.49	74.00	-23.51	41.89	5.11	38.77	35.28	Peak	100	221 HORIZONTAL
2	11484.10	37.16	54.00	-16.84	28.55	5.11	38.78	35.28	Average	100	221 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11489.60	37.49	54.00	-16.51	28.88	5.11	38.78	35.28	Average	100	314 VERTICAL
2	11491.40	50.68	74.00	-23.32	42.07	5.11	38.78	35.28	Peak	100	314 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch 157 / Chain 1+ Chain 2+ Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 7 (Ant. 7 Patch antenna / 2.3dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11583.30	50.54	74.00	-23.46	41.87	5.14	38.83	35.30	Peak	100	218 HORIZONTAL
2	11594.20	37.28	54.00	-16.72	28.61	5.14	38.83	35.30	Average	100	218 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11571.20	37.57	54.00	-16.43	28.90	5.14	38.83	35.30	Average	100	125 VERTICAL
2	11576.20	50.28	74.00	-23.72	41.61	5.14	38.83	35.30	Peak	100	125 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch165 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 7 (Ant. 7 Patch antenna / 2.3dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	cm	deg	
1	11653.20	37.46	54.00	-16.54	28.74	5.16	38.86	35.30	Average	100	51	HORIZONTAL
2	11666.30	50.57	74.00	-23.43	41.85	5.16	38.86	35.30	Peak	100	51	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	cm	deg	
1	11628.80	50.26	74.00	-23.74	41.55	5.16	38.85	35.30	Peak	100	127	VERTICAL
2	11645.30	37.38	54.00	-16.62	28.66	5.16	38.86	35.30	Average	100	127	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 20MHz Ch 149 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 7 (Ant. 7 Patch antenna / 2.3dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Loss Factor			Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	Line	dB	dBuV	dB	dB/m	dB	cm	deg	cm	deg	
1	11487.20	37.23	54.00	-16.77	28.62	5.11	38.78	35.28	Average	100	154	HORIZONTAL		
2	11493.00	49.89	74.00	-24.11	41.28	5.11	38.78	35.28	Peak	100	154	HORIZONTAL		

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Loss Factor			Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	Line	dB	dBuV	dB	dB/m	dB	cm	deg	cm	deg	
1	11490.20	37.25	54.00	-16.75	28.64	5.11	38.78	35.28	Average	100	241	VERTICAL		
2	11499.50	49.43	74.00	-24.57	40.80	5.12	38.79	35.28	Peak	100	241	VERTICAL		



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 20MHz Ch 157 / Chain 1+ Chain 2+ Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 7 (Ant. 7 Patch antenna / 2.3dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11566.80	50.42	74.00	-23.58	41.77	5.13	38.82	35.30	Peak	100	104 HORIZONTAL
2	11591.10	37.35	54.00	-16.65	28.68	5.14	38.83	35.30	Average	100	104 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11566.90	37.49	54.00	-16.51	28.84	5.13	38.82	35.30	Average	100	200 VERTICAL
2	11571.90	50.31	74.00	-23.69	41.64	5.14	38.83	35.30	Peak	100	200 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 20MHz Ch165 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 7 (Ant. 7 Patch antenna / 2.3dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	11633.10	50.38	74.00	-23.62	41.67	5.16	38.85	35.30	Peak	100	122	HORIZONTAL
2	11646.00	37.35	54.00	-16.65	28.63	5.16	38.86	35.30	Average	100	122	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	11657.00	37.37	54.00	-16.63	28.65	5.16	38.86	35.30	Average	100	43	VERTICAL
2	11660.90	50.15	74.00	-23.85	41.43	5.16	38.86	35.30	Peak	100	43	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 40MHz Ch 151 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 7 (Ant. 7 Patch antenna / 2.3dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11505.84	35.85	54.00	-18.15	27.22	5.12	38.79	35.28	Average	100	347 HORIZONTAL
2	11506.14	50.20	74.00	-23.80	41.57	5.12	38.79	35.28	Peak	100	347 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11505.70	35.83	54.00	-18.17	27.20	5.12	38.79	35.28	Average	100	326 VERTICAL
2	11507.72	49.74	74.00	-24.26	41.11	5.12	38.79	35.28	Peak	100	326 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 40MHz Ch 159 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 7 (Ant. 7 Patch antenna / 2.3dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable			Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	Line	dB	dBuV	dB	dB/m	dB	cm	deg	cm	deg	
1	11606.24	36.36	54.00	-17.64	27.67	5.15	38.84	35.30	Average	100	314	HORIZONTAL		
2	11614.98	50.60	74.00	-23.40	41.91	5.15	38.84	35.30	Peak	100	314	HORIZONTAL		

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable			Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	Line	dB	dBuV	dB	dB/m	dB	cm	deg	cm	deg	
1	11606.14	36.45	54.00	-17.55	27.76	5.15	38.84	35.30	Average	100	356	VERTICAL		
2	11608.98	50.78	74.00	-23.22	42.09	5.15	38.84	35.30	Peak	100	356	VERTICAL		



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 40MHz Ch 151 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 7 (Ant. 7 Patch antenna / 2.3dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
1	11534.30	35.64	54.00	-18.36	26.99	5.13	38.81	35.29	Average	100	97	HORIZONTAL
2	11534.60	49.37	74.00	-24.63	40.72	5.13	38.81	35.29	Peak	100	97	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
1	11509.40	49.98	74.00	-24.02	41.35	5.12	38.79	35.28	Peak	100	198	VERTICAL
2	11534.80	35.64	54.00	-18.36	26.99	5.13	38.81	35.29	Average	100	198	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 40MHz Ch 159 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 7 (Ant. 7 Patch antenna / 2.3dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	dB	cm	deg		
1	11587.40	49.03	74.00	-24.97	40.36	5.14	38.83	35.30	Peak	100	330	HORIZONTAL
2	11612.50	36.00	54.00	-18.00	27.31	5.15	38.84	35.30	Average	100	330	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	dB	cm	deg		
1	11609.50	35.95	54.00	-18.05	27.26	5.15	38.84	35.30	Average	100	200	VERTICAL
2	11614.40	49.71	74.00	-24.29	41.02	5.15	38.84	35.30	Peak	100	200	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 40MHz Ch 151 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 7 (Ant. 7 Patch antenna / 2.3dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	11587.40	49.03	74.00	-24.97	40.36	5.14	38.83	35.30	Peak	100	330	HORIZONTAL
2	11612.50	36.00	54.00	-18.00	27.31	5.15	38.84	35.30	Average	100	330	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	11609.50	35.95	54.00	-18.05	27.26	5.15	38.84	35.30	Average	100	200	VERTICAL
2	11614.40	49.71	74.00	-24.29	41.02	5.15	38.84	35.30	Peak	100	200	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 40MHz Ch 159 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 7 (Ant. 7 Patch antenna / 2.3dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	11496.30	48.74	74.00	-25.26	40.12	5.12	38.78	35.28	Peak	100	107	HORIZONTAL
2	11531.60	35.64	54.00	-18.36	27.00	5.13	38.80	35.29	Average	100	107	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	11526.80	48.71	74.00	-25.29	40.07	5.13	38.80	35.29	Peak	100	199	VERTICAL
2	11534.90	35.60	54.00	-18.40	26.95	5.13	38.81	35.29	Average	100	199	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 40MHz Ch 151 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 7 (Ant. 7 Patch antenna / 2.3dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	dB	cm	deg		
1	11589.60	49.64	74.00	-24.36	40.97	5.14	38.83	35.30	Peak	100	242	HORIZONTAL
2	11590.00	35.62	54.00	-18.38	26.95	5.14	38.83	35.30	Average	100	242	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	dB	cm	deg		
1	11540.50	49.09	74.00	-24.91	40.45	5.13	38.81	35.30	Peak	100	156	VERTICAL
2	11589.80	35.74	54.00	-18.26	27.07	5.14	38.83	35.30	Average	100	156	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 40MHz Ch 159 / Chain 1 + Chain 2 +Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 7 (Ant. 7 Patch antenna / 2.3dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over	Read	Cable			Antenna	Preamp	A/Pos	T/Pos	Pol/Phase
		Line	Limit			Loss	Factor	Factor					
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg				
1	11490.00	37.10	54.00	-16.90	28.49	5.11	38.78	35.28	Average		100	170	HORIZONTAL
2	11493.10	50.90	74.00	-23.10	42.29	5.11	38.78	35.28	Peak		100	170	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over	Read	Cable			Antenna	Preamp	A/Pos	T/Pos	Pol/Phase
		Line	Limit			Loss	Factor	Factor					
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg				
1	11490.30	37.10	54.00	-16.90	28.49	5.11	38.78	35.28	Average		100	224	VERTICAL
2	11505.20	50.04	74.00	-23.96	41.41	5.12	38.79	35.28	Peak		100	224	VERTICAL

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Serway Lee	<b>Configurations</b>	IEEE 802.11n MCS8 40MHz Ch 151 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Apr. 27, 2012	<b>Test Mode</b>	Mode 7 (Ant. 7 Patch antenna / 2.3dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	11567.60	50.78	74.00	-23.22	42.12	5.13	38.83	35.30	Peak	100	157	HORIZONTAL
2	11590.40	37.38	54.00	-16.62	28.71	5.14	38.83	35.30	Average	100	157	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	11599.80	37.35	54.00	-16.65	28.67	5.15	38.83	35.30	Average	100	72	VERTICAL
2	11608.00	50.80	74.00	-23.20	42.11	5.15	38.84	35.30	Peak	100	72	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 40MHz Ch 159 / Chain 1 + Chain 2 +Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 7 (Ant. 7 Patch antenna / 2.3dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Loss Factor			Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	Line	dB	dBuV	dB	dB/m	dB	cm	deg	cm	deg	
1	11487.10	37.25	54.00	-16.75	28.64	5.11	38.78	35.28	Average	100	66	HORIZONTAL		
2	11520.80	51.36	74.00	-22.64	42.72	5.13	38.80	35.29	Peak	100	66	HORIZONTAL		

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Loss Factor			Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	Line	dB	dBuV	dB	dB/m	dB	cm	deg	cm	deg	
1	11490.10	37.19	54.00	-16.81	28.58	5.11	38.78	35.28	Average	100	153	VERTICAL		
2	11513.80	49.94	74.00	-24.06	41.31	5.12	38.79	35.28	Peak	100	153	VERTICAL		

**Note:**

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch 149 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 8 (Ant. 8 Panel antenna / 10.5dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
1	11490.19	37.38	54.00	-16.62	28.77	5.11	38.78	35.28	Average	100	234	HORIZONTAL
2	11490.41	49.75	74.00	-24.25	41.14	5.11	38.78	35.28	Peak	100	234	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
1	11490.55	36.72	54.00	-17.28	28.11	5.11	38.78	35.28	Average	100	88	VERTICAL
2	11490.91	50.11	74.00	-23.89	41.50	5.11	38.78	35.28	Peak	100	88	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch 157 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 8 (Ant. 8 Panel antenna / 10.5dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11569.84	38.48	54.00	-15.52	29.81	5.14	38.83	35.30	Average	100	169	HORIZONTAL
2	11569.95	51.71	74.00	-22.29	43.04	5.14	38.83	35.30	Peak	100	169	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11569.55	41.26	54.00	-12.74	32.60	5.13	38.83	35.30	Average	100	163	VERTICAL
2	11569.71	54.17	74.00	-19.83	45.51	5.13	38.83	35.30	Peak	100	163	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch165 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 8 (Ant. 8 Panel antenna / 10.5dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	11649.55	51.27	74.00	-22.73	42.55	5.16	38.86	35.30	Peak	100	180	HORIZONTAL
2	11650.44	38.79	54.00	-15.21	30.07	5.16	38.86	35.30	Average	100	180	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	11649.66	39.18	54.00	-14.82	30.46	5.16	38.86	35.30	Average	100	276	VERTICAL
2	11650.04	52.47	74.00	-21.53	43.75	5.16	38.86	35.30	Peak	100	276	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch 149 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 8 (Ant. 8 Panel antenna / 10.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor				
1	11489.92	49.55	74.00	-24.45	40.94	5.11	38.78	35.28	Peak	100	274	HORIZONTAL
2	11489.99	37.22	54.00	-16.78	28.61	5.11	38.78	35.28	Average	100	274	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor				
1	11489.66	49.77	74.00	-24.23	41.16	5.11	38.78	35.28	Peak	100	119	VERTICAL
2	11490.45	36.72	54.00	-17.28	28.11	5.11	38.78	35.28	Average	100	119	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch157 / Chain 1+ Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 8 (Ant. 8 Panel antenna / 10.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
1	11570.05	51.37	74.00	-22.63	42.70	5.14	38.83	35.30	Peak	100	284	HORIZONTAL
2	11570.31	39.67	54.00	-14.33	31.00	5.14	38.83	35.30	Average	100	284	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
1	11569.90	42.07	54.00	-11.93	33.40	5.14	38.83	35.30	Average	100	166	VERTICAL
2	11569.95	55.72	74.00	-18.28	47.05	5.14	38.83	35.30	Peak	100	166	VERTICAL

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Serway Lee	<b>Configurations</b>	IEEE 802.11n MCS0 20MHz Ch165 / Chain 1+ Chain 2
<b>Test Date</b>	Apr. 27, 2012	<b>Test Mode</b>	Mode 8 (Ant. 8 Panel antenna / 10.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	11650.18	51.16	74.00	-22.84	42.44	5.16	38.86	35.30	Peak	100	210	HORIZONTAL
2	11650.29	38.63	54.00	-15.37	29.91	5.16	38.86	35.30	Average	100	210	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	11649.68	51.33	74.00	-22.67	42.61	5.16	38.86	35.30	Peak	100	161	VERTICAL
2	11650.13	38.38	54.00	-15.62	29.66	5.16	38.86	35.30	Average	100	161	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 20MHz Ch 149 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 8 (Ant. 8 Panel antenna / 10.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor				
1	11489.52	49.45	74.00	-24.55	40.84	5.11	38.78	35.28	Peak	100	286	HORIZONTAL
2	11489.94	36.99	54.00	-17.01	28.38	5.11	38.78	35.28	Average	100	286	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor				
1	11489.89	50.01	74.00	-23.99	41.40	5.11	38.78	35.28	Peak	100	172	VERTICAL
2	11489.99	37.36	54.00	-16.64	28.75	5.11	38.78	35.28	Average	100	172	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 20MHz Ch 157 / Chain 1+ Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 8 (Ant. 8 Panel antenna / 10.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	11569.55	39.12	54.00	-14.88	30.46	5.13	38.83	35.30	Average	100	230	HORIZONTAL
2	11570.26	51.03	74.00	-22.97	42.36	5.14	38.83	35.30	Peak	100	230	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	11569.64	54.37	74.00	-19.63	45.71	5.13	38.83	35.30	Peak	100	166	VERTICAL
2	11569.97	42.28	54.00	-11.72	33.61	5.14	38.83	35.30	Average	100	166	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 20MHz Ch165 / Chain 1+ Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 8 (Ant. 8 Panel antenna / 10.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11649.89	38.42	54.00	-15.58	29.70	5.16	38.86	35.30	Average	100	298	HORIZONTAL
2	11650.34	51.61	74.00	-22.39	42.89	5.16	38.86	35.30	Peak	100	298	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11650.03	38.83	54.00	-15.17	30.11	5.16	38.86	35.30	Average	100	161	VERTICAL
2	11650.29	51.64	74.00	-22.36	42.92	5.16	38.86	35.30	Peak	100	161	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch 149 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 8 (Ant. 8 Panel antenna / 10.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
1	11490.08	37.48	54.00	-16.52	28.87	5.11	38.78	35.28	Average	100	299	HORIZONTAL
2	11490.22	49.29	74.00	-24.71	40.68	5.11	38.78	35.28	Peak	100	299	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
1	11490.32	49.98	74.00	-24.02	41.37	5.11	38.78	35.28	Peak	100	114	VERTICAL
2	11490.34	38.32	54.00	-15.68	29.71	5.11	38.78	35.28	Average	100	114	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch 157 / Chain 1+ Chain 2+ Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 8 (Ant. 8 Panel antenna / 10.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor				
1	11569.72	50.61	74.00	-23.39	41.95	5.13	38.83	35.30	Peak	100	222	HORIZONTAL
2	11570.12	39.99	54.00	-14.01	31.32	5.14	38.83	35.30	Average	100	222	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor				
1	11569.83	55.41	74.00	-18.59	46.74	5.14	38.83	35.30	Peak	100	166	VERTICAL
2	11570.40	42.44	54.00	-11.56	33.77	5.14	38.83	35.30	Average	100	166	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch165 / Chain 1+ Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 8 (Ant. 8 Panel antenna / 10.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11649.54	39.53	54.00	-14.47	30.81	5.16	38.86	35.30	Average	100	218	HORIZONTAL
2	11650.33	50.97	74.00	-23.03	42.25	5.16	38.86	35.30	Peak	100	218	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11649.60	53.18	74.00	-20.82	44.46	5.16	38.86	35.30	Peak	100	160	VERTICAL
2	11649.74	41.21	54.00	-12.79	32.49	5.16	38.86	35.30	Average	100	160	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 20MHz Ch 149 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 8 (Ant. 8 Panel antenna / 10.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	11489.56	49.86	74.00	-24.14	41.25	5.11	38.78	35.28	Peak	100	238 HORIZONTAL
2	11489.59	37.27	54.00	-16.73	28.66	5.11	38.78	35.28	Average	100	238 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	11489.88	50.63	74.00	-23.37	42.02	5.11	38.78	35.28	Peak	100	151 VERTICAL
2	11490.06	38.11	54.00	-15.89	29.50	5.11	38.78	35.28	Average	100	151 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 20MHz Ch 157 / Chain 1+ Chain 2+ Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 8 (Ant. 8 Panel antenna / 10.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	11569.76	39.46	54.00	-14.54	30.79	5.14	38.83	35.30	Average	100	262	HORIZONTAL
2	11570.34	51.46	74.00	-22.54	42.79	5.14	38.83	35.30	Peak	100	262	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	11569.86	52.55	74.00	-21.45	43.88	5.14	38.83	35.30	Peak	100	162	VERTICAL
2	11570.10	41.08	54.00	-12.92	32.41	5.14	38.83	35.30	Average	100	162	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 20MHz Ch165 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 8 (Ant. 8 Panel antenna / 10.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dBuV				
1	11649.63	51.78	74.00	-22.22	43.06	5.16	38.86	35.30	Peak	100	234	HORIZONTAL
2	11649.64	39.32	54.00	-14.68	30.60	5.16	38.86	35.30	Average	100	234	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dBuV				
1	11649.91	40.51	54.00	-13.49	31.79	5.16	38.86	35.30	Average	100	110	VERTICAL
2	11649.94	52.26	74.00	-21.74	43.54	5.16	38.86	35.30	Peak	100	110	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 40MHz Ch 151 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 8 (Ant. 8 Panel antenna / 10.5dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
1	11509.80	50.84	74.00	-23.16	42.21	5.12	38.79	35.28	Peak	100	283	HORIZONTAL
2	11510.44	37.73	54.00	-16.27	29.10	5.12	38.79	35.28	Average	100	283	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
1	11509.93	51.09	74.00	-22.91	42.46	5.12	38.79	35.28	Peak	100	222	VERTICAL
2	11510.36	37.30	54.00	-16.70	28.67	5.12	38.79	35.28	Average	100	222	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 40MHz Ch 159 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 8 (Ant. 8 Panel antenna / 10.5dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11590.13	37.93	54.00	-16.07	29.26	5.14	38.83	35.30	Average	100	159	HORIZONTAL
2	11590.37	52.17	74.00	-21.83	43.50	5.14	38.83	35.30	Peak	100	159	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11589.65	39.57	54.00	-14.43	30.90	5.14	38.83	35.30	Average	100	197	VERTICAL
2	11589.83	51.73	74.00	-22.27	43.06	5.14	38.83	35.30	Peak	100	197	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 40MHz Ch 151 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 8 (Ant. 8 Panel antenna / 10.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	11510.44	37.66	54.00	-16.34	29.03	5.12	38.79	35.28	Average	100	218	HORIZONTAL
2	11510.47	50.20	74.00	-23.80	41.57	5.12	38.79	35.28	Peak	100	218	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	11510.31	37.76	54.00	-16.24	29.13	5.12	38.79	35.28	Average	100	127	VERTICAL
2	11510.46	50.90	74.00	-23.10	42.27	5.12	38.79	35.28	Peak	100	127	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 40MHz Ch 159 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 8 (Ant. 8 Panel antenna / 10.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	11589.99	38.46	54.00	-15.54	29.79	5.14	38.83	35.30	Average	100	244	HORIZONTAL
2	11590.39	50.81	74.00	-23.19	42.14	5.14	38.83	35.30	Peak	100	244	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	11590.23	39.84	54.00	-14.16	31.17	5.14	38.83	35.30	Average	100	168	VERTICAL
2	11590.27	52.46	74.00	-21.54	43.79	5.14	38.83	35.30	Peak	100	168	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 40MHz Ch 151 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 8 (Ant. 8 Panel antenna / 10.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	11509.78	37.68	54.00	-16.32	29.05	5.12	38.79	35.28	Average	100	254	HORIZONTAL
2	11510.33	50.58	74.00	-23.42	41.95	5.12	38.79	35.28	Peak	100	254	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	11509.65	50.72	74.00	-23.28	42.09	5.12	38.79	35.28	Peak	100	120	VERTICAL
2	11509.84	37.60	54.00	-16.40	28.97	5.12	38.79	35.28	Average	100	120	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 40MHz Ch 159 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 8 (Ant. 8 Panel antenna / 10.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Read	Cable			Preamp	A/Pos	T/Pos	Pol/Phase
		Line	Over Limit		Antenna	Loss Factor	Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11590.32	38.34	54.00	-15.66	29.67	5.14	38.83	35.30	Average	100	307 HORIZONTAL
2	11590.48	51.59	74.00	-22.41	42.92	5.14	38.83	35.30	Peak	100	307 HORIZONTAL

**Vertical**

Freq	Level	Limit		Read	Cable			Preamp	A/Pos	T/Pos	Pol/Phase
		Line	Over Limit		Antenna	Loss Factor	Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11589.62	50.93	74.00	-23.07	42.26	5.14	38.83	35.30	Peak	100	247 VERTICAL
2	11590.31	39.03	54.00	-14.97	30.36	5.14	38.83	35.30	Average	100	247 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 40MHz Ch 151 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 8 (Ant. 8 Panel antenna / 10.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11509.88	37.47	54.00	-16.53	28.84	5.12	38.79	35.28	Average	100	232	HORIZONTAL
2	11510.12	49.83	74.00	-24.17	41.20	5.12	38.79	35.28	Peak	100	232	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11509.95	37.81	54.00	-16.19	29.18	5.12	38.79	35.28	Average	100	122	VERTICAL
2	11509.97	49.93	74.00	-24.07	41.30	5.12	38.79	35.28	Peak	100	122	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 40MHz Ch 159 / Chain 1 + Chain 2 +Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 8 (Ant. 8 Panel antenna / 10.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	11589.71	38.46	54.00	-15.54	29.79	5.14	38.83	35.30	Average	100	242	HORIZONTAL
2	11589.80	51.08	74.00	-22.92	42.41	5.14	38.83	35.30	Peak	100	242	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	11589.72	53.08	74.00	-20.92	44.41	5.14	38.83	35.30	Peak	100	168	VERTICAL
2	11590.42	39.19	54.00	-14.81	30.52	5.14	38.83	35.30	Average	100	168	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 40MHz Ch 151 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 8 (Ant. 8 Panel antenna / 10.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor				
1	11510.20	50.37	74.00	-23.63	41.74	5.12	38.79	35.28	Peak	100	298	HORIZONTAL
2	11510.33	37.46	54.00	-16.54	28.83	5.12	38.79	35.28	Average	100	298	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor				
1	11509.57	50.73	74.00	-23.27	42.10	5.12	38.79	35.28	Peak	100	133	VERTICAL
2	11510.34	37.77	54.00	-16.23	29.14	5.12	38.79	35.28	Average	100	133	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 40MHz Ch 159 / Chain 1 + Chain 2 +Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 8 (Ant. 8 Panel antenna / 10.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11589.51	38.24	54.00	-15.76	29.57	5.14	38.83	35.30	Average	100	258	HORIZONTAL
2	11589.82	50.51	74.00	-23.49	41.84	5.14	38.83	35.30	Peak	100	258	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11589.74	38.93	54.00	-15.07	30.26	5.14	38.83	35.30	Average	100	113	VERTICAL
2	11589.83	51.60	74.00	-22.40	42.93	5.14	38.83	35.30	Peak	100	113	VERTICAL

**Note:**

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch 149 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 9 (Ant. 9 Yagi antenna / 8dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamplifier			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11490.99	36.38	54.00	-17.62	27.77	5.11	38.78	35.28	Average	100	334 HORIZONTAL
2	11491.90	50.46	74.00	-23.54	41.85	5.11	38.78	35.28	Peak	100	334 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamplifier			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11490.75	50.83	74.00	-23.17	42.22	5.11	38.78	35.28	Peak	100	329 VERTICAL
2	11491.11	36.44	54.00	-17.56	27.83	5.11	38.78	35.28	Average	100	329 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch 157 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 9 (Ant. 9 Yagi antenna / 8dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB		cm	deg	
1	11569.13	36.50	54.00	-17.50	27.84	5.13	38.83	35.30	Average	100	284	HORIZONTAL
2	11571.04	50.36	74.00	-23.64	41.69	5.14	38.83	35.30	Peak	100	284	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB		cm	deg	
1	11568.03	52.31	74.00	-21.69	43.65	5.13	38.83	35.30	Peak	100	73	VERTICAL
2	11569.50	38.38	54.00	-15.62	29.72	5.13	38.83	35.30	Average	100	73	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch165 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 9 (Ant. 9 Yagi antenna / 8dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11651.80	51.14	74.00	-22.86	42.42	5.16	38.86	35.30	Peak	100	172	HORIZONTAL
2	11652.30	36.74	54.00	-17.26	28.02	5.16	38.86	35.30	Average	100	172	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11647.92	52.86	74.00	-21.14	44.14	5.16	38.86	35.30	Peak	100	301	VERTICAL
2	11648.36	38.50	54.00	-15.50	29.78	5.16	38.86	35.30	Average	100	301	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch 149 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 9 (Ant. 9 Yagi antenna / 8dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
1	11489.88	50.32	74.00	-23.68	41.71	5.11	38.78	35.28	Peak	100	130	HORIZONTAL
2	11490.48	36.10	54.00	-17.90	27.49	5.11	38.78	35.28	Average	100	130	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
1	11489.01	50.47	74.00	-23.53	41.86	5.11	38.78	35.28	Peak	100	252	VERTICAL
2	11490.89	36.14	54.00	-17.86	27.53	5.11	38.78	35.28	Average	100	252	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch157 / Chain 1+ Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 9 (Ant. 9 Yagi antenna / 8dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11569.17	51.31	74.00	-22.69	42.65	5.13	38.83	35.30	Peak	100	344 HORIZONTAL
2	11570.62	36.73	54.00	-17.27	28.06	5.14	38.83	35.30	Average	100	344 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11569.35	51.76	74.00	-22.24	43.10	5.13	38.83	35.30	Peak	100	169 VERTICAL
2	11570.38	37.44	54.00	-16.56	28.77	5.14	38.83	35.30	Average	100	169 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch165 / Chain 1+ Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 9 (Ant. 9 Yagi antenna / 8dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	11649.17	50.35	74.00	-23.65	41.63	5.16	38.86	35.30	Peak	100	157	HORIZONTAL
2	11650.59	36.10	54.00	-17.90	27.38	5.16	38.86	35.30	Average	100	157	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	11649.78	50.35	74.00	-23.65	41.63	5.16	38.86	35.30	Peak	100	68	VERTICAL
2	11650.03	36.11	54.00	-17.89	27.39	5.16	38.86	35.30	Average	100	68	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 20MHz Ch 149 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 9 (Ant. 9 Yagi antenna / 8dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dB	dBuV	dB	dB/m	dB	cm	deg	cm	deg
1	11490.35	36.04	54.00	-17.96	27.43	5.11	38.78	35.28	Average	100	332	HORIZONTAL
2	11490.42	50.92	74.00	-23.08	42.31	5.11	38.78	35.28	Peak	100	332	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dB	dBuV	dB	dB/m	dB	cm	deg	cm	deg
1	11489.18	49.91	74.00	-24.09	41.30	5.11	38.78	35.28	Peak	100	187	VERTICAL
2	11490.15	36.04	54.00	-17.96	27.43	5.11	38.78	35.28	Average	100	187	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 20MHz Ch 157 / Chain 1+ Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 9 (Ant. 9 Yagi antenna / 8dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable			Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dBuV	dB	dB/m					
1	11570.28	36.31	54.00	-17.69	27.64	5.14	38.83	35.30	Average	100	246	HORIZONTAL	
2	11570.34	50.71	74.00	-23.29	42.04	5.14	38.83	35.30	Peak	100	246	HORIZONTAL	

