



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 40MHz Ch 110 / Port 1 + Port 2 (2TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 9

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	11100.45	50.86	74.00	-23.14	42.57	5.03	38.40	35.14	Peak	100	263	HORIZONTAL
2	11100.57	37.70	54.00	-16.30	29.41	5.03	38.40	35.14	Average	100	263	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	11100.43	38.40	54.00	-15.60	30.11	5.03	38.40	35.14	Average	100	182	VERTICAL
2	11100.55	50.53	74.00	-23.47	42.24	5.03	38.40	35.14	Peak	100	182	VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 40MHz Ch 134 / Port 1 + Port 2 (2TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 9

Horizontal

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	11338.16	49.32	74.00	-24.68	40.85	5.08	38.63	35.24 Peak	100	116	HORIZONTAL
2	11339.12	37.15	54.00	-16.85	28.68	5.08	38.63	35.24 Average	100	116	HORIZONTAL

Vertical

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	11338.52	37.10	54.00	-16.90	28.63	5.08	38.63	35.24 Average	100	256	VERTICAL
2	11338.84	50.17	74.00	-23.83	41.70	5.08	38.63	35.24 Peak	100	256	VERTICAL

Note:

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

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

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



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11a Ch 52 / Port 1 + Port 2 (2TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 9

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	15775.80	38.12	54.00	-15.88	29.98	6.14	37.42	35.42 Average	100	20	HORIZONTAL
2	15782.56	52.43	74.00	-21.57	44.30	6.14	37.41	35.42 Peak	100	20	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	15775.78	37.61	54.00	-16.39	29.47	6.14	37.42	35.42 Average	100	242	VERTICAL
2	15780.86	51.44	74.00	-22.56	43.31	6.14	37.41	35.42 Peak	100	242	VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11a Ch 60 / Port 1 + Port 2 (2TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 9

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	10601.72	36.76	54.00	-17.24	28.79	5.01	38.38	35.42	Average	137	293	HORIZONTAL
2	10601.86	51.40	74.00	-22.60	43.43	5.01	38.38	35.42	Peak	137	293	HORIZONTAL
3	15901.18	51.96	74.00	-22.04	43.96	6.15	37.29	35.44	Peak	119	321	HORIZONTAL
4	15901.42	38.65	54.00	-15.35	30.65	6.15	37.29	35.44	Average	119	321	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	10602.62	35.70	54.00	-18.30	27.73	5.01	38.38	35.42	Average	119	72	VERTICAL
2	10602.76	50.14	74.00	-23.86	42.17	5.01	38.38	35.42	Peak	119	72	VERTICAL
3	15904.06	51.54	74.00	-22.46	43.54	6.15	37.29	35.44	Peak	100	0	VERTICAL
4	15904.08	38.04	54.00	-15.96	30.04	6.15	37.29	35.44	Average	100	0	VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11a Ch 64 / Port 1 + Port 2 (2TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 9

Horizontal

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	10636.94	52.63	74.00	-21.37	44.64	5.01	38.37	35.39	Peak	126	61 HORIZONTAL
2	10641.88	37.93	54.00	-16.07	29.94	5.01	38.37	35.39	Average	126	61 HORIZONTAL
3	15955.04	53.10	74.00	-20.90	45.16	6.15	37.23	35.44	Peak	100	29 HORIZONTAL
4	15958.86	38.61	54.00	-15.39	30.67	6.15	37.23	35.44	Average	100	29 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	10641.68	49.53	74.00	-24.47	41.54	5.01	38.37	35.39	Peak	100	320 VERTICAL
2	10642.20	35.58	54.00	-18.42	27.59	5.01	38.37	35.39	Average	100	320 VERTICAL
3	15956.14	37.72	54.00	-16.28	29.78	6.15	37.23	35.44	Average	100	60 VERTICAL
4	15961.40	51.68	74.00	-22.32	43.74	6.15	37.23	35.44	Peak	100	60 VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11a Ch 100 / Port 1 + Port 2 (2TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 9

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	11000.34	39.12	54.00	-14.88	30.89	5.01	38.32	35.10	Average	140	66	HORIZONTAL
2	11000.84	53.32	74.00	-20.68	45.09	5.01	38.32	35.10	Peak	140	66	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	10999.64	35.33	54.00	-18.67	27.12	5.01	38.30	35.10	Average	100	350	VERTICAL
2	11000.96	49.60	74.00	-24.40	41.39	5.01	38.30	35.10	Peak	100	350	VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11a Ch 116 / Port 1 + Port 2 (2TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 9

Horizontal

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11158.24	49.12	74.00	-24.88	40.80	5.04	38.45	35.17 Peak	100	299	HORIZONTAL
2	11159.04	35.49	54.00	-18.51	27.15	5.04	38.47	35.17 Average	100	299	HORIZONTAL

Vertical

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11159.12	51.01	74.00	-22.99	42.67	5.04	38.47	35.17 Peak	124	93	VERTICAL
2	11159.34	37.41	54.00	-16.59	29.07	5.04	38.47	35.17 Average	124	93	VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11a Ch 140 / Port 1 + Port 2 (2TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 9

Horizontal

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	11399.94	35.91	54.00	-18.09	27.36	5.10	38.70	35.25 Average	100	67	HORIZONTAL
2	11402.46	49.89	74.00	-24.11	41.34	5.10	38.70	35.25 Peak	100	67	HORIZONTAL

Vertical

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	11399.92	36.90	54.00	-17.10	28.35	5.10	38.70	35.25 Average	100	272	VERTICAL
2	11400.90	50.62	74.00	-23.38	42.07	5.10	38.70	35.25 Peak	100	272	VERTICAL

Note:

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

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

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



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 20MHz Ch 52 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 12

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	15786.09	37.37	54.00	-16.63	29.24	6.14	37.41	35.42	Average	100	86	HORIZONTAL
2	15787.29	50.73	74.00	-23.27	42.60	6.14	37.41	35.42	Peak	100	86	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	15769.42	37.24	54.00	-16.76	29.10	6.14	37.42	35.42	Average	100	142	VERTICAL
2	15778.32	50.80	74.00	-23.20	42.67	6.14	37.41	35.42	Peak	100	142	VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 20MHz Ch 60 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 12

