

#### 4.4.7. Results for Radiated Emissions (1GHz~40GHz)

##### Mode 1 (Ant.6 Dipole antenna / 8dBi)

For Beamforming Mode

For 2TX

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 36 / Chain 1 + Chain 2
<b>Test Date</b>	Sep. 27, 2014		

##### Horizontal

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dBuV	dB	dB				
1	15535.08	62.70	74.00	-11.30	46.84	12.58	38.45	35.17	Peak	100	67	HORIZONTAL
2	15539.76	48.49	54.00	-5.51	32.63	12.58	38.45	35.17	Average	100	67	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				
1	15536.14	61.77	74.00	-12.23	45.91	12.58	38.45	35.17	Peak	100	249	VERTICAL
2	15540.10	48.66	54.00	-5.34	32.80	12.58	38.45	35.17	Average	100	249	VERTICAL

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 40 / Chain 1 + Chain 2
<b>Test Date</b>	Sep. 27, 2014		

**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									
1	15596.02	61.35	74.00	-12.65	45.59	12.58	38.36	35.18	Peak	100	34	HORIZONTAL
2	15602.88	49.23	54.00	-4.77	33.48	12.58	38.36	35.19	Average	100	34	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									
1	15595.26	52.86	54.00	-1.14	37.10	12.58	38.36	35.18	Average	154	232	VERTICAL
2	15595.70	68.21	74.00	-5.79	52.45	12.58	38.36	35.18	Peak	154	232	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 48 / Chain 1 + Chain 2
Test Date	Sep. 27, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB			
1	15718.78	48.54	54.00	-5.46	32.99	12.57	38.19	35.21	Average	100	53 HORIZONTAL
2	15724.56	60.52	74.00	-13.48	44.97	12.57	38.19	35.21	Peak	100	53 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB			
1	15718.00	66.46	74.00	-7.54	50.91	12.57	38.19	35.21	Peak	136	285 VERTICAL
2	15718.48	52.31	54.00	-1.69	36.76	12.57	38.19	35.21	Average	136	285 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 52 / Chain 1 + Chain 2
Test Date	Sep. 27, 2014		

**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		cm	deg	
1	15779.78	62.39	74.00	-11.61	46.95	12.57	38.11	35.24	Peak	101	123	HORIZONTAL
2	15780.17	49.38	54.00	-4.62	33.94	12.57	38.11	35.24	Average	101	123	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		cm	deg	
1	15779.38	68.42	74.00	-5.58	52.98	12.57	38.11	35.24	Peak	126	270	VERTICAL
2	15779.86	52.65	54.00	-1.35	37.21	12.57	38.11	35.24	Average	126	270	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 60 / Chain 1 + Chain 2
Test Date	Sep. 27, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
1	10599.22	44.83	54.00	-9.17	31.00	10.16	38.92	35.25	Average	100	338	HORIZONTAL
2	10600.92	57.83	74.00	-16.17	43.95	10.19	38.92	35.23	Peak	100	338	HORIZONTAL
3	15899.18	61.64	74.00	-12.36	46.39	12.57	37.94	35.26	Peak	100	293	HORIZONTAL
4	15900.78	48.30	54.00	-5.70	33.07	12.57	37.92	35.26	Average	100	293	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
1	10599.74	44.41	54.00	-9.59	30.58	10.16	38.92	35.25	Average	100	102	VERTICAL
2	10600.40	60.02	74.00	-13.98	46.19	10.16	38.92	35.25	Peak	100	102	VERTICAL
3	15900.40	61.43	74.00	-12.57	46.18	12.57	37.94	35.26	Peak	100	233	VERTICAL
4	15900.64	48.33	54.00	-5.67	33.10	12.57	37.92	35.26	Average	100	233	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 64 / Chain 1 + Chain 2
Test Date	Sep. 27, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
1	10639.36	60.00	74.00	-14.00	46.08	10.21	38.93	35.22	Peak	100	102	HORIZONTAL
2	10640.05	44.31	54.00	-9.69	30.39	10.21	38.93	35.22	Average	100	102	HORIZONTAL
3	15959.36	61.20	74.00	-12.80	46.07	12.56	37.85	35.28	Peak	100	223	HORIZONTAL
4	15960.15	48.18	54.00	-5.82	33.05	12.56	37.85	35.28	Average	100	223	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
1	10639.73	57.60	74.00	-16.40	43.68	10.21	38.93	35.22	Peak	100	59	VERTICAL
2	10640.05	44.50	54.00	-9.50	30.58	10.21	38.93	35.22	Average	100	59	VERTICAL
3	15959.92	61.49	74.00	-12.51	46.36	12.56	37.85	35.28	Peak	100	168	VERTICAL
4	15960.15	48.18	54.00	-5.82	33.05	12.56	37.85	35.28	Average	100	168	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 100 / Chain 1 + Chain 2
Test Date	Sep. 27, 2014		

**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	10999.74	44.33	54.00	-9.67	29.76	10.55	39.00	34.98	Average	100	329 HORIZONTAL
2	11000.04	57.59	74.00	-16.41	43.02	10.55	39.00	34.98	Peak	100	329 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	10999.69	58.35	74.00	-15.65	43.78	10.55	39.00	34.98	Peak	100	169 VERTICAL
2	11000.02	44.17	54.00	-9.83	29.60	10.55	39.00	34.98	Average	100	169 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 116 / Chain 1 + Chain 2
Test Date	Sep. 27, 2014		

**Horizontal**

Freq	Level	Limit		Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB		cm	deg	
MHz												
1	11159.08	59.30	74.00	-14.70	44.57	10.60	39.13	35.00	Peak	100	152	HORIZONTAL
2	11159.16	45.34	54.00	-8.66	30.61	10.60	39.13	35.00	Average	100	152	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB		cm	deg	
MHz												
1	11159.86	46.05	54.00	-7.95	31.32	10.60	39.13	35.00	Average	100	274	VERTICAL
2	11160.92	58.49	74.00	-15.51	43.76	10.60	39.13	35.00	Peak	100	274	VERTICAL

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 140 / Chain 1 + Chain 2
<b>Test Date</b>	Sep. 27, 2014		

**Horizontal**

Freq	Level	Limit		Over Line	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		
1	11399.44	43.58	54.00	-10.42	28.61	10.69	39.32	35.04	Average	100	157 HORIZONTAL
2	11399.60	57.30	74.00	-16.70	42.33	10.69	39.32	35.04	Peak	100	157 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Line	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		
1	11399.88	57.34	74.00	-16.66	42.37	10.69	39.32	35.04	Peak	100	81 VERTICAL
2	11400.20	43.55	54.00	-10.45	28.58	10.69	39.32	35.04	Average	100	81 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 38 / Chain 1 + Chain 2
Test Date	Sep. 27, 2014		

**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	15569.66	62.32	74.00	-11.68	46.51	12.58	38.40	35.17	Peak	100	145	HORIZONTAL
2	15570.05	48.59	54.00	-5.41	32.78	12.58	38.40	35.17	Average	100	145	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	15570.04	61.31	74.00	-12.69	45.50	12.58	38.40	35.17	Peak	100	341	VERTICAL
2	15570.32	48.53	54.00	-5.47	32.72	12.58	38.40	35.17	Average	100	341	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 46 / Chain 1 + Chain 2
Test Date	Sep. 27, 2014		

**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		cm	deg	
1	15689.45	60.34	74.00	-13.66	44.74	12.58	38.23	35.21	Peak	100	77	HORIZONTAL
2	15690.94	47.82	54.00	-6.18	32.22	12.58	38.23	35.21	Average	100	77	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		cm	deg	
1	15690.11	47.65	54.00	-6.35	32.05	12.58	38.23	35.21	Average	100	210	VERTICAL
2	15690.80	61.28	74.00	-12.72	45.68	12.58	38.23	35.21	Peak	100	210	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 54 / Chain 1 + Chain 2
Test Date	Sep. 27, 2014		

**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	15809.91	61.38	74.00	-12.62	45.98	12.57	38.07	35.24	Peak	100	311	HORIZONTAL
2	15810.73	47.64	54.00	-6.36	32.24	12.57	38.07	35.24	Average	100	311	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	15809.39	61.92	74.00	-12.08	46.52	12.57	38.07	35.24	Peak	100	82	VERTICAL
2	15810.21	47.94	54.00	-6.06	32.54	12.57	38.07	35.24	Average	100	82	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11nMCS0 HT40 CH 62 / Chain 1 + Chain 2
Test Date	Sep. 27, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
1	10620.39	57.60	74.00	-16.40	43.72	10.19	38.92	35.23	Peak	100	95 HORIZONTAL
2	10620.94	44.56	54.00	-9.44	30.68	10.19	38.92	35.23	Average	100	95 HORIZONTAL
3	15929.03	48.06	54.00	-5.94	32.87	12.56	37.90	35.27	Average	100	33 HORIZONTAL
4	15930.28	61.69	74.00	-12.31	46.51	12.56	37.90	35.28	Peak	100	33 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
1	10619.55	44.52	54.00	-9.48	30.64	10.19	38.92	35.23	Average	100	288 VERTICAL
2	10620.46	60.26	74.00	-13.74	46.38	10.19	38.92	35.23	Peak	100	288 VERTICAL
3	15929.22	48.16	54.00	-5.84	32.97	12.56	37.90	35.27	Average	100	180 VERTICAL
4	15930.46	61.56	74.00	-12.44	46.38	12.56	37.90	35.28	Peak	100	180 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 102 / Chain 1 + Chain 2
Test Date	Sep. 27, 2014		

**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	11019.14	44.38	54.00	-9.62	29.79	10.56	39.01	34.98	Average	100	158	HORIZONTAL
2	11020.54	57.30	74.00	-16.70	42.71	10.56	39.01	34.98	Peak	100	158	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	11019.49	44.28	54.00	-9.72	29.69	10.56	39.01	34.98	Average	100	313	VERTICAL
2	11020.62	57.37	74.00	-16.63	42.78	10.56	39.01	34.98	Peak	100	313	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 110 / Chain 1 + Chain 2
Test Date	Sep. 27, 2014		

**Horizontal**

Freq	Level	Limit		Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB		cm	deg	
1	11100.14	58.01	74.00	-15.99	43.34	10.58	39.08	34.99	Peak	100	53	HORIZONTAL
2	11100.23	45.28	54.00	-8.72	30.61	10.58	39.08	34.99	Average	100	53	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB		cm	deg	
1	11099.04	45.36	54.00	-8.64	30.69	10.58	39.08	34.99	Average	100	156	VERTICAL
2	11100.99	59.50	74.00	-14.50	44.83	10.58	39.08	34.99	Peak	100	156	VERTICAL

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT40 CH 134 / Chain 1 + Chain 2
<b>Test Date</b>	Sep. 27, 2014		

**Horizontal**

Freq	Level	Limit		Over Line	Read Level	Cable Loss			Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	dB	cm	deg		
1	11339.17	43.82	54.00	-10.18	28.92	10.66	39.27	35.03	Average		100	314	HORIZONTAL	
2	11340.57	57.27	74.00	-16.73	42.36	10.67	39.27	35.03	Peak		100	314	HORIZONTAL	

**Vertical**

Freq	Level	Limit		Over Line	Read Level	Cable Loss			Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	dB	cm	deg		
1	11339.88	43.85	54.00	-10.15	28.95	10.66	39.27	35.03	Average		100	69	VERTICAL	
2	11340.03	57.26	74.00	-16.74	42.36	10.66	39.27	35.03	Peak		100	69	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.



## For 3TX

Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 36 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 27, 2014		

*Horizontal*

Freq	Level	Limit		Over Line	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	15536.68	63.36	74.00	-10.64	47.50	12.58	38.45	35.17	Peak	100	223	HORIZONTAL
2	15540.26	49.44	54.00	-4.56	33.58	12.58	38.45	35.17	Average	100	223	HORIZONTAL

*Vertical*

Freq	Level	Limit		Over Line	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	15539.44	48.53	54.00	-5.47	32.67	12.58	38.45	35.17	Average	100	165	VERTICAL
2	15542.16	63.78	74.00	-10.22	47.92	12.58	38.45	35.17	Peak	100	165	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 40 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 27, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dBuV	dB	dB/m			
1	15599.90	48.91	54.00	-5.09	33.16	12.58	38.36	35.19	Average	100	168 HORIZONTAL
2	15603.94	63.16	74.00	-10.84	47.41	12.58	38.36	35.19	Peak	100	168 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dBuV	dB	dB/m			
1	15598.30	62.74	74.00	-11.26	46.98	12.58	38.36	35.18	Peak	100	233 VERTICAL
2	15598.72	48.99	54.00	-5.01	33.23	12.58	38.36	35.18	Average	100	233 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 48 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 27, 2014		

**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	15718.44	48.26	54.00	-5.74	32.71	12.57	38.19	35.21	Average	100	37	HORIZONTAL
2	15719.58	61.86	74.00	-12.14	46.31	12.57	38.19	35.21	Peak	100	37	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	15715.56	48.16	54.00	-5.84	32.61	12.57	38.19	35.21	Average	100	197	VERTICAL
2	15721.22	62.22	74.00	-11.78	46.67	12.57	38.19	35.21	Peak	100	197	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 52 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 27, 2014		

**Horizontal**

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	15775.10	62.99	74.00	-11.01	47.54	12.57	38.11	35.23 Peak	100	57	HORIZONTAL
2	15777.90	48.58	54.00	-5.42	33.14	12.57	38.11	35.24 Average	100	57	HORIZONTAL

**Vertical**

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	15775.88	48.65	54.00	-5.35	33.20	12.57	38.11	35.23 Average	100	242	VERTICAL
2	15776.98	62.86	74.00	-11.14	47.41	12.57	38.11	35.23 Peak	100	242	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 60 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 27, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor			
1	10601.38	58.46	74.00	-15.54	44.58	10.19	38.92	35.23	Peak	100	211 HORIZONTAL
2	10603.00	45.86	54.00	-8.14	31.98	10.19	38.92	35.23	Average	100	211 HORIZONTAL
3	15901.64	48.76	54.00	-5.24	33.53	12.57	37.92	35.26	Average	100	171 HORIZONTAL
4	15903.32	63.63	74.00	-10.37	48.40	12.57	37.92	35.26	Peak	100	171 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor			
1	10600.38	59.72	74.00	-14.28	45.89	10.16	38.92	35.25	Peak	100	214 VERTICAL
2	10603.92	44.52	54.00	-9.48	30.64	10.19	38.92	35.23	Average	100	214 VERTICAL
3	15898.32	49.00	54.00	-5.00	33.75	12.57	37.94	35.26	Average	100	152 VERTICAL
4	15904.78	62.41	74.00	-11.59	47.20	12.56	37.92	35.27	Peak	100	152 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 64 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 27, 2014		

**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	10637.86	45.46	54.00	-8.54	31.54	10.21	38.93	35.22	Average	100	262	HORIZONTAL
2	10639.82	58.58	74.00	-15.42	44.66	10.21	38.93	35.22	Peak	100	262	HORIZONTAL
3	15960.58	48.71	54.00	-5.29	33.58	12.56	37.85	35.28	Average	100	200	HORIZONTAL
4	15963.72	63.20	74.00	-10.80	48.07	12.56	37.85	35.28	Peak	100	200	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	10635.36	45.39	54.00	-8.61	31.47	10.21	38.93	35.22	Average	100	179	VERTICAL
2	10640.44	58.21	74.00	-15.79	44.29	10.21	38.93	35.22	Peak	100	179	VERTICAL
3	15962.32	48.78	54.00	-5.22	33.65	12.56	37.85	35.28	Average	100	299	VERTICAL
4	15963.14	63.31	74.00	-10.69	48.18	12.56	37.85	35.28	Peak	100	299	VERTICAL

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 100 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 27, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	11002.90	45.07	54.00	-8.93	30.50	10.55	39.00	34.98	Average	100	153 HORIZONTAL
2	11003.94	58.52	74.00	-15.48	43.95	10.55	39.00	34.98	Peak	100	153 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	10998.32	58.85	74.00	-15.15	44.28	10.55	39.00	34.98	Peak	100	239 VERTICAL
2	11004.54	45.19	54.00	-8.81	30.61	10.55	39.01	34.98	Average	100	239 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 116 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 27, 2014		

**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	11161.60	46.67	54.00	-7.33	31.94	10.60	39.13	35.00	Average	100	209	HORIZONTAL
2	11163.34	59.56	74.00	-14.44	44.82	10.61	39.13	35.00	Peak	100	209	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	11159.52	47.07	54.00	-6.93	32.34	10.60	39.13	35.00	Average	100	330	VERTICAL
2	11161.80	59.74	74.00	-14.26	45.00	10.61	39.13	35.00	Peak	100	330	VERTICAL

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 140 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 27, 2014		

**Horizontal**

Freq	Level	Limit		Over Line	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	11400.18	44.66	54.00	-9.34	29.69	10.69	39.32	35.04	Average	100	133	HORIZONTAL
2	11402.76	57.86	74.00	-16.14	42.89	10.69	39.32	35.04	Peak	100	133	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Line	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	11397.56	44.84	54.00	-9.16	29.87	10.69	39.32	35.04	Average	100	271	VERTICAL
2	11404.24	57.95	74.00	-16.05	42.98	10.69	39.32	35.04	Peak	100	271	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 38 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 27, 2014		

**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	dB	dB	dB/m	dB	cm	deg	cm	deg
1	15567.14	49.34	54.00	-4.66	33.53	12.58	38.40	35.17	Average	100	103	HORIZONTAL
2	15569.66	63.62	74.00	-10.38	47.81	12.58	38.40	35.17	Peak	100	103	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	dB	dB	dB	dB/m	dB	cm	deg	cm	deg
1	15567.24	49.32	54.00	-4.68	33.51	12.58	38.40	35.17	Average	100	161	VERTICAL	
2	15574.26	62.98	74.00	-11.02	47.18	12.58	38.40	35.18	Peak	100	161	VERTICAL	



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 46 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 27, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor			
1	15687.88	48.63	54.00	-5.37	33.03	12.58	38.23	35.21	Average	100	329 HORIZONTAL
2	15694.94	62.43	74.00	-11.57	46.83	12.58	38.23	35.21	Peak	100	329 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor			
1	15685.34	63.03	74.00	-10.97	47.43	12.58	38.23	35.21	Peak	100	263 VERTICAL
2	15690.52	48.64	54.00	-5.36	33.04	12.58	38.23	35.21	Average	100	263 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 54 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 27, 2014		

**Horizontal**

Freq	Level	Limit		Over Line	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	15811.80	62.26	74.00	-11.74	46.86	12.57	38.07	35.24	Peak	100	187	HORIZONTAL
2	15814.52	48.23	54.00	-5.77	32.83	12.57	38.07	35.24	Average	100	187	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Line	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	15805.58	48.33	54.00	-5.67	32.93	12.57	38.07	35.24	Average	100	301	VERTICAL
2	15806.98	62.15	74.00	-11.85	46.75	12.57	38.07	35.24	Peak	100	301	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11nMCS0 HT40 CH 62 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 27, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor		cm	deg	
1	10616.14	46.08	54.00	-7.92	32.20	10.19	38.92	35.23	Average	100	218	HORIZONTAL
2	10621.06	59.41	74.00	-14.59	45.53	10.19	38.92	35.23	Peak	100	218	HORIZONTAL
3	15925.84	49.02	54.00	-4.98	33.83	12.56	37.90	35.27	Average	100	299	HORIZONTAL
4	15929.94	62.75	74.00	-11.25	47.56	12.56	37.90	35.27	Peak	100	299	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor		cm	deg	
1	10616.14	46.09	54.00	-7.91	32.21	10.19	38.92	35.23	Average	100	133	VERTICAL
2	10618.06	59.17	74.00	-14.83	45.29	10.19	38.92	35.23	Peak	100	133	VERTICAL
3	15925.58	48.94	54.00	-5.06	33.75	12.56	37.90	35.27	Average	100	222	VERTICAL
4	15930.54	63.68	74.00	-10.32	48.50	12.56	37.90	35.28	Peak	100	222	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 102 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 26, 2014		

**Horizontal**

Freq	Level	Limit		Over Line	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		
1	11015.96	44.99	54.00	-9.01	30.40	10.56	39.01	34.98	Average	100	263 HORIZONTAL
2	11019.46	58.91	74.00	-15.09	44.32	10.56	39.01	34.98	Peak	100	263 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Line	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		
1	11018.14	44.49	54.00	-9.51	29.90	10.56	39.01	34.98	Average	100	197 VERTICAL
2	11019.88	58.90	74.00	-15.10	44.31	10.56	39.01	34.98	Peak	100	197 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 110 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 26, 2014		

**Horizontal**

Freq	Level	Limit		Over Line	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	11095.30	46.03	54.00	-7.97	31.36	10.58	39.08	34.99	Average	100	236	HORIZONTAL
2	11098.30	60.06	74.00	-13.94	45.39	10.58	39.08	34.99	Peak	100	236	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Line	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	11101.36	45.46	54.00	-8.54	30.79	10.58	39.08	34.99	Average	100	164	VERTICAL
2	11102.76	55.14	74.00	-18.86	40.47	10.58	39.08	34.99	Peak	100	164	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 134 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 26, 2014		

**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	11340.32	44.33	54.00	-9.67	29.42	10.67	39.27	35.03	Average	100	300	HORIZONTAL
2	11344.62	56.95	74.00	-17.05	42.03	10.67	39.28	35.03	Peak	100	300	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	11340.32	56.86	74.00	-17.14	41.95	10.67	39.27	35.03	Peak	100	136	VERTICAL
2	11344.46	44.66	54.00	-9.34	29.75	10.67	39.27	35.03	Average	100	136	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.