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable			Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dBuV	dB	dB/m					
1	11569.00	36.65	54.00	-17.35	27.99	5.13	38.83	35.30	Average	100	147	VERTICAL	
2	11569.96	50.64	74.00	-23.36	41.97	5.14	38.83	35.30	Peak	100	147	VERTICAL	



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 20MHz Ch165 / Chain 1+ Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 9 (Ant. 9 Yagi antenna / 8dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable			Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	dB	cm	deg	
1	11649.96	36.08	54.00	-17.92	27.36	5.16	38.86	35.30	Average			100	206	HORIZONTAL
2	11651.00	51.31	74.00	-22.69	42.59	5.16	38.86	35.30	Peak			100	206	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable			Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	dB	cm	deg	
1	11650.00	36.09	54.00	-17.91	27.37	5.16	38.86	35.30	Average			100	313	VERTICAL
2	11650.63	50.53	74.00	-23.47	41.81	5.16	38.86	35.30	Peak			100	313	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch 149 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 9 (Ant. 9 Yagi antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	11490.41	50.21	74.00	-23.79	41.60	5.11	38.78	35.28	Peak	100	215 HORIZONTAL
2	11490.48	36.68	54.00	-17.32	28.07	5.11	38.78	35.28	Average	100	215 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	11490.05	35.55	54.00	-18.45	26.94	5.11	38.78	35.28	Average	100	80 VERTICAL
2	11490.30	49.87	74.00	-24.13	41.26	5.11	38.78	35.28	Peak	100	80 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch 157 / Chain 1+ Chain 2+ Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 9 (Ant. 9 Yagi antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	11569.54	51.00	74.00	-23.00	42.34	5.13	38.83	35.30	Peak	100	251 HORIZONTAL
2	11569.58	36.93	54.00	-17.07	28.27	5.13	38.83	35.30	Average	100	251 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	11569.63	49.83	74.00	-24.17	41.17	5.13	38.83	35.30	Peak	100	189 VERTICAL
2	11569.79	37.72	54.00	-16.28	29.05	5.14	38.83	35.30	Average	100	189 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch165 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 9 (Ant. 9 Yagi antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11650.12	49.85	74.00	-24.15	41.13	5.16	38.86	35.30	Peak	100	251	HORIZONTAL
2	11650.14	37.02	54.00	-16.98	28.30	5.16	38.86	35.30	Average	100	251	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11649.51	49.89	74.00	-24.11	41.17	5.16	38.86	35.30	Peak	100	153	VERTICAL
2	11649.92	37.26	54.00	-16.74	28.54	5.16	38.86	35.30	Average	100	153	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 20MHz Ch 149 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 9 (Ant. 9 Yagi antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	11489.90	49.94	74.00	-24.06	41.33	5.11	38.78	35.28	Peak	100	297	HORIZONTAL
2	11490.46	36.66	54.00	-17.34	28.05	5.11	38.78	35.28	Average	100	297	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	11489.52	36.99	54.00	-17.01	28.38	5.11	38.78	35.28	Average	100	249	VERTICAL
2	11489.92	49.66	74.00	-24.34	41.05	5.11	38.78	35.28	Peak	100	249	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 20MHz Ch 157 / Chain 1+ Chain 2+ Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 9 (Ant. 9 Yagi antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable			Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	Line	dB	dBuV	dB	dB/m	dB	cm	deg	cm	deg	
1	11569.67	37.38	54.00	-16.62	28.72	5.13	38.83	35.30	Average	100	228	HORIZONTAL		
2	11570.12	50.28	74.00	-23.72	41.61	5.14	38.83	35.30	Peak	100	228	HORIZONTAL		

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable			Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	Line	dB	dBuV	dB	dB/m	dB	cm	deg	cm	deg	
1	11569.60	37.10	54.00	-16.90	28.44	5.13	38.83	35.30	Average	100	156	VERTICAL		
2	11570.41	50.64	74.00	-23.36	41.97	5.14	38.83	35.30	Peak	100	156	VERTICAL		



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 20MHz Ch165 / Chain 1+ Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 9 (Ant. 9 Yagi antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamplifier			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11649.99	36.85	54.00	-17.15	28.13	5.16	38.86	35.30	Average	100	275 HORIZONTAL
2	11650.13	49.98	74.00	-24.02	41.26	5.16	38.86	35.30	Peak	100	275 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamplifier			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11649.50	50.75	74.00	-23.25	42.03	5.16	38.86	35.30	Peak	100	169 VERTICAL
2	11650.40	37.41	54.00	-16.59	28.69	5.16	38.86	35.30	Average	100	169 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 40MHz Ch 151 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 9 (Ant. 9 Yagi antenna / 8dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11506.70	50.14	74.00	-23.86	41.51	5.12	38.79	35.28	Peak	100	161	HORIZONTAL
2	11514.92	37.10	54.00	-16.90	28.48	5.12	38.79	35.29	Average	100	161	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11508.30	50.05	74.00	-23.95	41.42	5.12	38.79	35.28	Peak	100	149	VERTICAL
2	11513.70	36.41	54.00	-17.59	27.78	5.12	38.79	35.28	Average	100	149	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 40MHz Ch 159 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 9 (Ant. 9 Yagi antenna / 8dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11589.71	50.51	74.00	-23.49	41.84	5.14	38.83	35.30	Peak	100	13	HORIZONTAL
2	11591.12	36.36	54.00	-17.64	27.69	5.14	38.83	35.30	Average	100	13	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11589.28	51.98	74.00	-22.02	43.31	5.14	38.83	35.30	Peak	100	301	VERTICAL
2	11589.82	37.06	54.00	-16.94	28.39	5.14	38.83	35.30	Average	100	301	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 40MHz Ch 151 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 9 (Ant. 9 Yagi antenna / 8dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Line	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		dB	dB			Loss	Factor	Factor			
1	11510.46	50.39	74.00	-23.61	41.76	5.12	38.79	35.28	Peak	100	116 HORIZONTAL
2	11510.85	36.18	54.00	-17.82	27.55	5.12	38.79	35.28	Average	100	116 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Line	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		dB	dB			Loss	Factor	Factor			
1	11509.11	50.53	74.00	-23.47	41.90	5.12	38.79	35.28	Peak	100	203 VERTICAL
2	11510.83	36.20	54.00	-17.80	27.57	5.12	38.79	35.28	Average	100	203 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 40MHz Ch 159 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 9 (Ant. 9 Yagi antenna / 8dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable			Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	Line	dB	dBuV	dB	dB/m	dB	cm	deg	cm	deg	
1	11589.07	36.19	54.00	-17.81	27.52	5.14	38.83	35.30	Average	100	176	HORIZONTAL		
2	11590.60	50.68	74.00	-23.32	42.01	5.14	38.83	35.30	Peak	100	176	HORIZONTAL		

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable			Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	Line	dB	dBuV	dB	dB/m	dB	cm	deg	cm	deg	
1	11589.62	36.18	54.00	-17.82	27.51	5.14	38.83	35.30	Average	100	346	VERTICAL		
2	11589.96	50.34	74.00	-23.66	41.67	5.14	38.83	35.30	Peak	100	346	VERTICAL		



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 40MHz Ch 151 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 9 (Ant. 9 Yagi antenna / 8dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1 11510.56	50.66	74.00	-23.34	42.03	5.12	38.79	35.28	Peak		100	21	HORIZONTAL
2 11510.84	36.23	54.00	-17.77	27.60	5.12	38.79	35.28	Average		100	21	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1 11509.16	36.23	54.00	-17.77	27.60	5.12	38.79	35.28	Average		100	130	VERTICAL
2 11510.64	50.94	74.00	-23.06	42.31	5.12	38.79	35.28	Peak		100	130	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 40MHz Ch 159 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 9 (Ant. 9 Yagi antenna / 8dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamplifier			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11589.00	36.31	54.00	-17.69	27.64	5.14	38.83	35.30	Average	100	129 HORIZONTAL
2	11590.72	51.09	74.00	-22.91	42.42	5.14	38.83	35.30	Peak	100	129 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamplifier			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11590.69	50.68	74.00	-23.32	42.01	5.14	38.83	35.30	Peak	100	236 VERTICAL
2	11590.94	36.31	54.00	-17.69	27.64	5.14	38.83	35.30	Average	100	236 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 40MHz Ch 151 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 9 (Ant. 9 Yagi antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable			Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				cm	deg	
MHz	dBuV/m	dBuV/m	dB	dB	dBuV	dB	dB/m	dB	cm	deg				
1	11510.03	36.70	54.00	-17.30	28.07	5.12	38.79	35.28	Average	100	240	HORIZONTAL		
2	11510.28	49.55	74.00	-24.45	40.92	5.12	38.79	35.28	Peak	100	240	HORIZONTAL		

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable			Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				cm	deg	
MHz	dBuV/m	dBuV/m	dB	dB	dBuV	dB	dB/m	dB	cm	deg				
1	11509.91	36.97	54.00	-17.03	28.34	5.12	38.79	35.28	Average	100	180	VERTICAL		
2	11510.17	50.78	74.00	-23.22	42.15	5.12	38.79	35.28	Peak	100	180	VERTICAL		



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 40MHz Ch 159 / Chain 1 + Chain 2 +Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 9 (Ant. 9 Yagi antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dB	dBuV	dB	dB/m	dB	cm	deg	cm	deg
1	11589.69	36.76	54.00	-17.24	28.09	5.14	38.83	35.30	Average	100	308	HORIZONTAL
2	11590.33	49.66	74.00	-24.34	40.99	5.14	38.83	35.30	Peak	100	308	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dB	dBuV	dB	dB/m	dB	cm	deg	cm	deg
1	11589.93	50.83	74.00	-23.17	42.16	5.14	38.83	35.30	Peak	100	213	VERTICAL
2	11590.12	37.28	54.00	-16.72	28.61	5.14	38.83	35.30	Average	100	213	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 40MHz Ch 151 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 9 (Ant. 9 Yagi antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	11509.56	50.50	74.00	-23.50	41.87	5.12	38.79	35.28	Peak	100	232	HORIZONTAL
2	11509.70	36.76	54.00	-17.24	28.13	5.12	38.79	35.28	Average	100	232	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	11509.86	37.05	54.00	-16.95	28.42	5.12	38.79	35.28	Average	100	121	VERTICAL
2	11510.10	50.19	74.00	-23.81	41.56	5.12	38.79	35.28	Peak	100	121	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 40MHz Ch 159 / Chain 1 + Chain 2 +Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 9 (Ant. 9 Yagi antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Loss Factor			Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	Line	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	cm	deg
1	11589.61	36.65	54.00	-17.35	27.98	5.14	38.83	35.30	Average		100	282	HORIZONTAL	
2	11590.37	49.37	74.00	-24.63	40.70	5.14	38.83	35.30	Peak		100	282	HORIZONTAL	

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Loss Factor			Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	Line	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	cm	deg
1	11589.70	37.21	54.00	-16.79	28.54	5.14	38.83	35.30	Average		100	198	VERTICAL	
2	11590.40	50.35	74.00	-23.65	41.68	5.14	38.83	35.30	Peak		100	198	VERTICAL	

**Note:**

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch 149 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 10 (Ant. 5 Facade antenna / 2.5dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
1	11490.64	52.11	74.00	-21.89	43.50	5.11	38.78	35.28	Peak	100	159	HORIZONTAL
2	11490.84	39.11	54.00	-14.89	30.50	5.11	38.78	35.28	Average	100	159	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
1	11490.36	38.70	54.00	-15.30	30.09	5.11	38.78	35.28	Average	100	260	VERTICAL
2	11490.84	52.14	74.00	-21.86	43.53	5.11	38.78	35.28	Peak	100	260	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch 157 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 10 (Ant. 5 Facade antenna / 2.5dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	11569.73	51.81	74.00	-22.19	43.15	5.13	38.83	35.30	Peak	100	191	HORIZONTAL
2	11570.12	38.61	54.00	-15.39	29.94	5.14	38.83	35.30	Average	100	191	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	11569.51	39.32	54.00	-14.68	30.66	5.13	38.83	35.30	Average	100	249	VERTICAL
2	11570.28	51.82	74.00	-22.18	43.15	5.14	38.83	35.30	Peak	100	249	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch165 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 10 (Ant. 5 Facade antenna / 2.5dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	dB	cm	deg		
1	11650.01	52.61	74.00	-21.39	43.89	5.16	38.86	35.30	Peak	100	223	HORIZONTAL
2	11650.37	39.64	54.00	-14.36	30.92	5.16	38.86	35.30	Average	100	223	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	dB	cm	deg		
1	11649.98	40.08	54.00	-13.92	31.36	5.16	38.86	35.30	Average	100	126	VERTICAL
2	11650.01	52.82	74.00	-21.18	44.10	5.16	38.86	35.30	Peak	100	126	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch 149 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 10 (Ant. 5 Facade antenna / 2.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	11489.50	36.70	54.00	-17.30	28.09	5.11	38.78	35.28	Average	100	45 HORIZONTAL
2	11489.60	50.67	74.00	-23.33	42.06	5.11	38.78	35.28	Peak	100	45 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	11489.35	36.57	54.00	-17.43	27.96	5.11	38.78	35.28	Average	100	191 VERTICAL
2	11489.51	50.42	74.00	-23.58	41.81	5.11	38.78	35.28	Peak	100	191 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch157 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 10 (Ant. 5 Facade antenna / 2.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	dB	cm	deg		
1	11569.49	51.21	74.00	-22.79	42.55	5.13	38.83	35.30	Peak	100	162	HORIZONTAL
2	11570.46	36.80	54.00	-17.20	28.13	5.14	38.83	35.30	Average	100	162	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	dB	cm	deg		
1	11570.24	36.88	54.00	-17.12	28.21	5.14	38.83	35.30	Average	100	319	VERTICAL
2	11570.83	51.67	74.00	-22.33	43.00	5.14	38.83	35.30	Peak	100	319	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch165 / Chain 1+ Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 10 (Ant. 5 Facade antenna / 2.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Line	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		dB	dB			Loss	Factor	Factor			
1	11650.80	50.99	74.00	-23.01	42.27	5.16	38.86	35.30	Peak	100	185 HORIZONTAL
2	11650.87	37.07	54.00	-16.93	28.35	5.16	38.86	35.30	Average	100	185 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Line	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		dB	dB			Loss	Factor	Factor			
1	11650.08	51.31	74.00	-22.69	42.59	5.16	38.86	35.30	Peak	100	11 VERTICAL
2	11650.62	37.34	54.00	-16.66	28.62	5.16	38.86	35.30	Average	100	11 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 20MHz Ch 149 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 10 (Ant. 5 Facade antenna / 2.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	dB	cm	deg		
1	11489.36	50.87	74.00	-23.13	42.26	5.11	38.78	35.28	Peak	100	192	HORIZONTAL
2	11489.41	36.83	54.00	-17.17	28.22	5.11	38.78	35.28	Average	100	192	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	dB	cm	deg		
1	11489.04	50.77	74.00	-23.23	42.16	5.11	38.78	35.28	Peak	100	316	VERTICAL
2	11489.55	36.85	54.00	-17.15	28.24	5.11	38.78	35.28	Average	100	316	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 20MHz Ch 157 / Chain 1+ Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 10 (Ant. 5 Facade antenna / 2.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor				
1	11570.12	51.56	74.00	-22.44	42.89	5.14	38.83	35.30	Peak	100	141	HORIZONTAL
2	11570.44	36.95	54.00	-17.05	28.28	5.14	38.83	35.30	Average	100	141	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor				
1	11569.32	37.04	54.00	-16.96	28.38	5.13	38.83	35.30	Average	100	219	VERTICAL
2	11569.59	51.18	74.00	-22.82	42.52	5.13	38.83	35.30	Peak	100	219	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 20MHz Ch165 / Chain 1+ Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 10 (Ant. 5 Facade antenna / 2.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11650.25	51.21	74.00	-22.79	42.49	5.16	38.86	35.30	Peak	100	152	HORIZONTAL
2	11650.55	37.05	54.00	-16.95	28.33	5.16	38.86	35.30	Average	100	152	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11649.72	50.57	74.00	-23.43	41.85	5.16	38.86	35.30	Peak	100	331	VERTICAL
2	11650.30	37.03	54.00	-16.97	28.31	5.16	38.86	35.30	Average	100	331	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch 149 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 10 (Ant. 5 Facade antenna / 2.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamplifier			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	11489.46	36.61	54.00	-17.39	28.00	5.11	38.78	35.28	Average	100	223 HORIZONTAL
2	11491.22	50.29	74.00	-23.71	41.68	5.11	38.78	35.28	Peak	100	223 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamplifier			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	11489.22	50.61	74.00	-23.39	42.00	5.11	38.78	35.28	Peak	100	159 VERTICAL
2	11489.57	36.66	54.00	-17.34	28.05	5.11	38.78	35.28	Average	100	159 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch 157 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 10 (Ant. 5 Facade antenna / 2.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11567.53	37.03	54.00	-16.97	28.37	5.13	38.83	35.30	Average	100	146 HORIZONTAL
2	11568.03	51.33	74.00	-22.67	42.67	5.13	38.83	35.30	Peak	100	146 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11570.25	37.02	54.00	-16.98	28.35	5.14	38.83	35.30	Average	100	199 VERTICAL
2	11572.10	51.77	74.00	-22.23	43.10	5.14	38.83	35.30	Peak	100	199 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch165 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 10 (Ant. 5 Facade antenna / 2.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamplifier			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11648.15	37.20	54.00	-16.80	28.48	5.16	38.86	35.30	Average	100	261 HORIZONTAL
2	11650.26	50.95	74.00	-23.05	42.23	5.16	38.86	35.30	Peak	100	261 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamplifier			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11649.15	51.91	74.00	-22.09	43.19	5.16	38.86	35.30	Peak	100	309 VERTICAL
2	11652.41	37.69	54.00	-16.31	28.97	5.16	38.86	35.30	Average	100	309 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 20MHz Ch 149 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 10 (Ant. 5 Facade antenna / 2.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	11489.56	36.49	54.00	-17.51	27.88	5.11	38.78	35.28	Average	100	29 HORIZONTAL
2	11489.88	50.55	74.00	-23.45	41.94	5.11	38.78	35.28	Peak	100	29 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	11489.53	36.52	54.00	-17.48	27.91	5.11	38.78	35.28	Average	100	266 VERTICAL
2	11490.00	50.12	74.00	-23.88	41.51	5.11	38.78	35.28	Peak	100	266 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 20MHz Ch 157 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 10 (Ant. 5 Facade antenna / 2.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11570.06	51.28	74.00	-22.72	42.61	5.14	38.83	35.30	Peak	100	116	HORIZONTAL
2	11570.23	36.94	54.00	-17.06	28.27	5.14	38.83	35.30	Average	100	116	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11567.50	36.95	54.00	-17.05	28.29	5.13	38.83	35.30	Average	100	59	VERTICAL
2	11572.18	51.18	74.00	-22.82	42.51	5.14	38.83	35.30	Peak	100	59	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 20MHz Ch165 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 10 (Ant. 5 Facade antenna / 2.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	cm	deg	
1	11647.71	37.15	54.00	-16.85	28.43	5.16	38.86	35.30	Average	100	210	HORIZONTAL
2	11647.89	50.86	74.00	-23.14	42.14	5.16	38.86	35.30	Peak	100	210	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	cm	deg	
1	11648.43	37.21	54.00	-16.79	28.49	5.16	38.86	35.30	Average	100	140	VERTICAL
2	11649.87	51.64	74.00	-22.36	42.92	5.16	38.86	35.30	Peak	100	140	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 40MHz Ch 151 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 10 (Ant. 5 Facade antenna / 2.5dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	11509.76	52.04	74.00	-21.96	43.41	5.12	38.79	35.28	Peak	100	305 HORIZONTAL
2	11509.88	38.71	54.00	-15.29	30.08	5.12	38.79	35.28	Average	100	305 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	11509.56	51.85	74.00	-22.15	43.22	5.12	38.79	35.28	Peak	100	228 VERTICAL
2	11509.65	38.96	54.00	-15.04	30.33	5.12	38.79	35.28	Average	100	228 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 40MHz Ch 159 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 10 (Ant. 5 Facade antenna / 2.5dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11569.64	52.21	74.00	-21.79	43.55	5.13	38.83	35.30	Peak	100	223	HORIZONTAL
2	11570.13	38.99	54.00	-15.01	30.32	5.14	38.83	35.30	Average	100	223	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11570.02	38.76	54.00	-15.24	30.09	5.14	38.83	35.30	Average	100	103	VERTICAL
2	11570.42	52.14	74.00	-21.86	43.47	5.14	38.83	35.30	Peak	100	103	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 40MHz Ch 151 / Chain 1+ Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 10 (Ant. 5 Facade antenna / 2.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	11510.00	50.42	74.00	-23.58	41.79	5.12	38.79	35.28	Peak	100	32 HORIZONTAL
2	11510.01	36.52	54.00	-17.48	27.89	5.12	38.79	35.28	Average	100	32 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	11510.00	50.66	74.00	-23.34	42.03	5.12	38.79	35.28	Peak	100	178 VERTICAL
2	11510.00	36.66	54.00	-17.34	28.03	5.12	38.79	35.28	Average	100	178 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 40MHz Ch 159 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 10 (Ant. 5 Facade antenna / 2.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11590.00	36.93	54.00	-17.07	28.26	5.14	38.83	35.30	Average	100	209 HORIZONTAL
2	11590.00	51.14	74.00	-22.86	42.47	5.14	38.83	35.30	Peak	100	209 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11590.01	36.97	54.00	-17.03	28.30	5.14	38.83	35.30	Average	100	297 VERTICAL
2	11590.01	51.52	74.00	-22.48	42.85	5.14	38.83	35.30	Peak	100	297 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 40MHz Ch 151 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 10 (Ant. 5 Facade antenna / 2.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	dB	cm	deg		
1	11510.00	50.61	74.00	-23.39	41.98	5.12	38.79	35.28	Peak	100	313	HORIZONTAL
2	11510.00	36.73	54.00	-17.27	28.10	5.12	38.79	35.28	Average	100	313	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	dB	cm	deg		
1	11509.99	36.74	54.00	-17.26	28.11	5.12	38.79	35.28	Average	100	186	VERTICAL
2	11510.01	50.46	74.00	-23.54	41.83	5.12	38.79	35.28	Peak	100	186	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 40MHz Ch 159 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 10 (Ant. 5 Facade antenna / 2.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	11590.00	50.91	74.00	-23.09	42.24	5.14	38.83	35.30	Peak	100	272 HORIZONTAL
2	11590.00	36.98	54.00	-17.02	28.31	5.14	38.83	35.30	Average	100	272 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	11590.00	51.00	74.00	-23.00	42.33	5.14	38.83	35.30	Peak	100	349 VERTICAL
2	11590.00	37.05	54.00	-16.95	28.38	5.14	38.83	35.30	Average	100	349 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 40MHz Ch 151 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 10 (Ant. 5 Facade antenna / 2.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB		cm	deg	
1	11509.88	36.75	54.00	-17.25	28.12	5.12	38.79	35.28	Average	100	209	HORIZONTAL
2	11511.65	50.93	74.00	-23.07	42.30	5.12	38.79	35.28	Peak	100	209	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB		cm	deg	
1	11509.35	50.73	74.00	-23.27	42.10	5.12	38.79	35.28	Peak	100	306	VERTICAL
2	11509.98	36.74	54.00	-17.26	28.11	5.12	38.79	35.28	Average	100	306	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 40MHz Ch 159 / Chain 1 + Chain 2 +Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 10 (Ant. 5 Facade antenna / 2.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11588.81	51.10	74.00	-22.90	42.43	5.14	38.83	35.30	Peak	100	144	HORIZONTAL
2	11590.55	37.11	54.00	-16.89	28.44	5.14	38.83	35.30	Average	100	144	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	11587.70	50.62	74.00	-23.38	41.95	5.14	38.83	35.30	Peak	100	242	VERTICAL
2	11590.48	37.13	54.00	-16.87	28.46	5.14	38.83	35.30	Average	100	242	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 40MHz Ch 151 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 10 (Ant. 5 Facade antenna / 2.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	cm	deg	Pol/Phase
1	11510.58	51.23	74.00	-22.77	42.60	5.12	38.79	35.28	Peak	100	147	HORIZONTAL
2	11512.43	36.93	54.00	-17.07	28.30	5.12	38.79	35.28	Average	100	147	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	cm	deg	Pol/Phase
1	11509.48	50.52	74.00	-23.48	41.89	5.12	38.79	35.28	Peak	100	207	VERTICAL
2	11509.99	36.75	54.00	-17.25	28.12	5.12	38.79	35.28	Average	100	207	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 40MHz Ch 159 / Chain 1 + Chain 2 +Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 10 (Ant. 5 Facade antenna / 2.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	11590.06	51.58	74.00	-22.42	42.91	5.14	38.83	35.30	Peak	100	187	HORIZONTAL
2	11592.49	37.24	54.00	-16.76	28.57	5.14	38.83	35.30	Average	100	187	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	11590.59	37.09	54.00	-16.91	28.42	5.14	38.83	35.30	Average	100	278	VERTICAL
2	11591.92	51.49	74.00	-22.51	42.82	5.14	38.83	35.30	Peak	100	278	VERTICAL

**Note:**

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

## 4.6. Band Edge Emissions Measurement

### 4.6.1. Limit

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (microvolt/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

### 4.6.2. Measuring Instruments and Setting

Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	100 MHz
RB / VB (Emission in restricted band)	1MHz / 3MHz for Peak, 1 MHz / 10Hz for Average
RB / VB (Emission in non-restricted band)	100 KHz /100 KHz for Peak

### 4.6.3. Test Procedures

- The test procedure is the same as section 4.5.3, only the frequency range investigated is limited to 100MHz around bandedges.
- In case the emission is fail due to the used RB/VB is too wide, marker-delta method of FCC Public Notice DA00-705 will be followed.

### 4.6.4. Test Setup Layout

This test setup layout is the same as that shown in section 4.5.4.

### 4.6.5. Test Deviation

There is no deviation with the original standard.