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	10614.82	49.33	74.00	-24.67	41.36	5.01	38.38	35.42	Peak	100	185	HORIZONTAL
2	10622.28	36.27	54.00	-17.73	28.30	5.01	38.38	35.42	Average	100	185	HORIZONTAL
3	15886.70	37.01	54.00	-16.99	29.00	6.15	37.30	35.44	Average	100	89	HORIZONTAL
4	15888.46	50.53	74.00	-23.47	42.52	6.15	37.30	35.44	Peak	100	89	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	10610.74	49.74	74.00	-24.26	41.77	5.01	38.38	35.42	Peak	100	307	VERTICAL
2	10622.20	36.24	54.00	-17.76	28.27	5.01	38.38	35.42	Average	100	307	VERTICAL
3	15879.25	37.04	54.00	-16.96	29.04	6.14	37.30	35.44	Average	100	191	VERTICAL
4	15886.14	50.73	74.00	-23.27	42.72	6.15	37.30	35.44	Peak	100	191	VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 20MHz Ch 64 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 12

Horizontal

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
1	10619.65	49.24	74.00	-24.76	41.27	5.01	38.38	35.42	Peak	100	146 HORIZONTAL
2	10633.35	36.25	54.00	-17.75	28.26	5.01	38.37	35.39	Average	100	146 HORIZONTAL
3	15943.17	50.35	74.00	-23.65	42.39	6.15	37.25	35.44	Peak	100	229 HORIZONTAL
4	15949.10	37.27	54.00	-16.73	29.33	6.15	37.23	35.44	Average	100	229 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	10621.49	36.29	54.00	-17.71	28.32	5.01	38.38	35.42	Average	100	34 VERTICAL
2	10640.72	49.80	74.00	-24.20	41.81	5.01	38.37	35.39	Peak	100	34 VERTICAL
3	15947.58	37.23	54.00	-16.77	29.29	6.15	37.23	35.44	Average	100	315 VERTICAL
4	15960.88	49.79	74.00	-24.21	41.85	6.15	37.23	35.44	Peak	100	315 VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 20MHz Ch 100 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 12

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	10975.16	49.87	74.00	-24.13	41.68	5.01	38.30	35.12	Peak	100	156	HORIZONTAL
2	10981.73	36.39	54.00	-17.61	28.18	5.01	38.30	35.10	Average	100	156	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	10998.88	36.42	54.00	-17.58	28.21	5.01	38.30	35.10	Average	100	73	VERTICAL
2	11003.13	49.91	74.00	-24.09	41.70	5.01	38.30	35.10	Peak	100	73	VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 20MHz Ch 116 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 12

Horizontal

Freq	Level	Limit		Over Line Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	11159.84	38.18	54.00	-15.82	29.84	5.04	38.47	35.17	Average	100	287	HORIZONTAL
2	11162.16	51.43	74.00	-22.57	43.08	5.05	38.47	35.17	Peak	100	287	HORIZONTAL

Vertical

Freq	Level	Limit		Over Line Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	11147.34	53.49	74.00	-20.51	45.16	5.04	38.45	35.16	Peak	100	0	VERTICAL
2	11160.88	40.28	54.00	-13.72	31.94	5.04	38.47	35.17	Average	100	0	VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 20MHz Ch 140 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 12

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	11387.18	50.01	74.00	-23.99	41.49	5.09	38.68	35.25	Peak	100	176	HORIZONTAL
2	11402.56	36.82	54.00	-17.18	28.27	5.10	38.70	35.25	Average	100	176	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	11392.07	50.64	74.00	-23.36	42.11	5.10	38.68	35.25	Peak	100	280	VERTICAL
2	11408.57	37.99	54.00	-16.01	29.44	5.10	38.70	35.25	Average	100	280	VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 40MHz Ch 54 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 12

Horizontal

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	10531.27	36.20	68.30	-32.10	28.28	5.01	38.39	35.48 Average	100	111	HORIZONTAL
2	10541.84	49.52	68.30	-18.78	41.60	5.01	38.39	35.48 Peak	100	111	HORIZONTAL
3	15788.21	37.28	54.00	-16.72	29.15	6.14	37.41	35.42 Average	100	318	HORIZONTAL
4	15790.77	50.61	74.00	-23.39	42.48	6.14	37.41	35.42 Peak	100	318	HORIZONTAL

Vertical

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	10533.75	36.23	68.30	-32.07	28.31	5.01	38.39	35.48 Average	100	263	VERTICAL
2	10560.35	49.74	68.30	-18.56	41.80	5.01	38.39	35.46 Peak	100	263	VERTICAL
3	15786.20	37.26	54.00	-16.74	29.13	6.14	37.41	35.42 Average	100	177	VERTICAL
4	15797.58	50.59	74.00	-23.41	42.49	6.14	37.39	35.43 Peak	100	177	VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 40MHz Ch 62 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 12

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	10605.26	36.21	54.00	-17.79	28.24	5.01	38.38	35.42	Average	100	139	HORIZONTAL
2	10638.11	50.30	74.00	-23.70	42.31	5.01	38.37	35.39	Peak	100	139	HORIZONTAL
3	15935.77	50.10	74.00	-23.90	42.14	6.15	37.25	35.44	Peak	100	220	HORIZONTAL
4	15945.06	37.12	54.00	-16.88	29.16	6.15	37.25	35.44	Average	100	220	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	10616.31	49.93	74.00	-24.07	41.96	5.01	38.38	35.42	Peak	100	325	VERTICAL
2	10625.93	36.28	54.00	-17.72	28.28	5.01	38.38	35.39	Average	100	325	VERTICAL
3	15934.09	50.21	74.00	-23.79	42.25	6.15	37.25	35.44	Peak	100	258	VERTICAL
4	15951.39	37.23	54.00	-16.77	29.29	6.15	37.23	35.44	Average	100	258	VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 40MHz Ch 102 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 12