**Mode 2 (Ant.16 Panel antenna / 3.5dBi)****For Beamforming Mode****For 2TX**

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 36 / Chain 1 + Chain 2
<b>Test Date</b>	Oct. 01, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	cm
1	15530.77	48.10	54.00	-5.90	32.24	12.58	38.45	35.17	59	114	Average	HORIZONTAL
2	15542.40	61.20	74.00	-12.80	45.34	12.58	38.45	35.17	59	114	Peak	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	cm
1	15542.82	61.40	74.00	-12.60	45.54	12.58	38.45	35.17	360	100	Peak	VERTICAL
2	15545.67	48.12	54.00	-5.88	32.28	12.58	38.43	35.17	360	100	Average	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 40 / Chain 1 + Chain 2
Test Date	Oct. 01, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	cm
1	15597.24	48.61	54.00	-5.39	32.85	12.58	38.36	35.18	118	109	Average	HORIZONTAL
2	15598.85	62.42	74.00	-11.58	46.67	12.58	38.36	35.19	118	109	Peak	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	cm
1	15597.79	51.50	54.00	-2.50	35.74	12.58	38.36	35.18	117	101	Average	VERTICAL
2	15598.43	64.43	74.00	-9.57	48.67	12.58	38.36	35.18	117	101	Peak	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 48 / Chain 1 + Chain 2
Test Date	Oct. 01, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
1	15712.44	60.69	74.00	-13.31	45.12	12.57	38.21	35.21	88	116	Peak	HORIZONTAL
2	15716.51	49.31	54.00	-4.69	33.76	12.57	38.19	35.21	88	116	Average	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
1	15715.96	52.23	54.00	-1.77	36.68	12.57	38.19	35.21	117	105	Average	VERTICAL
2	15719.26	67.84	74.00	-6.16	52.29	12.57	38.19	35.21	117	105	Peak	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 52 / Chain 1 + Chain 2
Test Date	Oct. 01, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	
1	15774.52	63.04	74.00	-10.96	47.59	12.57	38.11	35.23	332	100	Peak	HORIZONTAL
2	15784.52	49.38	54.00	-4.62	33.96	12.57	38.09	35.24	332	100	Average	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	
1	15780.51	52.79	54.00	-1.21	37.35	12.57	38.11	35.24	114	106	Average	VERTICAL
2	15781.15	69.15	74.00	-4.85	53.71	12.57	38.11	35.24	114	106	Peak	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 60 / Chain 1 + Chain 2
Test Date	Oct. 01, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBm			Loss	Factor	dB	dB/m	dB		
1	10597.66	45.19	54.00	-8.81	31.36	10.16	38.92	35.25	112	100 Average	HORIZONTAL	
2	10600.10	58.49	74.00	-15.51	44.66	10.16	38.92	35.25	112	100 Peak	HORIZONTAL	
3	15893.59	60.06	74.00	-13.94	44.81	12.57	37.94	35.26	315	100 Peak	HORIZONTAL	
4	15897.98	47.81	54.00	-6.19	32.56	12.57	37.94	35.26	315	100 Average	HORIZONTAL	

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBm			Loss	Factor	dB	dB/m	dB		
1	10598.01	58.17	74.00	-15.83	44.34	10.16	38.92	35.25	360	100 Peak	VERTICAL	
2	10609.62	45.57	54.00	-8.43	31.69	10.19	38.92	35.23	360	100 Average	VERTICAL	
3	15899.49	66.59	74.00	-7.41	51.34	12.57	37.94	35.26	120	102 Peak	VERTICAL	
4	15900.19	50.96	54.00	-3.04	35.71	12.57	37.94	35.26	120	102 Average	VERTICAL	



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 64 / Chain 1 + Chain 2
Test Date	Oct. 01, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamplifier	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	
1	10630.13	45.27	54.00	-8.73	31.36	10.21	38.92	35.22	130	101	Average	HORIZONTAL
2	10633.14	58.20	74.00	-15.80	44.28	10.21	38.93	35.22	130	101	Peak	HORIZONTAL
3	15953.30	60.76	74.00	-13.24	45.63	12.56	37.85	35.28	300	101	Peak	HORIZONTAL
4	15956.44	47.35	54.00	-6.65	32.22	12.56	37.85	35.28	300	101	Average	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamplifier	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	
1	10634.94	45.32	54.00	-8.68	31.40	10.21	38.93	35.22	360	100	Average	VERTICAL
2	10639.13	58.31	74.00	-15.69	44.39	10.21	38.93	35.22	360	100	Peak	VERTICAL
3	15954.97	47.48	54.00	-6.52	32.35	12.56	37.85	35.28	88	123	Average	VERTICAL
4	15961.76	60.27	74.00	-13.73	45.14	12.56	37.85	35.28	88	123	Peak	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 100 / Chain 1 + Chain 2
Test Date	Oct. 01, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
1	11002.50	58.83	74.00	-15.17	44.26	10.55	39.00	34.98	75	100 Peak		HORIZONTAL
2	11005.58	45.86	54.00	-8.14	31.28	10.55	39.01	34.98	75	100 Average		HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
1	10992.34	59.09	74.00	-14.91	44.52	10.55	39.00	34.98	212	119 Peak		VERTICAL
2	11009.13	45.91	54.00	-8.09	31.32	10.56	39.01	34.98	212	119 Average		VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 116 / Chain 1 + Chain 2
Test Date	Oct. 01, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
1	11157.56	59.16	74.00	-14.84	44.43	10.60	39.13	35.00	272	111	Peak	HORIZONTAL
2	11166.25	45.88	54.00	-8.12	31.14	10.61	39.13	35.00	272	111	Average	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
1	11160.77	61.12	74.00	-12.88	46.39	10.60	39.13	35.00	99	174	Peak	VERTICAL
2	11163.30	47.00	54.00	-7.00	32.26	10.61	39.13	35.00	99	174	Average	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 140 / Chain 1 + Chain 2
Test Date	Oct. 01, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
1	11394.97	59.98	74.00	-14.02	45.02	10.69	39.31	35.04	135	101	Peak	HORIZONTAL
2	11407.53	46.28	54.00	-7.72	31.31	10.69	39.32	35.04	135	101	Average	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
1	11399.13	60.29	74.00	-13.71	45.32	10.69	39.32	35.04	225	110	Peak	VERTICAL
2	11399.65	46.33	54.00	-7.67	31.36	10.69	39.32	35.04	225	110	Average	VERTICAL

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT40 CH 38 / Chain 1 + Chain 2
<b>Test Date</b>	Oct. 01, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	
1	15563.30	48.04	54.00	-5.96	32.23	12.58	38.40	35.17	96	112	Average	HORIZONTAL
2	15569.90	61.48	74.00	-12.52	45.67	12.58	38.40	35.17	96	112	Peak	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	
1	15575.96	61.09	74.00	-12.91	45.29	12.58	38.40	35.18	320	107	Peak	VERTICAL
2	15578.59	48.11	54.00	-5.89	32.33	12.58	38.38	35.18	320	107	Average	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 46 / Chain 1 + Chain 2
Test Date	Oct. 01, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	cm
1	15681.12	48.04	54.00	-5.96	32.44	12.58	38.23	35.21	154	106	Average	HORIZONTAL
2	15699.07	61.19	74.00	-12.81	45.61	12.58	38.21	35.21	154	106	Peak	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	cm
1	15690.54	48.32	54.00	-5.68	32.72	12.58	38.23	35.21	303	100	Average	VERTICAL
2	15693.78	61.10	74.00	-12.90	45.50	12.58	38.23	35.21	303	100	Peak	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 54 / Chain 1 + Chain 2
Test Date	Oct. 01, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
1	15806.60	61.17	74.00	-12.83	45.77	12.57	38.07	35.24	114	100 Peak		HORIZONTAL
2	15812.88	47.23	54.00	-6.77	31.83	12.57	38.07	35.24	114	100 Average		HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
1	15806.83	47.36	54.00	-6.64	31.96	12.57	38.07	35.24	141	154 Average		VERTICAL
2	15807.08	60.71	74.00	-13.29	45.31	12.57	38.07	35.24	141	154 Peak		VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11nMCS0 HT40 CH 62 / Chain 1 + Chain 2
Test Date	Oct. 01, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamplifier	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	cm
1	10611.67	58.72	74.00	-15.28	44.84	10.19	38.92	35.23	114	163	Peak	HORIZONTAL
2	10626.09	45.43	54.00	-8.57	31.55	10.19	38.92	35.23	114	163	Average	HORIZONTAL
3	15924.74	61.27	74.00	-12.73	46.08	12.56	37.90	35.27	232	112	Peak	HORIZONTAL
4	15937.69	47.09	54.00	-6.91	31.94	12.56	37.87	35.28	232	112	Average	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamplifier	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	cm
1	10612.24	58.61	74.00	-15.39	44.73	10.19	38.92	35.23	280	112	Peak	VERTICAL
2	10619.90	45.47	54.00	-8.53	31.59	10.19	38.92	35.23	280	112	Average	VERTICAL
3	15933.75	47.33	54.00	-6.67	32.15	12.56	37.90	35.28	148	125	Average	VERTICAL
4	15934.01	60.27	74.00	-13.73	45.09	12.56	37.90	35.28	148	125	Peak	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 102 / Chain 1 + Chain 2
Test Date	Oct. 01, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	
1	11019.81	45.98	54.00	-8.02	31.39	10.56	39.01	34.98	136	108	Average	HORIZONTAL
2	11029.39	58.97	74.00	-15.03	44.36	10.56	39.03	34.98	136	108	Peak	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	
1	11011.35	58.76	74.00	-15.24	44.17	10.56	39.01	34.98	280	100	Peak	VERTICAL
2	11020.90	45.86	54.00	-8.14	31.27	10.56	39.01	34.98	280	100	Average	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 110 / Chain 1 + Chain 2
Test Date	Oct. 01, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	
1	11094.36	45.86	54.00	-8.14	31.19	10.58	39.08	34.99	219	101	Average	HORIZONTAL
2	11104.65	59.21	74.00	-14.79	44.54	10.58	39.08	34.99	219	101	Peak	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	
1	11097.79	45.70	54.00	-8.30	31.03	10.58	39.08	34.99	155	114	Average	VERTICAL
2	11104.17	58.86	74.00	-15.14	44.19	10.58	39.08	34.99	155	114	Peak	VERTICAL

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT40 CH 134 / Chain 1 + Chain 2
<b>Test Date</b>	Oct. 01, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
MHz	dBuV/m	dBuV/m	dB									
1	11334.90	59.73	74.00	-14.27	44.83	10.66	39.27	35.03	143	100 Peak		HORIZONTAL
2	11348.30	46.27	54.00	-7.73	31.35	10.67	39.28	35.03	143	100 Average		HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
MHz	dBuV/m	dBuV/m	dB									
1	11347.18	60.29	74.00	-13.71	45.37	10.67	39.28	35.03	49	110 Peak		VERTICAL
2	11349.87	46.27	54.00	-7.73	31.35	10.67	39.28	35.03	49	110 Average		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.

**For 3TX**

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 36 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 30, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
MHz	dBuV/m	dBuV/m	dB									
1	15538.04	62.45	74.00	-11.55	46.59	12.58	38.45	35.17	300	115	Peak	HORIZONTAL
2	15545.00	49.40	54.00	-4.60	33.56	12.58	38.43	35.17	300	115	Average	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
MHz	dBuV/m	dBuV/m	dB									
1	15534.33	49.62	54.00	-4.38	33.76	12.58	38.45	35.17	59	138	Average	VERTICAL
2	15550.00	62.53	74.00	-11.47	46.69	12.58	38.43	35.17	59	138	Peak	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 40 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 30, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	cm
1	15604.29	49.35	54.00	-4.65	33.60	12.58	38.36	35.19	272	135	Average	HORIZONTAL
2	15608.65	62.22	74.00	-11.78	46.47	12.58	38.36	35.19	272	135	Peak	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	cm
1	15600.48	49.49	54.00	-4.51	33.74	12.58	38.36	35.19	200	117	Average	VERTICAL
2	15605.22	62.49	74.00	-11.51	46.74	12.58	38.36	35.19	200	117	Peak	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 48 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 30, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	cm
1	15719.68	51.21	54.00	-2.79	35.66	12.57	38.19	35.21	349	143	Average	HORIZONTAL
2	15720.74	65.66	74.00	-8.34	50.11	12.57	38.19	35.21	349	143	Peak	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	cm
1	15721.76	51.57	54.00	-2.43	36.02	12.57	38.19	35.21	122	110	Average	VERTICAL
2	15729.71	67.09	74.00	-6.91	51.55	12.57	38.19	35.22	122	110	Peak	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 52 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 30, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
1	15778.17	49.16	54.00	-4.84	33.72	12.57	38.11	35.24	271	123	Average	HORIZONTAL
2	15784.29	62.18	74.00	-11.82	46.76	12.57	38.09	35.24	271	123	Peak	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
1	15770.32	49.35	54.00	-4.65	33.90	12.57	38.11	35.23	67	116	Average	VERTICAL
2	15774.01	63.87	74.00	-10.13	48.42	12.57	38.11	35.23	67	116	Peak	VERTICAL



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Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 60 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 30, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamplifier	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	
1	10593.81	59.78	74.00	-14.22	45.95	10.16	38.92	35.25	88	124	Peak	HORIZONTAL
2	10600.51	46.75	54.00	-7.25	32.92	10.16	38.92	35.25	88	124	Average	HORIZONTAL
3	15895.54	48.71	54.00	-5.29	33.46	12.57	37.94	35.26	273	137	Average	HORIZONTAL
4	15900.45	61.66	74.00	-12.34	46.41	12.57	37.94	35.26	273	137	Peak	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamplifier	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	
1	10590.99	60.15	74.00	-13.85	46.32	10.16	38.92	35.25	31	121	Peak	VERTICAL
2	10607.28	46.73	54.00	-7.27	32.85	10.19	38.92	35.23	31	121	Average	VERTICAL
3	15893.14	48.62	54.00	-5.38	33.37	12.57	37.94	35.26	283	136	Average	VERTICAL
4	15904.07	61.39	74.00	-12.61	46.16	12.57	37.92	35.26	283	136	Peak	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 64 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 30, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	
1	10632.37	47.00	54.00	-7.00	33.08	10.21	38.93	35.22	259	121	Average	HORIZONTAL
2	10643.17	60.40	74.00	-13.60	46.48	10.21	38.93	35.22	259	121	Peak	HORIZONTAL
3	15959.52	48.62	54.00	-5.38	33.49	12.56	37.85	35.28	236	151	Average	HORIZONTAL
4	15960.51	61.38	74.00	-12.62	46.25	12.56	37.85	35.28	236	151	Peak	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	
1	10630.83	46.94	54.00	-7.06	33.02	10.21	38.93	35.22	293	119	Average	VERTICAL
2	10635.90	60.25	74.00	-13.75	46.33	10.21	38.93	35.22	293	119	Peak	VERTICAL
3	15955.64	48.69	54.00	-5.31	33.56	12.56	37.85	35.28	98	150	Average	VERTICAL
4	15960.32	62.94	74.00	-11.06	47.81	12.56	37.85	35.28	98	150	Peak	VERTICAL

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 100 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 30, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
MHz	dBuV/m	dBuV/m	dB									
1	10996.25	47.24	54.00	-6.76	32.67	10.55	39.00	34.98	88	150	Average	HORIZONTAL
2	11005.54	60.80	74.00	-13.20	46.22	10.55	39.01	34.98	88	150	Peak	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
MHz	dBuV/m	dBuV/m	dB									
1	11005.80	60.35	74.00	-13.65	45.77	10.55	39.01	34.98	241	106	Peak	VERTICAL
2	11007.18	47.25	54.00	-6.75	32.67	10.55	39.01	34.98	241	106	Average	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 116 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 30, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	
1	11154.55	60.29	74.00	-13.71	45.57	10.60	39.12	35.00		70	135 Peak	HORIZONTAL
2	11166.41	47.43	54.00	-6.57	32.69	10.61	39.13	35.00		70	135 Average	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	
1	11152.34	60.57	74.00	-13.43	45.85	10.60	39.12	35.00		264	162 Peak	VERTICAL
2	11169.46	47.50	54.00	-6.50	32.76	10.61	39.13	35.00		264	162 Average	VERTICAL



SPORTON LAB.

Report No.: FR240223-12AB

Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 140 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 30, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	
1	11394.39	61.38	74.00	-12.62	46.42	10.69	39.31	35.04	106	121	Peak	HORIZONTAL
2	11399.97	47.95	54.00	-6.05	32.98	10.69	39.32	35.04	106	121	Average	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	
1	11396.99	61.20	74.00	-12.80	46.23	10.69	39.32	35.04	263	103	Peak	VERTICAL
2	11401.89	47.94	54.00	-6.06	32.97	10.69	39.32	35.04	263	103	Average	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 38 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 30, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	cm
1	15576.57	49.39	54.00	-4.61	33.59	12.58	38.40	35.18	250	136	Average	HORIZONTAL
2	15579.42	63.71	74.00	-10.29	47.93	12.58	38.38	35.18	250	136	Peak	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	cm
1	15560.29	49.30	54.00	-4.70	33.46	12.58	38.43	35.17	109	131	Average	VERTICAL
2	15566.41	62.67	74.00	-11.33	46.86	12.58	38.40	35.17	109	131	Peak	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 46 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 30, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	cm
1	15682.98	49.56	54.00	-4.44	33.96	12.58	38.23	35.21		85	141 Average	HORIZONTAL
2	15685.90	62.99	74.00	-11.01	47.39	12.58	38.23	35.21		85	141 Peak	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	cm
1	15683.88	49.45	54.00	-4.55	33.85	12.58	38.23	35.21		202	120 Average	VERTICAL
2	15688.46	62.60	74.00	-11.40	47.00	12.58	38.23	35.21		202	120 Peak	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 54 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 30, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	cm
1	15800.38	48.84	54.00	-5.16	33.44	12.57	38.07	35.24		86	101 Average	HORIZONTAL
2	15817.69	61.38	74.00	-12.62	46.01	12.57	38.04	35.24		86	101 Peak	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	cm
1	15801.44	48.65	54.00	-5.35	33.25	12.57	38.07	35.24		125	145 Average	VERTICAL
2	15814.90	61.48	74.00	-12.52	46.08	12.57	38.07	35.24		125	145 Peak	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11nMCS0 HT40 CH 62 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 30, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	
1	10612.31	46.99	54.00	-7.01	33.11	10.19	38.92	35.23	138	100	Average	HORIZONTAL
2	10622.85	60.31	74.00	-13.69	46.43	10.19	38.92	35.23	138	100	Peak	HORIZONTAL
3	15931.51	48.25	54.00	-5.75	33.07	12.56	37.90	35.28	265	116	Average	HORIZONTAL
4	15933.27	61.62	74.00	-12.38	46.44	12.56	37.90	35.28	265	116	Peak	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	
1	10614.87	46.91	54.00	-7.09	33.03	10.19	38.92	35.23	193	122	Average	VERTICAL
2	10629.78	59.57	74.00	-14.43	45.66	10.21	38.92	35.22	193	122	Peak	VERTICAL
3	15937.31	60.98	74.00	-13.02	45.83	12.56	37.87	35.28	263	101	Peak	VERTICAL
4	15939.90	48.34	54.00	-5.66	33.19	12.56	37.87	35.28	263	101	Average	VERTICAL

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT40 CH 102 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 30, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	
1	11011.76	47.39	54.00	-6.61	32.80	10.56	39.01	34.98	148	152	Average	HORIZONTAL
2	11029.90	60.85	74.00	-13.15	46.24	10.56	39.03	34.98	148	152	Peak	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	
1	11020.00	60.65	74.00	-13.35	46.06	10.56	39.01	34.98	241	113	Peak	VERTICAL
2	11022.72	47.52	54.00	-6.48	32.91	10.56	39.03	34.98	241	113	Average	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 110 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 30, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
1	11100.67	60.13	74.00	-13.87	45.46	10.58	39.08	34.99	303	148	Peak	HORIZONTAL
2	11107.66	47.45	54.00	-6.55	32.77	10.58	39.09	34.99	303	148	Average	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
1	11091.92	60.75	74.00	-13.25	46.08	10.58	39.08	34.99	0	101	Peak	VERTICAL
2	11093.17	47.71	54.00	-6.29	33.04	10.58	39.08	34.99	0	101	Average	VERTICAL

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT40 CH 134 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 30, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	
1	11347.79	47.63	54.00	-6.37	32.71	10.67	39.28	35.03	182	107	Average	HORIZONTAL
2	11349.17	60.51	74.00	-13.49	45.59	10.67	39.28	35.03	182	107	Peak	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	
1	11345.87	61.05	74.00	-12.95	46.13	10.67	39.28	35.03	92	143	Peak	VERTICAL
2	11349.90	47.72	54.00	-6.28	32.80	10.67	39.28	35.03	92	143	Average	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.

**Mode 3 (Ant.32 3-Port Dual-Band Directional Panel antenna / Chain 1: 6.7, Chain 2: 4.3, Chain 3: 6.6dBi)****For Beamforming Mode****For 3TX**

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 36 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 24, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor				
1	15537.60	57.63	74.00	-16.37	44.30	10.77	38.15	35.59	Peak	100	333	HORIZONTAL
2	15540.67	44.96	54.00	-9.04	31.66	10.77	38.12	35.59	Average	100	333	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	15539.85	58.44	74.00	-15.56	45.14	10.77	38.12	35.59	Peak	100	36	VERTICAL
2	15541.37	44.87	54.00	-9.13	31.57	10.77	38.12	35.59	Average	100	36	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 40 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 24, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	Loss	Factor			
1	15598.46	60.76	74.00	-13.24	47.52	10.78	38.04	35.58	Peak	149	184 HORIZONTAL
2	15598.85	45.77	54.00	-8.23	32.53	10.78	38.04	35.58	Average	149	184 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	Loss	Factor			
1	15591.78	62.15	74.00	-11.85	48.91	10.78	38.04	35.58	Peak	109	155 VERTICAL
2	15592.21	47.59	54.00	-6.41	34.35	10.78	38.04	35.58	Average	109	155 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 48 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 24, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	15722.48	62.25	74.00	-11.75	49.17	10.79	37.85	35.56	Peak	148	185 HORIZONTAL
2	15722.56	48.73	54.00	-5.27	35.65	10.79	37.85	35.56	Average	148	185 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	15716.07	51.97	54.00	-2.03	38.89	10.79	37.85	35.56	Average	108	157 VERTICAL
2	15716.31	66.29	74.00	-7.71	53.21	10.79	37.85	35.56	Peak	108	157 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 52 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 24, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	Loss Factor	Factor			
1	15781.63	43.78	54.00	-10.22	30.77	10.80	37.75	35.54	Average	100	62 HORIZONTAL
2	15781.83	57.25	74.00	-16.75	44.24	10.80	37.75	35.54	Peak	100	62 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	Loss Factor	Factor			
1	15778.85	59.38	74.00	-14.62	46.37	10.80	37.75	35.54	Peak	109	157 VERTICAL
2	15780.38	46.03	54.00	-7.97	33.02	10.80	37.75	35.54	Average	109	157 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 60 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 24, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	10599.56	57.25	74.00	-16.75	43.85	8.64	39.90	35.14	Peak	100	110 HORIZONTAL
2	10599.95	43.89	54.00	-10.11	30.49	8.64	39.90	35.14	Average	100	110 HORIZONTAL
3	15901.52	58.54	74.00	-15.46	45.69	10.81	37.56	35.52	Peak	100	202 HORIZONTAL
4	15901.64	44.75	54.00	-9.25	31.90	10.81	37.56	35.52	Average	100	202 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	10610.45	45.27	54.00	-8.73	31.85	8.64	39.90	35.12	Average	136	269 VERTICAL
2	10610.90	58.86	74.00	-15.14	45.44	8.64	39.90	35.12	Peak	136	269 VERTICAL
3	15899.99	58.28	74.00	-15.72	45.43	10.81	37.56	35.52	Peak	115	163 VERTICAL
4	15901.72	44.94	54.00	-9.06	32.09	10.81	37.56	35.52	Average	115	163 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 64 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 24, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	10639.74	43.73	54.00	-10.27	30.30	8.66	39.86	35.09	Average	100	156 HORIZONTAL
2	10642.27	57.08	74.00	-16.92	43.65	8.66	39.86	35.09	Peak	100	156 HORIZONTAL
3	15960.54	44.39	54.00	-9.61	31.60	10.82	37.48	35.51	Average	100	178 HORIZONTAL
4	15962.10	57.66	74.00	-16.34	44.87	10.82	37.48	35.51	Peak	100	178 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	10638.79	57.06	74.00	-16.94	43.63	8.66	39.86	35.09	Peak	100	129 VERTICAL
2	10640.23	43.71	54.00	-10.29	30.28	8.66	39.86	35.09	Average	100	129 VERTICAL
3	15960.70	44.38	54.00	-9.62	31.59	10.82	37.48	35.51	Average	100	297 VERTICAL
4	15961.22	57.63	74.00	-16.37	44.84	10.82	37.48	35.51	Peak	100	297 VERTICAL

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 100 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 24, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dB	dB/m	dB				
1	10997.72	43.95	54.00	-10.05	30.32	8.93	39.50	34.80	Average	100	73	HORIZONTAL
2	10998.58	57.71	74.00	-16.29	44.08	8.93	39.50	34.80	Peak	100	73	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dB	dB/m	dB				
1	10999.73	56.99	74.00	-17.01	43.36	8.93	39.50	34.80	Peak	100	228	VERTICAL
2	11000.27	44.09	54.00	-9.91	30.46	8.93	39.50	34.80	Average	100	228	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 116 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 24, 2014		

**Horizontal**

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	11159.81	44.29	54.00	-9.71	30.64	9.04	39.50	34.89	Average	100	56 HORIZONTAL
2	11160.10	57.67	74.00	-16.33	44.02	9.04	39.50	34.89	Peak	100	56 HORIZONTAL

**Vertical**

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	11151.92	58.00	74.00	-16.00	44.36	9.03	39.50	34.89	Peak	129	306 VERTICAL
2	11155.45	45.42	54.00	-8.58	31.78	9.03	39.50	34.89	Average	129	306 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 140 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 24, 2014		

**Horizontal**

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	11401.23	43.93	54.00	-10.07	30.28	9.19	39.50	35.04	Average	100	312 HORIZONTAL
2	11402.47	57.37	74.00	-16.63	43.72	9.19	39.50	35.04	Peak	100	312 HORIZONTAL

**Vertical**

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	11398.06	57.37	74.00	-16.63	43.72	9.19	39.50	35.04	Peak	100	174 VERTICAL
2	11398.25	44.04	54.00	-9.96	30.39	9.19	39.50	35.04	Average	100	174 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 38 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 24, 2014		

**Horizontal**

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	15572.29	44.35	54.00	-9.65	31.08	10.78	38.07	35.58	Average	100	HORIZONTAL
2	15573.14	57.46	74.00	-16.54	44.19	10.78	38.07	35.58	Peak	100	HORIZONTAL

**Vertical**

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	15570.16	57.60	74.00	-16.40	44.31	10.78	38.09	35.58	Peak	100	VERTICAL
2	15572.39	44.28	54.00	-9.72	31.01	10.78	38.07	35.58	Average	100	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 46 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 24, 2014		

**Horizontal**

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	10462.05	43.32	54.00	-10.68	30.06	8.56	39.94	35.24	Average	100	70 HORIZONTAL
2	10463.73	56.96	74.00	-17.04	43.70	8.56	39.94	35.24	Peak	100	70 HORIZONTAL

**Vertical**

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	10456.47	56.43	74.00	-17.57	43.21	8.55	39.91	35.24	Peak	100	207 VERTICAL
2	10464.82	43.48	54.00	-10.52	30.22	8.56	39.94	35.24	Average	100	207 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 54 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 24, 2014		

**Horizontal**

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	15805.43	44.69	54.00	-9.31	31.71	10.80	37.72	35.54	Average	100	260 HORIZONTAL
2	15809.31	57.94	74.00	-16.06	44.96	10.80	37.72	35.54	Peak	100	260 HORIZONTAL

**Vertical**

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	15806.06	57.54	74.00	-16.46	44.56	10.80	37.72	35.54	Peak	100	103 VERTICAL
2	15810.00	44.39	54.00	-9.61	31.41	10.80	37.72	35.54	Average	100	103 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11nMCS0 HT40 CH 62 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 24, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	10615.02	56.92	74.00	-17.08	43.51	8.65	39.88	35.12	Peak	100	226 HORIZONTAL
2	10622.20	43.81	54.00	-10.19	30.40	8.65	39.88	35.12	Average	100	226 HORIZONTAL
3	15926.06	57.79	74.00	-16.21	44.96	10.81	37.53	35.51	Peak	100	111 HORIZONTAL
4	15930.19	44.66	54.00	-9.34	31.85	10.81	37.51	35.51	Average	100	111 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	10618.86	56.61	74.00	-17.39	43.20	8.65	39.88	35.12	Peak	100	241 VERTICAL
2	10621.06	43.67	54.00	-10.33	30.26	8.65	39.88	35.12	Average	100	241 VERTICAL
3	15927.53	58.14	74.00	-15.86	45.31	10.81	37.53	35.51	Peak	100	149 VERTICAL
4	15933.75	44.67	54.00	-9.33	31.86	10.81	37.51	35.51	Average	100	149 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 102 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 24, 2014		

**Horizontal**

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	11019.78	43.74	54.00	-10.26	30.11	8.94	39.50	34.81	Average	100	229 HORIZONTAL
2	11022.76	56.88	74.00	-17.12	43.24	8.95	39.50	34.81	Peak	100	229 HORIZONTAL

**Vertical**

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	11023.69	57.00	74.00	-17.00	43.36	8.95	39.50	34.81	Peak	100	104 VERTICAL
2	11024.23	43.82	54.00	-10.18	30.18	8.95	39.50	34.81	Average	100	104 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 110 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 24, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	Cable Loss	Antenna Factor	Preamp Factor		
1	11095.88	43.70	54.00	-10.30	30.07	8.99	39.50	34.86	Average	100	114 HORIZONTAL
2	11103.56	56.86	74.00	-17.14	43.23	8.99	39.50	34.86	Peak	100	114 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	Cable Loss	Antenna Factor	Preamp Factor		
1	11098.48	43.68	54.00	-10.32	30.05	8.99	39.50	34.86	Average	100	249 VERTICAL
2	11103.17	56.95	74.00	-17.05	43.32	8.99	39.50	34.86	Peak	100	249 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 134 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 24, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	Cable Loss			Antenna Factor	Preamp Factor	Remark			
1	11335.51	56.87	74.00	-17.13	43.22	9.14	39.50	34.99 Peak	100	213	HORIZONTAL
2	11343.09	43.85	54.00	-10.15	30.22	9.14	39.50	35.01 Average	100	213	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	Cable Loss			Antenna Factor	Preamp Factor	Remark			
1	11340.08	57.40	74.00	-16.60	43.75	9.14	39.50	34.99 Peak	100	181	VERTICAL
2	11343.40	43.85	54.00	-10.15	30.22	9.14	39.50	35.01 Average	100	181	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.