### 4.6.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

#### 4.6.7. Test Result of Band Edge and Fundamental Emissions

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Serway Lee	<b>Configurations</b>	IEEE 802.11n MCS0 20MHz Ch 1, 6, 11 / Chain 1
<b>Test Mode</b>	Mode 1(Ant. 1 Dipole antenna / 9dBi) (1TX)		

##### Channel 1

Freq	Level	Limit		Over Limit	Read Level	Cable	Preamp	Antenna	T/Pos	A/Pos	Remark	Pol/Phase
		Freq	Line			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dB	dBuV	dB	dB	dB/m	deg	cm		
1 !	2389.20	68.97	74.00	-5.03	38.26	2.84	0.00	27.87	304	106	Peak	VERTICAL
2 !	2390.00	52.73	54.00	-1.27	22.02	2.84	0.00	27.87	304	106	Average	VERTICAL
3 p	2408.40	115.00				2.85	0.00	27.84	304	106	Peak	VERTICAL
4 a	2409.60	103.86				2.85	0.00	27.84	304	106	Average	VERTICAL
5	2494.00	62.64	74.00	-11.36	32.03	2.91	0.00	27.70	304	106	Peak	VERTICAL
6 !	2494.40	51.20	54.00	-2.80	20.59	2.91	0.00	27.70	304	106	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

##### Channel 6

Freq	Level	Limit		Over Limit	Read Level	Cable	Preamp	Antenna	T/Pos	A/Pos	Remark	Pol/Phase
		Freq	Line			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dB	dBuV	dB	dB	dB/m	deg	cm		
1 !	2387.60	72.07	74.00	-1.93	41.36	2.84	0.00	27.87	65	119	Peak	VERTICAL
2 !	2390.00	50.81	54.00	-3.19	20.10	2.84	0.00	27.87	65	119	Average	VERTICAL
3 p	2441.40	121.80				2.87	0.00	27.78	65	119	Peak	VERTICAL
4 a	2443.40	110.82				2.87	0.00	27.78	65	119	Average	VERTICAL
5 !	2483.50	51.34	54.00	-2.66	20.71	2.90	0.00	27.73	65	119	Average	VERTICAL
6 !	2483.90	73.00	74.00	-1.00	42.37	2.90	0.00	27.73	65	119	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

##### Channel 11

Freq	Level	Limit		Over Limit	Read Level	Cable	Preamp	Antenna	T/Pos	A/Pos	Remark	Pol/Phase
		Freq	Line			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dB	dBuV	dB	dB	dB/m	deg	cm		
1	2380.00	59.98	74.00	-14.02	29.26	2.83	0.00	27.89	65	119	Peak	VERTICAL
2 !	2381.20	48.70	54.00	-5.30	17.98	2.83	0.00	27.89	65	119	Average	VERTICAL
3 p	2454.80	113.21				2.89	0.00	27.76	65	119	Peak	VERTICAL
4 a	2457.60	102.65				2.89	0.00	27.76	65	119	Average	VERTICAL
5 !	2483.50	52.78	54.00	-1.22	22.15	2.90	0.00	27.73	65	119	Average	VERTICAL
6	2484.30	67.98	74.00	-6.02	37.35	2.90	0.00	27.73	65	119	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2462 MHz.

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Serway Lee	<b>Configurations</b>	IEEE 802.11n MCS0 20MHz Ch 1, 6, 11 / Chain 1 + Chain 2
<b>Test Mode</b>	Mode 1(Ant. 1 Dipole antenna / 9dBi) (2TX)		

**Channel 1**

Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB	dB/m	deg	cm	
1	2389.20	65.43	74.00	-8.57	34.72	2.84	0.00	27.87	58	118	Peak VERTICAL
2 !	2390.00	52.64	54.00	-1.36	21.93	2.84	0.00	27.87	58	118	Average VERTICAL
3 a	2413.60	105.30				2.85	0.00	27.84	58	118	Average VERTICAL
4 p	2414.40	115.54				2.85	0.00	27.84	58	118	Peak VERTICAL
5 !	2493.10	52.23	54.00	-1.77	21.62	2.91	0.00	27.70	58	118	Average VERTICAL
6	2493.50	64.69	74.00	-9.31	34.08	2.91	0.00	27.70	58	118	Peak VERTICAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

**Channel 6**

Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB	dB/m	deg	cm	
1	2388.40	62.80	74.00	-11.20	32.09	2.84	0.00	27.87	264	115	Peak VERTICAL
2 !	2390.00	50.37	54.00	-3.63	19.66	2.84	0.00	27.87	264	115	Average VERTICAL
3 p	2439.40	119.74				2.87	0.00	27.78	264	115	Peak VERTICAL
4 a	2440.60	109.57				2.87	0.00	27.78	264	115	Average VERTICAL
5 !	2483.50	52.99	54.00	-1.01	22.36	2.90	0.00	27.73	264	115	Average VERTICAL
6	2487.10	66.38	74.00	-7.62	35.75	2.90	0.00	27.73	264	115	Peak VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

**Channel 11**

Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB	dB/m	deg	cm	
1	2379.60	59.31	74.00	-14.69	28.59	2.83	0.00	27.89	305	113	Peak VERTICAL
2 !	2382.40	48.01	54.00	-5.99	17.29	2.83	0.00	27.89	305	113	Average VERTICAL
3 a	2464.00	105.65				2.89	0.00	27.76	305	113	Average VERTICAL
4 p	2465.60	116.19				2.89	0.00	27.76	305	113	Peak VERTICAL
5 !	2483.50	52.84	54.00	-1.16	22.21	2.90	0.00	27.73	305	113	Average VERTICAL
6	2485.50	66.27	74.00	-7.73	35.64	2.90	0.00	27.73	305	113	Peak VERTICAL

Item 3, 4 are the fundamental frequency at 2462 MHz.

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Serway Lee	<b>Configurations</b>	IEEE 802.11n MCS8 20MHz Ch 1, 6, 11 / Chain 1 + Chain 2
<b>Test Mode</b>	Mode 1(Ant. 1 Dipole antenna / 9dBi) (2TX)		

**Channel 1**

Freq	Level	Limit		Over Limit	Read Level	Cable	Preamp	Antenna	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	deg	cm		
MHz	dBuV/m	dBuV/m	dB									
1	2390.00	66.56	74.00	-7.44	35.85	2.84	0.00	27.87	229	121	Peak	VERTICAL
2 !	2390.00	52.53	54.00	-1.47	21.82	2.84	0.00	27.87	229	121	Average	VERTICAL
3 a	2408.40	103.94				2.85	0.00	27.84	229	121	Average	VERTICAL
4 p	2409.20	115.63				2.85	0.00	27.84	229	121	Peak	VERTICAL
5 !	2492.70	51.84	54.00	-2.16	21.23	2.91	0.00	27.70	229	121	Average	VERTICAL
6	2493.10	64.90	74.00	-9.10	34.29	2.91	0.00	27.70	229	121	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

**Channel 6**

Freq	Level	Limit		Over Limit	Read Level	Cable	Preamp	Antenna	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	deg	cm		
MHz	dBuV/m	dBuV/m	dB									
1	2389.60	62.94	74.00	-11.06	32.23	2.84	0.00	27.87	303	118	Peak	VERTICAL
2 !	2390.00	50.24	54.00	-3.76	19.53	2.84	0.00	27.87	303	118	Average	VERTICAL
3 p	2439.40	117.99				2.87	0.00	27.78	303	118	Peak	VERTICAL
4 a	2444.20	107.14				2.87	0.00	27.78	303	118	Average	VERTICAL
5 !	2483.50	52.78	54.00	-1.22	22.15	2.90	0.00	27.73	303	118	Average	VERTICAL
6	2494.70	66.21	74.00	-7.79	35.60	2.91	0.00	27.70	303	118	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

**Channel 11**

Freq	Level	Limit		Over Limit	Read Level	Cable	Preamp	Antenna	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	deg	cm		
MHz	dBuV/m	dBuV/m	dB									
1 !	2381.20	48.91	54.00	-5.09	18.19	2.83	0.00	27.89	268	119	Average	VERTICAL
2	2381.60	60.84	74.00	-13.16	30.12	2.83	0.00	27.89	268	119	Peak	VERTICAL
3 a	2456.80	104.03				2.89	0.00	27.76	268	119	Average	VERTICAL
4 p	2458.40	116.12				2.89	0.00	27.76	268	119	Peak	VERTICAL
5	2483.50	65.89	74.00	-8.11	35.26	2.90	0.00	27.73	268	119	Peak	VERTICAL
6 !	2483.50	52.99	54.00	-1.01	22.36	2.90	0.00	27.73	268	119	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 2462 MHz.

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Serway Lee	<b>Configurations</b>	IEEE 802.11n MCS0 20MHz Ch 1, 6, 11 / Chain 1 + Chain 2 + Chain 3
<b>Test Mode</b>	Mode 1(Ant. 1 Dipole antenna / 9dBi) (3TX)		

### Channel 1

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		
1	2389.80	66.89	74.00	-7.11	36.50	2.22	28.17	0.00	Peak	100	25 VERTICAL
2	2390.00	52.90	54.00	-1.10	22.51	2.22	28.17	0.00	Average	100	25 VERTICAL
3	2410.80	105.95				2.22	28.21	0.00	Average	100	25 VERTICAL
4	2411.00	115.47				2.22	28.21	0.00	Peak	100	25 VERTICAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

### Channel 6

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		
1	2389.80	60.30	74.00	-13.70	29.91	2.22	28.17	0.00	Peak	108	298 VERTICAL
2	2390.00	49.45	54.00	-4.55	19.06	2.22	28.17	0.00	Average	108	298 VERTICAL
3	2443.20	110.48				2.24	28.29	0.00	Average	108	298 VERTICAL
4	2444.20	120.01				2.24	28.29	0.00	Peak	108	298 VERTICAL
5	2484.30	64.66	74.00	-9.34	34.03	2.26	28.37	0.00	Peak	108	298 VERTICAL
6	2487.00	52.52	54.00	-1.48	21.85	2.26	28.41	0.00	Average	108	298 VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

### Channel 11

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		
1	2466.40	117.33				2.26	28.33	0.00	Peak	114	303 VERTICAL
2	2466.80	108.36				2.26	28.33	0.00	Average	114	303 VERTICAL
3	2483.50	52.69	54.00	-1.31	22.06	2.26	28.37	0.00	Average	114	303 VERTICAL
4	2483.70	65.67	74.00	-8.33	35.04	2.26	28.37	0.00	Peak	114	303 VERTICAL

Item 1, 2 are the fundamental frequency at 2462 MHz.

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Serway Lee	<b>Configurations</b>	IEEE 802.11n MCS8 20MHz Ch 1, 6, 11 / Chain 1 + Chain 2 + Chain 3
<b>Test Mode</b>	Mode 1(Ant. 1 Dipole antenna / 9dBi) (3TX)		

**Channel 1**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
MHz	dBuV/m	dBuV/m	dB						cm	deg	
1	2389.80	66.51	74.00	-7.49	36.12	2.22	28.17	0.00 Peak	116	0	VERTICAL
2	2390.00	52.51	54.00	-1.49	22.12	2.22	28.17	0.00 Average	116	0	VERTICAL
3	2407.20	116.22				2.22	28.21	0.00 Peak	116	0	VERTICAL
4	2407.80	105.70				2.22	28.21	0.00 Average	116	0	VERTICAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

**Channel 6**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
MHz	dBuV/m	dBuV/m	dB						cm	deg	
1	2389.80	62.16	74.00	-11.84	31.77	2.22	28.17	0.00 Peak	105	315	VERTICAL
2	2390.00	49.30	54.00	-4.70	18.91	2.22	28.17	0.00 Average	105	315	VERTICAL
3	2442.20	120.81				2.24	28.29	0.00 Peak	105	315	VERTICAL
4	2442.60	110.20				2.24	28.29	0.00 Average	105	315	VERTICAL
5	2484.70	64.99	74.00	-9.01	34.36	2.26	28.37	0.00 Peak	105	315	VERTICAL
6	2487.00	52.46	54.00	-1.54	21.79	2.26	28.41	0.00 Average	105	315	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

**Channel 11**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
MHz	dBuV/m	dBuV/m	dB						cm	deg	
1	2468.20	106.32				2.26	28.37	0.00 Average	106	44	VERTICAL
2	2468.80	116.11				2.26	28.37	0.00 Peak	106	44	VERTICAL
3	2483.50	52.68	54.00	-1.32	22.05	2.26	28.37	0.00 Average	106	44	VERTICAL
4	2484.10	66.06	74.00	-7.94	35.43	2.26	28.37	0.00 Peak	106	44	VERTICAL

Item 1, 2 are the fundamental frequency at 2462 MHz.

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Serway Lee	<b>Configurations</b>	IEEE 802.11n MCS0 40MHz Ch 3, 6, 9 / Chain 1
<b>Test Mode</b>	Mode 1(Ant. 1 Dipole antenna / 9dBi) (1TX)		

**Channel 3**

Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB	dB/m	deg	cm	
1 !	2390.00	72.29	74.00	-1.71	41.58	2.84	0.00	27.87	304	106 Peak	VERTICAL
2 !	2390.00	52.59	54.00	-1.41	21.88	2.84	0.00	27.87	304	106 Average	VERTICAL
3 p	2408.00	107.72				2.85	0.00	27.84	304	106 Peak	VERTICAL
4 a	2408.80	97.33				2.85	0.00	27.84	304	106 Average	VERTICAL
5	2492.00	58.88	74.00	-15.12	28.27	2.91	0.00	27.70	304	106 Peak	VERTICAL
6	2492.70	46.23	54.00	-7.77	15.62	2.91	0.00	27.70	304	106 Average	VERTICAL

Item 3, 4 are the fundamental frequency at 2422 MHz.

**Channel 6**

Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB	dB/m	deg	cm	
1	2381.20	56.86	74.00	-17.14	26.14	2.83	0.00	27.89	299	119 Peak	VERTICAL
2	2381.20	45.06	54.00	-8.94	14.34	2.83	0.00	27.89	299	119 Average	VERTICAL
3 a	2464.00	97.21				2.89	0.00	27.76	299	119 Average	VERTICAL
4 p	2465.20	109.25				2.89	0.00	27.76	299	119 Peak	VERTICAL
5 !	2483.50	52.57	54.00	-1.43	21.94	2.90	0.00	27.73	299	119 Average	VERTICAL
6 !	2484.30	72.34	74.00	-1.66	41.71	2.90	0.00	27.73	299	119 Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

**Channel 9**

Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB	dB/m	deg	cm	
1	2390.00	67.71	74.00	-6.29	37.00	2.84	0.00	27.87	303	115 Peak	VERTICAL
2 !	2390.00	52.85	54.00	-1.15	22.14	2.84	0.00	27.87	303	115 Average	VERTICAL
3 p	2449.80	113.98				2.87	0.00	27.78	303	115 Peak	VERTICAL
4 a	2450.20	103.06				2.87	0.00	27.78	303	115 Average	VERTICAL
5 !	2483.50	51.81	54.00	-2.19	21.18	2.90	0.00	27.73	303	115 Average	VERTICAL
6 !	2483.90	68.12	74.00	-5.88	37.49	2.90	0.00	27.73	303	115 Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2452 MHz.

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Serway Lee	<b>Configurations</b>	IEEE 802.11n MCS0 40MHz Ch 3, 6, 9 / Chain 1 + Chain 2
<b>Test Mode</b>	Mode 1(Ant. 1 Dipole antenna / 9dBi) (2TX)		

**Channel 3**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	2389.60	69.71	74.00	-4.29	39.33	2.21	28.17	0.00	Peak	100	352	VERTICAL
2	2390.00	52.88	54.00	-1.12	22.49	2.22	28.17	0.00	Average	100	352	VERTICAL
3	2429.20	108.26				2.23	28.25	0.00	Peak	100	352	VERTICAL
4	2430.40	98.34				2.23	28.25	0.00	Average	100	352	VERTICAL

Item 3, 4 are the fundamental frequency at 2422 MHz.

**Channel 6**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	2390.00	50.30	54.00	-3.70	19.91	2.22	28.17	0.00	Average	100	162	VERTICAL
2	2390.00	65.80	74.00	-8.20	35.41	2.22	28.17	0.00	Peak	100	162	VERTICAL
3	2446.60	99.95				2.24	28.29	0.00	Average	100	162	VERTICAL
4	2448.60	109.68				2.24	28.29	0.00	Peak	100	162	VERTICAL
5	2483.50	46.43	54.00	-7.57	15.80	2.26	28.37	0.00	Average	100	162	VERTICAL
6	2484.30	58.73	74.00	-15.27	28.10	2.26	28.37	0.00	Peak	100	162	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

**Channel 9**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	2468.80	109.40				2.26	28.37	0.00	Peak	118	46	VERTICAL
2	2469.20	100.28				2.26	28.37	0.00	Average	118	46	VERTICAL
3	2483.50	52.65	54.00	-1.35	22.02	2.26	28.37	0.00	Average	118	46	VERTICAL
4	2483.90	72.27	74.00	-1.73	41.64	2.26	28.37	0.00	Peak	118	46	VERTICAL

Item 1, 2 are the fundamental frequency at 2452 MHz.

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Serway Lee	<b>Configurations</b>	IEEE 802.11n MCS8 40MHz Ch 3, 6, 9 / Chain 1 + Chain 2
<b>Test Mode</b>	Mode 1(Ant. 1 Dipole antenna / 9dBi) (2TX)		

**Channel 3**

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	2390.00	52.52	54.00	-1.48	22.13	2.22	28.17	0.00 Average	100	177	VERTICAL
2	2390.00	69.59	74.00	-4.41	39.20	2.22	28.17	0.00 Peak	100	177	VERTICAL
3	2409.60	97.84				2.22	28.21	0.00 Average	100	177	VERTICAL
4	2433.60	108.01				2.23	28.25	0.00 Peak	100	177	VERTICAL

Item 3, 4 are the fundamental frequency at 2422 MHz.

**Channel 6**

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	2389.60	65.49	74.00	-8.51	35.11	2.21	28.17	0.00 Peak	128	332	VERTICAL
2	2390.00	51.23	54.00	-2.77	20.84	2.22	28.17	0.00 Average	128	332	VERTICAL
3	2452.60	117.44				2.24	28.33	0.00 Peak	128	332	VERTICAL
4	2454.20	105.37				2.24	28.33	0.00 Average	128	332	VERTICAL
5	2499.20	52.54	54.00	-1.46	21.86	2.27	28.41	0.00 Average	128	332	VERTICAL
6	2500.00	64.92	74.00	-9.08	34.24	2.27	28.41	0.00 Peak	128	332	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

**Channel 9**

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	2454.80	99.30				2.24	28.33	0.00 Average	125	331	VERTICAL
2	2458.80	111.47				2.24	28.33	0.00 Peak	125	331	VERTICAL
3	2483.50	52.65	54.00	-1.35	22.02	2.26	28.37	0.00 Average	125	331	VERTICAL
4	2483.50	69.59	74.00	-4.41	38.96	2.26	28.37	0.00 Peak	125	331	VERTICAL

Item 1, 2 are the fundamental frequency at 2452 MHz.

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Serway Lee	<b>Configurations</b>	IEEE 802.11n MCS0 40MHz Ch 3, 6, 9 / Chain 1 + Chain 2 + Chain 3
<b>Test Mode</b>	Mode 1(Ant. 1 Dipole antenna / 9dBi) (3TX)		

**Channel 3**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	dB	cm	deg	
1	2390.00	52.91	54.00	-1.09	22.52	2.22	28.17	0.00 Average	110	328	VERTICAL
2	2390.00	68.55	74.00	-5.45	38.16	2.22	28.17	0.00 Peak	110	328	VERTICAL
3	2427.60	110.08				2.23	28.25	0.00 Peak	110	328	VERTICAL
4	2429.60	100.75				2.23	28.25	0.00 Average	110	328	VERTICAL

Item 3, 4 are the fundamental frequency at 2422 MHz.

**Channel 6**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	dB	cm	deg	
1	2390.00	51.52	54.00	-2.48	21.13	2.22	28.17	0.00 Average	116	18	VERTICAL
2	2390.00	67.27	74.00	-6.73	36.88	2.22	28.17	0.00 Peak	116	18	VERTICAL
3	2440.60	114.84				2.23	28.29	0.00 Peak	116	18	VERTICAL
4	2441.00	105.20				2.24	28.29	0.00 Average	116	18	VERTICAL
5	2483.50	52.75	54.00	-1.25	22.12	2.26	28.37	0.00 Average	116	18	VERTICAL
6	2483.50	68.25	74.00	-5.75	37.62	2.26	28.37	0.00 Peak	116	18	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

**Channel 9**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	dB	cm	deg	
1	2468.80	109.40				2.26	28.37	0.00 Peak	118	46	VERTICAL
2	2469.20	100.28				2.26	28.37	0.00 Average	118	46	VERTICAL
3	2483.50	52.65	54.00	-1.35	22.02	2.26	28.37	0.00 Average	118	46	VERTICAL
4	2483.90	72.27	74.00	-1.73	41.64	2.26	28.37	0.00 Peak	118	46	VERTICAL

Item 1, 2 are the fundamental frequency at 2452 MHz.

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Serway Lee	<b>Configurations</b>	IEEE 802.11n MCS8 40MHz Ch 3, 6, 9 / Chain 1 + Chain 2 + Chain 3
<b>Test Mode</b>	Mode 1(Ant. 1 Dipole antenna / 9dBi) (3TX)		

**Channel 3**

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	2390.00	52.39	54.00	-1.61	22.00	2.22	28.17	0.00 Average	100	40	VERTICAL
2	2390.00	68.16	74.00	-5.84	37.77	2.22	28.17	0.00 Peak	100	40	VERTICAL
3	2410.80	97.55				2.22	28.21	0.00 Average	100	40	VERTICAL
4	2418.80	108.56				2.23	28.25	0.00 Peak	100	40	VERTICAL

Item 3, 4 are the fundamental frequency at 2422 MHz.

**Channel 6**

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	2386.80	64.33	74.00	-9.67	33.95	2.21	28.17	0.00 Peak	112	313	VERTICAL
2	2390.00	51.67	54.00	-2.33	21.28	2.22	28.17	0.00 Average	112	313	VERTICAL
3	2444.20	104.50				2.24	28.29	0.00 Average	112	313	VERTICAL
4	2444.20	116.13				2.24	28.29	0.00 Peak	112	313	VERTICAL
5	2483.50	52.61	54.00	-1.39	21.98	2.26	28.37	0.00 Average	112	313	VERTICAL
6	2487.10	66.10	74.00	-7.90	35.43	2.26	28.41	0.00 Peak	112	313	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

**Channel 9**

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	2469.20	99.80				2.26	28.37	0.00 Average	110	15	VERTICAL
2	2469.60	110.04				2.26	28.37	0.00 Peak	110	15	VERTICAL
3	2483.50	52.98	54.00	-1.02	22.35	2.26	28.37	0.00 Average	110	15	VERTICAL
4	2483.50	72.80	74.00	-1.20	42.17	2.26	28.37	0.00 Peak	110	15	VERTICAL

Item 1, 2 are the fundamental frequency at 2452 MHz.

**Note:**

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11b CH 1, 6, 11 / Chain 1
Test Mode	Mode 1(Ant. 1 Dipole antenna / 9dBi) (1TX)		

**Channel 1**

Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB	dB/m	deg	cm	
1	2385.20	57.27	74.00	-16.73	26.55	2.83	0.00	27.89	304	105 Peak	VERTICAL
2	2390.00	45.03	54.00	-8.97	14.32	2.84	0.00	27.87	304	105 Average	VERTICAL
3 a	2410.40	108.04				2.85	0.00	27.84	304	105 Average	VERTICAL
4 p	2411.20	111.76				2.85	0.00	27.84	304	105 Peak	VERTICAL
5	2499.10	61.10	74.00	-12.90	30.49	2.91	0.00	27.70	304	105 Peak	VERTICAL
6 !	2499.10	52.97	54.00	-1.03	22.36	2.91	0.00	27.70	304	105 Average	VERTICAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

**Channel 6**

Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB	dB/m	deg	cm	
1	2390.00	61.46	74.00	-12.54	30.75	2.84	0.00	27.87	298	104 Peak	VERTICAL
2 !	2390.00	52.63	54.00	-1.37	21.92	2.84	0.00	27.87	298	104 Average	VERTICAL
3 p	2438.20	120.48				2.87	0.00	27.78	298	104 Peak	VERTICAL
4 a	2438.60	116.75				2.87	0.00	27.78	298	104 Average	VERTICAL
5	2483.50	60.46	74.00	-13.54	29.83	2.90	0.00	27.73	298	104 Peak	VERTICAL
6 !	2483.50	49.13	54.00	-4.87	18.50	2.90	0.00	27.73	298	104 Average	VERTICAL

Item 3, 4 are the fundamental frequency at 2437 MHz.

**Channel 11**

Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB	dB/m	deg	cm	
1 !	2377.60	51.88	54.00	-2.12	21.16	2.83	0.00	27.89	299	118 Average	VERTICAL
2	2378.00	60.75	74.00	-13.25	30.03	2.83	0.00	27.89	299	118 Peak	VERTICAL
3 p	2462.80	114.52				2.89	0.00	27.76	299	118 Peak	VERTICAL
4 a	2463.60	110.58				2.89	0.00	27.76	299	118 Average	VERTICAL
5 !	2487.50	52.74	54.00	-1.26	22.13	2.91	0.00	27.70	299	118 Average	VERTICAL
6	2488.30	61.81	74.00	-12.19	31.20	2.91	0.00	27.70	299	118 Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2462 MHz.

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Serway Lee	<b>Configurations</b>	IEEE 802.11b CH 1, 6, 11 / Chain 1 + Chain 2
<b>Test Mode</b>	Mode 1(Ant. 1 Dipole antenna / 9dBi) (2TX)		

**Channel 1**

Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1	2390.00	58.25	74.00	-15.75	27.54	2.84	0.00	27.87	242	105 Peak	VERTICAL
2	2390.00	46.56	54.00	-7.44	15.85	2.84	0.00	27.87	242	105 Average	VERTICAL
3 p	2414.80	112.43				2.85	0.00	27.84	242	105 Peak	VERTICAL
4 a	2414.80	108.60				2.85	0.00	27.84	242	105 Average	VERTICAL
5	2497.50	61.47	74.00	-12.53	30.86	2.91	0.00	27.70	242	105 Peak	VERTICAL
6 !	2498.30	52.19	54.00	-1.81	21.58	2.91	0.00	27.70	242	105 Average	VERTICAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

**Channel 6**

Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1	2390.00	61.41	74.00	-12.59	30.70	2.84	0.00	27.87	260	118 Peak	VERTICAL
2 !	2390.00	50.51	54.00	-3.49	19.80	2.84	0.00	27.87	260	118 Average	VERTICAL
3 p	2439.80	121.96				2.87	0.00	27.78	260	118 Peak	VERTICAL
4 a	2439.80	118.08				2.87	0.00	27.78	260	118 Average	VERTICAL
5 !	2483.50	52.78	54.00	-1.22	22.15	2.90	0.00	27.73	260	118 Average	VERTICAL
6	2484.30	64.64	74.00	-9.36	34.01	2.90	0.00	27.73	260	118 Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437 MHz.

**Channel 11**

Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	T/Pos	A/Pos	Remark	Pol/Phase
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1 !	2376.40	49.62	54.00	-4.38	18.90	2.83	0.00	27.89	268	117 Average	VERTICAL
2	2377.60	59.56	74.00	-14.44	28.84	2.83	0.00	27.89	268	117 Peak	VERTICAL
3 a	2460.40	113.54				2.89	0.00	27.76	268	117 Average	VERTICAL
4 p	2461.20	117.30				2.89	0.00	27.76	268	117 Peak	VERTICAL
5 !	2483.50	52.13	54.00	-1.87	21.50	2.90	0.00	27.73	268	117 Average	VERTICAL
6	2492.30	63.75	74.00	-10.25	33.14	2.91	0.00	27.70	268	117 Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2462 MHz.