Horizontal

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	10998.69	36.34	54.00	-17.66	28.11	5.01	38.32	35.10	Average	100	50	HORIZONTAL
2	11003.49	49.42	74.00	-24.58	41.19	5.01	38.32	35.10	Peak	100	50	HORIZONTAL

Vertical

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	10997.16	36.28	54.00	-17.72	28.07	5.01	38.30	35.10	Average	100	163	VERTICAL
2	11029.94	49.10	74.00	-24.90	40.86	5.02	38.33	35.11	Peak	100	163	VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 40MHz Ch 110 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 12

Horizontal

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	11075.00	36.18	54.00	-17.82	27.90	5.03	38.38	35.13 Average	100	235	HORIZONTAL
2	11080.21	49.08	74.00	-24.92	40.80	5.03	38.38	35.13 Peak	100	235	HORIZONTAL

Vertical

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	11091.27	49.67	74.00	-24.33	41.38	5.03	38.40	35.14 Peak	100	326	VERTICAL
2	11125.00	36.30	54.00	-17.70	27.98	5.04	38.43	35.15 Average	100	326	VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 40MHz Ch 134 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 12

Horizontal

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	11328.78	50.19	74.00	-23.81	41.72	5.08	38.62	35.23	Peak	100	131 HORIZONTAL
2	11338.32	36.61	54.00	-17.39	28.14	5.08	38.63	35.24	Average	100	131 HORIZONTAL

Vertical

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	11336.63	36.58	54.00	-17.42	28.11	5.08	38.63	35.24	Average	100	211 VERTICAL
2	11341.04	49.65	74.00	-24.35	41.17	5.09	38.63	35.24	Peak	100	211 VERTICAL

Note:

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

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

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



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11a Ch 52 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 12

Horizontal

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	15761.73	37.31	54.00	-16.69	29.16	6.14	37.42	35.41	Average	100	74	HORIZONTAL
2	15774.31	51.00	74.00	-23.00	42.86	6.14	37.42	35.42	Peak	100	74	HORIZONTAL

Vertical

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	15758.37	37.43	54.00	-16.57	29.26	6.14	37.44	35.41	Average	100	108	VERTICAL
2	15769.26	50.73	74.00	-23.27	42.59	6.14	37.42	35.42	Peak	100	108	VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11a Ch 60 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 12

Horizontal

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	10606.81	36.62	54.00	-17.38	28.65	5.01	38.38	35.42	Average	100	302 HORIZONTAL
2	10609.46	50.42	74.00	-23.58	42.45	5.01	38.38	35.42	Peak	100	302 HORIZONTAL
3	15905.69	50.69	74.00	-23.31	42.69	6.15	37.29	35.44	Peak	100	62 HORIZONTAL
4	15909.38	37.49	54.00	-16.51	29.49	6.15	37.29	35.44	Average	100	62 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	10600.80	50.41	74.00	-23.59	42.44	5.01	38.38	35.42	Peak	100	137 VERTICAL
2	10623.72	36.52	54.00	-17.48	28.52	5.01	38.38	35.39	Average	100	137 VERTICAL
3	15877.32	37.47	54.00	-16.53	29.45	6.14	37.32	35.44	Average	100	261 VERTICAL
4	15903.77	50.48	74.00	-23.52	42.48	6.15	37.29	35.44	Peak	100	261 VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11a Ch 64 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 12

Horizontal

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	10620.21	36.48	54.00	-17.52	28.51	5.01	38.38	35.42	Average	100	343 HORIZONTAL
2	10654.02	50.47	74.00	-23.53	42.46	5.01	38.37	35.37	Peak	100	343 HORIZONTAL
3	15941.25	50.58	74.00	-23.42	42.62	6.15	37.25	35.44	Peak	100	108 HORIZONTAL
4	15948.94	37.63	54.00	-16.37	29.69	6.15	37.23	35.44	Average	100	108 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	10616.84	36.45	54.00	-17.55	28.48	5.01	38.38	35.42	Average	100	120 VERTICAL
2	10627.18	49.78	74.00	-24.22	41.78	5.01	38.38	35.39	Peak	100	120 VERTICAL
3	15957.68	50.99	74.00	-23.01	43.05	6.15	37.23	35.44	Peak	100	345 VERTICAL
4	15962.08	38.19	54.00	-15.81	30.25	6.15	37.23	35.44	Average	100	345 VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11a Ch 100 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 12

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	10999.36	49.97	74.00	-24.03	41.74	5.01	38.32	35.10	Peak	100	260 HORIZONTAL
2	11001.28	36.82	54.00	-17.18	28.59	5.01	38.32	35.10	Average	100	260 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	10995.11	36.52	54.00	-17.48	28.31	5.01	38.30	35.10	Average	100	80 VERTICAL
2	11003.93	49.59	74.00	-24.41	41.38	5.01	38.30	35.10	Peak	100	80 VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11a Ch 116 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 12

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	11158.32	52.07	74.00	-21.93	43.75	5.04	38.45	35.17	Peak	116	63	HORIZONTAL
2	11159.28	38.72	54.00	-15.28	30.38	5.04	38.47	35.17	Average	116	63	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	11159.60	41.67	54.00	-12.33	33.33	5.04	38.47	35.17	Average	101	355	VERTICAL
2	11161.92	55.39	74.00	-18.61	47.04	5.05	38.47	35.17	Peak	101	355	VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11a Ch 140 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 12

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	11392.23	50.58	74.00	-23.42	42.05	5.10	38.68	35.25	Peak	100	288	HORIZONTAL
2	11399.12	36.93	54.00	-17.07	28.38	5.10	38.70	35.25	Average	100	288	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	11401.36	36.92	54.00	-17.08	28.37	5.10	38.70	35.25	Average	100	142	VERTICAL
2	11401.36	50.63	74.00	-23.37	42.08	5.10	38.70	35.25	Peak	100	142	VERTICAL

Note:

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

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

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



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 20MHz Ch 52 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 15