**For Non-Beamforming Mode****For 1TX**

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 36 / Chain 1
<b>Test Date</b>	Sep. 25, 2014		

**Horizontal**

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 15539.24	44.25	54.00	-9.75	28.39	12.58	38.45	35.17	Average	101	316	HORIZONTAL
2 15541.00	57.79	74.00	-16.21	41.93	12.58	38.45	35.17	Peak	101	316	HORIZONTAL

**Vertical**

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 15537.59	44.43	54.00	-9.57	28.57	12.58	38.45	35.17	Average	101	124	VERTICAL
2 15542.49	58.12	74.00	-15.88	42.26	12.58	38.45	35.17	Peak	101	124	VERTICAL

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 40 / Chain 1
<b>Test Date</b>	Sep. 25, 2014		

**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	15595.00	64.57	74.00	-9.43	48.81	12.58	38.36	35.18	Peak	128	182	HORIZONTAL
2	15597.31	49.42	54.00	-4.58	33.66	12.58	38.36	35.18	Average	128	182	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	15597.84	59.58	74.00	-14.42	43.82	12.58	38.36	35.18	Peak	100	155	VERTICAL
2	15601.39	46.54	54.00	-7.46	30.79	12.58	38.36	35.19	Average	100	155	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 48 / Chain 1
Test Date	Sep. 25, 2014		

**Horizontal**

Freq	Level	Limit		Over Line	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		dB	dB			Loss	Factor	Factor			
1	15712.95	61.49	74.00	-12.51	45.92	12.57	38.21	35.21	Peak	122	181 HORIZONTAL
2	15716.35	46.91	54.00	-7.09	31.36	12.57	38.19	35.21	Average	122	181 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Line	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		dB	dB			Loss	Factor	Factor			
1	15716.15	44.65	54.00	-9.35	29.10	12.57	38.19	35.21	Average	121	228 VERTICAL
2	15718.91	58.89	74.00	-15.11	43.34	12.57	38.19	35.21	Peak	121	228 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 52 / Chain 1
Test Date	Sep. 25, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	15782.50	45.67	54.00	-8.33	30.25	12.57	38.09	35.24	Average	119	184 HORIZONTAL
2	15787.63	60.66	74.00	-13.34	45.24	12.57	38.09	35.24	Peak	119	184 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	15782.50	58.29	74.00	-15.71	42.87	12.57	38.09	35.24	Peak	124	230 VERTICAL
2	15782.63	43.92	54.00	-10.08	28.50	12.57	38.09	35.24	Average	124	230 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 60 / Chain 1
Test Date	Sep. 25, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	10597.99	41.42	54.00	-12.58	27.59	10.16	38.92	35.25	Average	101	219 HORIZONTAL
2	10601.23	54.70	74.00	-19.30	40.82	10.19	38.92	35.23	Peak	101	219 HORIZONTAL
3	15893.08	59.60	74.00	-14.40	44.35	12.57	37.94	35.26	Peak	111	169 HORIZONTAL
4	15900.06	44.77	54.00	-9.23	29.52	12.57	37.94	35.26	Average	111	169 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	10598.68	41.45	54.00	-12.55	27.62	10.16	38.92	35.25	Average	101	238 VERTICAL
2	10600.15	54.68	74.00	-19.32	40.85	10.16	38.92	35.25	Peak	101	238 VERTICAL
3	15901.24	57.95	74.00	-16.05	42.72	12.57	37.92	35.26	Peak	100	222 VERTICAL
4	15901.45	43.33	54.00	-10.67	28.10	12.57	37.92	35.26	Average	100	222 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 64 / Chain 1
Test Date	Sep. 25, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor			
1	10637.59	41.12	54.00	-12.88	27.20	10.21	38.93	35.22	Average	100	137 HORIZONTAL
2	10639.97	54.59	74.00	-19.41	40.67	10.21	38.93	35.22	Peak	100	137 HORIZONTAL
3	15961.26	43.48	54.00	-10.52	28.35	12.56	37.85	35.28	Average	100	256 HORIZONTAL
4	15961.43	57.26	74.00	-16.74	42.13	12.56	37.85	35.28	Peak	100	256 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor			
1	10641.88	54.43	74.00	-19.57	40.51	10.21	38.93	35.22	Peak	100	210 VERTICAL
2	10642.11	41.07	54.00	-12.93	27.15	10.21	38.93	35.22	Average	100	210 VERTICAL
3	15958.53	56.78	74.00	-17.22	41.65	12.56	37.85	35.28	Peak	100	119 VERTICAL
4	15958.70	43.44	54.00	-10.56	28.31	12.56	37.85	35.28	Average	100	119 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 100 / Chain 1
Test Date	Sep. 25, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dB	dB		cm	deg	
1	10998.41	56.44	74.00	-17.56	41.87	10.55	39.00	34.98	Peak	100	146	HORIZONTAL
2	11002.04	42.49	54.00	-11.51	27.92	10.55	39.00	34.98	Average	100	146	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dB	dB		cm	deg	
1	11000.22	42.65	54.00	-11.35	28.08	10.55	39.00	34.98	Average	100	251	VERTICAL
2	11000.46	55.39	74.00	-18.61	40.82	10.55	39.00	34.98	Peak	100	251	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 116 / Chain 1
Test Date	Sep. 25, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dB	dB		cm	deg	
1	11157.73	55.22	74.00	-18.78	40.49	10.60	39.13	35.00	Peak	100	202	HORIZONTAL
2	11157.99	42.28	54.00	-11.72	27.55	10.60	39.13	35.00	Average	100	202	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dB	dB		cm	deg	
1	11159.90	42.24	54.00	-11.76	27.51	10.60	39.13	35.00	Average	100	100	VERTICAL
2	11161.56	55.18	74.00	-18.82	40.45	10.60	39.13	35.00	Peak	100	100	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 140 / Chain 1
Test Date	Sep. 25, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dB	dB/m		cm	deg	
1	11400.34	42.63	54.00	-11.37	27.66	10.69	39.32	35.04	Average	100	185	HORIZONTAL
2	11401.40	56.60	74.00	-17.40	41.63	10.69	39.32	35.04	Peak	100	185	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dB	dB/m		cm	deg	
1	11400.18	56.03	74.00	-17.97	41.06	10.69	39.32	35.04	Peak	100	81	VERTICAL
2	11401.37	42.59	54.00	-11.41	27.62	10.69	39.32	35.04	Average	100	81	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 38 / Chain 1
Test Date	Sep. 25, 2014		

**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	15568.37	57.28	74.00	-16.72	41.47	12.58	38.40	35.17	Peak	100	83	HORIZONTAL
2	15570.06	43.95	54.00	-10.05	28.14	12.58	38.40	35.17	Average	100	83	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	15567.89	57.32	74.00	-16.68	41.51	12.58	38.40	35.17	Peak	100	190	VERTICAL
2	15570.19	44.05	54.00	-9.95	28.24	12.58	38.40	35.17	Average	100	190	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 46 / Chain 1
Test Date	Sep. 25, 2014		

**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	15690.67	57.67	74.00	-16.33	42.07	12.58	38.23	35.21	Peak	109	182	HORIZONTAL
2	15690.88	44.52	54.00	-9.48	28.92	12.58	38.23	35.21	Average	109	182	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	15689.33	58.16	74.00	-15.84	42.56	12.58	38.23	35.21	Peak	107	219	VERTICAL
2	15690.95	44.11	54.00	-9.89	28.51	12.58	38.23	35.21	Average	107	219	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 54 / Chain 1
Test Date	Sep. 25, 2014		

**Horizontal**

Freq	Level	Limit		Over Line	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	15811.41	43.06	54.00	-10.94	27.66	12.57	38.07	35.24	Average	100	226	HORIZONTAL
2	15811.47	56.33	74.00	-17.67	40.93	12.57	38.07	35.24	Peak	100	226	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Line	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	15808.68	43.08	54.00	-10.92	27.68	12.57	38.07	35.24	Average	100	135	VERTICAL
2	15810.27	56.41	74.00	-17.59	41.01	12.57	38.07	35.24	Peak	100	135	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11nMCS0 HT40 CH 62 / Chain 1
Test Date	Sep. 25, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	10618.61	41.21	54.00	-12.79	27.33	10.19	38.92	35.23	Average	100	196 HORIZONTAL
2	10621.08	54.74	74.00	-19.26	40.86	10.19	38.92	35.23	Peak	100	196 HORIZONTAL
3	15931.31	56.33	74.00	-17.67	41.15	12.56	37.90	35.28	Peak	100	125 HORIZONTAL
4	15931.95	43.31	54.00	-10.69	28.13	12.56	37.90	35.28	Average	100	125 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	10619.97	41.19	54.00	-12.81	27.31	10.19	38.92	35.23	Average	100	96 VERTICAL
2	10621.45	54.70	74.00	-19.30	40.82	10.19	38.92	35.23	Peak	100	96 VERTICAL
3	15929.97	56.87	74.00	-17.13	41.68	12.56	37.90	35.27	Peak	100	200 VERTICAL
4	15930.68	43.27	54.00	-10.73	28.09	12.56	37.90	35.28	Average	100	200 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 102 / Chain 1
Test Date	Sep. 25, 2014		

**Horizontal**

Freq	Level	Limit		Over Line	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		
1	11000.90	42.31	54.00	-11.69	27.74	10.55	39.00	34.98	Average	100	265 HORIZONTAL
2	11001.74	55.83	74.00	-18.17	41.26	10.55	39.00	34.98	Peak	100	265 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Line	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		
1	10998.18	42.23	54.00	-11.77	27.66	10.55	39.00	34.98	Average	100	154 VERTICAL
2	11000.66	55.71	74.00	-18.29	41.14	10.55	39.00	34.98	Peak	100	154 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 110 / Chain 1
Test Date	Sep. 25, 2014		

**Horizontal**

Freq	Level	Limit		Over Line	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		
1	11100.17	42.01	54.00	-11.99	27.34	10.58	39.08	34.99	Average	100	79 HORIZONTAL
2	11100.31	55.43	74.00	-18.57	40.76	10.58	39.08	34.99	Peak	100	79 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Line	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		
1	11099.68	42.16	54.00	-11.84	27.49	10.58	39.08	34.99	Average	100	237 VERTICAL
2	11100.50	55.17	74.00	-18.83	40.50	10.58	39.08	34.99	Peak	100	237 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 134 / Chain 1
Test Date	Sep. 25, 2014		

**Horizontal**

Freq	Level	Limit		Over Line	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	11340.11	42.62	54.00	-11.38	27.72	10.66	39.27	35.03	Average	100	150	HORIZONTAL
2	11341.59	56.36	74.00	-17.64	41.45	10.67	39.27	35.03	Peak	100	150	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Line	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	11340.37	42.53	54.00	-11.47	27.62	10.67	39.27	35.03	Average	100	176	VERTICAL
2	11341.74	55.98	74.00	-18.02	41.07	10.67	39.27	35.03	Peak	100	176	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.



## For 2TX

Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 36 / Chain 1 + Chain 2
Test Date	Sep. 24, 2014		

*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	dB	dB	dB/m	dB	cm	deg	cm	deg
1	15536.63	44.23	54.00	-9.77	28.37	12.58	38.45	35.17	Average	100	205	HORIZONTAL
2	15542.60	57.34	74.00	-16.66	41.48	12.58	38.45	35.17	Peak	100	205	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	dB	dB	dB/m	dB	cm	deg	cm	deg
1	15543.86	44.17	54.00	-9.83	28.33	12.58	38.43	35.17	Average	100	159	VERTICAL
2	15543.99	57.75	74.00	-16.25	41.91	12.58	38.43	35.17	Peak	100	159	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 40 / Chain 1 + Chain 2
Test Date	Sep. 24, 2014		

**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	15592.82	64.93	74.00	-9.07	49.15	12.58	38.38	35.18	Peak	117	262	HORIZONTAL
2	15595.06	49.78	54.00	-4.22	34.02	12.58	38.36	35.18	Average	117	262	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	15597.24	65.10	74.00	-8.90	49.34	12.58	38.36	35.18	Peak	107	154	VERTICAL
2	15599.62	49.64	54.00	-4.36	33.89	12.58	38.36	35.19	Average	107	154	VERTICAL



SPORTON LAB.

Report No.: FR240223-12AB

Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 48 / Chain 1 + Chain 2
Test Date	Sep. 24, 2014		

**Horizontal**

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	15719.81	52.85	54.00	-1.15	37.30	12.57	38.19	35.21	Average	122	145 HORIZONTAL
2	15720.83	68.34	74.00	-5.66	52.79	12.57	38.19	35.21	Peak	122	145 HORIZONTAL

**Vertical**

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	15712.56	68.25	74.00	-5.75	52.68	12.57	38.21	35.21	Peak	107	170 VERTICAL
2	15714.04	52.99	54.00	-1.01	37.44	12.57	38.19	35.21	Average	107	170 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 52 / Chain 1 + Chain 2
Test Date	Sep. 24, 2014		

**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	15776.79	62.89	74.00	-11.11	47.44	12.57	38.11	35.23	Peak	100	151	HORIZONTAL
2	15779.55	48.41	54.00	-5.59	32.97	12.57	38.11	35.24	Average	100	151	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	15782.37	51.06	54.00	-2.94	35.64	12.57	38.09	35.24	Average	119	169	VERTICAL
2	15785.83	66.11	74.00	-7.89	50.69	12.57	38.09	35.24	Peak	119	169	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 60 / Chain 1 + Chain 2
Test Date	Sep. 24, 2014		

**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	10597.77	41.29	54.00	-12.71	27.46	10.16	38.92	35.25	Average			100	232	HORIZONTAL
2	10599.73	54.87	74.00	-19.13	41.04	10.16	38.92	35.25	Peak			100	232	HORIZONTAL
3	15901.35	44.60	54.00	-9.40	29.37	12.57	37.92	35.26	Average			113	153	HORIZONTAL
4	15919.68	58.43	74.00	-15.57	43.24	12.56	37.90	35.27	Peak			113	153	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	10601.10	54.32	74.00	-19.68	40.44	10.19	38.92	35.23	Peak			100	121	VERTICAL
2	10601.15	41.32	54.00	-12.68	27.44	10.19	38.92	35.23	Average			100	121	VERTICAL
3	15894.29	59.74	74.00	-14.26	44.49	12.57	37.94	35.26	Peak			119	161	VERTICAL
4	15897.18	45.32	54.00	-8.68	30.07	12.57	37.94	35.26	Average			119	161	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 64 / Chain 1 + Chain 2
Test Date	Sep. 24, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Loss		Antenna Factor		Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			dBm	dB	dBmV	dB	dB/m	dB	cm	deg	
1	10640.67	54.83	74.00	-19.17	40.91	10.21	38.93	35.22	Peak		100	206	HORIZONTAL	
2	10641.78	41.18	54.00	-12.82	27.26	10.21	38.93	35.22	Average		100	206	HORIZONTAL	
3	15957.50	43.33	54.00	-10.67	28.20	12.56	37.85	35.28	Average		100	163	HORIZONTAL	
4	15960.70	56.43	74.00	-17.57	41.30	12.56	37.85	35.28	Peak		100	163	HORIZONTAL	

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Loss		Antenna Factor		Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			dBm	dB	dBmV	dB	dB/m	dB	cm	deg	
1	10639.56	54.16	74.00	-19.84	40.24	10.21	38.93	35.22	Peak		100	108	VERTICAL	
2	10641.37	41.20	54.00	-12.80	27.28	10.21	38.93	35.22	Average		100	108	VERTICAL	
3	15958.41	56.95	74.00	-17.05	41.82	12.56	37.85	35.28	Peak		100	188	VERTICAL	
4	15959.70	43.41	54.00	-10.59	28.28	12.56	37.85	35.28	Average		100	188	VERTICAL	

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 100 / Chain 1 + Chain 2
<b>Test Date</b>	Sep. 24, 2014		

**Horizontal**

Freq	Level	Limit		Over Line	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	10998.97	42.37	54.00	-11.63	27.80	10.55	39.00	34.98	Average	100	229	HORIZONTAL
2	11000.21	55.35	74.00	-18.65	40.78	10.55	39.00	34.98	Peak	100	229	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Line	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	10998.52	42.12	54.00	-11.88	27.55	10.55	39.00	34.98	Average	100	118	VERTICAL
2	10999.10	55.80	74.00	-18.20	41.23	10.55	39.00	34.98	Peak	100	118	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 116 / Chain 1 + Chain 2
Test Date	Sep. 24, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dB	dB		cm	deg	
1	11158.03	55.18	74.00	-18.82	40.45	10.60	39.13	35.00	Peak	100	198	HORIZONTAL
2	11161.34	41.75	54.00	-12.25	27.02	10.60	39.13	35.00	Average	100	198	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dB	dB		cm	deg	
1	11160.38	42.43	54.00	-11.57	27.70	10.60	39.13	35.00	Average	100	140	VERTICAL
2	11162.39	55.32	74.00	-18.68	40.58	10.61	39.13	35.00	Peak	100	140	VERTICAL

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 140 / Chain 1 + Chain 2
<b>Test Date</b>	Sep. 24, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB				
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB		cm	deg	
1	11399.14	55.75	74.00	-18.25	40.78	10.69	39.32	35.04	Peak	100	149	HORIZONTAL
2	11402.19	42.36	54.00	-11.64	27.39	10.69	39.32	35.04	Average	100	149	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				
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB		cm	deg	
1	11400.79	42.30	54.00	-11.70	27.33	10.69	39.32	35.04	Average	100	191	VERTICAL
2	11401.35	56.06	74.00	-17.94	41.09	10.69	39.32	35.04	Peak	100	191	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 38 / Chain 1 + Chain 2
Test Date	Sep. 24, 2014		

**Horizontal**

Freq	Level	Limit		Over Line	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		
1	15542.12	43.69	54.00	-10.31	27.83	12.58	38.45	35.17	Average	100	185 HORIZONTAL
2	15542.15	56.92	74.00	-17.08	41.06	12.58	38.45	35.17	Peak	100	185 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Line	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		
1	15540.18	43.49	54.00	-10.51	27.63	12.58	38.45	35.17	Average	100	236 VERTICAL
2	15540.26	57.06	74.00	-16.94	41.20	12.58	38.45	35.17	Peak	100	236 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 46 / Chain 1 + Chain 2
Test Date	Sep. 24, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	15691.26	44.62	54.00	-9.38	29.02	12.58	38.23	35.21	Average	100	144 HORIZONTAL
2	15692.15	58.08	74.00	-15.92	42.48	12.58	38.23	35.21	Peak	100	144 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	15692.25	44.60	54.00	-9.40	29.00	12.58	38.23	35.21	Average	100	225 VERTICAL
2	15692.37	57.79	74.00	-16.21	42.19	12.58	38.23	35.21	Peak	100	225 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 54 / Chain 1 + Chain 2
Test Date	Sep. 24, 2014		

**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	15809.61	58.64	74.00	-15.36	43.24	12.57	38.07	35.24	Peak	127	116	HORIZONTAL
2	15809.85	46.00	54.00	-8.00	30.60	12.57	38.07	35.24	Average	127	116	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	15810.90	45.73	54.00	-8.27	30.33	12.57	38.07	35.24	Average	100	244	VERTICAL
2	15816.71	58.33	74.00	-15.67	42.96	12.57	38.04	35.24	Peak	100	244	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11nMCS0 HT40 CH 62 / Chain 1 + Chain 2
Test Date	Sep. 24, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor			
1	10606.40	42.65	54.00	-11.35	28.77	10.19	38.92	35.23	Average	120	268 HORIZONTAL
2	10618.12	55.10	74.00	-18.90	41.22	10.19	38.92	35.23	Peak	120	268 HORIZONTAL
3	15905.40	45.87	54.00	-8.13	30.66	12.56	37.92	35.27	Average	218	332 HORIZONTAL
4	15906.92	58.42	74.00	-15.58	43.21	12.56	37.92	35.27	Peak	218	332 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor			
1	10597.79	42.33	54.00	-11.67	28.50	10.16	38.92	35.25	Average	107	323 VERTICAL
2	10605.53	55.37	74.00	-18.63	41.49	10.19	38.92	35.23	Peak	107	323 VERTICAL
3	15905.18	45.84	54.00	-8.16	30.63	12.56	37.92	35.27	Average	199	51 VERTICAL
4	15905.62	60.12	74.00	-13.88	44.91	12.56	37.92	35.27	Peak	199	51 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 102 / Chain 1 + Chain 2
Test Date	Sep. 24, 2014		

**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	11020.87	55.71	74.00	-18.29	41.12	10.56	39.01	34.98	Peak	101	95	HORIZONTAL
2	11042.00	43.27	54.00	-10.73	28.65	10.57	39.04	34.99	Average	101	95	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	11012.11	56.18	74.00	-17.82	41.59	10.56	39.01	34.98	Peak	101	57	VERTICAL
2	11018.92	42.45	54.00	-11.55	27.86	10.56	39.01	34.98	Average	101	57	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 110 / Chain 1 + Chain 2
Test Date	Sep. 24, 2014		

**Horizontal**

Freq	Level	Limit		Over Line	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	11100.43	43.25	54.00	-10.75	28.58	10.58	39.08	34.99	Average	107	317	HORIZONTAL
2	11113.60	55.98	74.00	-18.02	41.30	10.59	39.09	35.00	Peak	107	317	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Line	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	11104.27	43.19	54.00	-10.81	28.52	10.58	39.08	34.99	Average	101	297	VERTICAL
2	11124.75	57.97	74.00	-16.03	43.27	10.59	39.11	35.00	Peak	101	297	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 134 / Chain 1 + Chain 2
Test Date	Sep. 24, 2014		

**Horizontal**

Freq	Level	Limit		Over Line	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	11318.22	56.11	74.00	-17.89	41.23	10.66	39.25	35.03	Peak	141	107	HORIZONTAL
2	11351.07	43.59	54.00	-10.41	28.67	10.67	39.28	35.03	Average	141	107	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Line	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	11327.63	43.48	54.00	-10.52	28.58	10.66	39.27	35.03	Average	103	133	VERTICAL
2	11347.16	56.20	74.00	-17.80	41.28	10.67	39.28	35.03	Peak	103	133	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.