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11b CH 1, 6, 11 / Chain 1 + Chain 2 + Chain 3
Test Mode	Mode 1(Ant. 1 Dipole antenna / 9dBi) (3TX)		

**Channel 1**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
1	2389.60	63.22	74.00	-10.78	32.84	2.21	28.17	0.00 Peak	100	349	VERTICAL
2	2390.00	51.97	54.00	-2.03	21.58	2.22	28.17	0.00 Average	100	349	VERTICAL
3	2410.20	116.53				2.22	28.21	0.00 Average	100	349	VERTICAL
4	2411.00	119.99				2.22	28.21	0.00 Peak	100	349	VERTICAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

**Channel 6**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
1	2389.80	61.76	74.00	-12.24	31.37	2.22	28.17	0.00 Peak	110	342	VERTICAL
2	2390.00	50.05	54.00	-3.95	19.66	2.22	28.17	0.00 Average	110	342	VERTICAL
3	2438.00	124.62				2.23	28.29	0.00 Peak	110	342	VERTICAL
4	2438.80	121.07				2.23	28.29	0.00 Average	110	342	VERTICAL
5	2483.50	52.43	54.00	-1.57	21.80	2.26	28.37	0.00 Average	110	342	VERTICAL
6	2485.50	66.44	74.00	-7.56	35.77	2.26	28.41	0.00 Peak	110	342	VERTICAL

Item 3, 4 are the fundamental frequency at 2437 MHz.

**Channel 11**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
1	2462.80	114.29				2.24	28.33	0.00 Average	115	29	VERTICAL
2	2463.00	118.21				2.24	28.33	0.00 Peak	115	29	VERTICAL
3	2483.50	52.60	54.00	-1.40	21.97	2.26	28.37	0.00 Average	115	29	VERTICAL
4	2483.50	61.93	74.00	-12.07	31.30	2.26	28.37	0.00 Peak	115	29	VERTICAL

Item 1, 2 are the fundamental frequency at 2462 MHz.

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Serway Lee	<b>Configurations</b>	IEEE 802.11g CH 1, 6, 11 / Chain 1
<b>Test Moe</b>	Mode 1(Ant. 1 Dipole antenna / 9dBi) (1TX)		

**Channel 1**

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	2389.60	67.00	74.00	-7.00	36.62	2.21	28.17	0.00	Peak	100	0	VERTICAL
2	2390.00	52.24	54.00	-1.76	21.85	2.22	28.17	0.00	Average	100	0	VERTICAL
3	2406.60	103.56				2.22	28.21	0.00	Average	100	0	VERTICAL
4	2409.20	113.24				2.22	28.21	0.00	Peak	100	0	VERTICAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

**Channel 6**

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	2388.80	48.36	54.00	-5.64	17.98	2.21	28.17	0.00	Average	100	318	VERTICAL
2	2388.80	70.94	74.00	-3.06	40.56	2.21	28.17	0.00	Peak	100	318	VERTICAL
3	2431.60	108.49				2.23	28.25	0.00	Average	100	318	VERTICAL
4	2432.40	119.00				2.23	28.25	0.00	Peak	100	318	VERTICAL
5	2483.50	51.35	54.00	-2.65	20.72	2.26	28.37	0.00	Average	100	318	VERTICAL
6	2484.70	72.36	74.00	-1.64	41.73	2.26	28.37	0.00	Peak	100	318	VERTICAL

Item 3, 4 are the fundamental frequency at 2437 MHz.

**Channel 11**

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	2468.20	104.86				2.26	28.37	0.00	Average	105	11	VERTICAL
2	2469.40	114.23				2.26	28.37	0.00	Peak	105	11	VERTICAL
3	2483.50	52.89	54.00	-1.11	22.26	2.26	28.37	0.00	Average	105	11	VERTICAL
4	2483.50	66.57	74.00	-7.43	35.94	2.26	28.37	0.00	Peak	105	11	VERTICAL

Item 1, 2 are the fundamental frequency at 2462 MHz.

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Serway Lee	<b>Configurations</b>	IEEE 802.11g CH 1, 6, 11 / Chain 1 + Chain 2
<b>Test Moe</b>	Mode 1(Ant. 1 Dipole antenna / 9dBi) (2TX)		

**Channel 1**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		
1	2389.20	67.04	74.00	-6.96	36.66	2.21	28.17	0.00	Peak	100	36 VERTICAL
2	2390.00	52.18	54.00	-1.82	21.79	2.22	28.17	0.00	Average	100	36 VERTICAL
3	2410.00	105.76				2.22	28.21	0.00	Average	100	36 VERTICAL
4	2410.00	115.54				2.22	28.21	0.00	Peak	100	36 VERTICAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

**Channel 6**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		
1	2389.80	59.04	74.00	-14.96	28.65	2.22	28.17	0.00	Peak	109	343 VERTICAL
2	2390.00	47.75	54.00	-6.25	17.36	2.22	28.17	0.00	Average	109	343 VERTICAL
3	2431.00	109.06				2.23	28.25	0.00	Average	109	343 VERTICAL
4	2436.00	119.22				2.23	28.29	0.00	Peak	109	343 VERTICAL
5	2485.90	65.67	74.00	-8.33	35.00	2.26	28.41	0.00	Peak	109	343 VERTICAL
6	2486.10	52.38	54.00	-1.62	21.71	2.26	28.41	0.00	Average	109	343 VERTICAL

Item 3, 4 are the fundamental frequency at 2437 MHz.

**Channel 11**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		
1	2468.00	115.67				2.26	28.33	0.00	Peak	108	39 VERTICAL
2	2468.40	106.57				2.26	28.37	0.00	Average	108	39 VERTICAL
3	2483.50	52.48	54.00	-1.52	21.85	2.26	28.37	0.00	Average	108	39 VERTICAL
4	2483.50	66.41	74.00	-7.59	35.78	2.26	28.37	0.00	Peak	108	39 VERTICAL

Item 1, 2 are the fundamental frequency at 2462 MHz.

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Serway Lee	<b>Configurations</b>	IEEE 802.11g CH 1, 6, 11 / Chain 1 + Chain 2 + Chain 3
<b>Test Moe</b>	Mode 1(Ant. 1 Dipole antenna / 9dBi) (3TX)		

**Channel 1**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg	
1	2390.00	52.88	54.00	-1.12	22.49	2.22	28.17	0.00 Average	100	55	VERTICAL
2	2390.00	66.05	74.00	-7.95	35.66	2.22	28.17	0.00 Peak	100	55	VERTICAL
3	2409.80	116.03				2.22	28.21	0.00 Peak	100	55	VERTICAL
4	2410.60	106.33				2.22	28.21	0.00 Average	100	55	VERTICAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

**Channel 6**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg	
1	2388.40	62.04	74.00	-11.96	31.66	2.21	28.17	0.00 Peak	115	304	VERTICAL
2	2390.00	49.41	54.00	-4.59	19.02	2.22	28.17	0.00 Average	115	304	VERTICAL
3	2442.00	121.65				2.24	28.29	0.00 Peak	115	304	VERTICAL
4	2442.40	112.31				2.24	28.29	0.00 Average	115	304	VERTICAL
5	2486.30	64.82	74.00	-9.18	34.15	2.26	28.41	0.00 Peak	115	304	VERTICAL
6	2487.00	52.88	54.00	-1.12	22.21	2.26	28.41	0.00 Average	115	304	VERTICAL

Item 3, 4 are the fundamental frequency at 2437 MHz.

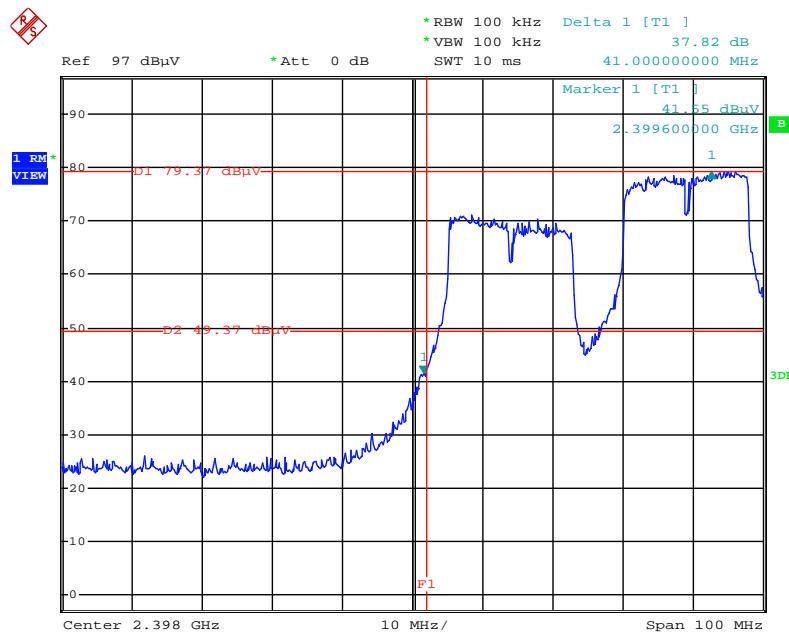
**Channel 11**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg	
1	2463.00	106.78				2.24	28.33	0.00 Average	114	25	VERTICAL
2	2464.00	115.72				2.24	28.33	0.00 Peak	114	25	VERTICAL
3	2483.50	52.47	54.00	-1.53	21.84	2.26	28.37	0.00 Average	114	25	VERTICAL
4	2483.50	65.86	74.00	-8.14	35.23	2.26	28.37	0.00 Peak	114	25	VERTICAL

Item 1, 2 are the fundamental frequency at 2462 MHz.

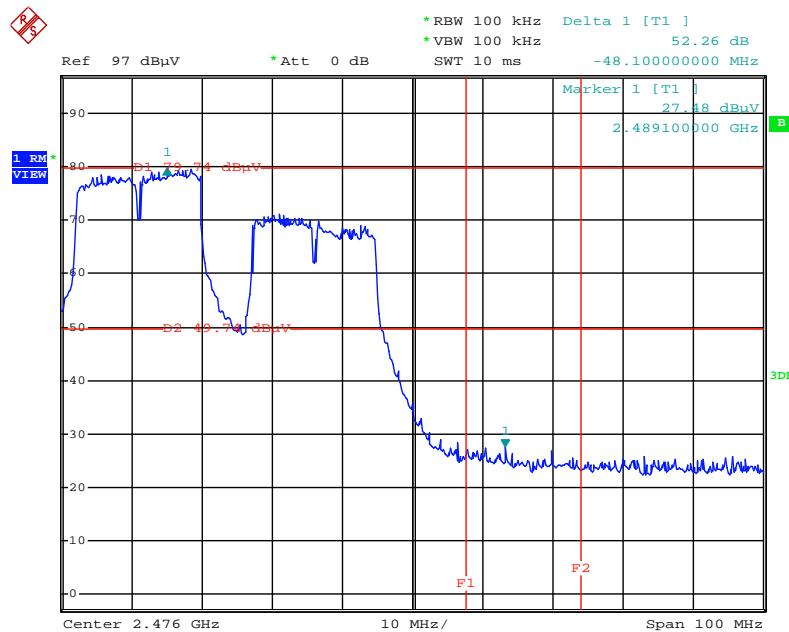
**For Emission not in Restricted Band**

**Plot on Configuration IEEE 802.11n MCS0 20MHz / Chain 1 / 2412 MHz (1TX)**



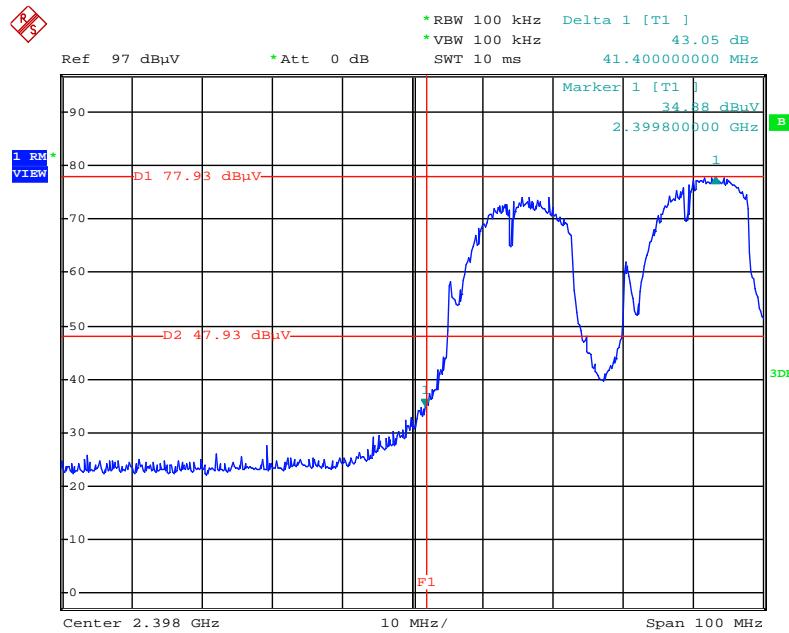
Date: 7.APR.2012 12:00:09

**Plot on Configuration IEEE 802.11n MCS0 20MHz / Chain 1 / 2462 MHz (1TX)**



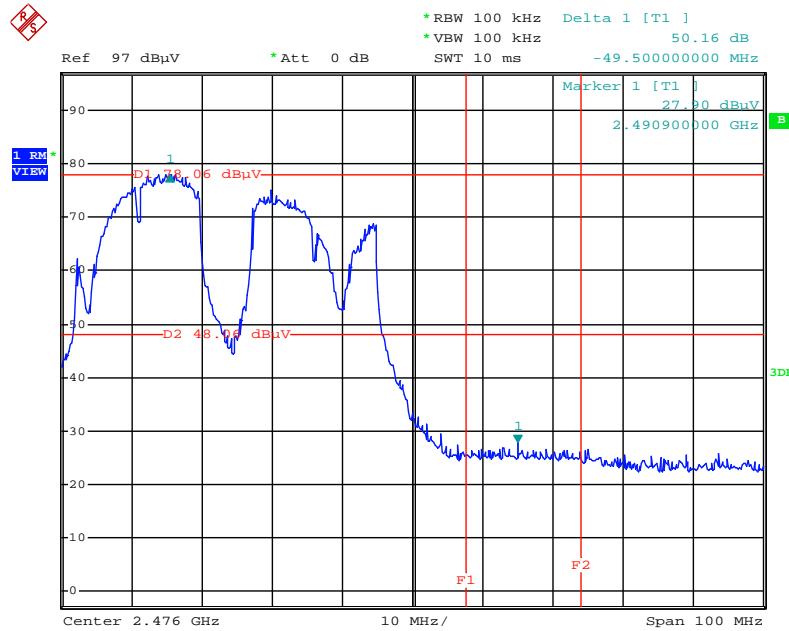
Date: 7.APR.2012 12:03:04

### Plot on Configuration IEEE 802.11n MCS0 20MHz / Chain 1 + Chain 2/ 2412 MHz (2TX)



Date: 7.APR.2012 14:36:31

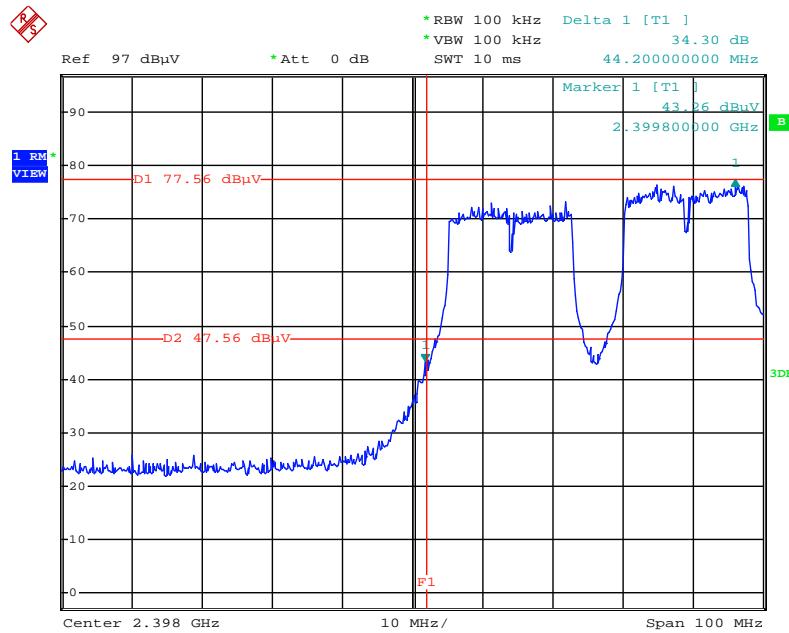
### Plot on Configuration IEEE 802.11n MCS0 20MHz / Chain 1+ Chain 2/ 2462 MHz (2TX)