Horizontal

Freq	Level	Limit		Over Line Limit	Read Level	Cable	Antenna	Preamplifier	Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	15780.08	37.52	54.00	-16.48	29.39	6.14	37.41	35.42	Average	100	264	HORIZONTAL
2	15784.90	50.37	74.00	-23.63	42.24	6.14	37.41	35.42	Peak	100	264	HORIZONTAL

Vertical

Freq	Level	Limit		Over Line Limit	Read Level	Cable	Antenna	Preamplifier	Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	15785.80	37.90	54.00	-16.10	29.77	6.14	37.41	35.42	Average	100	131	VERTICAL
2	15786.67	50.40	74.00	-23.60	42.27	6.14	37.41	35.42	Peak	100	131	VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 20MHz Ch 60 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 15

Horizontal

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
1	10601.70	49.17	74.00	-24.83	41.20	5.01	38.38	35.42 Peak	100	132	HORIZONTAL
2	10603.69	36.92	54.00	-17.08	28.95	5.01	38.38	35.42 Average	100	132	HORIZONTAL
3	15891.06	37.75	54.00	-16.25	29.74	6.15	37.30	35.44 Average	100	192	HORIZONTAL
4	15907.66	50.62	74.00	-23.38	42.62	6.15	37.29	35.44 Peak	100	192	HORIZONTAL

Vertical

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
1	10600.26	37.15	54.00	-16.85	29.18	5.01	38.38	35.42 Average	100	170	VERTICAL
2	10601.41	50.34	74.00	-23.66	42.37	5.01	38.38	35.42 Peak	100	170	VERTICAL
3	15891.73	37.70	54.00	-16.30	29.69	6.15	37.30	35.44 Average	100	283	VERTICAL
4	15894.68	50.33	74.00	-23.67	42.32	6.15	37.30	35.44 Peak	100	283	VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 20MHz Ch 64 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 15

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	10635.38	36.87	54.00	-17.13	28.88	5.01	38.37	35.39	Average	100	199 HORIZONTAL
2	10635.61	50.08	74.00	-23.92	42.09	5.01	38.37	35.39	Peak	100	199 HORIZONTAL
3	15954.10	37.72	54.00	-16.28	29.78	6.15	37.23	35.44	Average	100	235 HORIZONTAL
4	15961.06	50.53	74.00	-23.47	42.59	6.15	37.23	35.44	Peak	100	235 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	10630.93	49.91	74.00	-24.09	41.92	5.01	38.37	35.39	Peak	100	276 VERTICAL
2	10634.58	36.99	54.00	-17.01	29.00	5.01	38.37	35.39	Average	100	276 VERTICAL
3	15951.86	37.70	54.00	-16.30	29.76	6.15	37.23	35.44	Average	100	117 VERTICAL
4	15969.62	50.54	74.00	-23.46	42.61	6.15	37.22	35.44	Peak	100	117 VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 20MHz Ch 100 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 15

Horizontal

Freq	Level	Limit		Over Line Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	10995.22	49.66	74.00	-24.34	41.43	5.01	38.32	35.10	Peak	100	194	HORIZONTAL
2	10998.14	37.15	54.00	-16.85	28.92	5.01	38.32	35.10	Average	100	194	HORIZONTAL

Vertical

Freq	Level	Limit		Over Line Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	10999.94	37.64	54.00	-16.36	29.43	5.01	38.30	35.10	Average	100	126	VERTICAL
2	11004.42	50.34	74.00	-23.66	42.13	5.01	38.30	35.10	Peak	100	126	VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 20MHz Ch 116 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 15

Horizontal

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	cm	deg	Pol/Phase
1	11163.49	37.81	54.00	-16.19	29.46	5.05	38.47	35.17	Average	100	203	HORIZONTAL
2	11164.04	51.34	74.00	-22.66	42.99	5.05	38.47	35.17	Peak	100	203	HORIZONTAL

Vertical

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	cm	deg	Pol/Phase
1	11157.37	39.73	54.00	-14.27	31.40	5.04	38.45	35.16	Average	100	295	VERTICAL
2	11163.27	51.66	74.00	-22.34	43.31	5.05	38.47	35.17	Peak	100	295	VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 20MHz Ch 140 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 15

Horizontal

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	11396.25	37.44	54.00	-16.56	28.91	5.10	38.68	35.25	Average	100	272	HORIZONTAL
2	11404.10	51.01	74.00	-22.99	42.46	5.10	38.70	35.25	Peak	100	272	HORIZONTAL

Vertical

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	11407.76	50.34	74.00	-23.66	41.79	5.10	38.70	35.25	Peak	100	125	VERTICAL
2	11408.40	37.53	54.00	-16.47	28.98	5.10	38.70	35.25	Average	100	125	VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 40MHz Ch 54 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 15

Horizontal

Freq	Level	Limit		Over Line Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	15800.58	37.72	54.00	-16.28	29.62	6.14	37.39	35.43	Average	100	193	HORIZONTAL
2	15811.54	50.52	74.00	-23.48	42.44	6.14	37.37	35.43	Peak	100	193	HORIZONTAL

Vertical

Freq	Level	Limit		Over Line Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	15800.35	38.51	54.00	-15.49	30.41	6.14	37.39	35.43	Average	100	319	VERTICAL
2	15812.63	50.46	74.00	-23.54	42.38	6.14	37.37	35.43	Peak	100	319	VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 40MHz Ch 62 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 15

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	10612.05	49.89	74.00	-24.11	41.92	5.01	38.38	35.42	Peak	100	218	HORIZONTAL
2	10621.51	36.83	54.00	-17.17	28.86	5.01	38.38	35.42	Average	100	218	HORIZONTAL
3	15931.12	37.69	54.00	-16.31	29.73	6.15	37.25	35.44	Average	100	170	HORIZONTAL
4	15936.67	50.63	74.00	-23.37	42.67	6.15	37.25	35.44	Peak	100	170	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	10619.01	37.25	54.00	-16.75	29.28	5.01	38.38	35.42	Average	100	132	VERTICAL
2	10620.61	49.56	74.00	-24.44	41.59	5.01	38.38	35.42	Peak	100	132	VERTICAL
3	15921.47	37.70	54.00	-16.30	29.72	6.15	37.27	35.44	Average	100	250	VERTICAL
4	15934.78	50.57	74.00	-23.43	42.61	6.15	37.25	35.44	Peak	100	250	VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 40MHz Ch 102 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 15