## For 3TX

Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 36 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 21, 2014		

*Horizontal*

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	Loss Factor	Factor			
1	15539.77	44.08	54.00	-9.92	30.78	10.77	38.12	35.59	Average	100	HORIZONTAL
2	15540.57	58.39	74.00	-15.61	45.09	10.77	38.12	35.59	Peak	100	HORIZONTAL

*Vertical*

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	Loss Factor	Factor			
1	15539.38	57.50	74.00	-16.50	44.20	10.77	38.12	35.59	Peak	100	VERTICAL
2	15540.47	44.32	54.00	-9.68	31.02	10.77	38.12	35.59	Average	100	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 40 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 21, 2014		

**Horizontal**

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	15599.88	44.89	54.00	-9.11	31.65	10.78	38.04	35.58	Average	100	125 HORIZONTAL
2	15600.69	57.44	74.00	-16.56	44.20	10.78	38.04	35.58	Peak	100	125 HORIZONTAL

**Vertical**

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	15599.18	57.71	74.00	-16.29	44.47	10.78	38.04	35.58	Peak	100	335 VERTICAL
2	15600.58	44.88	54.00	-9.12	31.64	10.78	38.04	35.58	Average	100	335 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 48 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 21, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	15719.74	61.13	74.00	-12.87	48.05	10.79	37.85	35.56	Peak	100	26 HORIZONTAL
2	15720.78	47.91	54.00	-6.09	34.83	10.79	37.85	35.56	Average	100	26 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	15720.50	51.40	54.00	-2.60	38.32	10.79	37.85	35.56	Average	122	234 VERTICAL
2	15720.80	65.30	74.00	-8.70	52.22	10.79	37.85	35.56	Peak	122	234 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 52 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 21, 2014		

**Horizontal**

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	15779.55	44.60	54.00	-9.40	31.59	10.80	37.75	35.54	Average	100	246 HORIZONTAL
2	15780.59	58.75	74.00	-15.25	45.74	10.80	37.75	35.54	Peak	100	246 HORIZONTAL

**Vertical**

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	15779.52	57.54	74.00	-16.46	44.53	10.80	37.75	35.54	Peak	100	316 VERTICAL
2	15780.94	46.31	54.00	-7.69	33.30	10.80	37.75	35.54	Average	590	316 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 60 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 21, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	10599.21	56.60	74.00	-17.40	43.20	8.64	39.90	35.14	Peak	100	185 HORIZONTAL
2	10600.48	42.55	54.00	-11.45	29.15	8.64	39.90	35.14	Average	100	185 HORIZONTAL
3	15900.34	58.76	74.00	-15.24	45.91	10.81	37.56	35.52	Peak	100	31 HORIZONTAL
4	15900.66	46.60	54.00	-7.40	33.75	10.81	37.56	35.52	Average	100	31 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	10599.54	56.15	74.00	-17.85	42.75	8.64	39.90	35.14	Peak	100	265 VERTICAL
2	10600.61	42.83	54.00	-11.17	29.43	8.64	39.90	35.14	Average	100	265 VERTICAL
3	15899.06	59.40	74.00	-14.60	46.55	10.81	37.56	35.52	Peak	100	320 VERTICAL
4	15899.52	45.73	54.00	-8.27	32.88	10.81	37.56	35.52	Average	100	320 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 64 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 21, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	10636.54	41.95	54.00	-12.05	28.52	8.66	39.86	35.09	Average	100	124 HORIZONTAL
2	10640.98	57.18	74.00	-16.82	43.75	8.66	39.86	35.09	Peak	100	124 HORIZONTAL
3	15960.38	44.76	54.00	-9.24	31.97	10.82	37.48	35.51	Average	100	245 HORIZONTAL
4	15960.70	59.30	74.00	-14.70	46.51	10.82	37.48	35.51	Peak	100	245 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	10639.84	42.30	54.00	-11.70	28.87	8.66	39.86	35.09	Average	199	321 VERTICAL
2	10642.10	55.63	74.00	-18.37	42.20	8.66	39.86	35.09	Peak	100	321 VERTICAL
3	15960.05	44.99	54.00	-9.01	32.20	10.82	37.48	35.51	Average	100	172 VERTICAL
4	15960.20	57.97	74.00	-16.03	45.18	10.82	37.48	35.51	Peak	100	172 VERTICAL

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 100 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 21, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	10999.44	42.25	54.00	-11.75	28.62	8.93	39.50	34.80	Average	100	HORIZONTAL
2	11001.06	55.44	74.00	-18.56	41.81	8.93	39.50	34.80	Peak	100	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	10997.18	56.22	74.00	-17.78	42.59	8.93	39.50	34.80	Peak	100	VERTICAL
2	11004.12	42.44	54.00	-11.56	28.81	8.93	39.50	34.80	Average	198	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 116 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 21, 2014		

**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	11155.78	56.92	74.00	-17.06	43.28	9.03	39.50	34.89	Peak	100	104	HORIZONTAL
2	11157.10	42.66	54.00	-11.34	29.02	9.03	39.50	34.89	Average	100	104	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	11157.06	56.49	74.00	-17.51	42.85	9.03	39.50	34.89	Peak	100	285	VERTICAL
2	11160.12	43.78	54.00	-10.22	30.13	9.04	39.50	34.89	Average	100	285	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 140 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 21, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	Loss	Factor			
1	11396.28	56.39	74.00	-17.61	42.74	9.19	39.50	35.04	Peak	100	123 HORIZONTAL
2	11401.20	42.26	54.00	-11.74	28.61	9.19	39.50	35.04	Average	100	123 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	Loss	Factor			
1	11400.08	55.72	74.00	-18.28	42.07	9.19	39.50	35.04	Peak	100	351 VERTICAL
2	11404.64	42.53	54.00	-11.47	28.88	9.19	39.50	35.04	Average	183	351 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 38 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 21, 2014		

**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	15565.18	57.63	74.00	-16.37	44.34	10.78	38.09	35.58	Peak	100	107	HORIZONTAL
2	15570.80	43.99	54.00	-10.01	30.70	10.78	38.09	35.58	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		cm	deg	
1	15569.00	57.53	74.00	-16.47	44.24	10.78	38.09	35.58	Peak	100	286	VERTICAL
2	15572.80	44.16	54.00	-9.84	30.89	10.78	38.07	35.58	Average	100	286	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 46 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 21, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	Loss Factor	Factor			
1	15690.34	44.14	54.00	-9.86	31.00	10.79	37.91	35.56	Average	100	122 HORIZONTAL
2	15693.66	56.89	74.00	-17.11	43.78	10.79	37.88	35.56	Peak	100	122 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	Loss Factor	Factor			
1	15687.56	44.29	54.00	-9.71	31.15	10.79	37.91	35.56	Average	100	272 VERTICAL
2	15688.02	57.28	74.00	-16.72	44.14	10.79	37.91	35.56	Peak	100	272 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 54 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 21, 2014		

**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	15806.72	58.97	74.00	-15.03	45.99	10.80	37.72	35.54	Peak	100	143	HORIZONTAL
2	15806.40	44.75	54.00	-9.25	31.77	10.80	37.72	35.54	Average	100	143	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	15812.16	58.67	74.00	-15.33	45.71	10.80	37.69	35.53	Peak	100	342	VERTICAL
2	15812.60	45.03	54.00	-8.97	32.07	10.80	37.69	35.53	Average	100	342	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11nMCS0 HT40 CH 62 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 21, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	Cable			Loss	Antenna Factor	Preamp Factor			
1	10615.08	56.27	74.00	-17.73	42.86	8.65	39.88	35.12	Peak	100	265 HORIZONTAL
2	10616.54	42.15	54.00	-11.85	28.74	8.65	39.88	35.12	Average	100	265 HORIZONTAL
3	15925.52	58.27	74.00	-15.73	45.44	10.81	37.53	35.51	Peak	100	321 HORIZONTAL
4	15926.54	45.61	54.00	-8.39	32.78	10.81	37.53	35.51	Average	100	321 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	Cable			Loss	Antenna Factor	Preamp Factor			
1	10615.12	42.41	54.00	-11.59	29.00	8.65	39.88	35.12	Average	100	63 VERTICAL
2	10617.56	55.69	74.00	-18.31	42.28	8.65	39.88	35.12	Peak	100	63 VERTICAL
3	15927.66	58.23	74.00	-15.77	45.40	10.81	37.53	35.51	Peak	100	152 VERTICAL
4	15931.34	45.32	54.00	-8.68	32.51	10.81	37.51	35.51	Average	100	152 VERTICAL

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT40 CH 102 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 21, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dB	dB/m	dB				
1	11021.26	42.41	54.00	-11.59	28.78	8.94	39.50	34.81	Average	100	256	HORIZONTAL
2	11022.26	55.66	74.00	-18.34	42.02	8.95	39.50	34.81	Peak	100	256	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dB	dB/m	dB				
1	11020.12	55.83	74.00	-18.17	42.20	8.94	39.50	34.81	Peak	100	36	VERTICAL
2	11024.34	42.31	54.00	-11.69	28.67	8.95	39.50	34.81	Average	100	36	VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 110 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 21, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	Loss Factor	Factor			
1	11096.14	42.76	54.00	-11.24	29.13	8.99	39.50	34.86	Average	100	123 HORIZONTAL
2	11099.94	56.18	74.00	-17.82	42.55	8.99	39.50	34.86	Peak	100	123 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	Loss Factor	Factor			
1	11095.82	42.58	54.00	-11.42	28.95	8.99	39.50	34.86	Average	100	256 VERTICAL
2	11096.26	55.84	74.00	-18.16	42.21	8.99	39.50	34.86	Peak	100	256 VERTICAL



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 134 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 21, 2014		

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	11351.44	42.79	54.00	-11.21	29.15	9.15	39.50	35.01	Average	100	98 HORIZONTAL
2	11353.60	56.47	74.00	-17.53	42.83	9.15	39.50	35.01	Peak	100	98 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	11347.36	42.92	54.00	-11.08	29.28	9.15	39.50	35.01	Average	100	199 VERTICAL
2	11350.96	56.38	74.00	-17.62	42.74	9.15	39.50	35.01	Peak	100	199 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.

## 4.5. Band Edge Emissions Measurement

### 4.5.1. Limit

For transmitters operating in the 5.15-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed a -27dBm peak limit or average 54dBuV/m and peak 74dBuV/m limits. For transmitters operating in the 5.470-5.725 GHz band: all emissions outside of the 5.470-5.725 GHz band shall not exceed a -27dBm peak limit or average 54dBuV/m and peak 74dBuV/m limits. In addition, 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 (micorvolts/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

### 4.5.2. 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
RBW / VBW (Emission in restricted band)	1MHz / 3MHz for Peak, 1MHz / 1/T for Average
RBW / VBW (Emission in non-restricted band)	1MHz / 3MHz for Peak

### 4.5.3. Test Procedures

- The test procedure is the same as section 4.4.3, only the frequency range investigated is limited to 100MHz around bandedges.

#### 4.5.4. Test Setup Layout

This test setup layout is the same as that shown in section 4.4.4.

#### 4.5.5. Test Deviation

There is no deviation with the original standard.

#### 4.5.6. EUT Operation during Test

For non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

For beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

The measured result was added array gain  $10 \times \log(2) = 3.01 \text{ dBi}$  as worse case in beamforming mode.

The measured result was added array gain  $10 \times \log(3) = 4.77 \text{ dBi}$  as worse case in beamforming mode.

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

**Mode 1 (Ant.6 Dipole antenna / 8dBi)**

**For Beamforming Mode**

**For 2TX**

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 36, 40, 48 / Chain 1 + Chain 2
<b>Test Date</b>	Sep. 27, 2014		

##### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	5148.80	71.92	74.00	-2.08	66.51	6.21	34.11	34.91	Peak	100	168	VERTICAL
2	5150.00	52.41	54.00	-1.59	47.00	6.21	34.11	34.91	Average	100	168	VERTICAL
3	5186.40	114.49			109.00	6.24	34.16	34.91	Peak	100	168	VERTICAL
4	5186.80	102.19			96.70	6.24	34.16	34.91	Average	100	168	VERTICAL

Item 3, 4 are the fundamental frequency at 5180 MHz.

##### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	5148.40	69.76	74.00	-4.24	64.35	6.21	34.11	34.91	Peak	100	191	VERTICAL
2	5150.00	52.94	54.00	-1.06	47.53	6.21	34.11	34.91	Average	100	191	VERTICAL
3	5207.20	120.32			114.78	6.27	34.18	34.91	Peak	100	191	VERTICAL
4	5208.00	109.03			103.47	6.27	34.20	34.91	Average	100	191	VERTICAL

Item 3, 4 are the fundamental frequency at 5200 MHz.

##### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	5246.60	110.91			105.23	6.34	34.25	34.91	Average	100	183	VERTICAL
2	5247.20	120.82			115.14	6.34	34.25	34.91	Peak	100	183	VERTICAL
3	5350.00	52.28	54.00	-1.72	46.33	6.47	34.39	34.91	Average	100	183	VERTICAL
4	5350.00	67.36	74.00	-6.64	61.41	6.47	34.39	34.91	Peak	100	183	VERTICAL

Item 1, 2 are the fundamental frequency at 5240 MHz.



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 52, 60, 64 / Chain 1 + Chain 2
Test Date	Sep. 27, 2014		

### Channel 52

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	5264.00	111.79			106.09	6.34	34.27	34.91	Average			100	183	VERTICAL
2	5264.80	124.57			118.87	6.34	34.27	34.91	Peak			100	183	VERTICAL
3	5350.00	52.67	54.00	-1.33	46.72	6.47	34.39	34.91	Average			100	183	VERTICAL
4	5353.20	65.58	74.00	-8.42	59.63	6.47	34.39	34.91	Peak			100	183	VERTICAL

Item 1, 2 are the fundamental frequency at 5260 MHz.

### Channel 60

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	5305.20	108.41			102.60	6.40	34.32	34.91	Average			100	177	VERTICAL
2	5305.20	120.66			114.85	6.40	34.32	34.91	Peak			100	177	VERTICAL
3	5350.00	52.65	54.00	-1.35	46.70	6.47	34.39	34.91	Average			100	177	VERTICAL
4	5350.80	68.59	74.00	-5.41	62.64	6.47	34.39	34.91	Peak			100	177	VERTICAL

Item 1, 2 are the fundamental frequency at 5300 MHz.

### Channel 64

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	5325.60	104.92			99.06	6.43	34.34	34.91	Average			100	214	VERTICAL
2	5325.60	116.54			110.68	6.43	34.34	34.91	Peak			100	214	VERTICAL
3	5350.00	52.69	54.00	-1.31	46.74	6.47	34.39	34.91	Average			100	214	VERTICAL
4	5350.40	71.43	74.00	-2.57	65.48	6.47	34.39	34.91	Peak			100	214	VERTICAL

Item 1, 2 are the fundamental frequency at 5320 MHz.

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 100, 116, 140 / Chain 1 + Chain 2
<b>Test Date</b>	Sep. 27, 2014		

**Channel 100**

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	5459.60	61.41	74.00	-12.59	55.20	6.60	34.53	34.92	Peak	108	15 VERTICAL
2	5460.00	48.35	54.00	-5.65	42.14	6.60	34.53	34.92	Average	108	15 VERTICAL
3	5469.60	52.43	54.00	-1.57	46.20	6.60	34.55	34.92	Average	108	15 VERTICAL
4	5470.00	71.61	74.00	-2.39	65.38	6.60	34.55	34.92	Peak	108	15 VERTICAL
5	5492.20	116.31			110.02	6.63	34.58	34.92	Peak	108	15 VERTICAL
6	5492.60	105.08			98.79	6.63	34.58	34.92	Average	108	15 VERTICAL

Item 5, 6 are the fundamental frequency at 5500 MHz.

**Channel 116**

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	5425.00	63.15	74.00	-10.85	57.03	6.56	34.48	34.92	Peak	108	15 VERTICAL
2	5440.00	52.07	54.00	-1.93	45.92	6.56	34.51	34.92	Average	108	15 VERTICAL
3	5465.00	62.13	74.00	-11.87	55.90	6.60	34.55	34.92	Peak	108	15 VERTICAL
4	5470.00	49.90	54.00	-4.10	43.67	6.60	34.55	34.92	Average	108	15 VERTICAL
5	5572.00	104.96			98.56	6.70	34.63	34.93	Average	108	15 VERTICAL
6	5586.00	117.13			110.71	6.72	34.63	34.93	Peak	108	15 VERTICAL

Item 5, 6 are the fundamental frequency at 5580 MHz.

**Channel 140**

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	5692.00	103.40			96.85	6.81	34.68	34.94	Average	125	335 VERTICAL
2	5693.20	115.37			108.82	6.81	34.68	34.94	Peak	125	335 VERTICAL
3	5729.80	52.96	54.00	-1.04	46.38	6.83	34.69	34.94	Average	125	335 VERTICAL
4	5731.40	72.06	74.00	-1.94	65.45	6.86	34.69	34.94	Peak	125	335 VERTICAL

Item 1, 2 are the fundamental frequency at 5700 MHz.



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 38, 46 / Chain 1 + Chain 2
Test Date	Sep. 27, 2014		

### Channel 38

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			dB	dBmV	dB		cm	deg	
1	5145.20	68.56	74.00	-5.44	63.15	6.21	34.11	34.91	Peak	100	190	VERTICAL
2	5148.60	52.85	54.00	-1.15	47.44	6.21	34.11	34.91	Average	100	190	VERTICAL
3	5207.20	94.23			88.69	6.27	34.18	34.91	Average	100	190	VERTICAL
4	5207.20	106.38			100.84	6.27	34.18	34.91	Peak	100	190	VERTICAL

Item 3, 4 are the fundamental frequency at 5190 MHz.

### Channel 46

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			dB	dBmV	dB		cm	deg	
1	5141.00	52.20	54.00	-1.80	46.83	6.17	34.11	34.91	Average	101	170	VERTICAL
2	5141.00	68.58	74.00	-5.42	63.21	6.17	34.11	34.91	Peak	101	170	VERTICAL
3	5217.40	102.45			96.89	6.27	34.20	34.91	Average	101	170	VERTICAL
4	5217.40	114.89			109.33	6.27	34.20	34.91	Peak	101	170	VERTICAL

Item 3, 4 are the fundamental frequency at 5230 MHz.



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 54, 62 / Chain 1 + Chain 2
Test Date	Sep. 27, 2014		

#### Channel 54

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			dB	dBmV	dB		cm	deg	
1	5282.00	117.52			111.76	6.37	34.30	34.91	Peak	101	222	VERTICAL
2	5285.20	105.35			99.59	6.37	34.30	34.91	Average	101	222	VERTICAL
3	5350.00	52.40	54.00	-1.60	46.45	6.47	34.39	34.91	Average	101	222	VERTICAL
4	5363.60	68.19	74.00	-5.81	62.22	6.47	34.41	34.91	Peak	101	222	VERTICAL

Item 1, 2 are the fundamental frequency at 5270 MHz.

#### Channel 62

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			dB	dBmV	dB		cm	deg	
1	5296.40	98.33			92.55	6.37	34.32	34.91	Average	100	176	VERTICAL
2	5296.40	110.64			104.86	6.37	34.32	34.91	Peak	100	176	VERTICAL
3	5351.20	69.12	74.00	-4.88	63.17	6.47	34.39	34.91	Peak	100	176	VERTICAL
4	5351.60	52.65	54.00	-1.35	46.70	6.47	34.39	34.91	Average	100	176	VERTICAL

Item 1, 2 are the fundamental frequency at 5310 MHz.

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT40 CH 102, 110, 134 / Chain 1 + Chain 2
<b>Test Date</b>	Sep. 27, 2014		

**Channel 102**

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	5440.00	50.18	54.00	-3.82	44.03	6.56	34.51	34.92	Average	100	6 VERTICAL
2	5459.60	61.63	74.00	-12.37	55.42	6.60	34.53	34.92	Peak	100	6 VERTICAL
3	5469.60	67.44	74.00	-6.56	61.21	6.60	34.55	34.92	Peak	100	6 VERTICAL
4	5470.00	52.54	54.00	-1.46	46.31	6.60	34.55	34.92	Average	100	6 VERTICAL
5	5493.20	96.42			90.13	6.63	34.58	34.92	Average	100	6 VERTICAL
6	5494.40	108.85			102.56	6.63	34.58	34.92	Peak	100	6 VERTICAL

Item 5, 6 are the fundamental frequency at 5510 MHz.

**Channel 110**

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	5455.20	64.58	74.00	-9.42	58.37	6.60	34.53	34.92	Peak	100	58 VERTICAL
2	5455.80	50.53	54.00	-3.47	44.32	6.60	34.53	34.92	Average	100	58 VERTICAL
3	5470.00	52.99	54.00	-1.01	46.76	6.60	34.55	34.92	Average	100	58 VERTICAL
4	5470.00	66.59	74.00	-7.41	60.36	6.60	34.55	34.92	Peak	100	58 VERTICAL
5	5532.60	112.65			106.28	6.68	34.61	34.92	Peak	100	58 VERTICAL
6	5534.40	100.51			94.14	6.68	34.61	34.92	Average	100	58 VERTICAL

Item 5, 6 are the fundamental frequency at 5550 MHz.

**Channel 134**

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	5654.80	102.95			96.43	6.79	34.66	34.93	Average	101	343 VERTICAL
2	5654.80	115.26			108.74	6.79	34.66	34.93	Peak	101	343 VERTICAL
3	5726.60	72.30	74.00	-1.70	65.72	6.83	34.69	34.94	Peak	101	343 VERTICAL
4	5730.60	52.83	54.00	-1.17	46.22	6.86	34.69	34.94	Average	101	343 VERTICAL

Item 1, 2 are the fundamental frequency at 5670 MHz.

**Note:**

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

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

**For 3TX**

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 26, 2014		

**Channel 36**

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									
1	5150.00	52.71	54.00	-1.29	47.30	6.21	34.11	34.91	Average	100	149	VERTICAL
2	5150.00	65.02	74.00	-8.98	59.61	6.21	34.11	34.91	Peak	100	149	VERTICAL
3	5174.00	104.46			98.97	6.24	34.16	34.91	Average	100	149	VERTICAL
4	5176.00	113.45			107.96	6.24	34.16	34.91	Peak	100	149	VERTICAL
5	5400.00	52.47	54.00	-1.53	46.40	6.53	34.46	34.92	Average	100	149	VERTICAL
6	5400.00	64.68	74.00	-9.32	58.61	6.53	34.46	34.92	Peak	100	149	VERTICAL

Item 3, 4 are the fundamental frequency at 5180 MHz.

**Channel 40**

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									
1	5206.00	105.85			100.31	6.27	34.18	34.91	Average	100	224	VERTICAL
2	5206.00	115.06			109.52	6.27	34.18	34.91	Peak	100	224	VERTICAL
3	5360.00	52.70	54.00	-1.30	46.75	6.47	34.39	34.91	Average	100	224	VERTICAL
4	5376.00	64.41	74.00	-9.59	58.42	6.50	34.41	34.92	Peak	100	224	VERTICAL

Item 1, 2 are the fundamental frequency at 5200 MHz.

**Channel 48**

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									
1	5244.00	100.94			95.30	6.30	34.25	34.91	Average	100	189	VERTICAL
2	5246.00	110.24			104.56	6.34	34.25	34.91	Peak	100	189	VERTICAL
3	5360.00	52.82	54.00	-1.18	46.87	6.47	34.39	34.91	Average	100	189	VERTICAL
4	5412.00	64.15	74.00	-9.85	58.06	6.53	34.48	34.92	Peak	100	189	VERTICAL

Item 1, 2 are the fundamental frequency at 5240 MHz.



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 52, 60, 64 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 26, 2014		

**Channel 52**

Freq	Level	Limit		Over Limit	Read Level	Cable Loss			Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			dB	dBm	dB				cm	deg	
1	5266.00	102.84			97.14	6.34	34.27	34.91	Average			100	176	VERTICAL
2	5268.00	112.73			107.03	6.34	34.27	34.91	Peak			100	176	VERTICAL
3	5440.00	52.88	54.00	-1.12	46.73	6.56	34.51	34.92	Average			100	176	VERTICAL
4	5440.00	62.95	74.00	-11.05	56.80	6.56	34.51	34.92	Peak			100	176	VERTICAL

Item 1, 2 are the fundamental frequency at 5260 MHz.

**Channel 60**

Freq	Level	Limit		Over Limit	Read Level	Cable Loss			Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			dBm	dB	dBm				cm	deg	
1	5296.00	104.76			98.98	6.37	34.32	34.91	Average			100	193	VERTICAL
2	5296.00	114.05			108.27	6.37	34.32	34.91	Peak			100	193	VERTICAL
3	5382.00	53.00	54.00	-1.00	46.98	6.50	34.44	34.92	Average			100	193	VERTICAL
4	5384.00	63.89	74.00	-10.11	57.87	6.50	34.44	34.92	Peak			100	193	VERTICAL

Item 1, 2 are the fundamental frequency at 5300 MHz.

**Channel 64**

Freq	Level	Limit		Over Limit	Read Level	Cable Loss			Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			dBm	dB	dBm				cm	deg	
1	5324.80	116.60			110.74	6.43	34.34	34.91	Peak			100	201	VERTICAL
2	5328.40	107.63			101.74	6.43	34.37	34.91	Average			100	201	VERTICAL
3	5400.40	52.77	54.00	-1.23	46.70	6.53	34.46	34.92	Average			100	201	VERTICAL
4	5405.20	63.59	74.00	-10.41	57.52	6.53	34.46	34.92	Peak			100	201	VERTICAL

Item 1, 2 are the fundamental frequency at 5320 MHz.

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 100, 140 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 26, 2014		

### Channel 100

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									
1	5412.00	51.53	54.00	-2.47	45.44	6.53	34.48	34.92	Average	100	358	VERTICAL
2	5412.00	63.06	74.00	-10.94	56.97	6.53	34.48	34.92	Peak	100	358	VERTICAL
3	5470.00	52.96	54.00	-1.04	46.73	6.60	34.55	34.92	Average	100	358	VERTICAL
4	5470.00	70.65	74.00	-3.35	64.42	6.60	34.55	34.92	Peak	100	358	VERTICAL
5	5492.00	107.34			101.05	6.63	34.58	34.92	Average	100	358	VERTICAL
6	5492.00	117.87			111.58	6.63	34.58	34.92	Peak	100	358	VERTICAL

Item 5, 6 are the fundamental frequency at 5500 MHz.