Date: 7.APR.2012 14:38:37

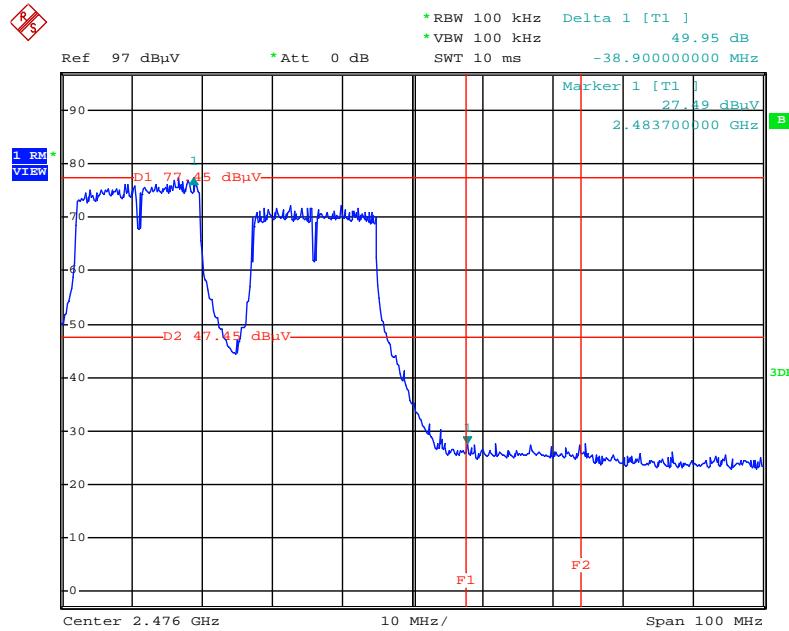


## Plot on Configuration IEEE 802.11n MCS8 20MHz / Chain 1 + Chain 2/ 2412 MHz (2TX)



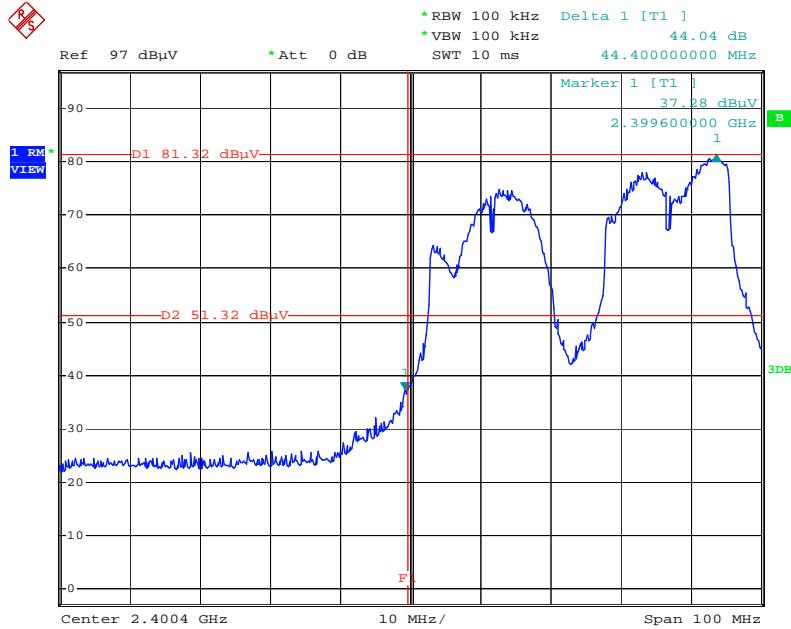
Date: 7.APR.2012 15:00:13

**Plot on Configuration IEEE 802.11n MCS8 20MHz / Chain 1 + Chain 2/ 2462 MHz (2TX)**



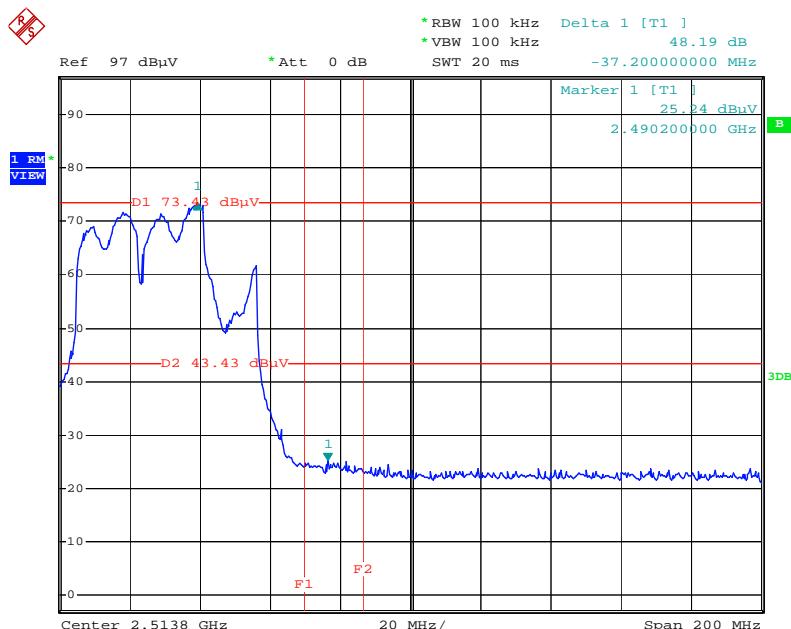
Date: 7.APR.2012 14:59:01

**Plot on Configuration IEEE 802.11n MCS0 20MHz / Chain 1 + Chain 2 + Chain 3 /  
2412 MHz (3TX)**



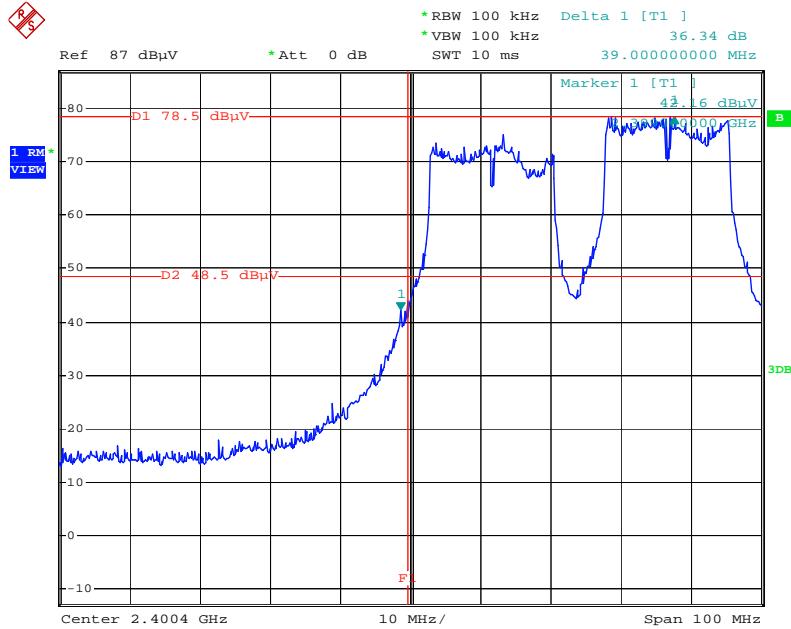
Date: 16.APR.2012 12:43:39

**Plot on Configuration IEEE 802.11n MCS0 20MHz / Chain 1+ Chain 2 + Chain 3 /  
2462 MHz (3TX)**



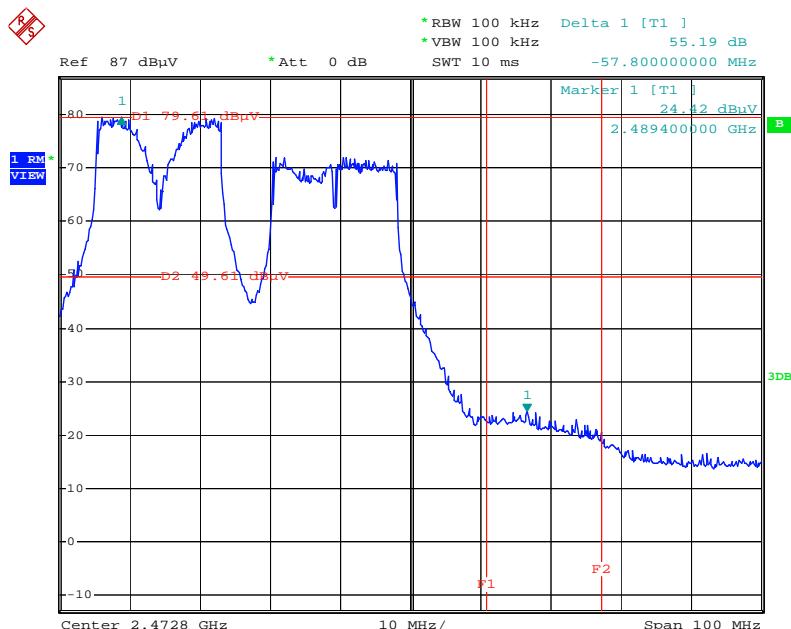
Date: 16.APR.2012 13:32:14

**Plot on Configuration IEEE 802.11n MCS8 20MHz / Chain 1 + Chain 2 + Chain 3 /  
2412 MHz (3TX)**



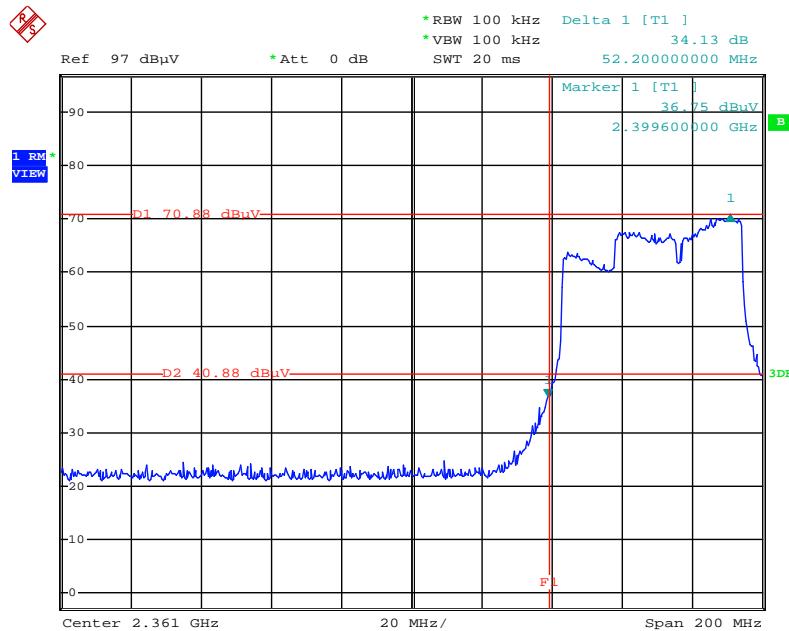
Date: 16.APR.2012 11:02:42

**Plot on Configuration IEEE 802.11n MCS8 20MHz / Chain 1+ Chain 2 + Chain 3 /  
2462 MHz (3TX)**



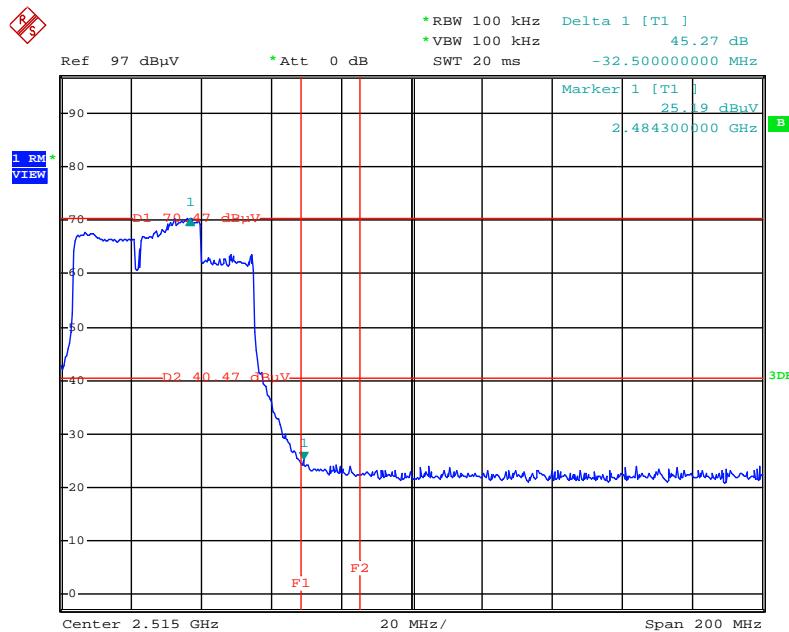
Date: 16.APR.2012 11:00:49

### Plot on Configuration IEEE 802.11n MCS0 40MHz / Chain 1 / 2422 MHz (1TX)



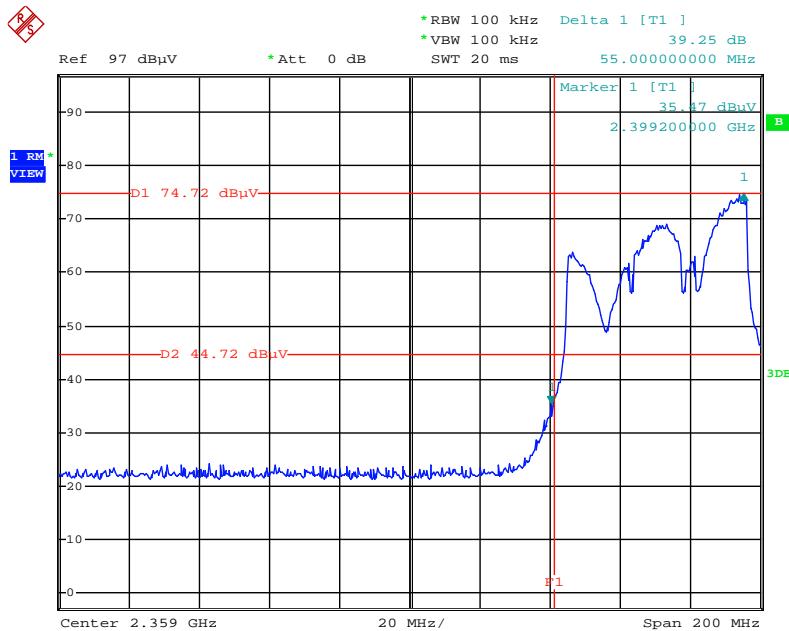
Date: 7.APR.2012 12:26:43

### Plot on Configuration IEEE 802.11n MCS0 40MHz / Chain 1 / 2452 MHz (1TX)



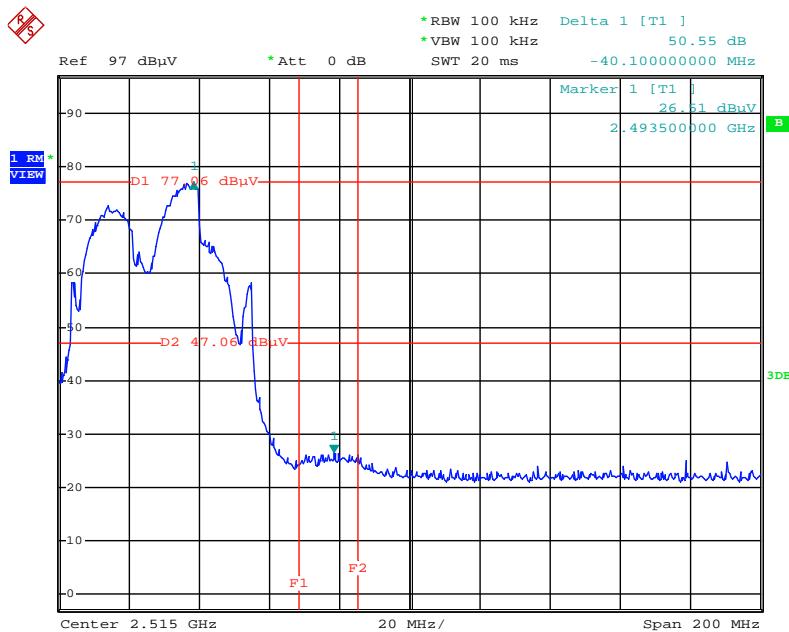
Date: 7.APR.2012 12:28:19

### Plot on Configuration IEEE 802.11n MCS0 40MHz / Chain 1 + Chain 2/ 2422 MHz (2TX)



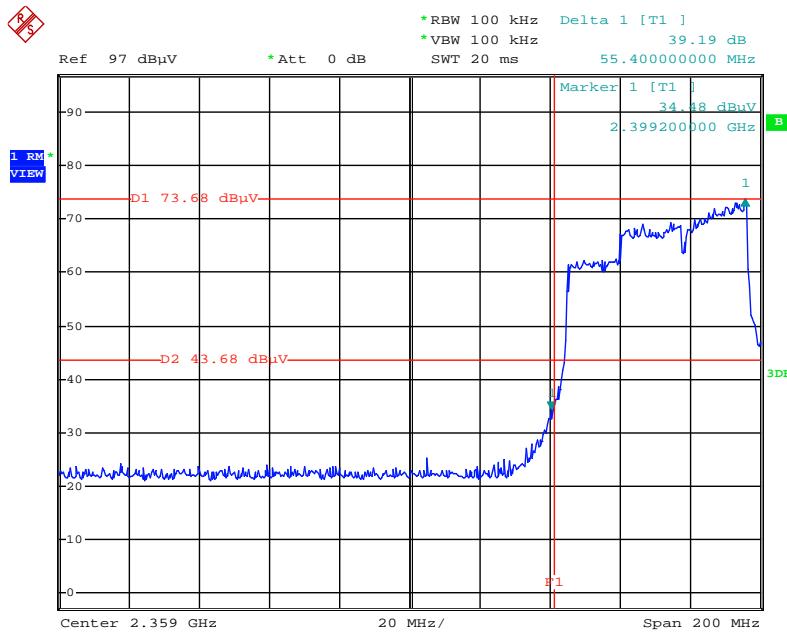
Date: 13.APR.2012 19:02:50

### Plot on Configuration IEEE 802.11n MCS0 40MHz / Chain 1 + Chain 2/ 2452 MHz (2TX)



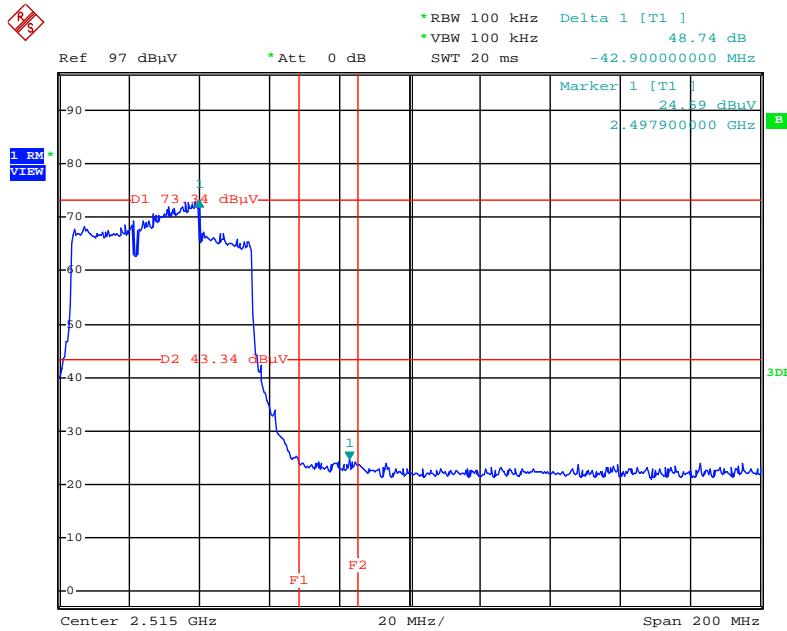
Date: 13.APR.2012 19:04:20

### Plot on Configuration IEEE 802.11n MCS8 40MHz / Chain 1 + Chain 2/ 2422 MHz (2TX)



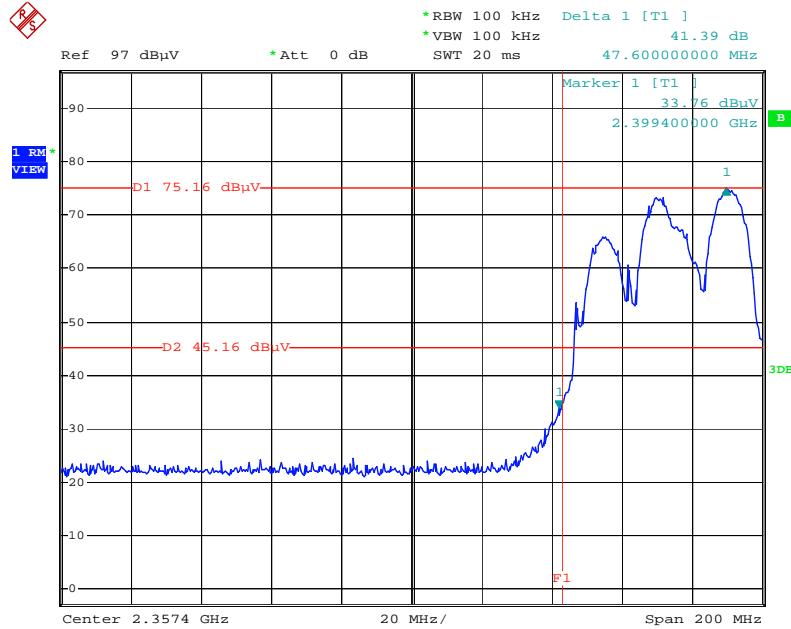
Date: 13.APR.2012 18:59:28

### Plot on Configuration IEEE 802.11n MCS8 40MHz / Chain 1 + Chain 2/ 2452 MHz (2TX)



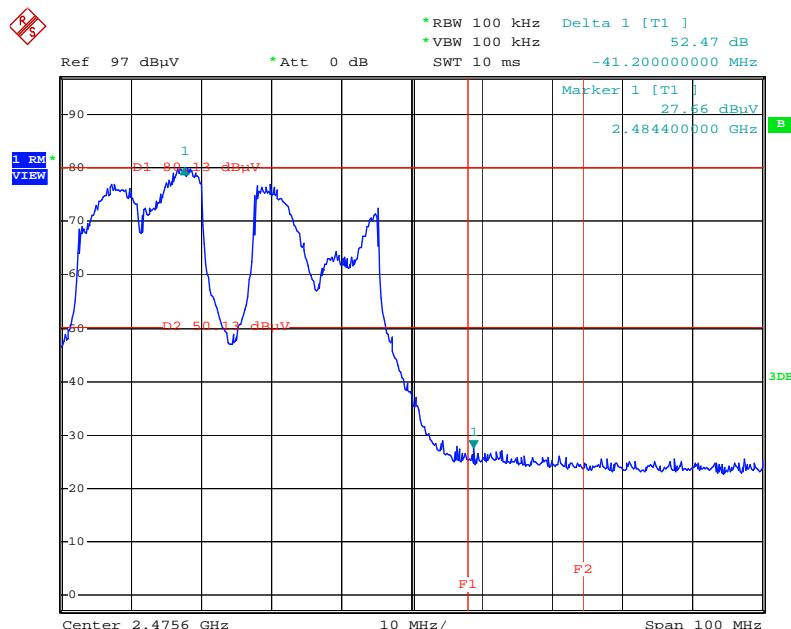
Date: 13.APR.2012 18:57:32

**Plot on Configuration IEEE 802.11n MCS0 40MHz / Chain 1 + Chain 2 + Chain 3 /  
2422 MHz (3TX)**



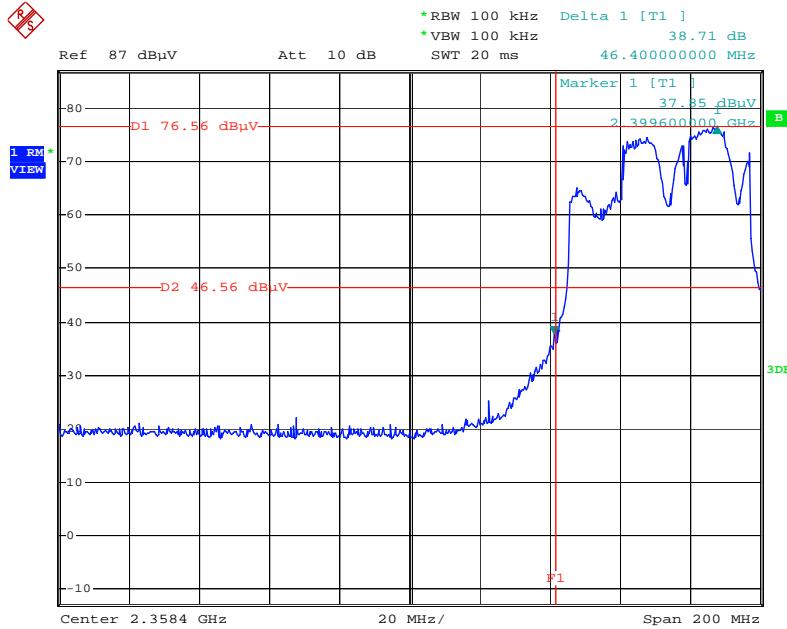
Date: 16.APR.2012 13:23:42

**Plot on Configuration IEEE 802.11n MCS0 40MHz / Chain 1 + Chain 2 + Chain 3 /  
2452 MHz (3TX)**



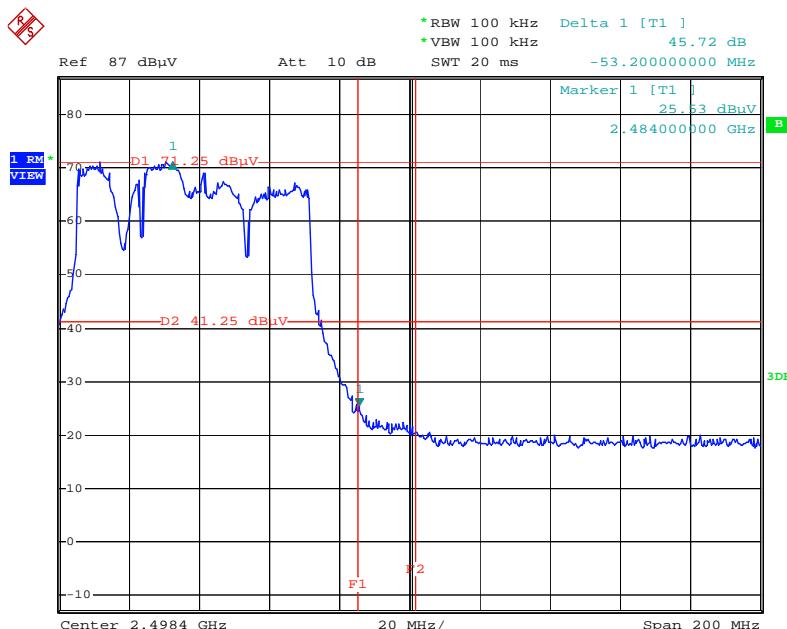
Date: 16.APR.2012 12:46:09

**Plot on Configuration IEEE 802.11n MCS8 40MHz / Chain 1 + Chain 2 + Chain 3 /  
2422 MHz (3TX)**



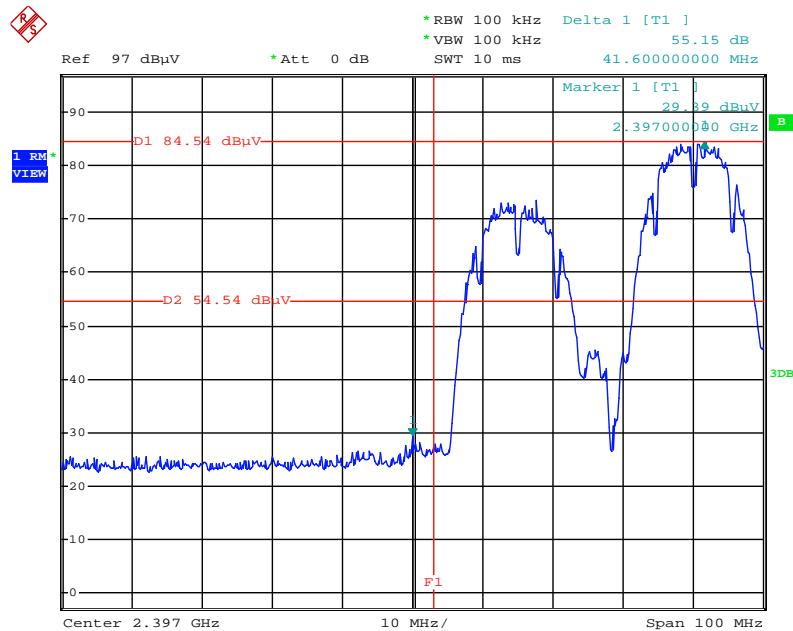
Date: 16.APR.2012 10:54:16

**Plot on Configuration IEEE 802.11n MCS8 40MHz / Chain 1 + Chain 2 + Chain 3 /  
2452 MHz (3TX)**



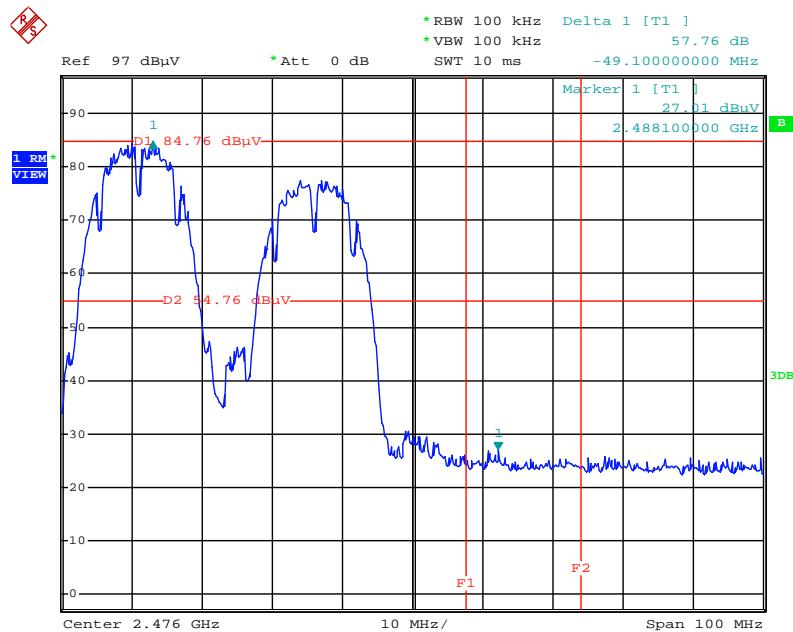
Date: 16.APR.2012 10:56:47

### Plot on Configuration IEEE 802.11b / Chain 1 / 2412 MHz (1TX)



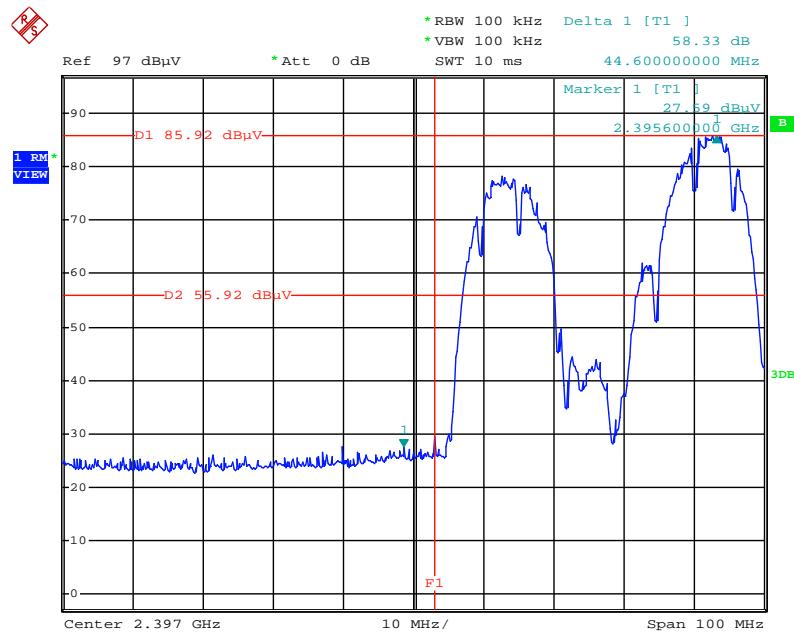
Date: 7.APR.2012 12:07:31

### Plot on Configuration IEEE 802.11b / Chain 1 / 2462 MHz (1TX)



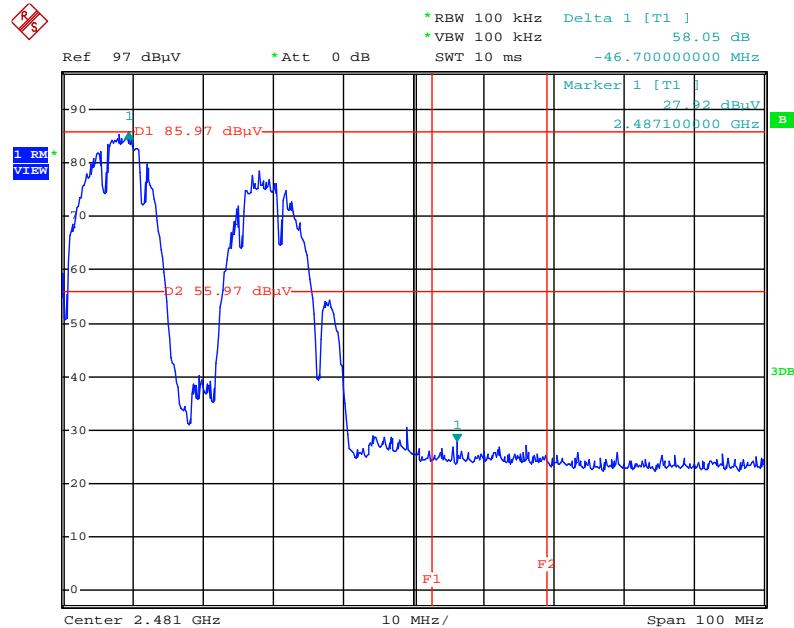
Date: 7.APR.2012 12:05:36

### Plot on Configuration IEEE 802.11b / Chain 1 + Chain 2 / 2412 MHz (2TX)



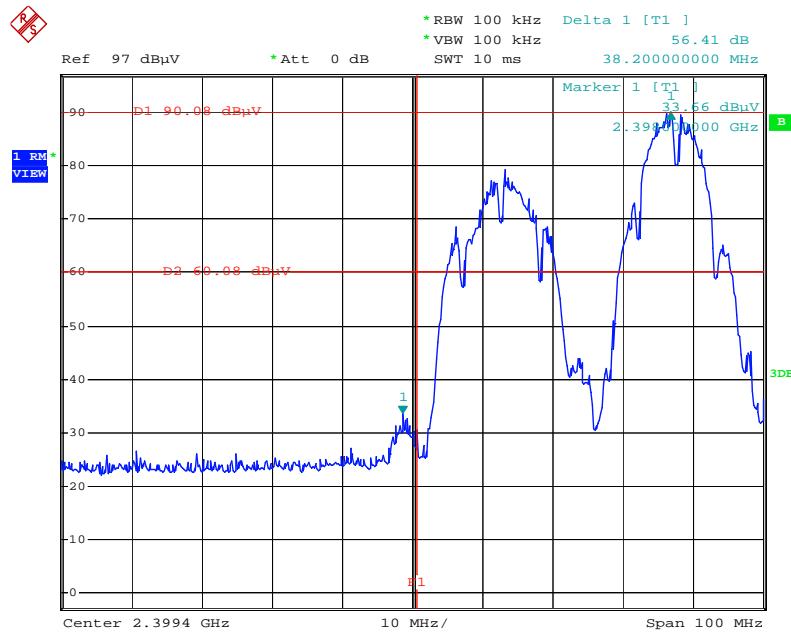
Date: 7.APR.2012 14:03:47

### Plot on Configuration IEEE 802.11b / Chain 1 + Chain 2 / 2462 MHz (2TX)



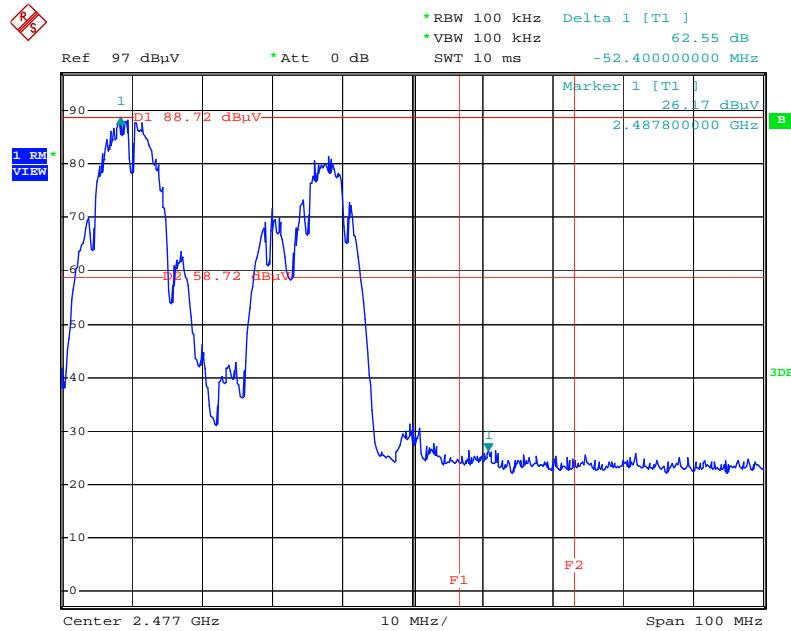
Date: 7.APR.2012 14:05:40

### Plot on Configuration IEEE 802.11b / Chain 1 + Chain 2 + Chain 3 / 2412 MHz (3TX)



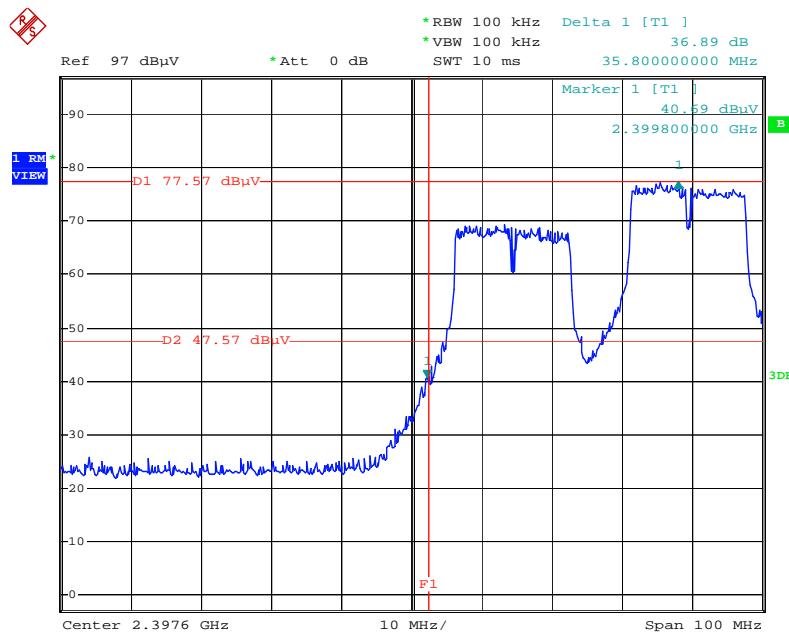
Date: 16.APR.2012 13:53:33

### Plot on Configuration IEEE 802.11b / Chain 1 + Chain 2 + Chain 3 / 2462 MHz (3TX)



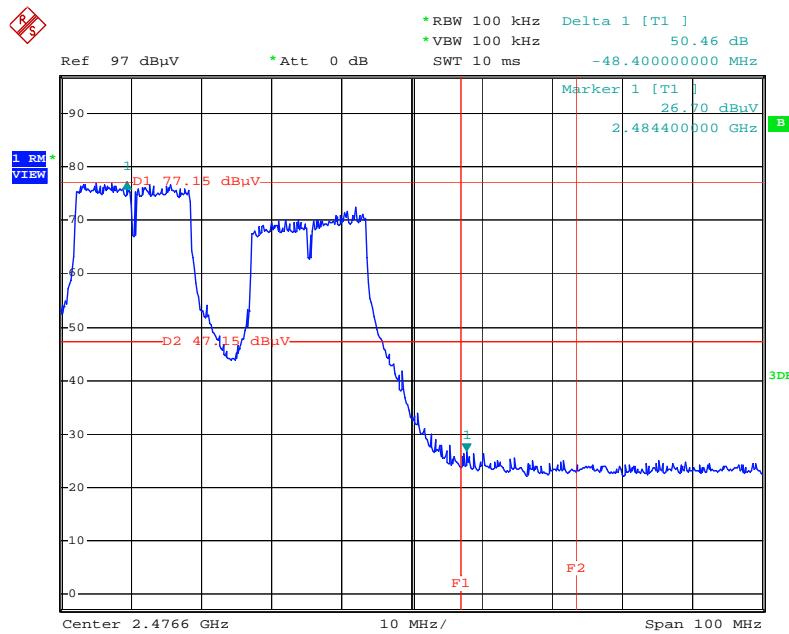
Date: 16.APR.2012 13:55:23

### Plot on Configuration IEEE 802.11g / Chain 1 / 2412 MHz (1TX)



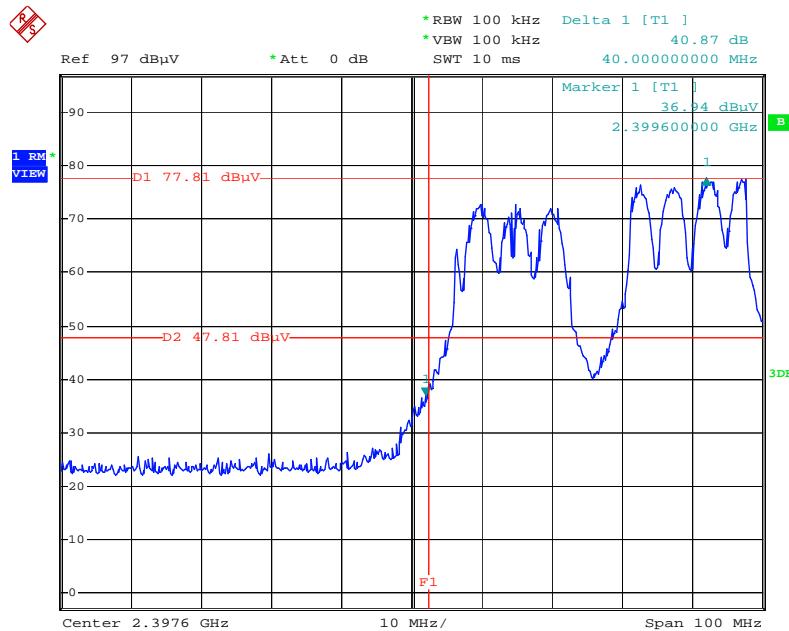
Date: 16.APR.2012 14:02:43

### Plot on Configuration IEEE 802.11g / Chain 1 / 2462 MHz (1TX)



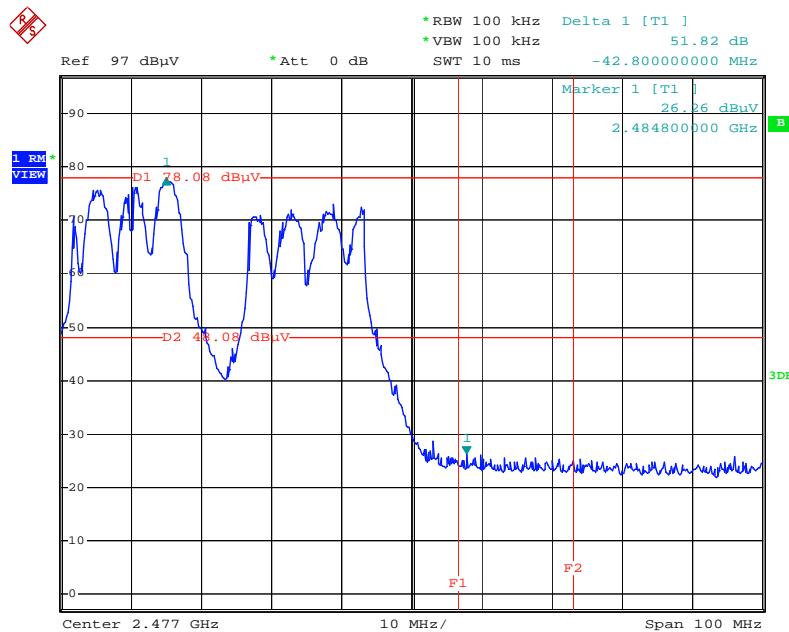
Date: 16.APR.2012 14:03:58

### Plot on Configuration IEEE 802.11g / Chain 1 + Chain 2 / 2412 MHz (2TX)



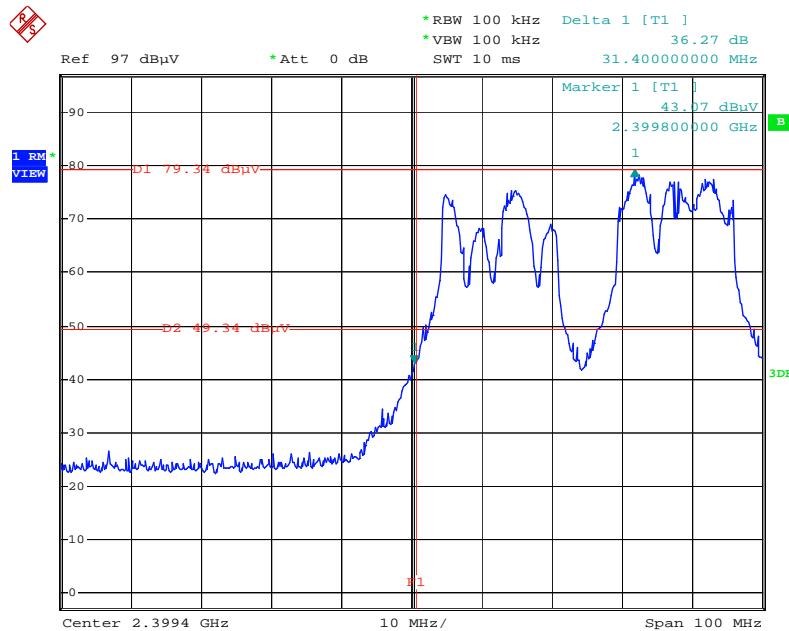
Date: 16.APR.2012 13:59:37

### Plot on Configuration IEEE 802.11g / Chain 1 + Chain 2 / 2462 MHz (2TX)



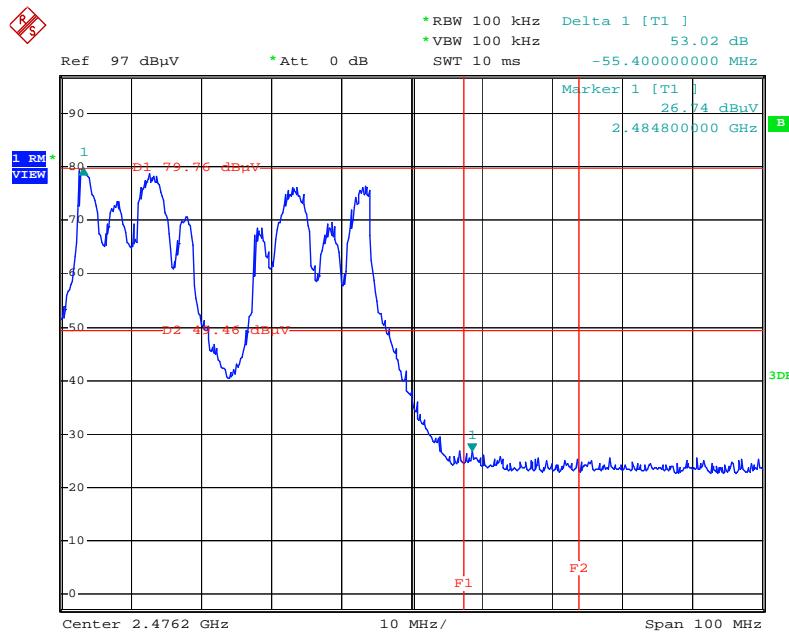
Date: 16.APR.2012 13:58:07

### Plot on Configuration IEEE 802.11g / Chain 1 + Chain 2 + Chain 3 / 2412 MHz (3TX)



Date: 16.APR.2012 13:49:38

### Plot on Configuration IEEE 802.11g / Chain 1 + Chain 2 + Chain 3 / 2462 MHz (3TX)



Date: 16.APR.2012 13:45:24

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Serway Lee	<b>Configurations</b>	IEEE 802.11n MCS0 20MHz Ch 1, 6, 11 / Chain 1
<b>Test Mode</b>	Mode 2 (Ant. 2 Patch antenna / 3dBi) (1TX)		

**Channel 1**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	dB	cm	deg	
1	2390.00	52.81	54.00	-1.19	22.42	2.22	28.17	0.00	Average	100	307 HORIZONTAL
2	2390.00	68.54	74.00	-5.46	38.15	2.22	28.17	0.00	Peak	100	307 HORIZONTAL
3	2406.60	109.27				2.22	28.21	0.00	Peak	100	307 HORIZONTAL
4	2409.60	99.07				2.22	28.21	0.00	Average	100	307 HORIZONTAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

**Channel 6**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	dB	cm	deg	
1	2388.00	72.61	74.00	-1.39	42.23	2.21	28.17	0.00	Peak	100	306 HORIZONTAL
2	2390.00	52.52	54.00	-1.48	22.13	2.22	28.17	0.00	Average	100	306 HORIZONTAL
3	2440.60	115.57				2.23	28.29	0.00	Peak	100	306 HORIZONTAL
4	2443.00	105.60				2.24	28.29	0.00	Average	100	306 HORIZONTAL
5	2483.50	51.66	54.00	-2.34	21.02	2.26	28.38	0.00	Average	100	306 HORIZONTAL
6	2484.30	70.65	74.00	-3.35	40.01	2.26	28.38	0.00	Peak	100	306 HORIZONTAL

Item 3, 4 are the fundamental frequency at 2437MHz.

**Channel 11**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	dB	cm	deg	
1	2468.60	99.59				2.26	28.38	0.00	Average	156	55 HORIZONTAL
2	2468.80	110.22				2.26	28.38	0.00	Peak	156	55 HORIZONTAL
3	2483.50	52.53	54.00	-1.47	21.89	2.26	28.38	0.00	Average	156	55 HORIZONTAL
4	2484.50	68.39	74.00	-5.61	37.75	2.26	28.38	0.00	Peak	156	55 HORIZONTAL

Item 1, 2 are the fundamental frequency at 2462 MHz.



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch 1, 6, 11 / Chain 1 + Chain 2
Test Mode	Mode 2 (Ant. 2 Patch antenna / 3dBi) (2TX)		

**Channel 1**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor			
1	2389.40	68.79	74.00	-5.21	38.41	2.21	28.17	0.00 Peak	167	49	HORIZONTAL
2	2390.00	52.87	54.00	-1.13	22.48	2.22	28.17	0.00 Average	167	49	HORIZONTAL
3	2407.20	101.90				2.22	28.21	0.00 Average	167	49	HORIZONTAL
4	2408.20	112.03				2.22	28.21	0.00 Peak	167	49	HORIZONTAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

**Channel 6**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor			
1	2385.60	70.13	74.00	-3.87	39.75	2.21	28.17	0.00 Peak	159	26	HORIZONTAL
2	2387.60	49.72	54.00	-4.28	19.34	2.21	28.17	0.00 Average	159	26	HORIZONTAL
3	2444.20	118.67				2.24	28.29	0.00 Peak	159	26	HORIZONTAL
4	2444.60	108.75				2.24	28.29	0.00 Average	159	26	HORIZONTAL
5	2485.10	52.80	54.00	-1.20	22.12	2.26	28.42	0.00 Average	159	26	HORIZONTAL
6	2485.50	72.86	74.00	-1.14	42.18	2.26	28.42	0.00 Peak	159	26	HORIZONTAL

Item 3, 4 are the fundamental frequency at 2437MHz.

**Channel 11**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor			
1	2457.00	99.98				2.24	28.33	0.00 Average	193	46	HORIZONTAL
2	2458.20	109.97				2.24	28.33	0.00 Peak	193	46	HORIZONTAL
3	2483.50	52.55	54.00	-1.45	21.91	2.26	28.38	0.00 Average	193	46	HORIZONTAL
4	2484.10	70.24	74.00	-3.76	39.60	2.26	28.38	0.00 Peak	193	46	HORIZONTAL

Item 1, 2 are the fundamental frequency at 2462 MHz.

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Serway Lee	<b>Configurations</b>	IEEE 802.11n MCS8 20MHz Ch 1, 6, 11 / Chain 1 + Chain 2
<b>Test Mode</b>	Mode 2 (Ant. 2 Patch antenna / 3dBi) (2TX)		

**Channel 1**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		
1	2389.40	66.60	74.00	-7.40	36.22	2.21	28.17	0.00	Peak	100	359 VERTICAL
2	2390.00	49.64	54.00	-4.36	19.25	2.22	28.17	0.00	Average	100	359 VERTICAL
3	2442.20	105.85				2.24	28.29	0.00	Average	100	359 VERTICAL
4	2442.80	116.40				2.24	28.29	0.00	Peak	100	359 VERTICAL
5	2483.50	52.76	54.00	-1.24	22.13	2.26	28.37	0.00	Average	100	359 VERTICAL
6	2483.70	71.04	74.00	-2.96	40.41	2.26	28.37	0.00	Peak	100	359 VERTICAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

**Channel 6**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		
1	2389.40	66.60	74.00	-7.40	36.22	2.21	28.17	0.00	Peak	100	359 VERTICAL
2	2390.00	49.64	54.00	-4.36	19.25	2.22	28.17	0.00	Average	100	359 VERTICAL
3	2442.20	105.85				2.24	28.29	0.00	Average	100	359 VERTICAL
4	2442.80	116.40				2.24	28.29	0.00	Peak	100	359 VERTICAL
5	2483.50	52.76	54.00	-1.24	22.13	2.26	28.37	0.00	Average	100	359 VERTICAL