Horizontal

Freq	Level	Limit		Over Line Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	11026.06	36.85	54.00	-17.15	28.60	5.02	38.34	35.11	Average	100	150	HORIZONTAL
2	11029.07	50.45	74.00	-23.55	42.20	5.02	38.34	35.11	Peak	100	150	HORIZONTAL

Vertical

Freq	Level	Limit		Over Line Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	11015.29	50.02	74.00	-23.98	41.79	5.02	38.32	35.11	Peak	100	165	VERTICAL
2	11028.08	37.03	54.00	-16.97	28.79	5.02	38.33	35.11	Average	100	165	VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 40MHz Ch 110 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 15

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	11098.81	50.31	74.00	-23.69	42.02	5.03	38.40	35.14	Peak	100	125 HORIZONTAL
2	11100.10	37.34	54.00	-16.66	29.05	5.03	38.40	35.14	Average	100	125 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	11096.19	49.74	74.00	-24.26	41.45	5.03	38.40	35.14	Peak	100	232 VERTICAL
2	11102.85	37.68	54.00	-16.32	29.39	5.03	38.40	35.14	Average	100	232 VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 40MHz Ch 134 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 15

Horizontal

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
1	11340.32	50.85	74.00	-23.15	42.37	5.09	38.63	35.24 Peak	100	170	HORIZONTAL
2	11347.88	37.46	54.00	-16.54	28.96	5.09	38.65	35.24 Average	100	170	HORIZONTAL

Vertical

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
1	11338.56	37.71	54.00	-16.29	29.24	5.08	38.63	35.24 Average	100	59	VERTICAL
2	11344.87	49.68	74.00	-24.32	41.20	5.09	38.63	35.24 Peak	100	59	VERTICAL

Note:

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

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

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



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11a Ch 52 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 15

Horizontal

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	15781.91	50.50	74.00	-23.50	42.37	6.14	37.41	35.42	Peak	100	161	HORIZONTAL
2	15781.98	37.81	54.00	-16.19	29.68	6.14	37.41	35.42	Average	100	161	HORIZONTAL

Vertical

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	15781.04	37.59	54.00	-16.41	29.46	6.14	37.41	35.42	Average	100	184	VERTICAL
2	15784.61	50.25	74.00	-23.75	42.12	6.14	37.41	35.42	Peak	100	184	VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11a Ch 60 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 15

Horizontal

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	10604.86	50.20	74.00	-23.80	42.23	5.01	38.38	35.42	Peak	100	167 HORIZONTAL
2	10605.00	37.10	54.00	-16.90	29.13	5.01	38.38	35.42	Average	100	167 HORIZONTAL
3	15896.78	37.56	54.00	-16.44	29.56	6.15	37.29	35.44	Average	100	93 HORIZONTAL
4	15896.96	50.85	74.00	-23.15	42.85	6.15	37.29	35.44	Peak	100	93 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	10600.11	37.55	54.00	-16.45	29.58	5.01	38.38	35.42	Average	100	238 VERTICAL
2	10603.49	50.10	74.00	-23.90	42.13	5.01	38.38	35.42	Peak	100	238 VERTICAL
3	15895.82	50.76	74.00	-23.24	42.76	6.15	37.29	35.44	Peak	100	172 VERTICAL
4	15898.33	37.88	54.00	-16.12	29.88	6.15	37.29	35.44	Average	100	172 VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11a Ch 64 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 15

Horizontal

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dBuV	dB	dB/m				
1	10639.58	37.07	54.00	-16.93	29.08	5.01	38.37	35.39	Average	100	227	HORIZONTAL
2	10640.80	49.71	74.00	-24.29	41.72	5.01	38.37	35.39	Peak	100	227	HORIZONTAL
3	15961.97	50.75	74.00	-23.25	42.81	6.15	37.23	35.44	Peak	100	265	HORIZONTAL
4	15962.66	37.78	54.00	-16.22	29.84	6.15	37.23	35.44	Average	100	265	HORIZONTAL

Vertical

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dBuV	dB	dB/m				
1	10640.16	37.42	54.00	-16.58	29.43	5.01	38.37	35.39	Average	100	140	VERTICAL
2	10643.29	50.28	74.00	-23.72	42.29	5.01	38.37	35.39	Peak	100	140	VERTICAL
3	15957.04	37.77	54.00	-16.23	29.83	6.15	37.23	35.44	Average	100	195	VERTICAL
4	15959.39	51.70	74.00	-22.30	43.76	6.15	37.23	35.44	Peak	100	195	VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11a Ch 100 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 15

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	10995.22	50.26	74.00	-23.74	42.03	5.01	38.32	35.10	Peak	100	265 HORIZONTAL
2	11004.01	37.38	54.00	-16.62	29.15	5.01	38.32	35.10	Average	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	10999.60	50.32	74.00	-23.68	42.11	5.01	38.30	35.10	Peak	100	153 VERTICAL
2	11000.58	38.18	54.00	-15.82	29.97	5.01	38.30	35.10	Average	100	153 VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11a Ch 116 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 15

Horizontal

Freq	Level	Limit		Over Line Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	11148.96	37.83	54.00	-16.17	29.50	5.04	38.45	35.16	Average	100	271	HORIZONTAL
2	11156.23	51.13	74.00	-22.87	42.80	5.04	38.45	35.16	Peak	100	271	HORIZONTAL

Vertical

Freq	Level	Limit		Over Line Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	11156.23	52.13	74.00	-21.87	43.80	5.04	38.45	35.16	Peak	100	271	VERTICAL
2	11156.96	40.13	54.00	-13.87	31.80	5.04	38.45	35.16	Average	100	271	VERTICAL



Temperature	25.6°C	Humidity	56°C
Test Engineer	Robert Chang	Configurations	IEEE 802.11a Ch 140 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 15

Horizontal

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		
1	11396.28	51.09	74.00	-22.91	42.56	5.10	38.68	35.25	Peak	100	229 HORIZONTAL
2	11403.21	37.69	54.00	-16.31	29.14	5.10	38.70	35.25	Average	100	229 HORIZONTAL

Vertical

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		
1	11395.45	37.48	54.00	-16.52	28.95	5.10	38.68	35.25	Average	100	116 VERTICAL
2	11400.24	51.09	74.00	-22.91	42.54	5.10	38.70	35.25	Peak	100	116 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.