### Channel 140

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									
1	5703.40	104.50			97.95	6.81	34.68	34.94	Average	108	339	VERTICAL
2	5704.00	116.75			110.20	6.81	34.68	34.94	Peak	108	339	VERTICAL
3	5725.00	51.98	54.00	-2.02	45.40	6.83	34.69	34.94	Average	108	339	VERTICAL
4	5725.00	72.69	74.00	-1.31	66.11	6.83	34.69	34.94	Peak	108	339	VERTICAL

Item 1, 2 are the fundamental frequency at 5700 MHz.

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT40 CH 38, 46 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 26, 2014		

### Channel 38

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	
1	5148.00	68.50	74.00	-5.50	63.09	6.21	34.11	34.91	Peak			100	214	VERTICAL
2	5148.40	52.43	54.00	-1.57	47.02	6.21	34.11	34.91	Average			100	214	VERTICAL
3	5207.20	95.94			90.40	6.27	34.18	34.91	Average			100	214	VERTICAL
4	5207.60	107.66			102.10	6.27	34.20	34.91	Peak			100	214	VERTICAL

Item 3, 4 are the fundamental frequency at 5190 MHz.

### Channel 46

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	
1	5150.00	48.97	54.00	-5.03	43.56	6.21	34.11	34.91	Average			100	210	VERTICAL
2	5150.00	63.08	74.00	-10.92	57.67	6.21	34.11	34.91	Peak			100	210	VERTICAL
3	5233.00	101.50			95.88	6.30	34.23	34.91	Average			100	210	VERTICAL
4	5241.00	113.55			107.93	6.30	34.23	34.91	Peak			100	210	VERTICAL
5	5382.00	65.23	74.00	-8.77	59.21	6.50	34.44	34.92	Peak			100	210	VERTICAL
6	5440.00	52.89	54.00	-1.11	46.74	6.56	34.51	34.92	Average			100	210	VERTICAL

Item 3, 4 are the fundamental frequency at 5230 MHz.

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT40 CH 54, 62 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 26, 2014		

### Channel 54

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	
1	5280.40	101.83			96.07	6.37	34.30	34.91	Average			100	167	VERTICAL
2	5285.60	116.09			110.33	6.37	34.30	34.91	Peak			100	167	VERTICAL
3	5363.20	66.36	74.00	-7.64	60.39	6.47	34.41	34.91	Peak			100	167	VERTICAL
4	5366.80	52.85	54.00	-1.15	46.88	6.47	34.41	34.91	Average			100	167	VERTICAL

Item 1, 2 are the fundamental frequency at 5270 MHz.

### Channel 62

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	
1	5326.40	113.87			108.01	6.43	34.34	34.91	Peak			100	206	VERTICAL
2	5327.20	101.30			95.41	6.43	34.37	34.91	Average			100	206	VERTICAL
3	5350.00	52.77	54.00	-1.23	46.82	6.47	34.39	34.91	Average			100	206	VERTICAL
4	5355.60	67.94	74.00	-6.06	61.99	6.47	34.39	34.91	Peak			100	206	VERTICAL

Item 1, 2 are the fundamental frequency at 5310 MHz.



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 102, 110, 134 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 26, 2014		

### Channel 102

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5439.60	51.77	54.00	-2.23	45.62	6.56	34.51	34.92	Average	107	165 VERTICAL
2	5440.00	64.41	74.00	-9.59	58.26	6.56	34.51	34.92	Peak	107	165 VERTICAL
3	5469.60	68.63	74.00	-5.37	62.40	6.60	34.55	34.92	Peak	107	165 VERTICAL
4	5470.00	52.69	54.00	-1.31	46.46	6.60	34.55	34.92	Average	107	165 VERTICAL
5	5492.40	95.12			88.83	6.63	34.58	34.92	Average	107	165 VERTICAL
6	5509.60	107.80			101.47	6.65	34.60	34.92	Peak	107	165 VERTICAL

Item 5, 6 are the fundamental frequency at 5510 MHz.

### Channel 110

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5438.00	65.54	74.00	-8.46	59.39	6.56	34.51	34.92	Peak	101	319 VERTICAL
2	5440.00	52.37	54.00	-1.63	46.22	6.56	34.51	34.92	Average	101	319 VERTICAL
3	5467.00	63.15			56.92	6.60	34.55	34.92	Peak	101	319 VERTICAL
4	5468.00	51.49			45.26	6.60	34.55	34.92	Average	101	319 VERTICAL
5	5558.00	102.84	54.00	48.84	96.45	6.70	34.62	34.93	Average	101	319 VERTICAL
6	5558.00	115.04	74.00	41.04	108.65	6.70	34.62	34.93	Peak	101	319 VERTICAL

Item 3, 4 are the fundamental frequency at 5550 MHz.

### Channel 134

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5653.60	104.06			97.57	6.76	34.66	34.93	Average	100	11 VERTICAL
2	5653.60	116.96			110.47	6.76	34.66	34.93	Peak	100	11 VERTICAL
3	5730.60	52.63	54.00	-1.37	46.02	6.86	34.69	34.94	Average	100	11 VERTICAL
4	5732.60	68.62	74.00	-5.38	62.01	6.86	34.69	34.94	Peak	100	11 VERTICAL

Item 1, 2 are the fundamental frequency at 5670 MHz.

#### Note:

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

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

**Mode 2 (Ant.16 Panel antenna / 3.5dBi)**
**For Beamforming Mode**
**For 2TX**

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 36, 40, 48 / Chain 1 + Chain 2
<b>Test Date</b>	Oct. 01, 2014		

**Channel 36**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg	cm	
1	5148.00	71.57	74.00	-2.43	66.16	6.21	34.11	34.91	110	101	Peak	VERTICAL
2	5150.00	52.98	54.00	-1.02	47.57	6.21	34.11	34.91	110	101	Average	VERTICAL
3	5185.00	115.22			109.73	6.24	34.16	34.91	110	101	Peak	VERTICAL
4	5188.01	106.69			101.20	6.24	34.16	34.91	111	101	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5180 MHz.

**Channel 40**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg	cm	
1	5113.14	52.10	54.00	-1.90	46.80	6.14	34.06	34.90	122	100	Average	VERTICAL
2	5150.00	66.74	74.00	-7.26	61.33	6.21	34.11	34.91	122	100	Peak	VERTICAL
3	5195.19	112.39			106.85	6.27	34.18	34.91	122	100	Average	VERTICAL
4	5204.81	119.84			114.30	6.27	34.18	34.91	122	100	Peak	VERTICAL
5	5359.62	51.41	54.00	-2.59	45.46	6.47	34.39	34.91	122	100	Average	VERTICAL
6	5364.42	63.58	74.00	-10.42	57.61	6.47	34.41	34.91	122	100	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5200 MHz.

**Channel 48**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg	cm	
1	5143.59	52.04	54.00	-1.96	46.67	6.17	34.11	34.91	119	101	Average	VERTICAL
2	5145.19	63.21	74.00	-10.79	57.80	6.21	34.11	34.91	119	101	Peak	VERTICAL
3	5233.59	113.91			108.29	6.30	34.23	34.91	119	101	Average	VERTICAL
4	5235.19	122.78			117.16	6.30	34.23	34.91	119	101	Peak	VERTICAL
5	5364.42	63.78	74.00	-10.22	57.81	6.47	34.41	34.91	119	101	Peak	VERTICAL
6	5479.81	51.95	54.00	-2.05	45.66	6.63	34.58	34.92	119	101	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5240 MHz.

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 52, 60, 64 / Chain 1 + Chain 2
<b>Test Date</b>	Oct. 01, 2014		

### Channel 52

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
MHz	dBuV/m	dBuV/m	dB									
1	5079.49	51.52	54.00	-2.48	46.29	6.11	34.02	34.90	119	101	Average	VERTICAL
2	5137.18	60.66	74.00	-13.34	55.31	6.17	34.09	34.91	119	101	Peak	VERTICAL
3	5264.81	113.41			107.71	6.34	34.27	34.91	119	101	Average	VERTICAL
4	5266.41	120.88			115.18	6.34	34.27	34.91	119	101	Peak	VERTICAL
5	5353.21	63.52	74.00	-10.48	57.57	6.47	34.39	34.91	119	101	Peak	VERTICAL
6	5354.81	52.67	54.00	-1.33	46.72	6.47	34.39	34.91	119	101	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5260 MHz.

### Channel 60

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
MHz	dBuV/m	dBuV/m	dB									
1	5080.00	50.68	54.00	-3.32	45.45	6.11	34.02	34.90	120	101	Average	VERTICAL
2	5138.78	61.41	74.00	-12.59	56.06	6.17	34.09	34.91	120	101	Peak	VERTICAL
3	5293.59	120.25			114.47	6.37	34.32	34.91	120	101	Peak	VERTICAL
4	5295.19	113.06			107.28	6.37	34.32	34.91	120	101	Average	VERTICAL
5	5359.62	70.29	74.00	-3.71	64.34	6.47	34.39	34.91	120	101	Peak	VERTICAL
6	5383.65	52.40	54.00	-1.60	46.38	6.50	34.44	34.92	120	101	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5300 MHz.

### Channel 64

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
MHz	dBuV/m	dBuV/m	dB									
1	5080.00	49.06	54.00	-4.94	43.83	6.11	34.02	34.90	110	100	Average	VERTICAL
2	5146.80	59.81	74.00	-14.19	54.40	6.21	34.11	34.91	110	100	Peak	VERTICAL
3	5323.21	117.01			111.15	6.43	34.34	34.91	110	100	Peak	VERTICAL
4	5324.81	107.88			102.02	6.43	34.34	34.91	110	100	Average	VERTICAL
5	5350.00	52.73	54.00	-1.27	46.78	6.47	34.39	34.91	110	100	Average	VERTICAL
6	5350.00	67.53	74.00	-6.47	61.58	6.47	34.39	34.91	110	100	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5320 MHz.

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 100, 116, 140 / Chain 1 + Chain 2
<b>Test Date</b>	Oct. 01, 2014 ~ Oct. 02, 2014		

### Channel 100

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
MHz	dBuV/m	dBuV/m	dB									
1	5405.51	51.46	54.00	-2.54	45.39	6.53	34.46	34.92	79	100 Average	VERTICAL	
2	5460.00	64.53	74.00	-9.47	58.32	6.60	34.53	34.92	79	100 Peak	VERTICAL	
3	5470.00	52.93	54.00	-1.07	46.70	6.60	34.55	34.92	79	100 Average	VERTICAL	
4	5470.00	68.74	74.00	-5.26	62.51	6.60	34.55	34.92	79	100 Peak	VERTICAL	
5	5495.19	105.11			98.82	6.63	34.58	34.92	79	100 Average	VERTICAL	
6	5496.80	115.12			108.81	6.63	34.60	34.92	79	100 Peak	VERTICAL	

Item 5, 6 are the fundamental frequency at 5500 MHz.

### Channel 116

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
MHz	dBuV/m	dBuV/m	dB									
1	5359.74	52.55	54.00	-1.45	46.60	6.47	34.39	34.91	92	100 Average	VERTICAL	
2	5373.46	63.73	74.00	-10.27	57.74	6.50	34.41	34.92	92	100 Peak	VERTICAL	
3	5465.19	64.57	74.00	-9.43	58.34	6.60	34.55	34.92	92	100 Peak	VERTICAL	
4	5470.00	49.74	54.00	-4.26	43.51	6.60	34.55	34.92	92	100 Average	VERTICAL	
5	5585.61	125.69			119.27	6.72	34.63	34.93	92	100 Peak	VERTICAL	
6	5587.21	115.95			109.53	6.72	34.63	34.93	92	100 Average	VERTICAL	
7	5725.00	49.76	54.00	-4.24	43.18	6.83	34.69	34.94	92	100 Average	VERTICAL	
8	5737.82	63.29	74.00	-10.71	56.67	6.86	34.70	34.94	92	100 Peak	VERTICAL	

Item 5, 6 are the fundamental frequency at 5580 MHz.

### Channel 140

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
MHz	dBuV/m	dBuV/m	dB									
1	5440.77	49.11	54.00	-4.89	42.96	6.56	34.51	34.92	110	100 Average	VERTICAL	
2	5460.00	59.74	74.00	-14.26	53.53	6.60	34.53	34.92	110	100 Peak	VERTICAL	
3	5468.40	59.83	74.00	-14.17	53.60	6.60	34.55	34.92	110	100 Peak	VERTICAL	
4	5470.00	47.83	54.00	-6.17	41.60	6.60	34.55	34.92	110	100 Average	VERTICAL	
5	5703.21	108.59			102.04	6.81	34.68	34.94	110	100 Average	VERTICAL	
6	5704.81	117.80			111.23	6.83	34.68	34.94	110	100 Peak	VERTICAL	
7	5725.00	52.95	54.00	-1.05	46.37	6.83	34.69	34.94	110	100 Average	VERTICAL	
8	5726.60	70.31	74.00	-3.69	63.73	6.83	34.69	34.94	110	100 Peak	VERTICAL	

Item 5, 6 are the fundamental frequency at 5700 MHz.

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT40 CH 38, 46 / Chain 1 + Chain 2
<b>Test Date</b>	Oct. 01, 2014		

**Channel 38**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
MHz	dBuV/m	dBuV/m	dB									
1	5150.00	52.74	54.00	-1.26	47.33	6.21	34.11	34.91	99	101	Average	VERTICAL
2	5150.00	65.36	74.00	-8.64	59.95	6.21	34.11	34.91	99	101	Peak	VERTICAL
3	5196.41	99.87			94.33	6.27	34.18	34.91	99	101	Average	VERTICAL
4	5206.03	109.71			104.17	6.27	34.18	34.91	99	101	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5190 MHz.

**Channel 46**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
MHz	dBuV/m	dBuV/m	dB									
1	5143.59	70.62	74.00	-3.38	65.25	6.17	34.11	34.91	100	101	Peak	VERTICAL
2	5148.40	52.90	54.00	-1.10	47.49	6.21	34.11	34.91	100	101	Average	VERTICAL
3	5246.03	109.86			104.18	6.34	34.25	34.91	100	101	Average	VERTICAL
4	5247.63	118.58			112.90	6.34	34.25	34.91	100	101	Peak	VERTICAL
5	5362.82	64.65	74.00	-9.35	58.68	6.47	34.41	34.91	100	101	Peak	VERTICAL
6	5439.74	52.35	54.00	-1.65	46.20	6.56	34.51	34.92	100	101	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5230 MHz.

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT40 CH 54, 62 / Chain 1 + Chain 2
<b>Test Date</b>	Oct. 01, 2014		

#### Channel 54

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
MHz		dBuV/m	dBuV/m									
1	5079.49	51.59	54.00	-2.41	46.36	6.11	34.02	34.90	100	101	Average	VERTICAL
2	5081.09	61.83	74.00	-12.17	56.60	6.11	34.02	34.90	100	101	Peak	VERTICAL
3	5257.18	118.34			112.66	6.34	34.25	34.91	100	101	Peak	VERTICAL
4	5278.01	108.93			103.17	6.37	34.30	34.91	100	101	Average	VERTICAL
5	5359.62	52.97	54.00	-1.03	47.02	6.47	34.39	34.91	100	101	Average	VERTICAL
6	5362.82	68.14	74.00	-5.86	62.17	6.47	34.41	34.91	100	101	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5270 MHz.

#### Channel 62

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
MHz		dBuV/m	dBuV/m									
1	5079.49	50.02	54.00	-3.98	44.79	6.11	34.02	34.90	99	101	Average	VERTICAL
2	5140.39	59.45	74.00	-14.55	54.08	6.17	34.11	34.91	99	101	Peak	VERTICAL
3	5303.59	111.89			106.08	6.40	34.32	34.91	99	101	Peak	VERTICAL
4	5324.42	102.28			96.42	6.43	34.34	34.91	99	101	Average	VERTICAL
5	5350.00	52.98	54.00	-1.02	47.03	6.47	34.39	34.91	99	101	Average	VERTICAL
6	5350.00	66.81	74.00	-7.19	60.86	6.47	34.39	34.91	99	101	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5310 MHz.



<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT40 CH 102, 110, 134 / Chain 1 + Chain 2
<b>Test Date</b>	Oct. 01, 2014		

**Channel 102**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5439.17	50.95	54.00	-3.05	44.80	6.56	34.51	34.92	82	100	Average	VERTICAL
2	5460.00	61.22	74.00	-12.78	55.01	6.60	34.53	34.92	82	100	Peak	VERTICAL
3	5470.00	52.83	54.00	-1.17	46.60	6.60	34.55	34.92	82	100	Average	VERTICAL
4	5470.00	66.63	74.00	-7.37	60.40	6.60	34.55	34.92	82	100	Peak	VERTICAL
5	5495.58	98.88			92.59	6.63	34.58	34.92	82	100	Average	VERTICAL
6	5495.58	108.07			101.78	6.63	34.58	34.92	82	100	Peak	VERTICAL

Item 5, 6 are the fundamental frequency at 5510 MHz.

**Channel 110**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5318.97	52.58	54.00	-1.42	46.75	6.40	34.34	34.91	90	102	Average	VERTICAL
2	5460.00	66.87	74.00	-7.13	60.66	6.60	34.53	34.92	90	102	Peak	VERTICAL
3	5466.80	68.15	74.00	-5.85	61.92	6.60	34.55	34.92	90	102	Peak	VERTICAL
4	5468.40	52.94	54.00	-1.06	46.71	6.60	34.55	34.92	90	102	Average	VERTICAL
5	5564.42	108.63			102.24	6.70	34.62	34.93	90	102	Average	VERTICAL
6	5564.42	118.06			111.67	6.70	34.62	34.93	90	102	Peak	VERTICAL
7	5725.00	50.16	54.00	-3.84	43.58	6.83	34.69	34.94	90	102	Average	VERTICAL
8	5726.60	61.53	74.00	-12.47	54.95	6.83	34.69	34.94	90	102	Peak	VERTICAL

Item 5, 6 are the fundamental frequency at 5550 MHz.

**Channel 134**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5318.97	52.31	54.00	-1.69	46.48	6.40	34.34	34.91	92	100	Average	VERTICAL
2	5399.10	62.60	74.00	-11.40	56.53	6.53	34.46	34.92	92	100	Peak	VERTICAL
3	5465.19	62.00	74.00	-12.00	55.77	6.60	34.55	34.92	92	100	Peak	VERTICAL
4	5470.00	49.69	54.00	-4.31	43.46	6.60	34.55	34.92	92	100	Average	VERTICAL
5	5657.18	107.03			100.51	6.79	34.66	34.93	92	100	Average	VERTICAL
6	5657.18	116.79			110.27	6.79	34.66	34.93	92	100	Peak	VERTICAL
7	5725.00	52.85	54.00	-1.15	46.27	6.83	34.69	34.94	92	100	Average	VERTICAL
8	5741.03	72.53	74.00	-1.47	65.91	6.86	34.70	34.94	92	100	Peak	VERTICAL

Item 5, 6 are the fundamental frequency at 5670 MHz.

**Note:**

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

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

**For 3TX**

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 30, 2014 ~ Oct. 02, 2014		

**Channel 36**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB	dB/m	dB	deg	
MHz	dBuV/m	dBuV/m		dB	dBuV							
1	5097.12	52.96	54.00	-1.04	47.68	6.14	34.04	34.90	89	105	Average	VERTICAL
2	5100.32	64.84	74.00	-9.16	59.56	6.14	34.04	34.90	89	105	Peak	VERTICAL
3	5186.41	107.65			102.16	6.24	34.16	34.91	89	105	Average	VERTICAL
4	5188.01	117.30			111.81	6.24	34.16	34.91	89	105	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5180 MHz.

**Channel 40**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB	dB/m	dB	deg	
MHz	dBuV/m	dBuV/m		dB	dBuV							
1	5103.53	52.92	54.00	-1.08	47.64	6.14	34.04	34.90	111	100	Average	VERTICAL
2	5105.13	63.47	74.00	-10.53	58.19	6.14	34.04	34.90	111	100	Peak	VERTICAL
3	5193.59	111.97			106.46	6.24	34.18	34.91	111	100	Average	VERTICAL
4	5195.19	120.60			115.06	6.27	34.18	34.91	111	100	Peak	VERTICAL
5	5353.21	51.99	54.00	-2.01	46.04	6.47	34.39	34.91	111	100	Average	VERTICAL
6	5366.03	63.82	74.00	-10.18	57.85	6.47	34.41	34.91	111	100	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5200 MHz.

**Channel 48**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB	dB/m	dB	deg	
MHz	dBuV/m	dBuV/m		dB	dBuV							
1	5079.49	52.85	54.00	-1.15	47.62	6.11	34.02	34.90	112	100	Average	VERTICAL
2	5114.74	63.47	74.00	-10.53	58.17	6.14	34.06	34.90	112	100	Peak	VERTICAL
3	5235.19	121.72			116.10	6.30	34.23	34.91	112	100	Peak	VERTICAL
4	5248.01	114.26			108.58	6.34	34.25	34.91	112	100	Average	VERTICAL
5	5371.64	66.32	74.00	-7.68	60.35	6.47	34.41	34.91	112	100	Peak	VERTICAL
6	5407.69	52.92	54.00	-1.08	46.85	6.53	34.46	34.92	112	100	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5240 MHz.

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 52, 60, 64 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Oct. 02, 2014		

### Channel 52

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
1	4960.90	52.34	54.00	-1.66	47.38	6.04	33.83	34.91	88	100	Average	VERTICAL
2	4992.95	63.17	74.00	-10.83	58.16	6.01	33.90	34.90	88	100	Peak	VERTICAL
3	5251.99	105.51			99.83	6.34	34.25	34.91	88	100	Average	VERTICAL
4	5265.61	116.35			110.65	6.34	34.27	34.91	88	100	Peak	VERTICAL
5	5385.90	65.07	74.00	-8.93	59.05	6.50	34.44	34.92	88	100	Peak	VERTICAL
6	5399.68	52.91	54.00	-1.09	46.84	6.53	34.46	34.92	88	100	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5260 MHz.

### Channel 60

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
1	4959.30	51.93	54.00	-2.07	46.97	6.04	33.83	34.91	112	100	Average	VERTICAL
2	4988.14	62.89	74.00	-11.11	57.87	6.02	33.90	34.90	112	100	Peak	VERTICAL
3	5301.60	105.71			99.90	6.40	34.32	34.91	112	100	Average	VERTICAL
4	5306.41	114.90			109.09	6.40	34.32	34.91	112	100	Peak	VERTICAL
5	5382.05	52.91	54.00	-1.09	46.89	6.50	34.44	34.92	112	100	Average	VERTICAL
6	5382.05	64.72	74.00	-9.28	58.70	6.50	34.44	34.92	112	100	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5300 MHz.

### Channel 64

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
1	4959.30	50.61	54.00	-3.39	45.65	6.04	33.83	34.91	86	100	Average	VERTICAL
2	5098.72	61.85	74.00	-12.15	56.57	6.14	34.04	34.90	86	100	Peak	VERTICAL
3	5328.01	107.35			101.46	6.43	34.37	34.91	86	100	Average	VERTICAL
4	5328.01	116.91			111.02	6.43	34.37	34.91	86	100	Peak	VERTICAL
5	5404.49	65.18	74.00	-8.82	59.11	6.53	34.46	34.92	86	100	Peak	VERTICAL
6	5406.09	52.96	54.00	-1.04	46.89	6.53	34.46	34.92	86	100	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5320 MHz.

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 100, 116, 140 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 30, 2014 ~ Oct. 02, 2014		

**Channel 100**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
1	5413.53	52.97	54.00	-1.03	46.88	6.53	34.48	34.92	95	105	Average	VERTICAL
2	5413.53	65.41	74.00	-8.59	59.32	6.53	34.48	34.92	95	105	Peak	VERTICAL
3	5460.39	51.97	54.00	-2.03	45.76	6.60	34.53	34.92	95	105	Average	VERTICAL
4	5460.39	63.57	74.00	-10.43	57.36	6.60	34.53	34.92	95	105	Peak	VERTICAL
5	5503.21	108.14			101.81	6.65	34.60	34.92	95	105	Average	VERTICAL
6	5504.81	117.33			111.00	6.65	34.60	34.92	95	105	Peak	VERTICAL
7	5726.60	49.77	54.00	-4.23	43.19	6.83	34.69	34.94	95	105	Average	VERTICAL
8	5768.27	62.08	74.00	-11.92	55.44	6.88	34.70	34.94	95	105	Peak	VERTICAL

Item 5, 6 are the fundamental frequency at 5500 MHz.

**Channel 116**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
1	5397.50	65.65	74.00	-8.35	59.61	6.50	34.46	34.92	108	100	Peak	VERTICAL
2	5453.59	52.84	54.00	-1.16	46.63	6.60	34.53	34.92	108	100	Average	VERTICAL
3	5463.59	65.65	74.00	-8.35	59.42	6.60	34.55	34.92	108	100	Peak	VERTICAL
4	5468.40	52.82	54.00	-1.18	46.59	6.60	34.55	34.92	108	100	Average	VERTICAL
5	5584.81	113.85			107.43	6.72	34.63	34.93	108	100	Average	VERTICAL
6	5584.81	123.33			116.91	6.72	34.63	34.93	108	100	Peak	VERTICAL
7	5729.81	51.40	54.00	-2.60	44.82	6.83	34.69	34.94	108	100	Average	VERTICAL
8	5742.63	64.56	74.00	-9.44	57.94	6.86	34.70	34.94	108	100	Peak	VERTICAL

Item 5, 6 are the fundamental frequency at 5580 MHz.