6	2483.70	71.04	74.00	-2.96	40.41	2.26	28.37	0.00	Peak	100	359 VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

**Channel 11**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		
1	2468.20	99.97				2.26	28.37	0.00	Average	100	355 VERTICAL
2	2470.00	111.54				2.26	28.37	0.00	Peak	100	355 VERTICAL
3	2483.50	52.37	54.00	-1.63	21.74	2.26	28.37	0.00	Average	100	355 VERTICAL
4	2484.10	69.74	74.00	-4.26	39.11	2.26	28.37	0.00	Peak	100	355 VERTICAL

Item 1, 2 are the fundamental frequency at 2462 MHz.



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 20MHz Ch 1, 6, 11 / Chain 1 + Chain 2 + Chain 3
Test Mode	Mode 2 (Ant. 2 Patch antenna / 3dBi) (3TX)		

**Channel 1**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor			
1	2390.00	52.36	54.00	-1.64	21.97	2.22	28.17	0.00	Average	157	304 HORIZONTAL
2	2390.00	66.90	74.00	-7.10	36.51	2.22	28.17	0.00	Peak	157	304 HORIZONTAL
3	2409.20	101.80				2.22	28.21	0.00	Average	157	304 HORIZONTAL
4	2409.60	111.87				2.22	28.21	0.00	Peak	157	304 HORIZONTAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

**Channel 6**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor			
1	2389.80	64.42	74.00	-9.58	34.03	2.22	28.17	0.00	Peak	183	317 HORIZONTAL
2	2390.00	48.53	54.00	-5.47	18.14	2.22	28.17	0.00	Average	183	317 HORIZONTAL
3	2443.20	108.45				2.24	28.29	0.00	Average	183	317 HORIZONTAL
4	2443.80	117.99				2.24	28.29	0.00	Peak	183	317 HORIZONTAL
5	2483.50	51.95	54.00	-2.05	21.31	2.26	28.38	0.00	Average	183	317 HORIZONTAL
6	2483.50	71.63	74.00	-2.37	40.99	2.26	28.38	0.00	Peak	183	317 HORIZONTAL

Item 3, 4 are the fundamental frequency at 2437MHz.

**Channel 11**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor			
1	2466.40	104.43				2.26	28.33	0.00	Average	187	304 HORIZONTAL
2	2467.00	114.03				2.26	28.33	0.00	Peak	187	304 HORIZONTAL
3	2484.50	52.62	54.00	-1.38	21.98	2.26	28.38	0.00	Average	187	304 HORIZONTAL
4	2484.70	71.52	74.00	-2.48	40.88	2.26	28.38	0.00	Peak	187	304 HORIZONTAL

Item 1, 2 are the fundamental frequency at 2462 MHz.

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Serway Lee	<b>Configurations</b>	IEEE 802.11n MCS8 20MHz Ch 1, 6, 11 / Chain 1 + Chain 2 + Chain 3
<b>Test Mode</b>	Mode 2 (Ant. 2 Patch antenna / 3dBi) (3TX)		

**Channel 1**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg	
1	2389.80	67.13	74.00	-6.87	36.74	2.22	28.17	0.00 Peak	100	47	HORIZONTAL
2	2390.00	52.34	54.00	-1.66	21.95	2.22	28.17	0.00 Average	100	47	HORIZONTAL
3	2408.40	113.67				2.22	28.21	0.00 Peak	100	47	HORIZONTAL
4	2409.20	101.26				2.22	28.21	0.00 Average	100	47	HORIZONTAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

**Channel 6**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg	
1	2390.00	50.71	54.00	-3.29	20.32	2.22	28.17	0.00 Average	153	32	HORIZONTAL
2	2390.00	66.56	74.00	-7.44	36.17	2.22	28.17	0.00 Peak	153	32	HORIZONTAL
3	2442.00	108.34				2.24	28.29	0.00 Average	153	32	HORIZONTAL
4	2442.40	118.84				2.24	28.29	0.00 Peak	153	32	HORIZONTAL
5	2483.50	52.95	54.00	-1.05	22.31	2.26	28.38	0.00 Average	153	32	HORIZONTAL
6	2484.10	72.89	74.00	-1.11	42.25	2.26	28.38	0.00 Peak	153	32	HORIZONTAL

Item 3, 4 are the fundamental frequency at 2437MHz.

**Channel 11**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg	
1	2455.20	114.85				2.24	28.33	0.00 Peak	195	57	HORIZONTAL
2	2467.80	103.48				2.26	28.33	0.00 Average	195	57	HORIZONTAL
3	2483.50	52.91	54.00	-1.09	22.27	2.26	28.38	0.00 Average	195	57	HORIZONTAL
4	2484.10	70.77	74.00	-3.23	40.13	2.26	28.38	0.00 Peak	195	57	HORIZONTAL

Item 1, 2 are the fundamental frequency at 2462 MHz.

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Serway Lee	<b>Configurations</b>	IEEE 802.11n MCS0 40MHz Ch 3, 6, 9 / Chain 1
<b>Test Mode</b>	Mode 2 (Ant. 2 Patch antenna / 3dBi) (1TX)		

**Channel 3**

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	2390.00	52.91	54.00	-1.09	22.52	2.22	28.17	0.00 Average	100	307	HORIZONTAL
2	2390.00	68.78	74.00	-5.22	38.39	2.22	28.17	0.00 Peak	100	307	HORIZONTAL
3	2408.80	93.43				2.22	28.21	0.00 Average	100	307	HORIZONTAL
4	2409.20	103.31				2.22	28.21	0.00 Peak	100	307	HORIZONTAL

Item 3, 4 are the fundamental frequency at 2422 MHz.

**Channel 6**

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	2390.00	52.16	54.00	-1.84	21.77	2.22	28.17	0.00 Average	155	28	HORIZONTAL
2	2390.00	70.55	74.00	-3.45	40.16	2.22	28.17	0.00 Peak	155	28	HORIZONTAL
3	2451.40	98.95				2.24	28.33	0.00 Average	155	28	HORIZONTAL
4	2451.40	108.74				2.24	28.33	0.00 Peak	155	28	HORIZONTAL
5	2483.50	52.59	54.00	-1.41	21.95	2.26	28.38	0.00 Average	155	28	HORIZONTAL
6	2488.30	71.75	74.00	-2.25	41.07	2.26	28.42	0.00 Peak	155	28	HORIZONTAL

Item 3, 4 are the fundamental frequency at 2437MHz.

**Channel 9**

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	2468.40	105.11				2.26	28.38	0.00 Peak	157	55	HORIZONTAL
2	2469.60	95.00				2.26	28.38	0.00 Average	157	55	HORIZONTAL
3	2483.50	52.44	54.00	-1.56	21.80	2.26	28.38	0.00 Average	157	55	HORIZONTAL
4	2483.50	69.49	74.00	-4.51	38.85	2.26	28.38	0.00 Peak	157	55	HORIZONTAL

Item 1, 2 are the fundamental frequency at 2452 MHz.



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS0 40MHz Ch 3, 6, 9 / Chain 1 + Chain 2
Test Mode	Mode 2 (Ant. 2 Patch antenna / 3dBi) (2TX)		

**Channel 3**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor				
1	2390.00	52.62	54.00	-1.38	22.23	2.22	28.17	0.00	Average	163	30	HORIZONTAL
2	2390.00	68.77	74.00	-5.23	38.38	2.22	28.17	0.00	Peak	163	30	HORIZONTAL
3	2432.80	97.14				2.23	28.25	0.00	Average	163	30	HORIZONTAL
4	2433.20	106.94				2.23	28.25	0.00	Peak	163	30	HORIZONTAL

Item 3, 4 are the fundamental frequency at 2422 MHz.

**Channel 6**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor				
1	2389.60	65.89	74.00	-8.11	35.51	2.21	28.17	0.00	Peak	100	360	VERTICAL
2	2390.00	48.09	54.00	-5.91	17.70	2.22	28.17	0.00	Average	100	360	VERTICAL
3	2440.20	100.14				2.23	28.29	0.00	Average	100	360	VERTICAL
4	2442.20	110.45				2.24	28.29	0.00	Peak	100	360	VERTICAL
5	2483.50	52.76	54.00	-1.24	22.13	2.26	28.37	0.00	Average	100	360	VERTICAL
6	2484.70	72.69	74.00	-1.31	42.06	2.26	28.37	0.00	Peak	100	360	VERTICAL

Item 3, 4 are the fundamental frequency at 2437MHz.

**Channel 9**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor				
1	2463.60	97.27				2.24	28.33	0.00	Average	197	63	HORIZONTAL
2	2465.20	108.54				2.24	28.33	0.00	Peak	197	63	HORIZONTAL
3	2483.50	53.00	54.00	-1.00	22.36	2.26	28.38	0.00	Average	197	63	HORIZONTAL
4	2483.50	71.38	74.00	-2.62	40.74	2.26	28.38	0.00	Peak	197	63	HORIZONTAL

Item 1, 2 are the fundamental frequency at 2452 MHz.



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11n MCS8 40MHz Ch 3, 6, 9 / Chain 1 + Chain 2
Test Mode	Mode 2 (Ant. 2 Patch antenna / 3dBi) (2TX)		

**Channel 3**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
1	2390.00	52.21	54.00	-1.79	21.82	2.22	28.17	0.00	Average	100	40 HORIZONTAL
2	2390.00	66.51	74.00	-7.49	36.12	2.22	28.17	0.00	Peak	100	40 HORIZONTAL
3	2408.80	105.80				2.22	28.21	0.00	Peak	100	40 HORIZONTAL
4	2438.40	94.98				2.23	28.29	0.00	Average	100	40 HORIZONTAL

Item 3, 4 are the fundamental frequency at 2422 MHz.

**Channel 6**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
1	2390.00	52.76	54.00	-1.24	22.37	2.22	28.17	0.00	Average	163	29 HORIZONTAL
2	2390.00	67.58	74.00	-6.42	37.19	2.22	28.17	0.00	Peak	163	29 HORIZONTAL
3	2441.80	98.66				2.24	28.29	0.00	Average	163	29 HORIZONTAL
4	2453.40	110.07				2.24	28.33	0.00	Peak	163	29 HORIZONTAL
5	2483.50	51.35	54.00	-2.65	20.71	2.26	28.38	0.00	Average	163	29 HORIZONTAL
6	2483.50	67.40	74.00	-6.60	36.76	2.26	28.38	0.00	Peak	163	29 HORIZONTAL

Item 3, 4 are the fundamental frequency at 2437MHz.

**Channel 9**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
1	2467.60	107.01				2.26	28.33	0.00	Peak	157	55 HORIZONTAL
2	2469.20	95.67				2.26	28.38	0.00	Average	157	55 HORIZONTAL
3	2483.50	52.73	54.00	-1.27	22.09	2.26	28.38	0.00	Average	157	55 HORIZONTAL
4	2483.50	69.73	74.00	-4.27	39.09	2.26	28.38	0.00	Peak	157	55 HORIZONTAL

Item 1, 2 are the fundamental frequency at 2452 MHz.

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Serway Lee	<b>Configurations</b>	IEEE 802.11n MCS0 40MHz Ch 3, 6, 9 / Chain 1 + Chain 2 + Chain 3
<b>Test Mode</b>	Mode 2 (Ant. 2 Patch antenna / 3dBi) (3TX)		

**Channel 3**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg	
1	2390.00	52.96	54.00	-1.04	22.57	2.22	28.17	0.00 Average	156	312	HORIZONTAL
2	2390.00	67.13	74.00	-6.87	36.74	2.22	28.17	0.00 Peak	156	312	HORIZONTAL
3	2407.60	108.69				2.22	28.21	0.00 Peak	156	312	HORIZONTAL
4	2408.00	98.48				2.22	28.21	0.00 Average	156	312	HORIZONTAL

Item 3, 4 are the fundamental frequency at 2422 MHz.