4.7. Band Edge Emissions Measurement

4.7.1. 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 an EIRP of -27 dBm/MHz (68.3dBuV/m at 3m). 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 an EIRP of -27 dBm/MHz (68.3dBuV/m at 3m). For transmitters operating in the 5.725-5.825 GHz band: all emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an EIRP of -17 dBm/MHz (78.3dBuV/m at 3m); for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an EIRP of -27 dBm/MHz (68.3dBuV/m at 3m). 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

4.7.2. Measuring Instruments and Setting

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

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

4.7.3. Test Procedures

- The test procedure is the same as section 4.6.3, only the frequency range investigated is limited to 100MHz around bandedges.
- In case the emission is fail due to the used RB/VB is too wide, marker-delta method of FCC Public Notice DA00-705 will be followed.

4.7.4. Test Setup Layout

This test setup layout is the same as that shown in section 4.6.4.

4.7.5. Test Deviation

There is no deviation with the original standard.

4.7.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

4.7.7. Test Result of Band Edge and Fundamental Emissions

Temperature	25.6°C	Humidity	56%
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 20MHz Ch 52, 60, 64 / Port 1 + Port 2 (2TX, 2RX)
Test Date	Jan. 17, 2012	Test Mode	Mode 3

Channel 52

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	dB/m	dB	cm	deg
1	5119.40	51.68	74.00	-22.32	14.64	3.43	33.61	0.00	Peak	100	320 VERTICAL
2	5119.60	38.67	54.00	-15.33	1.63	3.43	33.61	0.00	Average	100	320 VERTICAL
3	5255.80	99.23	68.30			3.46	33.85	0.00	Average	100	320 VERTICAL
4	5256.40	110.16	68.30			3.46	33.85	0.00	Peak	100	320 VERTICAL
5	5360.20	41.18	54.00	-12.82	3.66	3.49	34.03	0.00	Average	100	320 VERTICAL
6	5360.20	51.62	74.00	-22.38	14.10	3.49	34.03	0.00	Peak	100	320 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			
MHz	dBuV/m	dBuV/m	dB	dB	dBuV	dB	dB	dB/m	dB	cm	deg
1	5307.60	114.43	68.30			3.48	33.94	0.00	Peak	129	321 HORIZONTAL
2	5308.00	104.79	68.30			3.48	33.94	0.00	Average	129	321 HORIZONTAL
3	5355.20	63.58	74.00	-10.42	26.06	3.49	34.03	0.00	Peak	129	321 HORIZONTAL
4	5381.20	47.18	54.00	-6.82	9.62	3.50	34.06	0.00	Average	129	321 HORIZONTAL

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			
MHz	dBuV/m	dBuV/m	dB	dB	dBuV	dB	dB	dB/m	dB	cm	deg
1	5325.60	114.40	68.30			3.49	33.97	0.00	Peak	124	323 HORIZONTAL
2	5327.80	104.22	68.30			3.49	33.97	0.00	Average	124	323 HORIZONTAL
3	5350.00	52.92	54.00	-1.08	15.40	3.49	34.03	0.00	Average	124	323 HORIZONTAL
4	5350.40	72.86	74.00	-1.14	35.34	3.49	34.03	0.00	Peak	124	323 HORIZONTAL

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

Temperature	25.6°C	Humidity	56%
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 20MHz Ch 100, 140 / Port 1 + Port 2 (2TX, 2RX)
Test Date	Jan. 17, 2012	Test Mode	Mode 3

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	5452.40	42.91	54.00	-11.09	5.20	3.52	34.19	0.00 Average	140	323	HORIZONTAL
2	5457.00	60.28	74.00	-13.72	22.57	3.52	34.19	0.00 Peak	140	323	HORIZONTAL
3	5469.60	66.99	68.30	-1.31	29.26	3.52	34.21	0.00 Peak	140	323	HORIZONTAL
4	5492.20	101.21	68.30			3.53	34.23	0.00 Average	140	323	HORIZONTAL
5	5492.60	111.59	68.30			3.53	34.23	0.00 Peak	140	323	HORIZONTAL

Item 4, 5 are the fundamental frequency at 5500 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	5706.60	101.94	68.30				3.60	34.34	0.00 Average	123	191	HORIZONTAL
2	5706.60	112.44	68.30				3.60	34.34	0.00 Peak	123	191	HORIZONTAL
3	5725.00	66.66	68.30	-1.64	28.72	3.60	34.34	0.00 Peak	123	191	HORIZONTAL	

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



Temperature	25.6°C	Humidity	56%
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 40MHz Ch 54, 62 / Port 1 + Port 2 (2TX, 2RX)
Test Date	Jan. 17, 2012	Test Mode	Mode 3

Channel 54

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	5285.20	110.85	68.30			3.47	33.91	0.00	Peak	140	270 HORIZONTAL
2	5286.40	101.38	68.30			3.47	33.91	0.00	Average	140	270 HORIZONTAL
3	5350.00	47.83	54.00	-6.17	10.31	3.49	34.03	0.00	Average	140	270 HORIZONTAL
4	5351.60	63.87	74.00	-10.13	26.35	3.49	34.03	0.00	Peak	140	270 HORIZONTAL

Item 1, 2 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	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
1	5326.00	105.24	68.30			3.49	33.97	0.00	Peak	157	305 HORIZONTAL
2	5327.20	95.89	68.30			3.49	33.97	0.00	Average	157	305 HORIZONTAL
3	5350.00	52.43	54.00	-1.57	14.91	3.49	34.03	0.00	Average	157	305 HORIZONTAL
4	5352.40	66.80	74.00	-7.20	29.28	3.49	34.03	0.00	Peak	157	305 HORIZONTAL