**Channel 140**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
1	5418.33	52.92	54.00	-1.08	46.83	6.53	34.48	34.92	86	100	Average	VERTICAL
2	5423.14	66.29	74.00	-7.71	60.20	6.53	34.48	34.92	86	100	Peak	VERTICAL
3	5465.19	64.20	74.00	-9.80	57.97	6.60	34.55	34.92	86	100	Peak	VERTICAL
4	5470.00	52.06	54.00	-1.94	45.83	6.60	34.55	34.92	86	100	Average	VERTICAL
5	5704.81	108.69			102.12	6.83	34.68	34.94	86	100	Average	VERTICAL
6	5704.81	117.62			111.05	6.83	34.68	34.94	86	100	Peak	VERTICAL
7	5725.00	52.31	54.00	-1.69	45.73	6.83	34.69	34.94	86	100	Average	VERTICAL
8	5725.00	68.23	74.00	-5.77	61.65	6.83	34.69	34.94	86	100	Peak	VERTICAL

Item 5, 6 are the fundamental frequency at 5700 MHz.

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT40 CH 38, 46 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 30, 2014 ~ Oct. 02, 2014		

### Channel 38

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
MHz	dBuV/m	dBuV/m	dB									
1	4853.53	61.94	74.00	-12.06	57.14	6.10	33.62	34.92	87	100 Peak		VERTICAL
2	4959.30	52.94	54.00	-1.06	47.98	6.04	33.83	34.91	87	100 Average		VERTICAL
3	5150.00	52.11	54.00	-1.89	46.70	6.21	34.11	34.91	87	100 Average		VERTICAL
4	5150.00	65.90	74.00	-8.10	60.49	6.21	34.11	34.91	87	100 Peak		VERTICAL
5	5196.41	101.10			95.56	6.27	34.18	34.91	87	100 Average		VERTICAL
6	5196.41	110.67			105.13	6.27	34.18	34.91	87	100 Peak		VERTICAL

Item 5, 6 are the fundamental frequency at 5190 MHz.

### Channel 46

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
MHz	dBuV/m	dBuV/m	dB									
1	5138.78	62.55	74.00	-11.45	57.20	6.17	34.09	34.91	96	100 Peak		VERTICAL
2	5145.19	51.24	54.00	-2.76	45.83	6.21	34.11	34.91	96	100 Average		VERTICAL
3	5244.42	108.07			102.43	6.30	34.25	34.91	96	100 Average		VERTICAL
4	5244.42	117.34			111.70	6.30	34.25	34.91	96	100 Peak		VERTICAL
5	5350.00	64.08	74.00	-9.92	58.13	6.47	34.39	34.91	96	100 Peak		VERTICAL
6	5359.04	52.87	54.00	-1.13	46.92	6.47	34.39	34.91	96	100 Average		VERTICAL

Item 3, 4 are the fundamental frequency at 5230 MHz.

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT40 CH 54, 62 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 30, 2014		

#### Channel 54

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg	cm	
1	5079.49	52.37	54.00	-1.63	47.14	6.11	34.02	34.90	112	100	Average	VERTICAL
2	5094.87	61.63	74.00	-12.37	56.35	6.14	34.04	34.90	112	100	Peak	VERTICAL
3	5284.10	108.41			102.65	6.37	34.30	34.91	112	100	Average	VERTICAL
4	5284.10	117.72			111.96	6.37	34.30	34.91	112	100	Peak	VERTICAL
5	5372.44	52.78	54.00	-1.22	46.81	6.47	34.41	34.91	112	100	Average	VERTICAL
6	5373.08	64.35	74.00	-9.65	58.38	6.47	34.41	34.91	112	100	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5270 MHz.

#### Channel 62

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg	cm	
1	5080.29	50.98	54.00	-3.02	45.75	6.11	34.02	34.90	93	100	Average	VERTICAL
2	5092.31	61.56	74.00	-12.44	56.31	6.11	34.04	34.90	93	100	Peak	VERTICAL
3	5322.02	102.42			96.59	6.40	34.34	34.91	93	100	Average	VERTICAL
4	5326.03	112.44			106.58	6.43	34.34	34.91	93	100	Peak	VERTICAL
5	5350.80	52.92	54.00	-1.08	46.97	6.47	34.39	34.91	93	100	Average	VERTICAL
6	5354.81	66.18	74.00	-7.82	60.23	6.47	34.39	34.91	93	100	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5310 MHz.

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT40 CH 102, 110, 134 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 30, 2014		

### Channel 102

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
MHz	dBuV/m	dBuV/m	dB									
1	5440.13	50.91	54.00	-3.09	44.76	6.56	34.51	34.92	122	100	Average	VERTICAL
2	5457.44	62.68	74.00	-11.32	56.47	6.60	34.53	34.92	122	100	Peak	VERTICAL
3	5468.08	52.83	54.00	-1.17	46.60	6.60	34.55	34.92	122	100	Average	VERTICAL
4	5468.72	66.11	74.00	-7.89	59.88	6.60	34.55	34.92	122	100	Peak	VERTICAL
5	5526.67	99.06			92.71	6.68	34.61	34.92	122	100	Average	VERTICAL
6	5526.67	108.88			102.51	6.68	34.61	34.92	122	100	Peak	VERTICAL

Item 5, 6 are the fundamental frequency at 5510 MHz.

### Channel 110

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
MHz	dBuV/m	dBuV/m	dB									
1	5458.40	51.69	54.00	-2.31	45.48	6.60	34.53	34.92	95	101	Average	VERTICAL
2	5459.20	66.77	74.00	-7.23	60.56	6.60	34.53	34.92	95	101	Peak	VERTICAL
3	5465.99	69.01	74.00	-4.99	62.78	6.60	34.55	34.92	95	101	Peak	VERTICAL
4	5468.40	52.85	54.00	-1.15	46.62	6.60	34.55	34.92	95	101	Average	VERTICAL
5	5566.83	110.07			103.67	6.70	34.63	34.93	95	101	Average	VERTICAL
6	5567.63	119.09			112.69	6.70	34.63	34.93	95	101	Peak	VERTICAL

Item 5, 6 are the fundamental frequency at 5550 MHz.

### Channel 134

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
MHz	dBuV/m	dBuV/m	dB									
1	5436.76	62.05	74.00	-11.95	55.90	6.56	34.51	34.92	101	100	Peak	VERTICAL
2	5439.17	51.83	54.00	-2.17	45.68	6.56	34.51	34.92	101	100	Average	VERTICAL
3	5464.39	62.16	74.00	-11.84	55.93	6.60	34.55	34.92	101	100	Peak	VERTICAL
4	5470.00	49.71	54.00	-4.29	43.48	6.60	34.55	34.92	101	100	Average	VERTICAL
5	5661.99	108.73			102.21	6.79	34.66	34.93	101	100	Average	VERTICAL
6	5664.39	118.44			111.92	6.79	34.66	34.93	101	100	Peak	VERTICAL
7	5725.80	52.99	54.00	-1.01	46.41	6.83	34.69	34.94	101	100	Average	VERTICAL
8	5727.40	71.59	74.00	-2.41	65.01	6.83	34.69	34.94	101	100	Peak	VERTICAL

Item 5, 6 are the fundamental frequency at 5670 MHz.

### Note:

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

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

**Mode 3 (Ant.32 3-Port Dual-Band Directional Panel antenna / Chain 1: 6.7, Chain 2: 4.3, Chain 3: 6.6dBi)**
**For Beamforming Mode**
**For 3TX**

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 23, 2014		

**Channel 36**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Cable Loss	Antenna Factor	Preamp Factor			
MHz	dBuV/m	dBuV/m	dB		dBuV	dB	dB/m	dB		cm	deg
1	5149.68	50.95	54.00	-3.05	46.01	6.13	34.01	35.20	Average	133	206 VERTICAL
2	5149.68	72.95	74.00	-1.05	68.01	6.13	34.01	35.20	Peak	133	206 VERTICAL
3	5178.72	117.73			112.70	6.15	34.08	35.20	Peak	133	206 VERTICAL
4	5179.04	105.76			100.73	6.15	34.08	35.20	Average	133	206 VERTICAL

Item 3, 4 are the fundamental frequency at 5180 MHz.

**Channel 40**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Cable Loss	Antenna Factor	Preamp Factor			
MHz	dBuV/m	dBuV/m	dB		dBuV	dB	dB/m	dB		cm	deg
1	5079.81	52.86	54.00	-1.14	48.10	6.09	33.87	35.20	Average	126	201 VERTICAL
2	5149.04	66.04	74.00	-7.96	61.10	6.13	34.01	35.20	Peak	126	201 VERTICAL
3	5194.23	121.20			116.16	6.16	34.08	35.20	Peak	126	201 VERTICAL
4	5194.71	109.62			104.55	6.16	34.11	35.20	Average	126	201 VERTICAL

Item 3, 4 are the fundamental frequency at 5200 MHz.

**Channel 48**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Cable Loss	Antenna Factor	Preamp Factor			
MHz	dBuV/m	dBuV/m	dB		dBuV	dB	dB/m	dB		cm	deg
1	5079.49	52.86	54.00	-1.14	48.10	6.09	33.87	35.20	Average	132	205 VERTICAL
2	5145.51	64.80	74.00	-9.20	59.86	6.13	34.01	35.20	Peak	132	205 VERTICAL
3	5233.59	125.66			120.50	6.18	34.18	35.20	Peak	132	205 VERTICAL
4	5243.85	113.60			108.42	6.20	34.18	35.20	Average	132	205 VERTICAL
5	5403.85	50.75	54.00	-3.25	45.13	6.29	34.53	35.20	Average	132	205 VERTICAL
6	5406.41	63.21	74.00	-10.79	57.59	6.29	34.53	35.20	Peak	132	205 VERTICAL

Item 3, 4 are the fundamental frequency at 5240 MHz.



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 52, 60, 64 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 23, 2014		

**Channel 52**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5080.13	50.90	54.00	-3.10	46.14	6.09	33.87	35.20	Average	116	143 VERTICAL
2	5080.13	60.57	74.00	-13.43	55.81	6.09	33.87	35.20	Peak	116	143 VERTICAL
3	5256.80	113.46			108.24	6.20	34.22	35.20	Average	116	143 VERTICAL
4	5256.80	123.21			117.99	6.20	34.22	35.20	Peak	116	143 VERTICAL
5	5350.00	52.83	54.00	-1.17	47.35	6.26	34.42	35.20	Average	116	143 VERTICAL
6	5355.77	64.93	74.00	-9.07	59.45	6.26	34.42	35.20	Peak	116	143 VERTICAL

Item 3, 4 are the fundamental frequency at 5260 MHz.

**Channel 60**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5304.17	120.56			115.21	6.23	34.32	35.20	Peak	111	173 VERTICAL
2	5304.49	110.84			105.49	6.23	34.32	35.20	Average	111	173 VERTICAL
3	5382.05	52.88	54.00	-1.12	47.31	6.28	34.49	35.20	Average	111	173 VERTICAL
4	5382.05	65.27	74.00	-8.73	59.70	6.28	34.49	35.20	Peak	111	173 VERTICAL

Item 1, 2 are the fundamental frequency at 5300 MHz.

**Channel 64**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5079.49	50.91	54.00	-3.09	46.15	6.09	33.87	35.20	Average	119	149 VERTICAL
2	5079.49	59.88	74.00	-14.12	55.12	6.09	33.87	35.20	Peak	119	149 VERTICAL
3	5328.01	106.06			100.65	6.25	34.36	35.20	Average	119	149 VERTICAL
4	5328.01	115.24			109.83	6.25	34.36	35.20	Peak	119	149 VERTICAL
5	5439.97	52.04	54.00	-1.96	46.32	6.32	34.60	35.20	Average	119	149 VERTICAL
6	5439.97	61.85	74.00	-12.15	56.13	6.32	34.60	35.20	Peak	119	149 VERTICAL

Item 3, 4 are the fundamental frequency at 5320 MHz.

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 100, 116, 140 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 23, 2014 ~ Sep. 24, 2014		

### Channel 100

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5416.25	63.24	74.00	-10.76	57.57	6.31	34.56	35.20	Peak	110	152 VERTICAL
2	5439.81	52.07	54.00	-1.93	46.35	6.32	34.60	35.20	Average	110	152 VERTICAL
3	5469.04	52.09	54.00	-1.91	46.28	6.34	34.67	35.20	Average	110	152 VERTICAL
4	5470.00	72.70	74.00	-1.30	66.89	6.34	34.67	35.20	Peak	110	152 VERTICAL
5	5507.21	118.09			112.22	6.36	34.71	35.20	Peak	110	152 VERTICAL
6	5507.69	108.01			102.14	6.36	34.71	35.20	Average	110	152 VERTICAL

Item 5, 6 are the fundamental frequency at 5500 MHz.

### Channel 116

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5459.36	51.99	54.00	-2.01	46.23	6.33	34.63	35.20	Average	124	205 VERTICAL
2	5459.36	64.60	74.00	-9.40	58.84	6.33	34.63	35.20	Peak	124	205 VERTICAL
3	5468.08	51.69	54.00	-2.31	45.88	6.34	34.67	35.20	Average	124	205 VERTICAL
4	5470.00	64.15	74.00	-9.85	58.34	6.34	34.67	35.20	Peak	124	205 VERTICAL
5	5572.31	117.68			111.72	6.39	34.77	35.20	Average	124	205 VERTICAL
6	5575.51	127.10			121.14	6.39	34.77	35.20	Peak	124	205 VERTICAL

Item 5, 6 are the fundamental frequency at 5580 MHz.

### Channel 140

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5707.05	117.53			111.42	6.44	34.87	35.20	Peak	124	179 VERTICAL
2	5707.21	107.38			101.27	6.44	34.87	35.20	Average	124	179 VERTICAL
3	5725.00	51.26	54.00	-2.74	45.12	6.45	34.89	35.20	Average	124	179 VERTICAL
4	5725.48	72.76	74.00	-1.24	66.62	6.45	34.89	35.20	Peak	124	179 VERTICAL

Item 1, 2 are the fundamental frequency at 5700 MHz.



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 38, 46 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 24, 2014		

**Channel 38**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	Loss	Factor	Factor	Remark	
1	5149.36	66.49	74.00	-7.51	61.55	6.13	34.01	35.20	Peak	125	187 VERTICAL
2	5150.00	52.76	54.00	-1.24	47.82	6.13	34.01	35.20	Average	125	187 VERTICAL
3	5201.54	99.27			94.20	6.16	34.11	35.20	Average	125	187 VERTICAL
4	5206.03	109.79			104.72	6.16	34.11	35.20	Peak	125	187 VERTICAL

Item 3, 4 are the fundamental frequency at 5190 MHz.

**Channel 46**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	Loss	Factor	Factor	Remark	
1	5080.13	52.85	54.00	-1.15	48.09	6.09	33.87	35.20	Average	122	202 VERTICAL
2	5080.13	61.71	74.00	-12.29	56.95	6.09	33.87	35.20	Peak	122	202 VERTICAL
3	5243.46	106.77			101.59	6.20	34.18	35.20	Average	122	202 VERTICAL
4	5244.10	116.20			111.02	6.20	34.18	35.20	Peak	122	202 VERTICAL

Item 3, 4 are the fundamental frequency at 5230 MHz.

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT40 CH 54, 62 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 24, 2014		

### Channel 54

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	5079.49	52.67	54.00	-1.33	47.91	6.09	33.87	35.20	Average	119	205 VERTICAL
2	5079.49	60.83	74.00	-13.17	56.07	6.09	33.87	35.20	Peak	119	205 VERTICAL
3	5287.31	102.39			97.08	6.22	34.29	35.20	Average	119	205 VERTICAL
4	5287.31	111.55			106.24	6.22	34.29	35.20	Peak	119	205 VERTICAL
5	5440.77	52.98	54.00	-1.02	47.26	6.32	34.60	35.20	Average	119	205 VERTICAL
6	5446.54	63.85	74.00	-10.15	58.12	6.33	34.60	35.20	Peak	119	205 VERTICAL

Item 3, 4 are the fundamental frequency at 5270 MHz.

### Channel 62

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	5079.49	48.38	54.00	-5.62	43.62	6.09	33.87	35.20	Average	119	210 VERTICAL
2	5080.29	58.94	74.00	-15.06	54.18	6.09	33.87	35.20	Peak	119	210 VERTICAL
3	5301.19	111.19			105.84	6.23	34.32	35.20	Peak	119	210 VERTICAL
4	5312.40	102.34			96.98	6.24	34.32	35.20	Average	119	210 VERTICAL
5	5350.80	52.91	54.00	-1.09	47.43	6.26	34.42	35.20	Average	119	210 VERTICAL
6	5350.80	69.26	74.00	-4.74	63.78	6.26	34.42	35.20	Peak	119	210 VERTICAL

Item 3, 4 are the fundamental frequency at 5310 MHz.

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT40 CH 102, 110, 134 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 24, 2014		

### Channel 102

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Cable Loss	Antenna Factor	Preamp Factor			
1	5439.81	52.07	54.00	-1.93	46.35	6.32	34.60	35.20	Average	112	147 VERTICAL
2	5470.00	52.91	54.00	-1.09	47.10	6.34	34.67	35.20	Average	112	147 VERTICAL
3	5470.00	65.80	74.00	-8.20	59.99	6.34	34.67	35.20	Peak	112	147 VERTICAL
4	5470.00	68.80	74.00	-5.20	62.99	6.34	34.67	35.20	Peak	112	147 VERTICAL
5	5503.27	99.60			93.73	6.36	34.71	35.20	Average	112	147 VERTICAL

Item 5 are the fundamental frequency at 5510 MHz.

### Channel 110

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Cable Loss	Antenna Factor	Preamp Factor			
1	5439.81	52.78	54.00	-1.22	47.06	6.32	34.60	35.20	Average	121	152 VERTICAL
2	5459.04	66.51	74.00	-7.49	60.75	6.33	34.63	35.20	Peak	121	152 VERTICAL
3	5465.67	70.40	74.00	-3.60	64.63	6.34	34.63	35.20	Peak	121	152 VERTICAL
4	5466.64	52.84	54.00	-1.16	47.07	6.34	34.63	35.20	Average	121	152 VERTICAL
5	5567.31	108.51			102.57	6.39	34.75	35.20	Average	121	152 VERTICAL

Item 5 are the fundamental frequency at 5550 MHz.

### Channel 134

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Cable Loss	Antenna Factor	Preamp Factor			
1	5665.83	116.18			110.13	6.42	34.83	35.20	Peak	117	156 VERTICAL
2	5667.44	106.56			100.50	6.43	34.83	35.20	Average	117	156 VERTICAL
3	5725.32	52.55	54.00	-1.45	46.41	6.45	34.89	35.20	Average	117	156 VERTICAL
4	5726.60	69.25	74.00	-4.75	63.11	6.45	34.89	35.20	Peak	117	156 VERTICAL

Item 1, 2 are the fundamental frequency at 5670 MHz.

#### Note:

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

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

**For Non-Beamforming Mode****For 1TX**

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 36, 40, 48 / Chain 1
<b>Test Date</b>	Sep. 24, 2014		

**Channel 36**

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	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5150.00	52.37	54.00	-1.63	46.96	6.21	34.11	34.91	Average	131	179 VERTICAL
2	5150.00	72.58	74.00	-1.42	67.17	6.21	34.11	34.91	Peak	131	179 VERTICAL
3	5183.21	113.60			108.11	6.24	34.16	34.91	Peak	131	179 VERTICAL
4	5186.25	100.81			95.32	6.24	34.16	34.91	Average	131	179 VERTICAL

Item 3, 4 are the fundamental frequency at 5180 MHz.

**Channel 40**

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	dBuV	dB	dB/m	dB	cm	deg		
1	5150.00	52.69	54.00	-1.31	47.28	6.21	34.11	34.91	Average	130	209 VERTICAL
2	5150.00	68.86	74.00	-5.14	63.45	6.21	34.11	34.91	Peak	130	209 VERTICAL
3	5204.49	117.96			112.42	6.27	34.18	34.91	Peak	130	209 VERTICAL
4	5205.13	105.90			100.36	6.27	34.18	34.91	Average	130	209 VERTICAL

Item 3, 4 are the fundamental frequency at 5200 MHz.

**Channel 48**

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	dBuV	dB	dB/m	dB	cm	deg		
1	5144.87	66.39	74.00	-7.61	60.98	6.21	34.11	34.91	Peak	106	211 VERTICAL
2	5150.00	49.26	54.00	-4.74	43.85	6.21	34.11	34.91	Average	106	211 VERTICAL
3	5232.95	110.61			104.99	6.30	34.23	34.91	Average	106	211 VERTICAL
4	5232.95	122.10			116.48	6.30	34.23	34.91	Peak	106	211 VERTICAL
5	5392.95	49.70	54.00	-4.30	43.68	6.50	34.44	34.92	Average	106	211 VERTICAL
6	5392.95	61.26	74.00	-12.74	55.24	6.50	34.44	34.92	Peak	106	211 VERTICAL

Item 3, 4 are the fundamental frequency at 5240 MHz.



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 52, 60, 64 / Chain 1
Test Date	Sep. 24, 2014		

### Channel 52

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				cm	deg	
1	5150.00	45.84	54.00	-8.16	40.43	6.21	34.11	34.91	Average	105	210	VERTICAL		
2	5150.00	57.35	74.00	-16.65	51.94	6.21	34.11	34.91	Peak	105	210	VERTICAL		
3	5253.27	109.76			104.08	6.34	34.25	34.91	Average	105	210	VERTICAL		
4	5253.27	122.22			116.54	6.34	34.25	34.91	Peak	105	210	VERTICAL		
5	5350.00	49.69	54.00	-4.31	43.74	6.47	34.39	34.91	Average	105	210	VERTICAL		
6	5350.00	61.90	74.00	-12.10	55.95	6.47	34.39	34.91	Peak	105	210	VERTICAL		

Item 3, 4 are the fundamental frequency at 5260 MHz.

### Channel 60

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				cm	deg	
1	5306.09	105.82			100.01	6.40	34.32	34.91	Average	100	153	VERTICAL		
2	5306.09	116.72			110.91	6.40	34.32	34.91	Peak	100	153	VERTICAL		
3	5350.00	52.59	54.00	-1.41	46.64	6.47	34.39	34.91	Average	100	153	VERTICAL		
4	5350.00	67.03	74.00	-6.97	61.08	6.47	34.39	34.91	Peak	100	153	VERTICAL		

Item 1, 2 are the fundamental frequency at 5300 MHz.

### Channel 64

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				cm	deg	
1	5324.01	114.00			108.14	6.43	34.34	34.91	Peak	102	150	VERTICAL		
2	5324.97	102.13			96.27	6.43	34.34	34.91	Average	102	150	VERTICAL		
3	5350.00	52.80	54.00	-1.20	46.85	6.47	34.39	34.91	Average	102	150	VERTICAL		
4	5350.32	71.12	74.00	-2.88	65.17	6.47	34.39	34.91	Peak	102	150	VERTICAL		

Item 1, 2 are the fundamental frequency at 5320 MHz.



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 100, 116, 140 / Chain 1
Test Date	Sep. 25, 2014		

### Channel 100

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor			
1	5419.62	48.18	54.00	-5.82	42.09	6.53	34.48	34.92	Average	100	176 VERTICAL
2	5460.00	64.25	74.00	-9.75	58.04	6.60	34.53	34.92	Peak	100	176 VERTICAL
3	5469.68	72.18	74.00	-1.82	65.95	6.60	34.55	34.92	Peak	100	176 VERTICAL
4	5470.00	52.87	54.00	-1.13	46.64	6.60	34.55	34.92	Average	100	176 VERTICAL
5	5496.80	114.97			108.66	6.63	34.60	34.92	Peak	100	176 VERTICAL
6	5498.72	102.01			95.70	6.63	34.60	34.92	Average	100	176 VERTICAL

Item 5, 6 are the fundamental frequency at 5500 MHz.

### Channel 116

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor			
1	5460.00	46.99	54.00	-7.01	40.78	6.60	34.53	34.92	Average	100	174 VERTICAL
2	5460.00	57.56	74.00	-16.44	51.35	6.60	34.53	34.92	Peak	100	174 VERTICAL
3	5470.00	47.10	54.00	-6.90	40.87	6.60	34.55	34.92	Average	100	174 VERTICAL
4	5470.00	58.55	74.00	-15.45	52.32	6.60	34.55	34.92	Peak	100	174 VERTICAL
5	5573.75	110.23			103.83	6.70	34.63	34.93	Average	100	174 VERTICAL
6	5576.64	122.26			115.86	6.70	34.63	34.93	Peak	100	174 VERTICAL
7	5725.00	46.07	54.00	-7.93	39.49	6.83	34.69	34.94	Average	100	174 VERTICAL
8	5725.00	57.26	74.00	-16.74	50.68	6.83	34.69	34.94	Peak	100	174 VERTICAL

Item 5, 6 are the fundamental frequency at 5580 MHz.

### Channel 140

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor			
1	5706.09	112.82			106.25	6.83	34.68	34.94	Peak	100	176 VERTICAL
2	5706.25	101.19			94.62	6.83	34.68	34.94	Average	100	176 VERTICAL
3	5725.00	52.45	54.00	-1.55	45.87	6.83	34.69	34.94	Average	100	176 VERTICAL
4	5725.16	72.16	74.00	-1.84	65.58	6.83	34.69	34.94	Peak	100	176 VERTICAL

Item 1, 2 are the fundamental frequency at 5700 MHz.