**Channel 6**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg	
1	2389.60	52.23	54.00	-1.77	21.85	2.21	28.17	0.00 Average	188	317	HORIZONTAL
2	2390.00	69.68	74.00	-4.32	39.29	2.22	28.17	0.00 Peak	188	317	HORIZONTAL
3	2447.80	112.81				2.24	28.29	0.00 Peak	188	317	HORIZONTAL
4	2448.60	103.38				2.24	28.29	0.00 Average	188	317	HORIZONTAL
5	2489.10	51.20	54.00	-2.80	20.52	2.26	28.42	0.00 Average	188	317	HORIZONTAL
6	2489.90	65.57	74.00	-8.43	34.89	2.26	28.42	0.00 Peak	188	317	HORIZONTAL

Item 3, 4 are the fundamental frequency at 2437MHz.

**Channel 9**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg	
1	2453.60	96.89				2.24	28.33	0.00 Average	184	284	HORIZONTAL
2	2454.00	106.49				2.24	28.33	0.00 Peak	184	284	HORIZONTAL
3	2483.50	52.27	54.00	-1.73	21.63	2.26	28.38	0.00 Average	184	284	HORIZONTAL
4	2483.50	70.13	74.00	-3.87	39.49	2.26	28.38	0.00 Peak	184	284	HORIZONTAL

Item 1, 2 are the fundamental frequency at 2452 MHz.

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Serway Lee	<b>Configurations</b>	IEEE 802.11n MCS8 40MHz Ch 3, 6, 9 / Chain 1 + Chain 2 + Chain 3
<b>Test Mode</b>	Mode 2 (Ant. 2 Patch antenna / 3dBi) (3TX)		

**Channel 3**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		
1	2390.00	52.98	54.00	-1.02	22.59	2.22	28.17	0.00	Average	151	309 HORIZONTAL
2	2390.00	67.04	74.00	-6.96	36.65	2.22	28.17	0.00	Peak	151	309 HORIZONTAL
3	2409.20	97.20				2.22	28.21	0.00	Average	151	309 HORIZONTAL
4	2435.60	108.14				2.23	28.29	0.00	Peak	151	309 HORIZONTAL

Item 3, 4 are the fundamental frequency at 2422 MHz.

**Channel 6**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		
1	2389.60	66.90	74.00	-7.10	36.52	2.21	28.17	0.00	Peak	204	44 HORIZONTAL
2	2390.00	52.52	54.00	-1.48	22.13	2.22	28.17	0.00	Average	204	44 HORIZONTAL
3	2452.20	113.15				2.24	28.33	0.00	Peak	204	44 HORIZONTAL
4	2452.60	101.40				2.24	28.33	0.00	Average	204	44 HORIZONTAL
5	2483.50	50.15	54.00	-3.85	19.51	2.26	28.38	0.00	Average	204	44 HORIZONTAL
6	2483.50	60.88	74.00	-13.12	30.24	2.26	28.38	0.00	Peak	204	44 HORIZONTAL

Item 3, 4 are the fundamental frequency at 2437MHz.

**Channel 9**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase	
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	2467.20	109.17					2.26	28.33	0.00	Peak	218	296 HORIZONTAL
2	2468.00	98.40					2.26	28.33	0.00	Average	218	296 HORIZONTAL
3	2483.50	52.71	54.00	-1.29	22.07	2.26	28.38	0.00	Average	218	296 HORIZONTAL	
4	2483.50	72.24	74.00	-1.76	41.60	2.26	28.38	0.00	Peak	218	296 HORIZONTAL	

Item 1, 2 are the fundamental frequency at 2452 MHz.

**Note:**

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11b CH 1, 6, 11 / Chain 1
Test Mode	Mode 2 (Ant. 2 Patch antenna / 3dBi) (1TX)		

**Channel 1**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		
1	2386.00	52.91	54.00	-1.09	22.53	2.21	28.17	0.00	Average	156	307 HORIZONTAL
2	2387.20	60.05	74.00	-13.95	29.67	2.21	28.17	0.00	Peak	156	307 HORIZONTAL
3	2410.40	107.70				2.22	28.21	0.00	Average	156	307 HORIZONTAL
4	2411.20	111.45				2.22	28.21	0.00	Peak	156	307 HORIZONTAL
5	2498.70	52.53	54.00	-1.47	21.84	2.27	28.42	0.00	Average	156	307 HORIZONTAL
6	2500.70	60.58	74.00	-13.42	29.89	2.27	28.42	0.00	Peak	156	307 HORIZONTAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

**Channel 6**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		
1	2388.80	52.91	54.00	-1.09	22.53	2.21	28.17	0.00	Average	160	58 HORIZONTAL
2	2388.80	60.20	74.00	-13.80	29.82	2.21	28.17	0.00	Peak	160	58 HORIZONTAL
3	2438.20	117.63				2.23	28.29	0.00	Peak	160	58 HORIZONTAL
4	2438.60	113.94				2.23	28.29	0.00	Average	160	58 HORIZONTAL

Item 3, 4 are the fundamental frequency at 2437 MHz.

**Channel 11**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		
1	2463.20	109.96				2.24	28.33	0.00	Peak	153	303 HORIZONTAL
2	2463.60	106.16				2.24	28.33	0.00	Average	153	303 HORIZONTAL
3	2487.50	52.57	54.00	-1.43	21.89	2.26	28.42	0.00	Average	153	303 HORIZONTAL
4	2487.90	61.17	74.00	-12.83	30.49	2.26	28.42	0.00	Peak	153	303 HORIZONTAL

Item 1, 2 are the fundamental frequency at 2462 MHz.

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Serway Lee	<b>Configurations</b>	IEEE 802.11b CH 1, 6, 11 / Chain 1 + Chain 2
<b>Test Mode</b>	Mode 2 (Ant. 2 Patch antenna / 3dBi) (2TX)		

### Channel 1

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	2386.00	52.13	54.00	-1.87	21.75	2.21	28.17	0.00 Average	190	292	HORIZONTAL
2	2386.40	60.48	74.00	-13.52	30.10	2.21	28.17	0.00 Peak	190	292	HORIZONTAL
3	2410.40	109.47				2.22	28.21	0.00 Average	190	292	HORIZONTAL
4	2411.20	113.04				2.22	28.21	0.00 Peak	190	292	HORIZONTAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

### Channel 6

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	2387.20	60.50	74.00	-13.50	30.12	2.21	28.17	0.00 Peak	159	30	HORIZONTAL
2	2388.80	52.05	54.00	-1.95	21.67	2.21	28.17	0.00 Average	159	30	HORIZONTAL
3	2440.60	111.21				2.23	28.29	0.00 Average	159	30	HORIZONTAL
4	2441.00	114.89				2.24	28.29	0.00 Peak	159	30	HORIZONTAL
5	2491.50	50.12	54.00	-3.88	19.44	2.26	28.42	0.00 Average	159	30	HORIZONTAL
6	2491.50	61.59	74.00	-12.41	30.91	2.26	28.42	0.00 Peak	159	30	HORIZONTAL

Item 3, 4 are the fundamental frequency at 2437 MHz.

### Channel 11

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	2463.20	111.84				2.24	28.33	0.00 Peak	161	54	HORIZONTAL
2	2463.60	107.94				2.24	28.33	0.00 Average	161	54	HORIZONTAL
3	2483.50	52.13	54.00	-1.87	21.49	2.26	28.38	0.00 Average	161	54	HORIZONTAL
4	2487.90	61.28	74.00	-12.72	30.60	2.26	28.42	0.00 Peak	161	54	HORIZONTAL

Item 1, 2 are the fundamental frequency at 2462 MHz.



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11b CH 1, 6, 11 / Chain 1 + Chain 2 + Chain 3
Test Mode	Mode 2 (Ant. 2 Patch antenna / 3dBi) (3TX)		

**Channel 1**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	2386.00	52.22	54.00	-1.78	21.84	2.21	28.17	0.00	Average	128	317 HORIZONTAL
2	2386.00	59.97	74.00	-14.03	29.59	2.21	28.17	0.00	Peak	128	317 HORIZONTAL
3	2408.00	109.84				2.22	28.21	0.00	Peak	128	317 HORIZONTAL
4	2408.40	106.19				2.22	28.21	0.00	Average	128	317 HORIZONTAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

**Channel 6**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	2390.00	50.47	54.00	-3.53	20.08	2.22	28.17	0.00	Average	154	307 HORIZONTAL
2	2390.00	60.65	74.00	-13.35	30.26	2.22	28.17	0.00	Peak	154	307 HORIZONTAL
3	2434.60	119.27				2.23	28.29	0.00	Peak	154	307 HORIZONTAL
4	2435.40	115.68				2.23	28.29	0.00	Average	154	307 HORIZONTAL
5	2484.70	48.16	54.00	-5.84	17.52	2.26	28.38	0.00	Average	154	307 HORIZONTAL
6	2488.30	60.64	74.00	-13.36	29.96	2.26	28.42	0.00	Peak	154	307 HORIZONTAL

Item 3, 4 are the fundamental frequency at 2437 MHz.

**Channel 11**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	2464.80	110.01				2.24	28.33	0.00	Peak	188	319 HORIZONTAL
2	2465.20	106.32				2.24	28.33	0.00	Average	188	319 HORIZONTAL
3	2487.90	52.08	54.00	-1.92	21.40	2.26	28.42	0.00	Average	188	319 HORIZONTAL
4	2488.30	60.89	74.00	-13.11	30.21	2.26	28.42	0.00	Peak	188	319 HORIZONTAL

Item 1, 2 are the fundamental frequency at 2462 MHz.



Temperature	25°C	Humidity	65%
Test Engineer	Serway Lee	Configurations	IEEE 802.11g CH 1, 6, 11 / Chain 1
Test Moe	Mode 2 (Ant. 2 Patch antenna / 3dBi) (1TX)		

**Channel 1**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBmV/m			Loss	Factor	Factor			
1	2390.00	52.12	54.00	-1.88	21.73	2.22	28.17	0.00	Average	100	308 HORIZONTAL
2	2390.00	67.80	74.00	-6.20	37.41	2.22	28.17	0.00	Peak	100	308 HORIZONTAL
3	2406.60	110.14				2.22	28.21	0.00	Peak	100	308 HORIZONTAL
4	2407.80	100.09				2.22	28.21	0.00	Average	100	308 HORIZONTAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

**Channel 6**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBmV/m			Loss	Factor	Factor			
1	2388.00	72.47	74.00	-1.53	42.09	2.21	28.17	0.00	Peak	100	55 HORIZONTAL
2	2390.00	52.34	54.00	-1.66	21.95	2.22	28.17	0.00	Average	100	55 HORIZONTAL
3	2441.80	106.33				2.24	28.29	0.00	Average	100	55 HORIZONTAL
4	2443.20	117.05				2.24	28.29	0.00	Peak	100	55 HORIZONTAL
5	2483.50	52.70	54.00	-1.30	22.06	2.26	28.38	0.00	Average	100	55 HORIZONTAL
6	2484.70	72.83	74.00	-1.17	42.19	2.26	28.38	0.00	Peak	100	55 HORIZONTAL

Item 3, 4 are the fundamental frequency at 2437 MHz.

**Channel 11**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBmV/m			Loss	Factor	Factor			
1	2468.40	111.23				2.26	28.38	0.00	Peak	100	306 HORIZONTAL
2	2469.20	101.36				2.26	28.38	0.00	Average	100	306 HORIZONTAL
3	2483.50	52.38	54.00	-1.62	21.74	2.26	28.38	0.00	Average	100	306 HORIZONTAL
4	2484.70	69.70	74.00	-4.30	39.06	2.26	28.38	0.00	Peak	100	306 HORIZONTAL

Item 1, 2 are the fundamental frequency at 2462 MHz.

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Serway Lee	<b>Configurations</b>	IEEE 802.11g CH 1, 6, 11 / Chain 1 + Chain 2
<b>Test Moe</b>	Mode 2 (Ant. 2 Patch antenna / 3dBi) (2TX)		

**Channel 1**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
MHz	dBuV/m	dBuV/m	dB						cm	deg	
1	2390.00	52.25	54.00	-1.75	21.86	2.22	28.17	0.00	Average	153	316 HORIZONTAL
2	2390.00	68.63	74.00	-5.37	38.24	2.22	28.17	0.00	Peak	153	316 HORIZONTAL
3	2404.60	113.31				2.22	28.21	0.00	Peak	153	316 HORIZONTAL
4	2409.80	103.41				2.22	28.21	0.00	Average	153	316 HORIZONTAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

**Channel 6**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
MHz	dBuV/m	dBuV/m	dB						cm	deg	
1	2388.80	70.60	74.00	-3.40	40.22	2.21	28.17	0.00	Peak	162	32 HORIZONTAL
2	2389.60	50.33	54.00	-3.67	19.95	2.21	28.17	0.00	Average	162	32 HORIZONTAL
3	2439.60	119.16				2.23	28.29	0.00	Peak	162	32 HORIZONTAL
4	2440.00	109.29				2.23	28.29	0.00	Average	162	32 HORIZONTAL
5	2484.50	71.79	74.00	-2.21	41.15	2.26	28.38	0.00	Peak	162	32 HORIZONTAL
6	2484.70	51.32	54.00	-2.68	20.68	2.26	28.38	0.00	Average	162	32 HORIZONTAL

Item 3, 4 are the fundamental frequency at 2437 MHz.

**Channel 11**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase	
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB						cm	deg		
1	2467.20	114.05					2.26	28.33	0.00	Peak	161	31 HORIZONTAL
2	2467.40	104.18					2.26	28.33	0.00	Average	161	31 HORIZONTAL
3	2483.50	52.32	54.00	-1.68	21.68	2.26	28.38	0.00	Average	161	31 HORIZONTAL	
4	2483.50	69.14	74.00	-4.86	38.50	2.26	28.38	0.00	Peak	161	31 HORIZONTAL	

Item 1, 2 are the fundamental frequency at 2462 MHz.

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Serway Lee	<b>Configurations</b>	IEEE 802.11g CH 1, 6, 11 / Chain 1 + Chain 2 + Chain 3
<b>Test Moe</b>	Mode 2 (Ant. 2 Patch antenna / 3dBi) (3TX)		

### Channel 1

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB							cm	deg	
1	2390.00	52.52	54.00	-1.48	22.13	2.22	28.17	0.00	Average	154	310	HORIZONTAL
2	2390.00	66.32	74.00	-7.68	35.93	2.22	28.17	0.00	Peak	154	310	HORIZONTAL
3	2410.40	105.23				2.22	28.21	0.00	Average	154	310	HORIZONTAL
4	2410.80	115.13				2.22	28.21	0.00	Peak	154	310	HORIZONTAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

### Channel 6

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB							cm	deg	
1	2386.80	63.58	74.00	-10.42	33.20	2.21	28.17	0.00	Peak	153	32	HORIZONTAL
2	2390.00	49.12	54.00	-4.88	18.73	2.22	28.17	0.00	Average	153	32	HORIZONTAL
3	2442.60	110.69				2.24	28.29	0.00	Average	153	32	HORIZONTAL
4	2443.00	120.39				2.24	28.29	0.00	Peak	153	32	HORIZONTAL
5	2483.50	52.32	54.00	-1.68	21.68	2.26	28.38	0.00	Average	153	32	HORIZONTAL
6	2483.50	70.61	74.00	-3.39	39.97	2.26	28.38	0.00	Peak	153	32	HORIZONTAL

Item 3, 4 are the fundamental frequency at 2437 MHz.

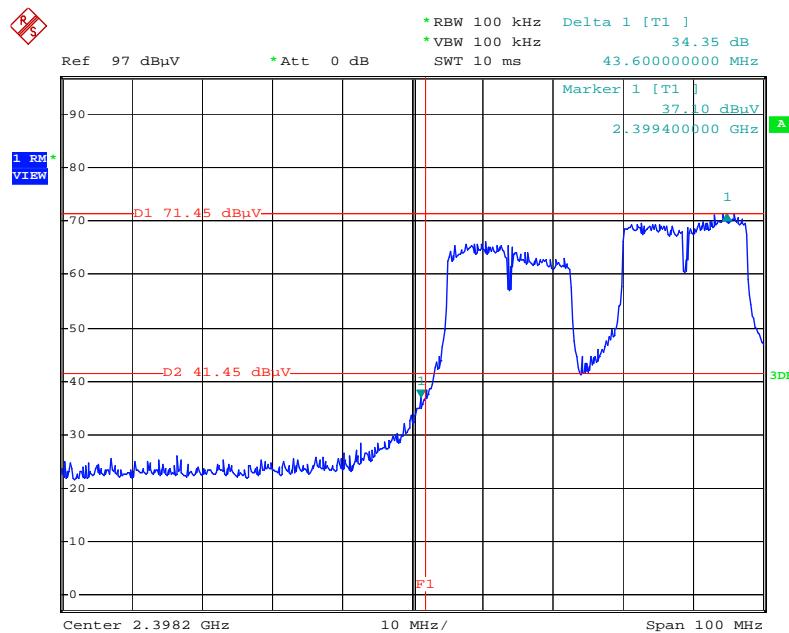
### Channel 11

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB							cm	deg	
1	2462.80	103.29				2.24	28.33	0.00	Average	209	299	HORIZONTAL
2	2463.60	112.86				2.24	28.33	0.00	Peak	209	299	HORIZONTAL
3	2483.50	52.18	54.00	-1.82	21.54	2.26	28.38	0.00	Average	209	299	HORIZONTAL
4	2483.50	64.92	74.00	-9.08	34.28	2.26	28.38	0.00	Peak	209	299	HORIZONTAL

Item 1, 2 are the fundamental frequency at 2462 MHz.

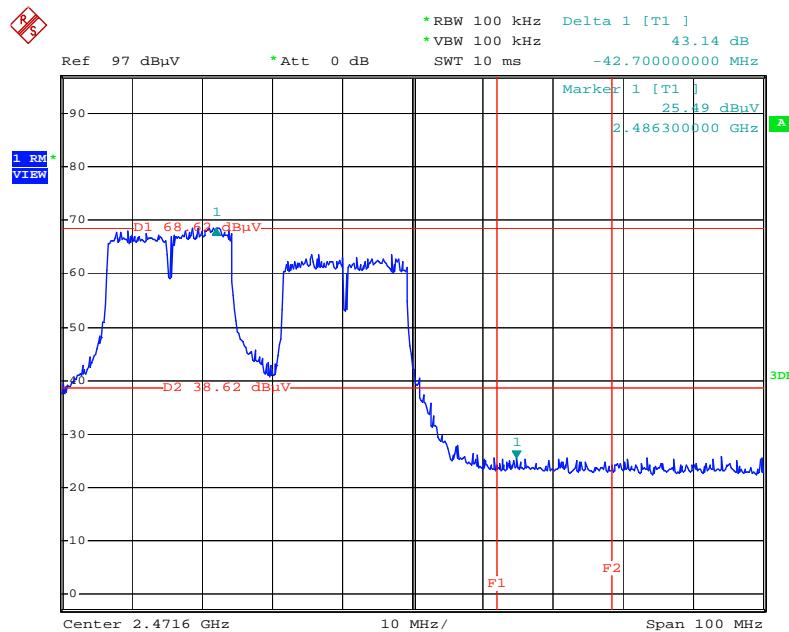
**For Emission not in Restricted Band**

**Plot on Configuration IEEE 802.11n MCS0 20MHz / Chain 1 / 2412 MHz (1TX)**



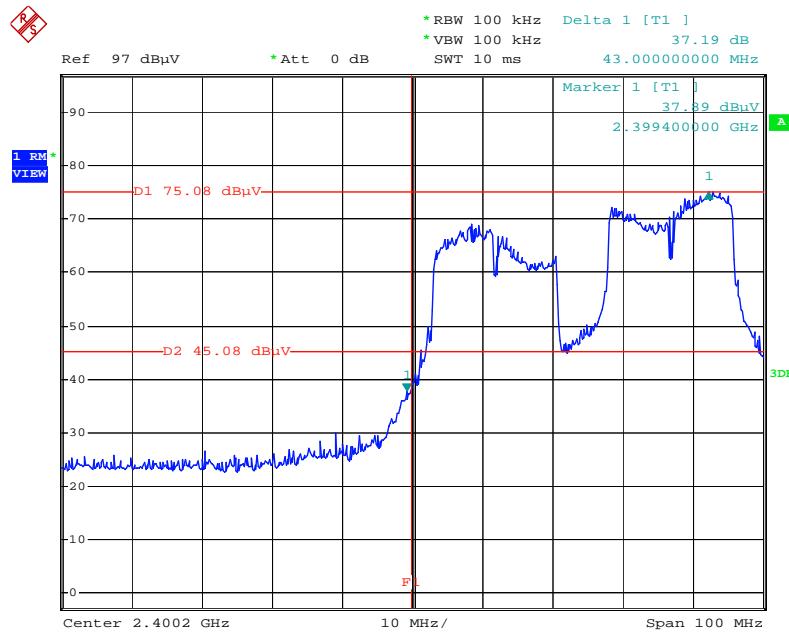
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**Plot on Configuration IEEE 802.11n MCS0 20MHz / Chain 1 / 2462 MHz (1TX)**



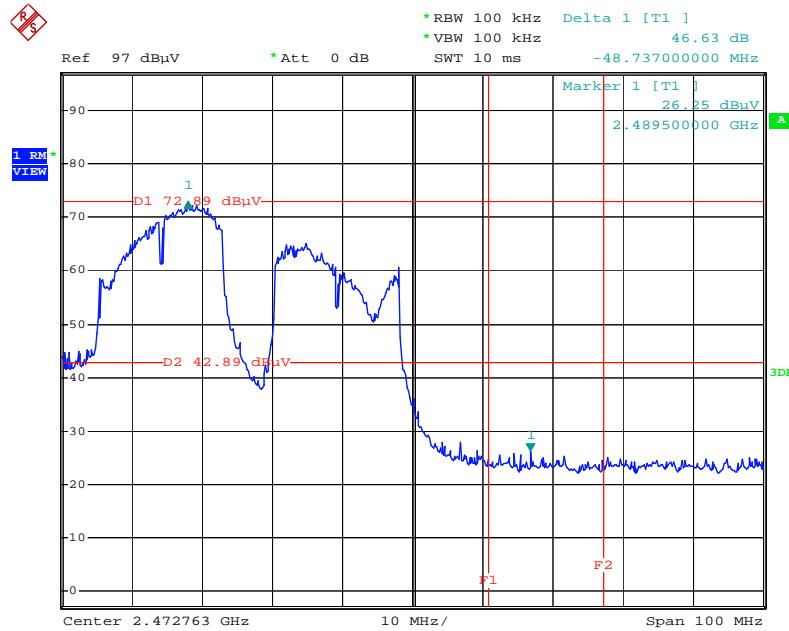
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### Plot on Configuration IEEE 802.11n MCS0 20MHz / Chain 1 + Chain 2/ 2412 MHz (2TX)



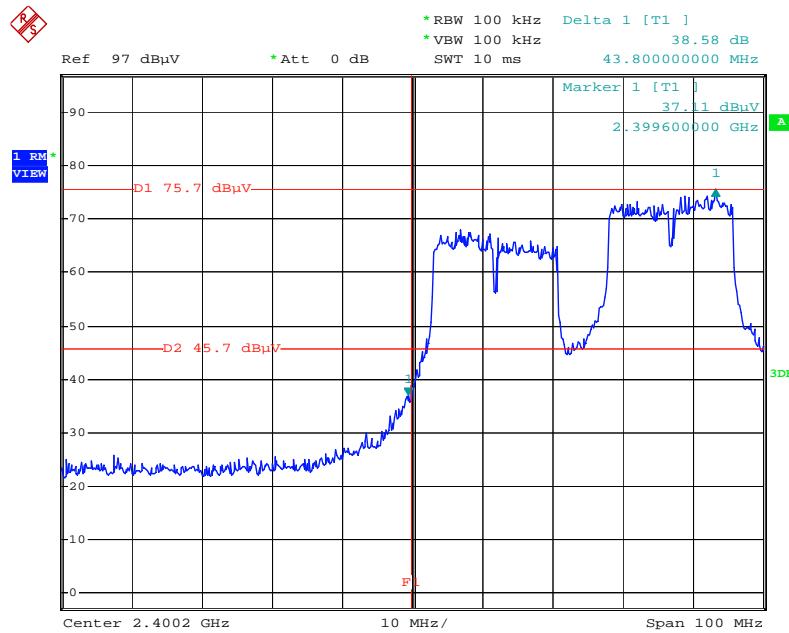
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### Plot on Configuration IEEE 802.11n MCS0 20MHz / Chain 1+ Chain 2/ 2462 MHz (2TX)