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

Temperature	25.6°C	Humidity	56%
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 40MHz Ch 102, 110, 134 / Port 1 + Port 2 (2TX, 2RX)
Test Date	Jan. 17, 2012	Test Mode	Mode 3

Channel 102

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	5460.00	43.82	54.00	-10.18	6.11	3.52	34.19	0.00 Average	140	205	HORIZONTAL
2	5460.00	57.76	74.00	-16.24	20.05	3.52	34.19	0.00 Peak	140	205	HORIZONTAL
3	5466.00	67.04	68.30	-1.26	29.33	3.52	34.19	0.00 Peak	140	205	HORIZONTAL
4	5505.20	105.23	68.30			3.54	34.25	0.00 Peak	140	205	HORIZONTAL
5	5506.40	94.61	68.30			3.54	34.25	0.00 Average	140	205	HORIZONTAL

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

Channel 110

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	5452.40	43.92	54.00	-10.08	6.21	3.52	34.19	0.00 Average	141	195	HORIZONTAL
2	5456.40	60.29	74.00	-13.71	22.58	3.52	34.19	0.00 Peak	141	195	HORIZONTAL
3	5470.00	61.65	68.30	-6.65	23.92	3.52	34.21	0.00 Peak	141	195	HORIZONTAL
4	5547.20	101.54	68.30			3.55	34.29	0.00 Average	141	195	HORIZONTAL
5	5548.00	112.28	68.30			3.55	34.29	0.00 Peak	141	195	HORIZONTAL

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

Channel 134

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	5684.80	111.62	68.30			3.59	34.33	0.00 Peak	150	194	HORIZONTAL
2	5685.20	101.58	68.30			3.59	34.33	0.00 Average	150	194	HORIZONTAL
3	5726.20	66.83	68.30	-1.47	28.89	3.60	34.34	0.00 Peak	150	194	HORIZONTAL

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

Temperature	25.6°C	Humidity	56%
Test Engineer	Robert Chang	Configurations	IEEE 802.11a Ch 52, 60, 64 / Chain 1 + Chain 2 (2TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 3

Channel 52

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5144.60	54.68	74.00	-19.32	17.58	3.43	33.67	0.00 Peak	137	334	HORIZONTAL
2	5146.40	40.88	54.00	-13.12	3.78	3.43	33.67	0.00 Average	137	334	HORIZONTAL
3	5264.80	107.20	68.30			3.46	33.88	0.00 Average	137	334	HORIZONTAL
4	5265.40	116.65	68.30			3.46	33.88	0.00 Peak	137	334	HORIZONTAL
5	5351.80	57.51	74.00	-16.49	19.99	3.49	34.03	0.00 Peak	137	334	HORIZONTAL
6	5353.60	45.59	54.00	-8.41	8.07	3.49	34.03	0.00 Average	137	334	HORIZONTAL

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			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5304.80	106.72	68.30			3.48	33.94	0.00 Average	126	292	HORIZONTAL
2	5304.80	116.66	68.30			3.48	33.94	0.00 Peak	126	292	HORIZONTAL
3	5351.60	68.16	74.00	-5.84	30.64	3.49	34.03	0.00 Peak	126	292	HORIZONTAL
4	5381.60	49.74	54.00	-4.26	12.18	3.50	34.06	0.00 Average	126	292	HORIZONTAL

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			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5326.60	116.67	68.30			3.49	33.97	0.00 Peak	127	207	HORIZONTAL
2	5327.00	105.82	68.30			3.49	33.97	0.00 Average	127	207	HORIZONTAL
3	5350.80	72.92	74.00	-1.08	35.40	3.49	34.03	0.00 Peak	127	207	HORIZONTAL
4	5351.80	51.13	54.00	-2.87	13.61	3.49	34.03	0.00 Average	127	207	HORIZONTAL

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

Temperature	25.6°C	Humidity	56%
Test Engineer	Robert Chang	Configurations	IEEE 802.11a Ch 100, 140 / Chain 1 + Chain 2 (2TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 3

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	5453.80	63.43	74.00	-10.57	25.72	3.52	34.19	0.00 Peak	124	192	HORIZONTAL
2	5460.00	43.83	54.00	-10.17	6.12	3.52	34.19	0.00 Average	124	192	HORIZONTAL
3	5469.60	66.95	68.30	-1.35	29.22	3.52	34.21	0.00 Peak	124	192	HORIZONTAL
4	5504.40	114.07	68.30			3.54	34.25	0.00 Peak	124	192	HORIZONTAL
5	5504.60	103.82	68.30			3.54	34.25	0.00 Average	124	192	HORIZONTAL

Item 4, 5 are the fundamental frequency at 5500 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	5696.00	111.69	68.30				3.59	34.34	0.00 Peak	113	345	HORIZONTAL
2	5696.20	101.56	68.30				3.59	34.34	0.00 Average	113	345	HORIZONTAL
3	5727.60	66.73	68.30	-1.57	28.79	3.60	34.34	0.00 Peak	113	345	HORIZONTAL	

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



Temperature	25.6°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11n MCS0 20MHz Ch 52, 60, 64 / Chain 1 (1TX, 2RX)
Test Date	Nov. 28, 2011	Test Mode	Mode 6