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 38, 46 / Chain 1
Test Date	Sep. 25, 2014		

**Channel 38**

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor			
1	5148.08	69.34	74.00	-4.66	63.93	6.21	34.11	34.91	Peak	130	147 VERTICAL
2	5150.00	52.73	54.00	-1.27	47.32	6.21	34.11	34.91	Average	130	147 VERTICAL
3	5185.51	103.99			98.50	6.24	34.16	34.91	Peak	130	147 VERTICAL
4	5205.39	93.60			88.06	6.27	34.18	34.91	Average	130	147 VERTICAL

Item 3, 4 are the fundamental frequency at 5190 MHz.

**Channel 46**

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor			
1	5150.00	52.55	54.00	-1.45	47.14	6.21	34.11	34.91	Average	105	213 VERTICAL
2	5150.00	68.01	74.00	-5.99	62.60	6.21	34.11	34.91	Peak	105	213 VERTICAL
3	5243.46	106.04			100.40	6.30	34.25	34.91	Average	105	213 VERTICAL
4	5245.71	115.68			110.04	6.30	34.25	34.91	Peak	105	213 VERTICAL

Item 3, 4 are the fundamental frequency at 5230 MHz.

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT40 CH 54, 62 / Chain 1
<b>Test Date</b>	Sep. 25, 2014		

**Channel 54**

Freq	Level	Limit		Over Limit	Read Level	CableAntenna 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	5257.50	114.29			108.61	6.34	34.25	34.91	Peak	116	212 VERTICAL
2	5286.99	104.35			98.59	6.37	34.30	34.91	Average	116	212 VERTICAL
3	5350.64	52.85	54.00	-1.15	46.90	6.47	34.39	34.91	Average	116	212 VERTICAL
4	5350.96	65.94	74.00	-8.06	59.99	6.47	34.39	34.91	Peak	116	212 VERTICAL

Item 1, 2 are the fundamental frequency at 5270 MHz.

**Channel 62**

Freq	Level	Limit		Over Limit	Read Level	CableAntenna 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	5320.90	110.05			104.22	6.40	34.34	34.91	Peak	115	213 VERTICAL
2	5323.46	99.22			93.36	6.43	34.34	34.91	Average	115	213 VERTICAL
3	5350.00	52.79	54.00	-1.21	46.84	6.47	34.39	34.91	Average	115	213 VERTICAL
4	5350.00	70.27	74.00	-3.73	64.32	6.47	34.39	34.91	Peak	115	213 VERTICAL

Item 1, 2 are the fundamental frequency at 5310 MHz.



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 102, 110, 134 / Chain 1
Test Date	Sep. 25, 2014		

### Channel 102

Freq	Level	Limit		Over Limit	Read Level	Cable			Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			dB	dBm	dB				cm	deg	
1	5460.00	47.57	54.00	-6.43	41.36	6.60	34.53	34.92	Average			100	177	VERTICAL
2	5460.00	61.59	74.00	-12.41	55.38	6.60	34.53	34.92	Peak			100	177	VERTICAL
3	5470.00	52.76	54.00	-1.24	46.53	6.60	34.55	34.92	Average			100	177	VERTICAL
4	5470.00	67.43	74.00	-6.57	61.20	6.60	34.55	34.92	Peak			100	177	VERTICAL
5	5497.50	95.84			89.53	6.63	34.60	34.92	Average			100	177	VERTICAL
6	5499.74	106.69			100.38	6.63	34.60	34.92	Peak			100	177	VERTICAL

Item 5, 6 are the fundamental frequency at 5510 MHz.

### Channel 110

Freq	Level	Limit		Over Limit	Read Level	Cable			Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			dBm	dB	dBm				cm	deg	
1	5460.00	50.19	54.00	-3.81	43.98	6.60	34.53	34.92	Average			100	179	VERTICAL
2	5460.00	65.86	74.00	-8.14	59.65	6.60	34.53	34.92	Peak			100	179	VERTICAL
3	5468.72	68.38	74.00	-5.62	62.15	6.60	34.55	34.92	Peak			100	179	VERTICAL
4	5470.00	52.77	54.00	-1.23	46.54	6.60	34.55	34.92	Average			100	179	VERTICAL
5	5533.65	101.98			95.61	6.68	34.61	34.92	Average			100	179	VERTICAL
6	5564.42	115.11			108.72	6.70	34.62	34.93	Peak			100	179	VERTICAL

Item 5, 6 are the fundamental frequency at 5550 MHz.

### Channel 134

Freq	Level	Limit		Over Limit	Read Level	Cable			Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			dBm	dB	dBm				cm	deg	
1	5656.22	100.13			93.61	6.79	34.66	34.93	Average			100	180	VERTICAL
2	5659.74	113.61			107.09	6.79	34.66	34.93	Peak			100	180	VERTICAL
3	5725.00	52.66	54.00	-1.34	46.08	6.83	34.69	34.94	Average			100	180	VERTICAL
4	5725.32	68.32	74.00	-5.68	61.74	6.83	34.69	34.94	Peak			100	180	VERTICAL

Item 1, 2 are the fundamental frequency at 5670 MHz.



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11a CH 36, 40, 48 / Chain 1
Test Date	Sep. 24, 2014		

**Channel 36**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
1	5149.68	72.33	74.00	-1.67	66.92	6.21	34.11	34.91	Peak	120	210 VERTICAL
2	5150.00	52.69	54.00	-1.31	47.28	6.21	34.11	34.91	Average	120	210 VERTICAL
3	5184.01	115.29			109.80	6.24	34.16	34.91	Peak	120	210 VERTICAL
4	5186.41	102.75			97.26	6.24	34.16	34.91	Average	120	210 VERTICAL

Item 3, 4 are the fundamental frequency at 5180 MHz.

**Channel 40**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
1	5150.00	52.69	54.00	-1.31	47.28	6.21	34.11	34.91	Average	130	210 VERTICAL
2	5150.00	70.71	74.00	-3.29	65.30	6.21	34.11	34.91	Peak	130	210 VERTICAL
3	5206.73	106.98			101.44	6.27	34.18	34.91	Average	130	210 VERTICAL
4	5207.05	118.81			113.27	6.27	34.18	34.91	Peak	130	210 VERTICAL

Item 3, 4 are the fundamental frequency at 5200 MHz.

**Channel 48**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
1	5146.80	64.64	74.00	-9.36	59.23	6.21	34.11	34.91	Peak	103	152 VERTICAL
2	5150.00	48.60	54.00	-5.40	43.19	6.21	34.11	34.91	Average	103	152 VERTICAL
3	5244.01	110.43			104.79	6.30	34.25	34.91	Average	103	152 VERTICAL
4	5247.21	122.55			116.87	6.34	34.25	34.91	Peak	103	152 VERTICAL
5	5394.87	49.50	54.00	-4.50	43.46	6.50	34.46	34.92	Average	103	152 VERTICAL
6	5395.67	62.35	74.00	-11.65	56.31	6.50	34.46	34.92	Peak	103	152 VERTICAL

Item 3, 4 are the fundamental frequency at 5240 MHz.



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11a CH 52, 60, 64 / Chain 1
Test Date	Sep. 24, 2014		

**Channel 52**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
1	5150.00	46.06	54.00	-7.94	40.65	6.21	34.11	34.91	Average	106	211 VERTICAL
2	5150.00	57.41	74.00	-16.59	52.00	6.21	34.11	34.91	Peak	106	211 VERTICAL
3	5253.59	110.29			104.61	6.34	34.25	34.91	Average	106	211 VERTICAL
4	5254.23	122.11			116.43	6.34	34.25	34.91	Peak	106	211 VERTICAL
5	5350.00	49.39	54.00	-4.61	43.44	6.47	34.39	34.91	Average	106	211 VERTICAL
6	5350.00	60.85	74.00	-13.15	54.90	6.47	34.39	34.91	Peak	106	211 VERTICAL

Item 3, 4 are the fundamental frequency at 5260 MHz.

**Channel 60**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
1	5304.81	107.96			102.15	6.40	34.32	34.91	Average	104	211 VERTICAL
2	5306.41	120.43			114.62	6.40	34.32	34.91	Peak	104	211 VERTICAL
3	5350.00	52.92	54.00	-1.08	46.97	6.47	34.39	34.91	Average	104	211 VERTICAL
4	5350.00	70.49	74.00	-3.51	64.54	6.47	34.39	34.91	Peak	104	211 VERTICAL

Item 1, 2 are the fundamental frequency at 5300 MHz.

**Channel 64**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
1	5325.13	115.41			109.55	6.43	34.34	34.91	Peak	114	212 VERTICAL
2	5325.29	103.83			97.97	6.43	34.34	34.91	Average	114	212 VERTICAL
3	5350.00	52.83	54.00	-1.17	46.88	6.47	34.39	34.91	Average	114	212 VERTICAL
4	5350.32	71.02	74.00	-2.98	65.07	6.47	34.39	34.91	Peak	114	212 VERTICAL

Item 1, 2 are the fundamental frequency at 5320 MHz.



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11a CH 100, 116, 140 / Chain 1
Test Date	Sep. 24, 2014		

### Channel 100

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamplifier	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB		cm	deg	
1	5412.89	48.79	54.00	-5.21	42.70	6.53	34.48	34.92	Average	100	211	VERTICAL
2	5460.00	63.74	74.00	-10.26	57.53	6.60	34.53	34.92	Peak	100	211	VERTICAL
3	5470.00	52.86	54.00	-1.14	46.63	6.60	34.55	34.92	Average	100	211	VERTICAL
4	5470.00	72.24	74.00	-1.76	66.01	6.60	34.55	34.92	Peak	100	211	VERTICAL
5	5494.87	102.42			96.13	6.63	34.58	34.92	Average	100	211	VERTICAL
6	5494.87	114.90			108.61	6.63	34.58	34.92	Peak	100	211	VERTICAL

Item 5, 6 are the fundamental frequency at 5500 MHz.

### Channel 116

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamplifier	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB		cm	deg	
1	5460.00	46.91	54.00	-7.09	40.70	6.60	34.53	34.92	Average	100	174	VERTICAL
2	5460.00	59.27	74.00	-14.73	53.06	6.60	34.53	34.92	Peak	100	174	VERTICAL
3	5470.00	46.87	54.00	-7.13	40.64	6.60	34.55	34.92	Average	100	174	VERTICAL
4	5470.00	57.88	74.00	-16.12	51.65	6.60	34.55	34.92	Peak	100	174	VERTICAL
5	5573.27	122.34			115.94	6.70	34.63	34.93	Peak	100	174	VERTICAL
6	5573.75	110.73			104.33	6.70	34.63	34.93	Average	100	174	VERTICAL
7	5725.00	45.99	54.00	-8.01	39.41	6.83	34.69	34.94	Average	100	174	VERTICAL
8	5725.00	56.88	74.00	-17.12	50.30	6.83	34.69	34.94	Peak	100	174	VERTICAL

Item 5, 6 are the fundamental frequency at 5580 MHz.

### Channel 140

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamplifier	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB		cm	deg	
1	5706.25	101.33			94.76	6.83	34.68	34.94	Average	100	179	VERTICAL
2	5706.73	112.83			106.26	6.83	34.68	34.94	Peak	100	179	VERTICAL
3	5725.00	52.25	54.00	-1.75	45.67	6.83	34.69	34.94	Average	100	179	VERTICAL
4	5725.00	70.78	74.00	-3.22	64.20	6.83	34.69	34.94	Peak	100	179	VERTICAL

Item 1, 2 are the fundamental frequency at 5700 MHz.

### Note:

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

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

**For 2TX**

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 36, 40, 48 / Chain 1 + Chain 2
<b>Test Date</b>	Sep. 24, 2014		

**Channel 36**

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									
1	5150.00	52.88	54.00	-1.12	47.47	6.21	34.11	34.91	Average	123	257	HORIZONTAL
2	5150.00	71.34	74.00	-2.66	65.93	6.21	34.11	34.91	Peak	123	257	HORIZONTAL
3	5186.80	110.85			105.36	6.24	34.16	34.91	Peak	123	257	HORIZONTAL
4	5188.40	101.30			95.81	6.24	34.16	34.91	Average	123	257	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5180 MHz.

**Channel 40**

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									
1	5148.80	69.24	74.00	-4.76	63.83	6.21	34.11	34.91	Peak	134	258	HORIZONTAL
2	5150.00	52.76	54.00	-1.24	47.35	6.21	34.11	34.91	Average	134	258	HORIZONTAL
3	5193.40	104.91			99.40	6.24	34.18	34.91	Average	134	258	HORIZONTAL
4	5205.40	114.55			109.01	6.27	34.18	34.91	Peak	134	258	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5200 MHz.

**Channel 48**

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									
1	5079.38	52.86	54.00	-1.14	47.63	6.11	34.02	34.90	Average	137	242	HORIZONTAL
2	5126.85	64.97	74.00	-9.03	59.62	6.17	34.09	34.91	Peak	137	242	HORIZONTAL
3	5242.32	118.69			113.05	6.30	34.25	34.91	Peak	137	242	HORIZONTAL
4	5243.47	108.76			103.12	6.30	34.25	34.91	Average	137	242	HORIZONTAL
5	5350.00	63.31	74.00	-10.69	57.36	6.47	34.39	34.91	Peak	137	242	HORIZONTAL
6	5400.36	50.32	54.00	-3.68	44.25	6.53	34.46	34.92	Average	137	242	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5240 MHz.

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 52, 60, 64 / Chain 1 + Chain 2
<b>Test Date</b>	Sep. 24, 2014		

### Channel 52

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	5119.90	51.10	54.00	-2.90	45.78	6.17	34.06	34.91	Average	126	250	HORIZONTAL
2	5119.90	64.27	74.00	-9.73	58.95	6.17	34.06	34.91	Peak	126	250	HORIZONTAL
3	5255.37	119.60			113.92	6.34	34.25	34.91	Peak	126	250	HORIZONTAL
4	5256.53	109.29			103.61	6.34	34.25	34.91	Average	126	250	HORIZONTAL
5	5352.89	67.19	74.00	-6.81	61.24	6.47	34.39	34.91	Peak	126	250	HORIZONTAL
6	5360.42	52.62	54.00	-1.38	46.67	6.47	34.39	34.91	Average	126	250	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5260 MHz.

### Channel 60

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	5302.03	116.00			110.19	6.40	34.32	34.91	Peak	122	255	HORIZONTAL
2	5303.47	105.52			99.71	6.40	34.32	34.91	Average	122	255	HORIZONTAL
3	5350.00	52.65	54.00	-1.35	46.70	6.47	34.39	34.91	Average	122	255	HORIZONTAL
4	5351.45	68.34	74.00	-5.66	62.39	6.47	34.39	34.91	Peak	122	255	HORIZONTAL

Item 1, 2 are the fundamental frequency at 5300 MHz.

### Channel 64

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	5328.39	101.56			95.67	6.43	34.37	34.91	Average	135	248	HORIZONTAL
2	5328.39	111.03			105.14	6.43	34.37	34.91	Peak	135	248	HORIZONTAL
3	5350.00	52.79	54.00	-1.21	46.84	6.47	34.39	34.91	Average	135	248	HORIZONTAL
4	5350.87	71.14	74.00	-2.86	65.19	6.47	34.39	34.91	Peak	135	248	HORIZONTAL

Item 1, 2 are the fundamental frequency at 5320 MHz.



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 100, 116, 140 / Chain 1 + Chain 2
Test Date	Sep. 24, 2014		

### Channel 100

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5458.26	64.00	74.00	-10.00	57.79	6.60	34.53	34.92	Peak	100	172 HORIZONTAL
2	5460.00	48.52	54.00	-5.48	42.31	6.60	34.53	34.92	Average	100	172 HORIZONTAL
3	5470.00	52.82	54.00	-1.18	46.59	6.60	34.55	34.92	Average	100	172 HORIZONTAL
4	5470.00	67.39	74.00	-6.61	61.16	6.60	34.55	34.92	Peak	100	172 HORIZONTAL
5	5504.63	112.18			105.85	6.65	34.60	34.92	Peak	100	172 HORIZONTAL
6	5505.79	101.81			95.48	6.65	34.60	34.92	Average	100	172 HORIZONTAL

Item 5, 6 are the fundamental frequency at 5500 MHz.

### Channel 116

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5411.37	49.96	54.00	-4.04	43.89	6.53	34.46	34.92	Average	112	170 VERTICAL
2	5424.27	61.88	74.00	-12.12	55.76	6.56	34.48	34.92	Peak	112	170 VERTICAL
3	5466.53	61.62	74.00	-12.38	55.39	6.60	34.55	34.92	Peak	112	170 VERTICAL
4	5467.68	48.82	54.00	-5.18	42.59	6.60	34.55	34.92	Average	112	170 VERTICAL
5	5573.05	111.48			105.08	6.70	34.63	34.93	Average	112	170 VERTICAL
6	5573.05	122.01			115.61	6.70	34.63	34.93	Peak	112	170 VERTICAL
7	5727.89	60.77	74.00	-13.23	54.19	6.83	34.69	34.94	Peak	112	170 VERTICAL
8	5733.10	49.15	54.00	-4.85	42.54	6.86	34.69	34.94	Average	112	170 VERTICAL

Item 5, 6 are the fundamental frequency at 5580 MHz.

### Channel 140

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5693.34	100.39			93.84	6.81	34.68	34.94	Average	131	230 HORIZONTAL
2	5696.53	110.60			104.05	6.81	34.68	34.94	Peak	131	230 HORIZONTAL
3	5725.00	52.85	54.00	-1.15	46.27	6.83	34.69	34.94	Average	131	230 HORIZONTAL
4	5725.58	70.88	74.00	-3.12	64.30	6.83	34.69	34.94	Peak	131	230 HORIZONTAL

Item 1, 2 are the fundamental frequency at 5700 MHz.

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT40 CH 38, 46 / Chain 1 + Chain 2
<b>Test Date</b>	Sep. 24, 2014		

### Channel 38

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	5149.42	66.72	74.00	-7.28	61.31	6.21	34.11	34.91	Peak	126	205	VERTICAL
2	5150.00	52.94	54.00	-1.06	47.53	6.21	34.11	34.91	Average	126	205	VERTICAL
3	5173.79	94.23			88.74	6.24	34.16	34.91	Average	126	205	VERTICAL
4	5185.95	104.73			99.24	6.24	34.16	34.91	Peak	126	205	VERTICAL

Item 3, 4 are the fundamental frequency at 5190 MHz.

### Channel 46

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	5146.96	67.31	74.00	-6.69	61.90	6.21	34.11	34.91	Peak	137	241	HORIZONTAL
2	5150.00	52.66	54.00	-1.34	47.25	6.21	34.11	34.91	Average	137	241	HORIZONTAL
3	5233.47	102.22			96.60	6.30	34.23	34.91	Average	137	241	HORIZONTAL
4	5245.63	113.76			108.12	6.30	34.25	34.91	Peak	137	241	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5230 MHz.



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 54, 62 / Chain 1 + Chain 2
Test Date	Sep. 24, 2014		

#### Channel 54

Freq	Level	Limit		Over Limit	Read Level	Cable			Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			dB	dBm	dB	dB/m	dB	dB	cm	deg	
1	5265.66	102.69			96.99	6.34	34.27	34.91	Average			137	251	HORIZONTAL
2	5265.66	113.15			107.45	6.34	34.27	34.91	Peak			137	251	HORIZONTAL
3	5350.00	52.72	54.00	-1.28	46.77	6.47	34.39	34.91	Average			137	251	HORIZONTAL
4	5350.00	65.94	74.00	-8.06	59.99	6.47	34.39	34.91	Peak			137	251	HORIZONTAL

Item 1, 2 are the fundamental frequency at 5270 MHz.

#### Channel 62

Freq	Level	Limit		Over Limit	Read Level	Cable			Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			dBm	dB	dBm	dB	dB/m	dB	cm	deg	
1	5324.76	95.73			89.87	6.43	34.34	34.91	Average			109	237	HORIZONTAL
2	5325.63	107.57			101.71	6.43	34.34	34.91	Peak			109	237	HORIZONTAL
3	5350.00	52.80	54.00	-1.20	46.85	6.47	34.39	34.91	Average			109	237	HORIZONTAL
4	5352.60	69.71	74.00	-4.29	63.76	6.47	34.39	34.91	Peak			109	237	HORIZONTAL

Item 1, 2 are the fundamental frequency at 5310 MHz.

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT40 CH 102, 110, 134 / Chain 1 + Chain 2
<b>Test Date</b>	Sep. 24, 2014		

### Channel 102

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	5460.00	48.29	54.00	-5.71	42.08	6.60	34.53	34.92	Average	102	153	VERTICAL
2	5460.00	63.22	74.00	-10.78	57.01	6.60	34.53	34.92	Peak	102	153	VERTICAL
3	5467.40	69.07	74.00	-4.93	62.84	6.60	34.55	34.92	Peak	102	153	VERTICAL
4	5470.00	52.99	54.00	-1.01	46.76	6.60	34.55	34.92	Average	102	153	VERTICAL
5	5492.63	93.08			86.79	6.63	34.58	34.92	Average	102	153	VERTICAL
6	5513.18	106.59			100.26	6.65	34.60	34.92	Peak	102	153	VERTICAL

Item 5, 6 are the fundamental frequency at 5510 MHz.

### Channel 110

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	5460.00	51.22	54.00	-2.78	45.01	6.60	34.53	34.92	Average	125	248	HORIZONTAL
2	5460.00	65.87	74.00	-8.13	59.66	6.60	34.53	34.92	Peak	125	248	HORIZONTAL
3	5468.26	68.31	74.00	-5.69	62.08	6.60	34.55	34.92	Peak	125	248	HORIZONTAL
4	5470.00	52.64	54.00	-1.36	46.41	6.60	34.55	34.92	Average	125	248	HORIZONTAL
5	5564.33	112.28			105.89	6.70	34.62	34.93	Peak	125	248	HORIZONTAL
6	5564.76	102.03			95.63	6.70	34.63	34.93	Average	125	248	HORIZONTAL

Item 5, 6 are the fundamental frequency at 5550 MHz.

### Channel 134

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	5657.55	101.54			95.02	6.79	34.66	34.93	Average	100	176	VERTICAL
2	5661.32	111.78			105.26	6.79	34.66	34.93	Peak	100	176	VERTICAL
3	5725.00	52.86	54.00	-1.14	46.28	6.83	34.69	34.94	Average	100	176	VERTICAL
4	5731.66	68.32	74.00	-5.68	61.71	6.86	34.69	34.94	Peak	100	176	VERTICAL

Item 1, 2 are the fundamental frequency at 5670 MHz.



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11a CH 36, 40, 48 / Chain 1 + Chain 2
Test Date	Sep. 24, 2014		

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable			Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Antenna Factor	dB			cm	deg	
1	5147.80	70.41	74.00	-3.59	65.00	6.21	34.11	34.91	Peak		127	235	HORIZONTAL
2	5150.00	52.99	54.00	-1.01	47.58	6.21	34.11	34.91	Average		127	235	HORIZONTAL
3	5182.40	111.93			106.44	6.24	34.16	34.91	Peak		127	235	HORIZONTAL
4	5185.60	100.65			95.16	6.24	34.16	34.91	Average		127	235	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5180 MHz.

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable			Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Antenna Factor	dB			cm	deg	
1	5144.80	68.73	74.00	-5.27	63.32	6.21	34.11	34.91	Peak		136	247	HORIZONTAL
2	5150.00	52.85	54.00	-1.15	47.44	6.21	34.11	34.91	Average		136	247	HORIZONTAL
3	5204.80	117.86			112.32	6.27	34.18	34.91	Peak		136	247	HORIZONTAL
4	5205.60	106.61			101.07	6.27	34.18	34.91	Average		136	247	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5200 MHz.

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable			Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Antenna Factor	dB			cm	deg	
1	5079.60	52.84	54.00	-1.16	47.61	6.11	34.02	34.90	Average		125	252	HORIZONTAL
2	5137.20	64.46	74.00	-9.54	59.11	6.17	34.09	34.91	Peak		125	252	HORIZONTAL
3	5242.40	118.81			113.17	6.30	34.25	34.91	Peak		125	252	HORIZONTAL
4	5244.00	109.01			103.37	6.30	34.25	34.91	Average		125	252	HORIZONTAL
5	5359.60	60.94	74.00	-13.06	54.99	6.47	34.39	34.91	Peak		125	252	HORIZONTAL
6	5360.40	50.97	54.00	-3.03	45.02	6.47	34.39	34.91	Average		125	252	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5240 MHz.



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11a CH 52, 60, 64 / Chain 1 + Chain 2
Test Date	Sep. 24, 2014		

### Channel 52

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			dB	dBuV	dB		cm	deg	
1	5119.60	50.24	54.00	-3.76	44.92	6.17	34.06	34.91	Average	102	233	HORIZONTAL
2	5141.20	60.37	74.00	-13.63	55.00	6.17	34.11	34.91	Peak	102	233	HORIZONTAL
3	5263.20	108.20			102.50	6.34	34.27	34.91	Average	102	233	HORIZONTAL
4	5267.20	119.05			113.35	6.34	34.27	34.91	Peak	102	233	HORIZONTAL
5	5352.40	65.44	74.00	-8.56	59.49	6.47	34.39	34.91	Peak	102	233	HORIZONTAL
6	5359.60	51.41	54.00	-2.59	45.46	6.47	34.39	34.91	Average	102	233	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5260 MHz.