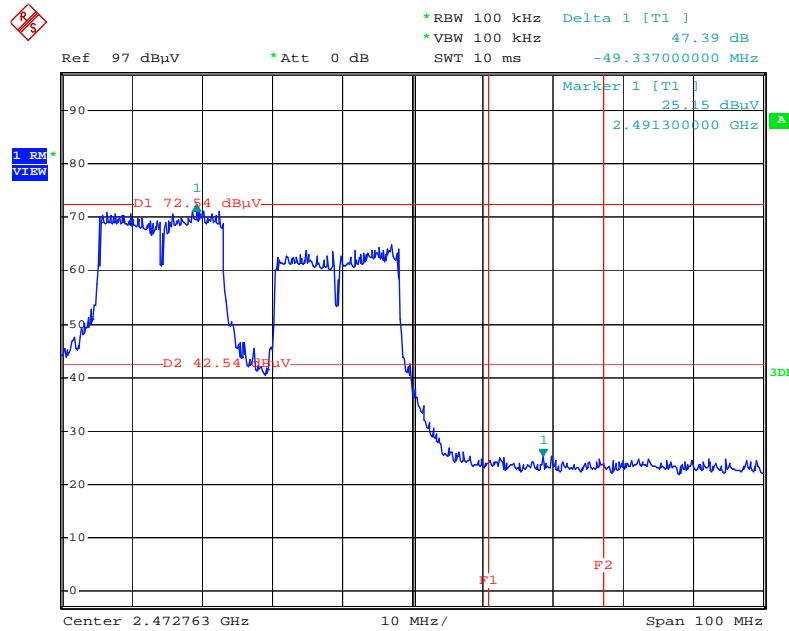
Date: 20.APR.2012 01:24:30

### Plot on Configuration IEEE 802.11n MCS8 20MHz / Chain 1 + Chain 2/ 2412 MHz (2TX)



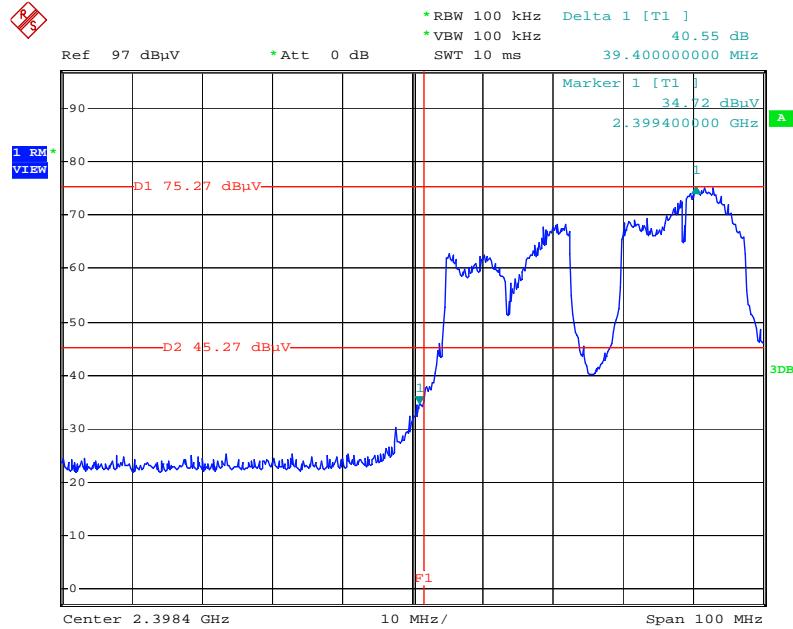
Date: 20.APR.2012 01:35:32

### Plot on Configuration IEEE 802.11n MCS8 20MHz / Chain 1+ Chain 2/ 2462 MHz (2TX)



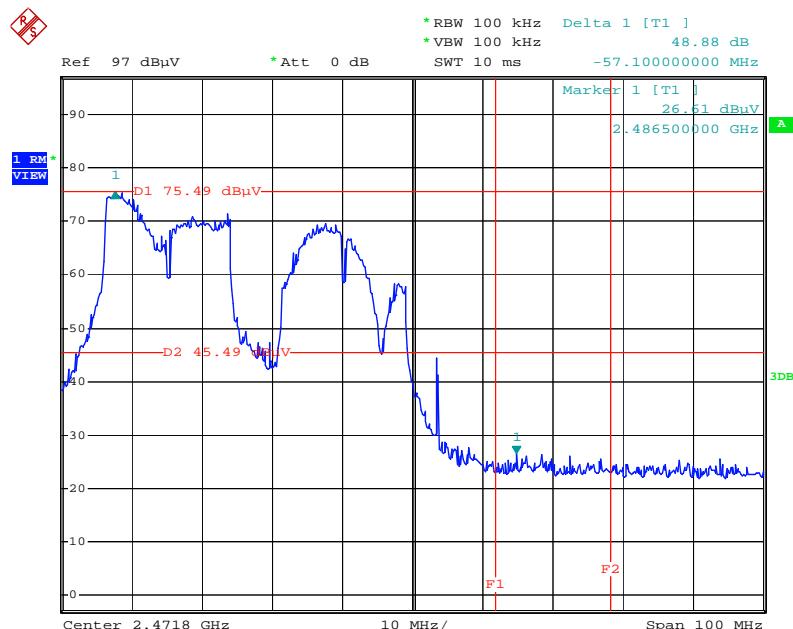
Date: 20.APR.2012 01:25:59

**Plot on Configuration IEEE 802.11n MCS0 20MHz / Chain 1 + Chain 2 + Chain 3 /  
2412 MHz (3TX)**



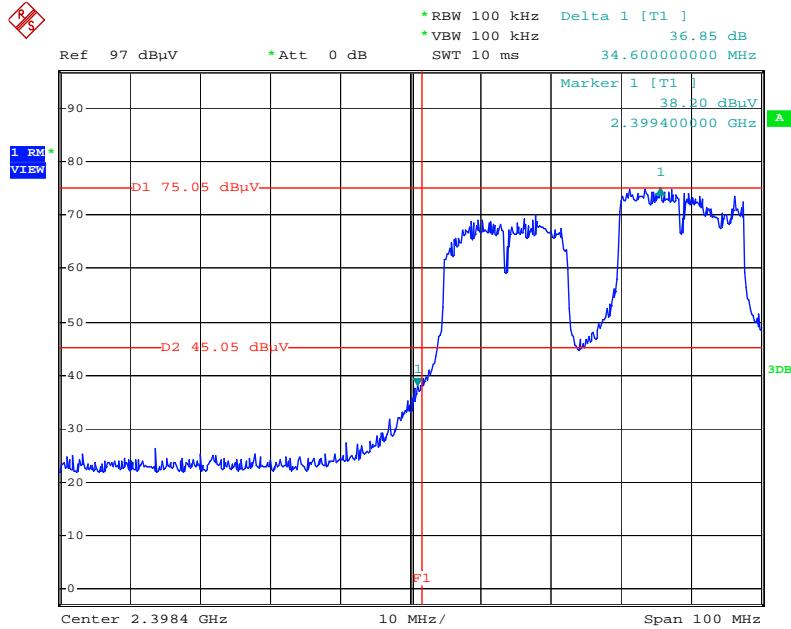
Date: 21.APR.2012 01:54:12

**Plot on Configuration IEEE 802.11n MCS0 20MHz / Chain 1+ Chain 2 + Chain 3 /  
2462 MHz (3TX)**



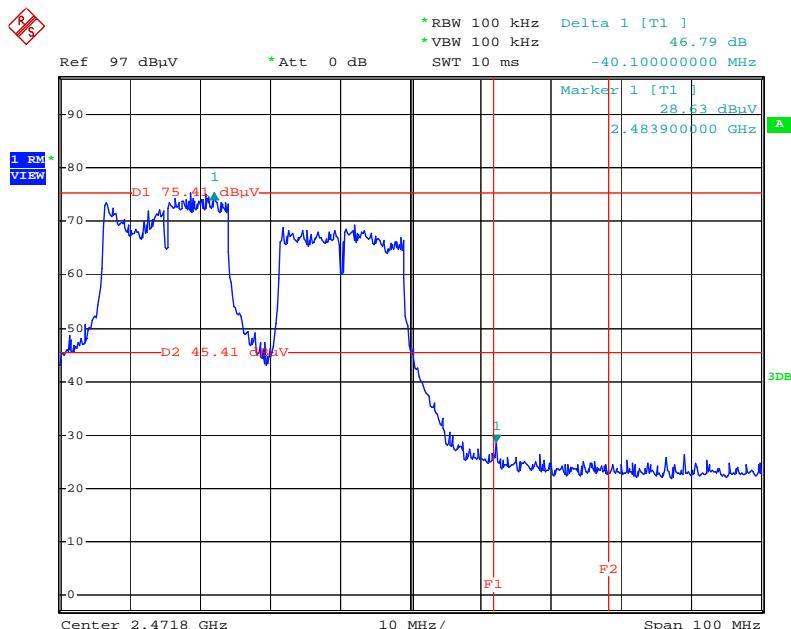
Date: 21.APR.2012 01:46:14

**Plot on Configuration IEEE 802.11n MCS8 20MHz / Chain 1 + Chain 2 + Chain 3 /  
2412 MHz (3TX)**



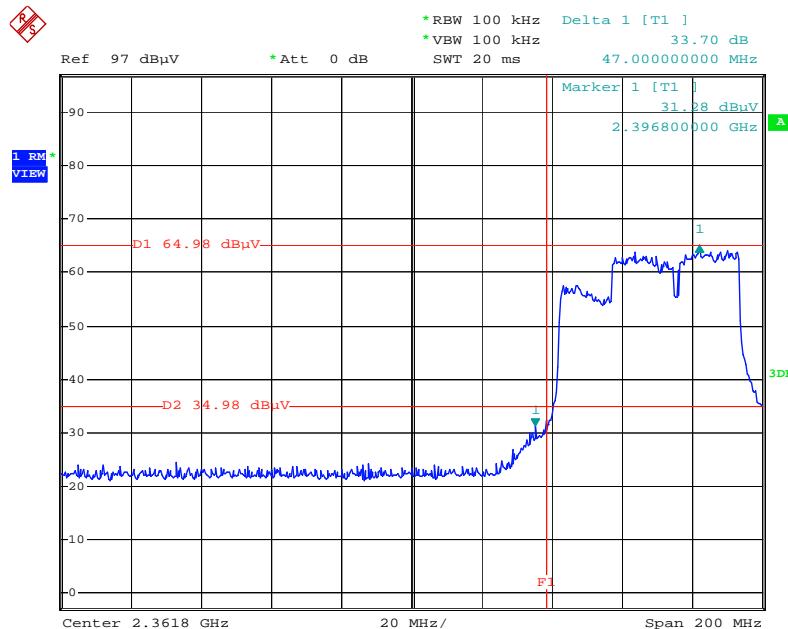
Date: 21.APR.2012 01:55:21

**Plot on Configuration IEEE 802.11n MCS8 20MHz / Chain 1+ Chain 2 + Chain 3 /  
2462 MHz (3TX)**



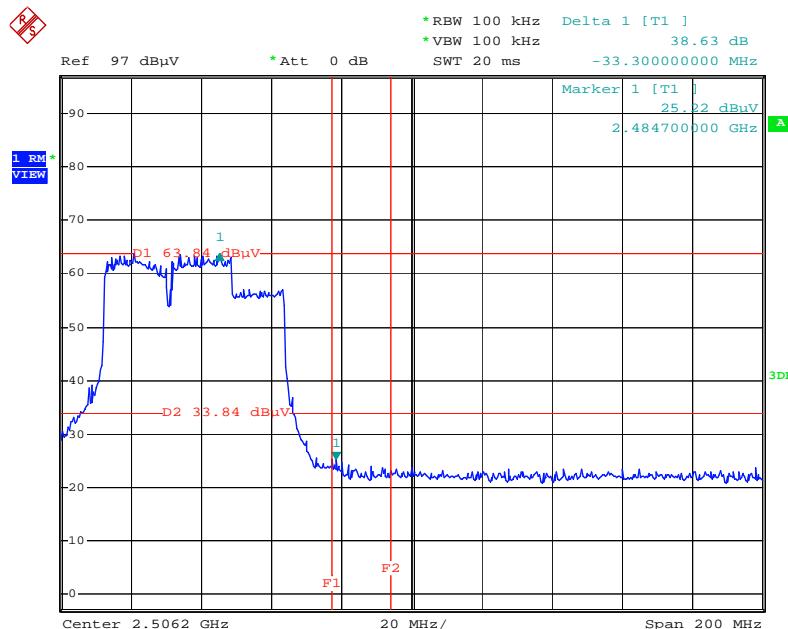
Date: 21.APR.2012 01:47:38

### Plot on Configuration IEEE 802.11n MCS0 40MHz / Chain 1 / 2422 MHz (1TX)



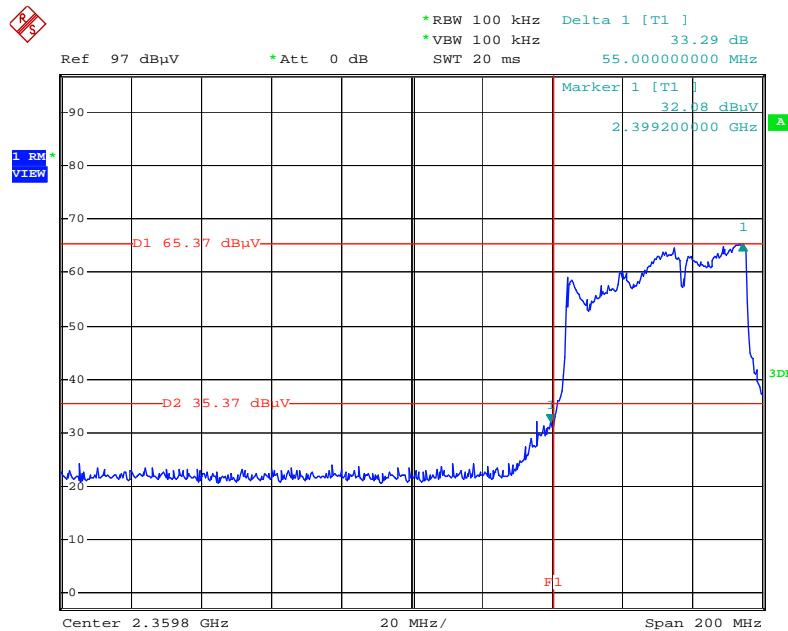
Date: 19.APR.2012 20:31:17

### Plot on Configuration IEEE 802.11n MCS0 40MHz / Chain 1 / 2452 MHz (1TX)



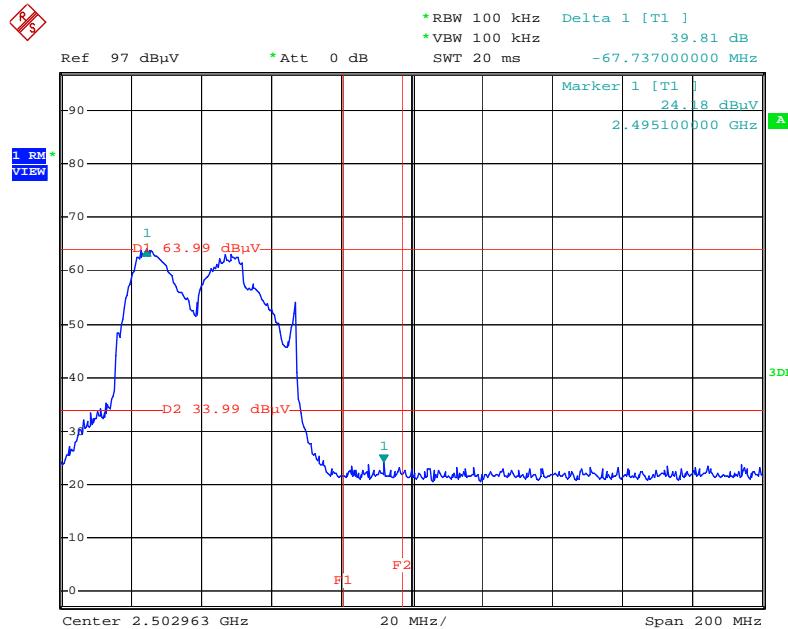
Date: 19.APR.2012 20:34:35

### Plot on Configuration IEEE 802.11n MCS0 40MHz / Chain 1 + Chain 2/ 2422 MHz (2TX)



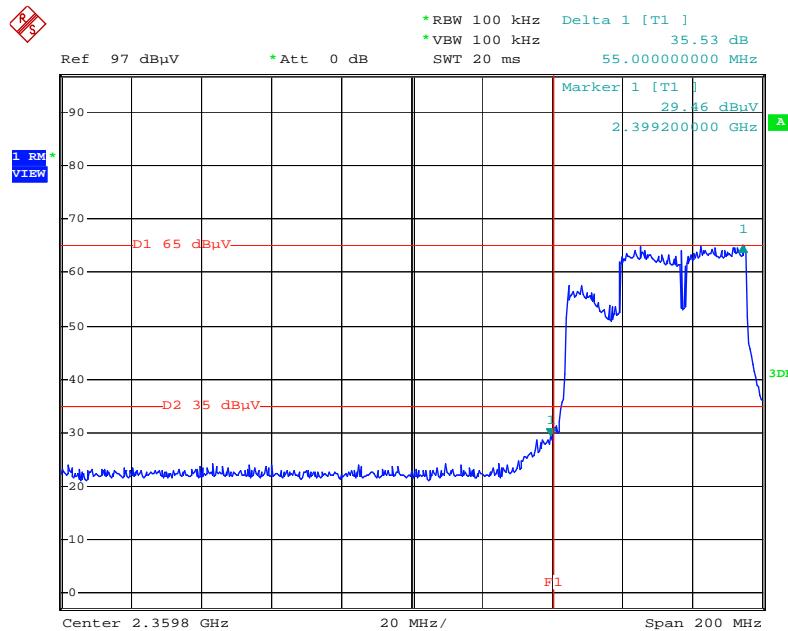
Date: 20.APR.2012 01:37:14

### Plot on Configuration IEEE 802.11n MCS0 40MHz / Chain 1 + Chain 2/ 2452 MHz (2TX)



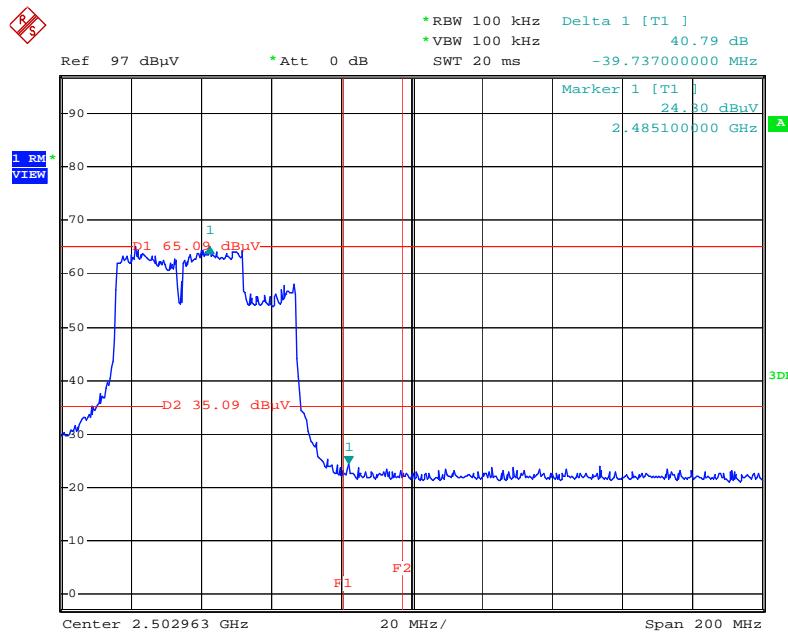
Date: 20.APR.2012 01:22:23

### Plot on Configuration IEEE 802.11n MCS8 40MHz / Chain 1 + Chain 2/ 2422 MHz (2TX)



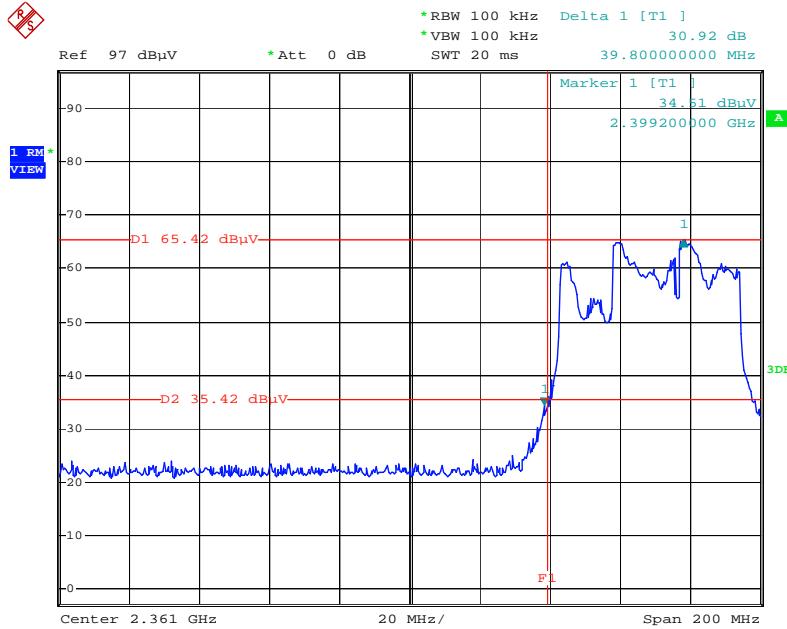
Date: 20.APR.2012 01:40:18

### Plot on Configuration IEEE 802.11n MCS8 40MHz / Chain 1 + Chain 2/ 2452 MHz (2TX)



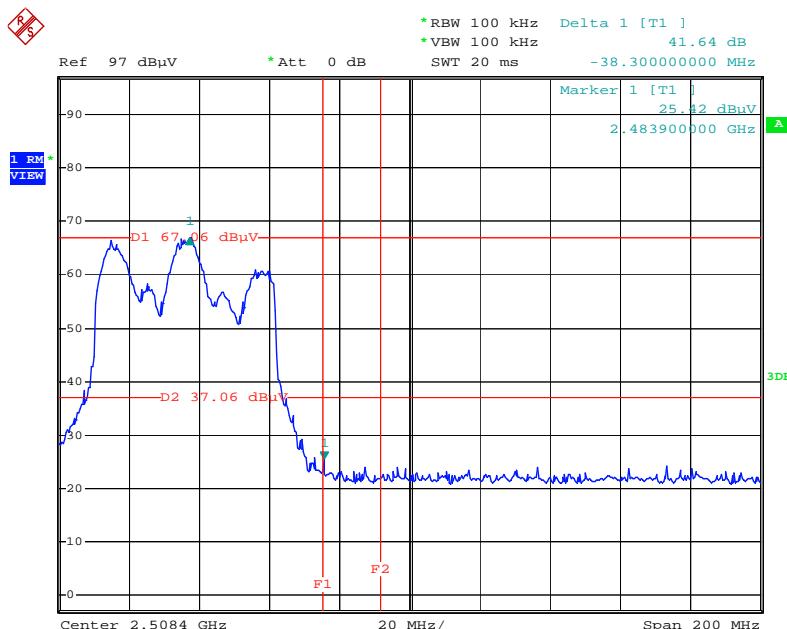
Date: 20.APR.2012 01:20:39

**Plot on Configuration IEEE 802.11n MCS0 40MHz / Chain 1 + Chain 2 + Chain 3 /  
2422 MHz (3TX)**



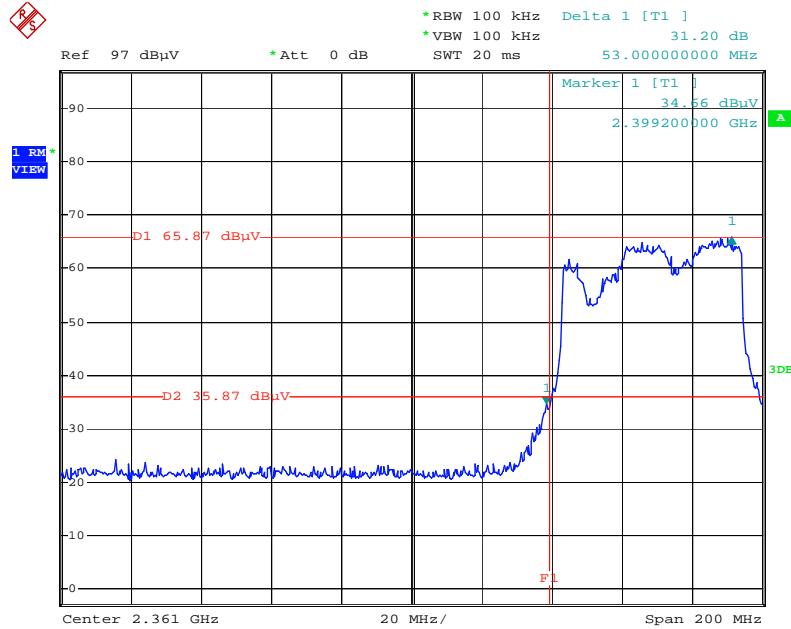
Date: 21.APR.2012 01:56:55

**Plot on Configuration IEEE 802.11n MCS0 40MHz / Chain 1 + Chain 2 + Chain 3 /  
2452 MHz (3TX)**



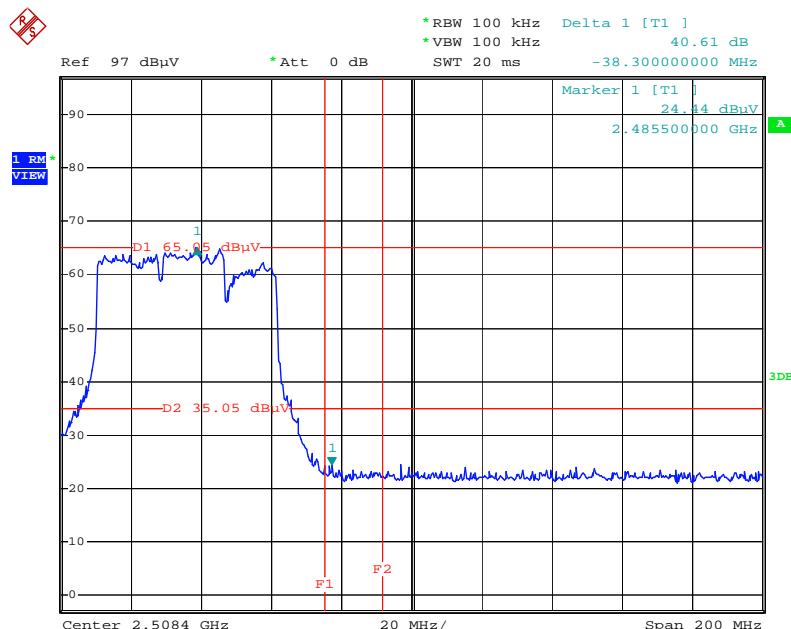
Date: 21.APR.2012 01:44:30

**Plot on Configuration IEEE 802.11n MCS8 40MHz / Chain 1 + Chain 2 + Chain 3 /  
2422 MHz (3TX)**



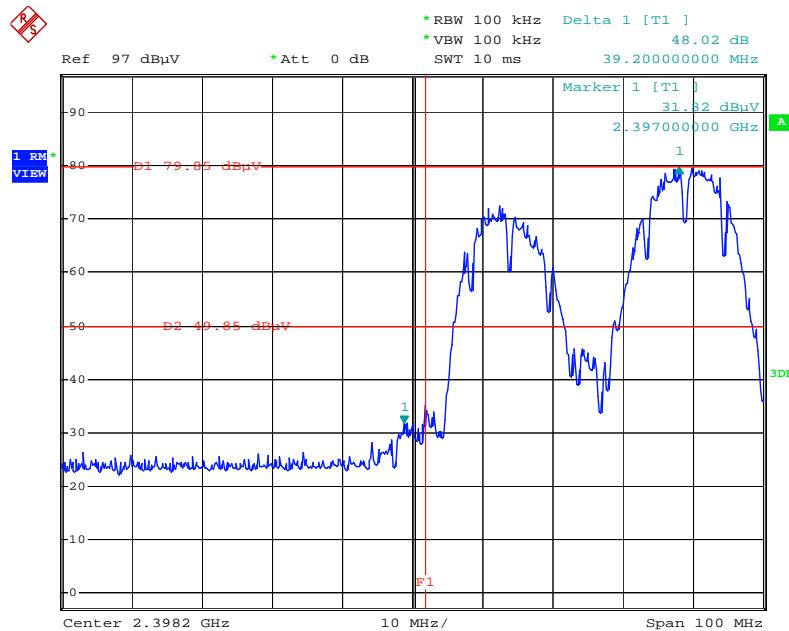
Date: 21.APR.2012 01:58:11

**Plot on Configuration IEEE 802.11n MCS8 40MHz / Chain 1 + Chain 2 + Chain 3 /  
2452 MHz (3TX)**



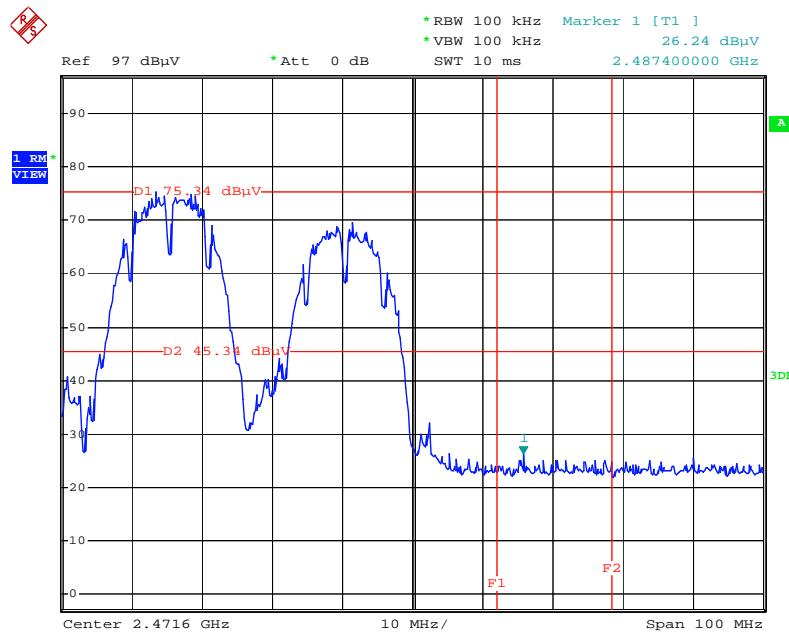
Date: 21.APR.2012 01:43:05

### Plot on Configuration IEEE 802.11b / Chain 1 / 2412 MHz (1TX)



Date: 19.APR.2012 20:23:56

### Plot on Configuration IEEE 802.11b / Chain 1 / 2462 MHz (1TX)



Date: 19.APR.2012 20:40:37