### Channel 60

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			dB	dBuV	dB		cm	deg	
1	5295.60	106.61			100.83	6.37	34.32	34.91	Average	134	239	HORIZONTAL
2	5296.40	117.15			111.37	6.37	34.32	34.91	Peak	134	239	HORIZONTAL
3	5350.00	52.99	54.00	-1.01	47.04	6.47	34.39	34.91	Average	134	239	HORIZONTAL
4	5350.80	70.41	74.00	-3.59	64.46	6.47	34.39	34.91	Peak	134	239	HORIZONTAL

Item 1, 2 are the fundamental frequency at 5300 MHz.

### Channel 64

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			dB	dBuV	dB		cm	deg	
1	5326.00	112.52			106.66	6.43	34.34	34.91	Peak	117	241	HORIZONTAL
2	5326.80	102.29			96.40	6.43	34.37	34.91	Average	117	241	HORIZONTAL
3	5350.00	52.43	54.00	-1.57	46.48	6.47	34.39	34.91	Average	117	241	HORIZONTAL
4	5351.20	69.87	74.00	-4.13	63.92	6.47	34.39	34.91	Peak	117	241	HORIZONTAL

Item 1, 2 are the fundamental frequency at 5320 MHz.



<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11a CH 100, 116, 140 / Chain 1 + Chain 2
<b>Test Date</b>	Sep. 24, 2014		

**Channel 100**

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	5418.40	49.47	54.00	-4.53	43.38	6.53	34.48	34.92	Average	116	172	VERTICAL
2	5419.20	62.09	74.00	-11.91	56.00	6.53	34.48	34.92	Peak	116	172	VERTICAL
3	5467.60	70.10	74.00	-3.90	63.87	6.60	34.55	34.92	Peak	116	172	VERTICAL
4	5470.00	52.91	54.00	-1.09	46.68	6.60	34.55	34.92	Average	116	172	VERTICAL
5	5503.20	105.13			98.80	6.65	34.60	34.92	Average	116	172	VERTICAL
6	5504.00	114.59			108.26	6.65	34.60	34.92	Peak	116	172	VERTICAL

Item 5, 6 are the fundamental frequency at 5500 MHz.

**Channel 116**

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	5360.00	49.43	54.00	-4.57	43.48	6.47	34.39	34.91	Average	130	234	HORIZONTAL
2	5459.00	59.81	74.00	-14.19	53.60	6.60	34.53	34.92	Peak	130	234	HORIZONTAL
3	5461.00	58.18	74.00	-15.82	51.97	6.60	34.53	34.92	Peak	130	234	HORIZONTAL
4	5470.00	47.52	54.00	-6.48	41.29	6.60	34.55	34.92	Average	130	234	HORIZONTAL
5	5574.00	108.75			102.35	6.70	34.63	34.93	Average	130	234	HORIZONTAL
6	5585.00	118.36			111.94	6.72	34.63	34.93	Peak	130	234	HORIZONTAL
7	5736.00	46.84	54.00	-7.16	40.22	6.86	34.70	34.94	Average	130	234	HORIZONTAL
8	5755.00	58.22	74.00	-15.78	51.60	6.86	34.70	34.94	Peak	130	234	HORIZONTAL

Item 5, 6 are the fundamental frequency at 5580 MHz.

**Channel 140**

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	5706.40	103.50			96.93	6.83	34.68	34.94	Average	100	172	VERTICAL
2	5706.40	113.10			106.53	6.83	34.68	34.94	Peak	100	172	VERTICAL
3	5726.20	70.84	74.00	-3.16	64.26	6.83	34.69	34.94	Peak	100	172	VERTICAL
4	5726.60	52.82	54.00	-1.18	46.24	6.83	34.69	34.94	Average	100	172	VERTICAL

Item 1, 2 are the fundamental frequency at 5700 MHz.

**Note:**

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

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

**For 3TX**

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 20, 2014		

**Channel 36**

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			T/Pos	A/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB		dBuV	dB	dB/m	dB		deg	cm
1	5150.00	69.13	74.00	-4.87	66.18	4.34	33.14	34.53	Peak	22	131 VERTICAL
2	5150.00	52.77	54.00	-1.23	49.82	4.34	33.14	34.53	Average	22	131 VERTICAL
3	5173.75	116.77			113.75	4.36	33.19	34.53	Peak	22	131 VERTICAL
4	5173.75	107.29			104.27	4.36	33.19	34.53	Average	22	131 VERTICAL

Item 3, 4 are the fundamental frequency at 5180 MHz.

**Channel 40**

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			T/Pos	A/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB		dBuV	dB	dB/m	dB		deg	cm
1	5150.00	69.69	74.00	-4.31	66.74	4.34	33.14	34.53	Peak	18	123 VERTICAL
2	5150.00	52.39	54.00	-1.61	49.44	4.34	33.14	34.53	Average	18	123 VERTICAL
3	5193.59	121.24			118.18	4.37	33.22	34.53	Peak	18	123 VERTICAL
4	5194.39	110.34			107.28	4.37	33.22	34.53	Average	18	123 VERTICAL

Item 3, 4 are the fundamental frequency at 5200 MHz.

**Channel 48**

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			T/Pos	A/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB		dBuV	dB	dB/m	dB		deg	cm
1	5149.20	65.34	74.00	-8.66	62.39	4.34	33.14	34.53	Peak	19	119 VERTICAL
2	5150.00	52.56	54.00	-1.44	49.61	4.34	33.14	34.53	Average	19	119 VERTICAL
3	5239.20	122.62			119.49	4.39	33.27	34.53	Peak	19	119 VERTICAL
4	5248.81	113.87			110.70	4.40	33.30	34.53	Average	19	119 VERTICAL

Item 3, 4 are the fundamental frequency at 5240 MHz.

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT20 CH 52, 60, 64 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 20, 2014		

### Channel 52

Freq MHz	Level dBuV/m	Limit		Over Limit	Read Level	CableAntenna Preamp			T/Pos deg	A/Pos cm	Pol/Phase
		Line	dB			Cable Loss	Antenna Factor	Preamp Factor			
1 5079.49	52.55	54.00	-1.45	49.75	4.30	33.03	34.53	Average	21	123	VERTICAL
2 5130.77	60.78	74.00	-13.22	57.87	4.33	33.11	34.53	Peak	21	123	VERTICAL
3 5268.01	123.24			120.02	4.42	33.33	34.53	Peak	21	123	VERTICAL
4 5268.01	113.92			110.70	4.42	33.33	34.53	Average	21	123	VERTICAL
5 5350.00	61.60	74.00	-12.40	58.20	4.47	33.46	34.53	Peak	21	123	VERTICAL
6 5350.00	51.32	54.00	-2.68	47.92	4.47	33.46	34.53	Average	21	123	VERTICAL

Item 3, 4 are the fundamental frequency at 5260 MHz.

### Channel 60

Freq MHz	Level dBuV/m	Limit		Over Limit	Read Level	CableAntenna Preamp			T/Pos deg	A/Pos cm	Pol/Phase
		Line	dB			Cable Loss	Antenna Factor	Preamp Factor			
1 5079.49	59.11	74.00	-14.89	56.31	4.30	33.03	34.53	Peak	22	120	VERTICAL
2 5079.49	52.39	54.00	-1.61	49.59	4.30	33.03	34.53	Average	22	120	VERTICAL
3 5308.01	120.65			117.36	4.44	33.38	34.53	Peak	22	120	VERTICAL
4 5308.01	109.65			106.36	4.44	33.38	34.53	Average	22	120	VERTICAL
5 5350.00	69.64	74.00	-4.36	66.24	4.47	33.46	34.53	Peak	22	120	VERTICAL
6 5350.00	52.43	54.00	-1.57	49.03	4.47	33.46	34.53	Average	22	120	VERTICAL

Item 3, 4 are the fundamental frequency at 5300 MHz.

### Channel 64

Freq MHz	Level dBuV/m	Limit		Over Limit	Read Level	CableAntenna Preamp			T/Pos deg	A/Pos cm	Pol/Phase
		Line	dB			Cable Loss	Antenna Factor	Preamp Factor			
1 5079.49	59.73	74.00	-14.27	56.93	4.30	33.03	34.53	Peak	22	121	VERTICAL
2 5079.49	51.84	54.00	-2.16	49.04	4.30	33.03	34.53	Average	22	121	VERTICAL
3 5328.01	116.86			113.50	4.46	33.43	34.53	Peak	22	121	VERTICAL
4 5328.01	105.89			102.53	4.46	33.43	34.53	Average	22	121	VERTICAL
5 5350.00	72.60	74.00	-1.40	69.20	4.47	33.46	34.53	Peak	22	121	VERTICAL
6 5350.00	52.54	54.00	-1.46	49.14	4.47	33.46	34.53	Average	22	121	VERTICAL

Item 3, 4 are the fundamental frequency at 5320 MHz.



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT20 CH 100, 116, 140 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 20, 2014		

### Channel 100

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			T/Pos	A/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
1	5412.72	45.30	54.00	-8.70	41.74	4.52	33.57	34.53	Average	23	127 HORIZONTAL
2	5460.00	61.76	74.00	-12.24	58.13	4.54	33.62	34.53	Peak	23	127 HORIZONTAL
3	5470.00	72.12	74.00	-1.88	68.45	4.55	33.65	34.53	Peak	23	127 HORIZONTAL
4	5470.00	52.70	54.00	-1.30	49.03	4.55	33.65	34.53	Average	23	127 HORIZONTAL
5	5492.79	100.30			96.60	4.56	33.67	34.53	Average	23	127 HORIZONTAL
6	5493.59	111.80			108.10	4.56	33.67	34.53	Peak	23	127 HORIZONTAL

Item 5, 6 are the fundamental frequency at 5500 MHz.

### Channel 116

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			T/Pos	A/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
1	5453.97	63.61	74.00	-10.39	59.98	4.54	33.62	34.53	Peak	327	120 VERTICAL
2	5470.00	48.52	54.00	-5.48	44.85	4.55	33.65	34.53	Average	327	120 VERTICAL
3	5573.59	113.32			109.33	4.62	33.91	34.54	Average	327	120 VERTICAL
4	5586.41	123.66			119.62	4.63	33.96	34.55	Peak	327	120 VERTICAL

Item 3, 4 are the fundamental frequency at 5580 MHz.

### Channel 140

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			T/Pos	A/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
1	5694.39	104.40			100.00	4.70	34.27	34.57	Average	13	100 VERTICAL
2	5695.19	115.73			111.33	4.70	34.27	34.57	Peak	13	100 VERTICAL
3	5725.00	72.77	74.00	-1.23	68.26	4.72	34.37	34.58	Peak	13	100 VERTICAL
4	5725.00	52.45	54.00	-1.55	47.94	4.72	34.37	34.58	Average	13	100 VERTICAL

Item 1, 2 are the fundamental frequency at 5700 MHz.



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 38, 46 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 21, 2014 ~ Sep. 24, 2014		

**Channel 38**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Freq	Line			Loss	Factor	Factor			
1	5142.40	69.61	74.00	-4.39	64.70	6.13	33.98	35.20	Peak	128	25 VERTICAL
2	5150.00	52.82	54.00	-1.18	47.88	6.13	34.01	35.20	Average	128	25 VERTICAL
3	5197.60	99.96			94.89	6.16	34.11	35.20	Average	128	25 VERTICAL
4	5205.60	111.18			106.11	6.16	34.11	35.20	Peak	128	25 VERTICAL

Item 3, 4 are the fundamental frequency at 5190 MHz.

**Channel 46**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Freq	Line			Loss	Factor	Factor			
1	5079.30	52.82	54.00	-1.18	48.06	6.09	33.87	35.20	Average	122	23 VERTICAL
2	5149.30	71.48	74.00	-2.52	66.54	6.13	34.01	35.20	Peak	122	23 VERTICAL
3	5246.10	108.39			103.17	6.20	34.22	35.20	Average	122	23 VERTICAL
4	5246.80	117.74			112.52	6.20	34.22	35.20	Peak	122	23 VERTICAL

Item 3, 4 are the fundamental frequency at 5230 MHz.



Temperature	26°C	Humidity	68%
Test Engineer	Mars Lin	Configurations	IEEE 802.11n MCS0 HT40 CH 54, 62 / Chain 1 + Chain 2 + Chain 3
Test Date	Sep. 21, 2014 ~ Sep. 24, 2014		

**Channel 54**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBmV/m			Cable Loss	Antenna Factor	Preamp Factor			
1	5079.60	52.94	54.00	-1.06	48.18	6.09	33.87	35.20	Average	122	23 VERTICAL
2	5147.60	59.09	74.00	-14.91	54.15	6.13	34.01	35.20	Peak	122	23 VERTICAL
3	5256.40	105.01			99.79	6.20	34.22	35.20	Average	122	23 VERTICAL
4	5256.40	114.54			109.32	6.20	34.22	35.20	Peak	122	23 VERTICAL
5	5354.80	63.63	74.00	-10.37	58.15	6.26	34.42	35.20	Peak	122	23 VERTICAL
6	5440.40	52.61	54.00	-1.39	46.89	6.32	34.60	35.20	Average	122	23 VERTICAL

Item 3, 4 are the fundamental frequency at 5270 MHz.

**Channel 62**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBmV/m			Cable Loss	Antenna Factor	Preamp Factor			
1	5080.00	52.60	54.00	-1.40	47.84	6.09	33.87	35.20	Average	111	24 VERTICAL
2	5080.00	60.10	74.00	-13.90	55.34	6.09	33.87	35.20	Peak	111	24 VERTICAL
3	5327.00	101.53			96.12	6.25	34.36	35.20	Average	111	24 VERTICAL
4	5327.00	110.99			105.58	6.25	34.36	35.20	Peak	111	24 VERTICAL
5	5350.00	52.89	54.00	-1.11	47.41	6.26	34.42	35.20	Average	111	24 VERTICAL
6	5350.00	69.50	74.00	-4.50	64.02	6.26	34.42	35.20	Peak	111	24 VERTICAL

Item 3, 4 are the fundamental frequency at 5310 MHz.

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11n MCS0 HT40 CH 102, 110, 134 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 21, 2014 ~ Sep. 24, 2014		

### Channel 102

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	5440.00	49.88	54.00	-4.12	44.16	6.32	34.60	35.20	Average	116	330	VERTICAL
2	5460.00	62.48	74.00	-11.52	56.72	6.33	34.63	35.20	Peak	116	330	VERTICAL
3	5469.60	66.97	68.20	-1.23	61.16	6.34	34.67	35.20	Peak	116	330	VERTICAL
4	5514.40	98.59			92.71	6.37	34.71	35.20	Average	116	330	VERTICAL
5	5515.20	108.54			102.66	6.37	34.71	35.20	Peak	116	330	VERTICAL

Item 4, 5 are the fundamental frequency at 5510 MHz.

### Channel 110

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	5456.00	51.59	54.00	-2.41	45.83	6.33	34.63	35.20	Average	111	11	VERTICAL
2	5456.00	67.69	74.00	-6.31	61.93	6.33	34.63	35.20	Peak	111	11	VERTICAL
3	5470.00	66.65	68.20	-1.55	60.84	6.34	34.67	35.20	Peak	111	11	VERTICAL
4	5558.00	107.22			101.29	6.38	34.75	35.20	Average	111	11	VERTICAL
5	5558.00	117.82			111.89	6.38	34.75	35.20	Peak	111	11	VERTICAL

Item 4, 5 are the fundamental frequency at 5550 MHz.

### Channel 134

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	5654.80	115.61			109.56	6.42	34.83	35.20	Peak	117	17	VERTICAL
2	5655.60	105.48			99.43	6.42	34.83	35.20	Average	117	17	VERTICAL
3	5725.00	69.81	74.00	-4.19	63.67	6.45	34.89	35.20	Peak	117	17	VERTICAL
4	5733.00	52.32	54.00	-1.68	46.18	6.45	34.89	35.20	Average	117	17	VERTICAL

Item 1, 2 are the fundamental frequency at 5670 MHz.

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11a CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 20, 2014		

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			T/Pos	A/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB		dBuV	dB	dB/m	dB	deg	cm	
1	5149.04	72.74	74.00	-1.26	69.79	4.34	33.14	34.53	Peak	16	129 VERTICAL
2	5150.00	50.45	54.00	-3.55	47.50	4.34	33.14	34.53	Average	16	129 VERTICAL
3	5179.36	114.81			111.79	4.36	33.19	34.53	Peak	16	129 VERTICAL
4	5179.36	103.11			100.09	4.36	33.19	34.53	Average	16	129 VERTICAL

Item 3, 4 are the fundamental frequency at 5180 MHz.

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			T/Pos	A/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB		dBuV	dB	dB/m	dB	deg	cm	
1	5079.49	52.78	54.00	-1.22	49.98	4.30	33.03	34.53	Average	25	125 VERTICAL
2	5149.20	71.30	74.00	-2.70	68.35	4.34	33.14	34.53	Peak	25	125 VERTICAL
3	5199.20	120.06			117.00	4.37	33.22	34.53	Peak	25	125 VERTICAL
4	5199.20	109.54			106.48	4.37	33.22	34.53	Average	25	125 VERTICAL

Item 3, 4 are the fundamental frequency at 5200 MHz.

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			T/Pos	A/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB		dBuV	dB	dB/m	dB	deg	cm	
1	5079.49	52.74	54.00	-1.26	49.94	4.30	33.03	34.53	Average	18	113 VERTICAL
2	5145.19	63.38	74.00	-10.62	60.43	4.34	33.14	34.53	Peak	18	113 VERTICAL
3	5235.19	122.89			119.76	4.39	33.27	34.53	Peak	18	113 VERTICAL
4	5244.81	114.25			111.08	4.40	33.30	34.53	Average	18	113 VERTICAL

Item 3, 4 are the fundamental frequency at 5240 MHz.

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11a CH 52, 60, 64 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 20, 2014		

### Channel 52

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			T/Pos	A/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
1	5101.12	61.82	74.00	-12.18	58.98	4.31	33.06	34.53	Peak	21	115 VERTICAL
2	5119.55	52.94	54.00	-1.06	50.06	4.32	33.09	34.53	Average	21	115 VERTICAL
3	5259.20	123.91			120.69	4.42	33.33	34.53	Peak	21	115 VERTICAL
4	5259.20	115.48			112.26	4.42	33.33	34.53	Average	21	115 VERTICAL
5	5350.00	64.39	74.00	-9.61	60.99	4.47	33.46	34.53	Peak	21	115 VERTICAL
6	5350.00	52.75	54.00	-1.25	49.35	4.47	33.46	34.53	Average	21	115 VERTICAL

Item 3, 4 are the fundamental frequency at 5260 MHz.

### Channel 60

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			T/Pos	A/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
1	5079.49	60.64	74.00	-13.36	57.84	4.30	33.03	34.53	Peak	20	114 VERTICAL
2	5079.49	52.18	54.00	-1.82	49.38	4.30	33.03	34.53	Average	20	114 VERTICAL
3	5299.20	120.41			117.12	4.44	33.38	34.53	Peak	20	114 VERTICAL
4	5299.20	109.68			106.39	4.44	33.38	34.53	Average	20	114 VERTICAL
5	5350.00	69.56	74.00	-4.44	66.16	4.47	33.46	34.53	Peak	20	114 VERTICAL
6	5350.00	52.79	54.00	-1.21	49.39	4.47	33.46	34.53	Average	20	114 VERTICAL

Item 3, 4 are the fundamental frequency at 5300 MHz.

### Channel 64

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			T/Pos	A/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
1	5318.72	117.05			113.72	4.45	33.41	34.53	Peak	329	119 VERTICAL
2	5319.36	105.80			102.47	4.45	33.41	34.53	Average	329	119 VERTICAL
3	5350.00	72.88	74.00	-1.12	69.48	4.47	33.46	34.53	Peak	329	119 VERTICAL
4	5350.00	52.58	54.00	-1.42	49.18	4.47	33.46	34.53	Average	329	119 VERTICAL
5	5480.03	63.26	68.20	-4.94	59.56	4.56	33.67	34.53	Peak	329	119 VERTICAL

Item 1, 2 are the fundamental frequency at 5320 MHz.

<b>Temperature</b>	26°C	<b>Humidity</b>	68%
<b>Test Engineer</b>	Mars Lin	<b>Configurations</b>	IEEE 802.11a CH 100, 116, 140 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Sep. 20, 2014		

### Channel 100

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			T/Pos	A/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
1	5460.00	63.20	74.00	-10.80	59.57	4.54	33.62	34.53	Peak	329	121 VERTICAL
2	5460.00	49.52	54.00	-4.48	45.89	4.54	33.62	34.53	Average	329	121 VERTICAL
3	5469.36	72.42	74.00	-1.58	68.75	4.55	33.65	34.53	Peak	329	121 VERTICAL
4	5470.00	51.96	54.00	-2.04	48.29	4.55	33.65	34.53	Average	329	121 VERTICAL
5	5498.40	116.95			113.21	4.57	33.70	34.53	Peak	329	121 VERTICAL
6	5498.72	105.21			101.47	4.57	33.70	34.53	Average	329	121 VERTICAL

Item 5, 6 are the fundamental frequency at 5500 MHz.

### Channel 116

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			T/Pos	A/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
1	5452.79	61.92	74.00	-12.08	58.29	4.54	33.62	34.53	Peak	330	118 VERTICAL
2	5452.79	51.19	54.00	-2.81	47.56	4.54	33.62	34.53	Average	330	118 VERTICAL
3	5468.40	63.69	74.00	-10.31	60.02	4.55	33.65	34.53	Peak	330	118 VERTICAL
4	5468.40	50.51	54.00	-3.49	46.84	4.55	33.65	34.53	Average	330	118 VERTICAL
5	5579.20	125.78			121.80	4.62	33.91	34.55	Peak	330	118 VERTICAL
6	5579.20	115.72			111.74	4.62	33.91	34.55	Average	330	118 VERTICAL

Item 5, 6 are the fundamental frequency at 5580 MHz.

### Channel 140

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			T/Pos	A/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
1	5696.80	105.39			100.99	4.70	34.27	34.57	Average	333	108 VERTICAL
2	5706.41	116.68			112.23	4.71	34.32	34.58	Peak	333	108 VERTICAL
3	5725.00	51.23	54.00	-2.77	46.72	4.72	34.37	34.58	Average	333	108 VERTICAL
4	5726.60	72.37	74.00	-1.63	67.86	4.72	34.37	34.58	Peak	333	108 VERTICAL

Item 1, 2 are the fundamental frequency at 5700 MHz.

#### Note:

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

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

## 4.6. Antenna Requirements

### 4.6.1. Limit

Except for special regulations, the Low-power Radio-frequency Devices must not be equipped with any jacket for installing an antenna with extension cable. An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

### 4.6.2. Antenna Connector Construction

Please refer to section 3.3 in this test report; antenna connector complied with the requirements.

## 5. LIST OF MEASURING EQUIPMENTS

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Horn Antenna	EMCO	3115	00075790	750MHz~18GHz	Oct. 28, 2014	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 22, 2014	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8447D	2944A10991	0.1MHz ~ 1.3GHz	Nov. 12, 2013	Radiation (03CH01-CB)
Pre-Amplifier	WM	TF-130N-R1	923365	26GHz ~ 40GHz	Oct. 23, 2013	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSP40	100019	9kHz~40GHz	Dec. 02, 2013	Radiation (03CH01-CB)
Turn Table	INN CO	CO 2000	N/A	0 ~ 360 degree	N.C.R.	Radiation (03CH01-CB)
Antenna Mast	INN CO	CO 2000	N/A	1 m - 4 m	N.C.R.	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-3	N/A	1 GHz - 40 GHz	Nov. 17, 2013	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-4	N/A	1 GHz - 40 GHz	Nov. 17, 2013	Radiation (03CH01-CB)
Signal analyzer	R&S	FSV40	100979	9kHz~40GHz	Nov. 29, 2013	Conducted (TH01-CB)
RF Cable-high	Woken	High Cable-7	-	1 GHz – 26.5 GHz	Nov. 17, 2013	Conducted (TH01-CB)
RF Cable-high	Woken	High Cable-8	-	1 GHz – 26.5 GHz	Nov. 17, 2013	Conducted (TH01-CB)
RF Cable-high	Woken	High Cable-9	-	1 GHz – 26.5 GHz	Nov. 17, 2013	Conducted (TH01-CB)
RF Cable-high	Woken	High Cable-10	-	1 GHz – 26.5 GHz	Nov. 17, 2013	Conducted (TH01-CB)
RF Cable-high	Woken	High Cable-11	-	1 GHz – 26.5 GHz	Nov. 17, 2013	Conducted (TH01-CB)
Power Sensor	Agilent	E9327A	US40442088	50MHz~18GHz	Dec. 02, 2013	Conducted (TH01-CB)
Power Meter	Agilent	E4416A	GB41291199	50MHz~18GHz	Dec. 02, 2013	Conducted (TH01-CB)

Note: Calibration Interval of instruments listed above is one year.

NCR means Non-Calibration required.

## 6. MEASUREMENT UNCERTAINTY

Test Items	Uncertainty	Remark
Radiated Emission (1GHz ~ 18GHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.7 dB	Confidence levels of 95%