Channel 52

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	5147.60	51.66	74.00	-22.34	14.56	3.43	33.67	0.00 Peak	100	303	VERTICAL
2	5150.00	39.48	54.00	-14.52	2.38	3.43	33.67	0.00 Average	100	303	VERTICAL
3	5264.80	114.72	68.30			3.46	33.88	0.00 Peak	100	303	VERTICAL
4	5267.20	105.17	68.30			3.46	33.88	0.00 Average	100	303	VERTICAL
5	5350.00	49.80	54.00	-4.20	12.28	3.49	34.03	0.00 Average	100	303	VERTICAL
6	5351.20	61.02	74.00	-12.98	23.50	3.49	34.03	0.00 Peak	100	303	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			Cable Loss	Antenna Factor	Preamp Factor			
1	5306.80	115.57	68.30			3.48	33.94	0.00 Peak	100	336	VERTICAL
2	5307.60	106.59	68.30			3.48	33.94	0.00 Average	100	336	VERTICAL
3	5386.80	63.05	74.00	-10.95	25.46	3.50	34.09	0.00 Peak	100	336	VERTICAL
4	5387.20	51.41	54.00	-2.59	13.82	3.50	34.09	0.00 Average	100	336	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			Cable Loss	Antenna Factor	Preamp Factor			
1	5327.20	105.63	68.30			3.49	33.97	0.00 Average	100	304	VERTICAL
2	5327.80	115.19	68.30			3.49	33.97	0.00 Peak	100	304	VERTICAL
3	5350.00	52.44	54.00	-1.56	14.92	3.49	34.03	0.00 Average	100	304	VERTICAL
4	5351.80	68.56	74.00	-5.44	31.04	3.49	34.03	0.00 Peak	100	304	VERTICAL

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



Temperature	25.6°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11n MCS0 20MHz Ch 100, 140 / Chain 1 (1TX, 2RX)
Test Date	Nov. 28, 2011	Test Mode	Mode 6

Channel 100

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	5458.20	64.14	74.00	-9.86	26.41	3.52	34.21	0.00 Peak	105	182	VERTICAL
2	5460.00	46.83	54.00	-7.17	9.10	3.52	34.21	0.00 Average	105	182	VERTICAL
3	5465.00	66.42	68.30	-1.88	28.69	3.52	34.21	0.00 Peak	105	182	VERTICAL
4	5494.80	106.17	68.30			3.53	34.26	0.00 Average	105	182	VERTICAL
5	5496.40	116.98	68.30			3.53	34.26	0.00 Peak	105	182	VERTICAL

Item 4, 5 are the fundamental frequency at 5500 MHz.

Channel 140

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	5693.40	102.79	68.30			3.59	34.34	0.00 Average	126	172	VERTICAL
2	5695.40	112.75	68.30			3.59	34.34	0.00 Peak	126	172	VERTICAL
3	5725.00	66.45	68.30	-1.85	28.51	3.60	34.34	0.00 Peak	126	172	VERTICAL

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

Temperature	25.6°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11n MCS0 40MHz Ch 54, 62 / Chain 1 (1TX, 2RX)
Test Date	Nov. 28, 2011	Test Mode	Mode 6

Channel 54

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	5286.00	104.08	68.30			3.47	33.91	0.00	Average	100	323 VERTICAL
2	5287.20	113.45	68.30			3.47	33.91	0.00	Peak	100	323 VERTICAL
3	5350.00	51.85	54.00	-2.15	14.33	3.49	34.03	0.00	Average	100	323 VERTICAL
4	5354.00	70.46	74.00	-3.54	32.94	3.49	34.03	0.00	Peak	100	323 VERTICAL

Item 1, 2 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	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	5326.80	99.13	68.30			3.49	33.97	0.00	Average	100	140 VERTICAL
2	5326.80	109.72	68.30			3.49	33.97	0.00	Peak	100	140 VERTICAL
3	5350.00	52.37	54.00	-1.63	14.85	3.49	34.03	0.00	Average	100	140 VERTICAL
4	5352.80	66.68	74.00	-7.32	29.16	3.49	34.03	0.00	Peak	100	140 VERTICAL

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

Temperature	25.6°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11n MCS0 40MHz Ch 102, 110, 134 / Chain 1 (1TX, 2RX)
Test Date	Nov. 28, 2011	Test Mode	Mode 6

Channel 102

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	63.49	74.00	-10.51	25.76	3.52	34.21	0.00 Peak	107	183	VERTICAL
2	5460.00	49.32	54.00	-4.68	11.59	3.52	34.21	0.00 Average	107	183	VERTICAL
3	5466.00	66.40	68.30	-1.90	28.67	3.52	34.21	0.00 Peak	107	183	VERTICAL
4	5494.80	99.42	68.30			3.53	34.26	0.00 Average	107	183	VERTICAL
5	5497.20	110.21	68.30			3.53	34.26	0.00 Peak	107	183	VERTICAL

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

Channel 110

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	5452.40	48.19	54.00	-5.81	10.46	3.52	34.21	0.00 Average	112	304	VERTICAL
2	5454.80	61.56	74.00	-12.44	23.83	3.52	34.21	0.00 Peak	112	304	VERTICAL
3	5470.00	60.39	68.30	-7.91	22.63	3.52	34.24	0.00 Peak	112	304	VERTICAL
4	5565.20	112.43	68.30			3.55	34.31	0.00 Peak	112	304	VERTICAL
5	5566.40	102.64	68.30			3.55	34.31	0.00 Average	112	304	VERTICAL

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

Channel 134

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	5686.00	112.53	68.30				3.59	34.33	0.00 Peak	131	170	VERTICAL
2	5687.20	102.37	68.30				3.59	34.33	0.00 Average	131	170	VERTICAL
3	5727.00	66.82	68.30	-1.48	28.88	3.60	34.34	0.00 Peak	131	170	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



Temperature	25.6°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11n MCS0 20MHz Ch 52, 60, 64 / Port 1 + Port 2 (2TX, 2RX)
Test Date	Nov. 28, 2011	Test Mode	Mode 6

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	5128.40	62.76	74.00	-11.24	25.69	3.43	33.64	0.00 Peak	100	348	VERTICAL
2	5150.00	49.11	54.00	-4.89	12.01	3.43	33.67	0.00 Average	100	348	VERTICAL
3	5266.60	109.16	68.30			3.46	33.88	0.00 Average	100	348	VERTICAL
4	5267.20	119.16	68.30			3.46	33.88	0.00 Peak	100	348	VERTICAL
5	5351.20	50.64	54.00	-3.36	13.12	3.49	34.03	0.00 Average	100	348	VERTICAL
6	5351.20	62.54	74.00	-11.46	25.02	3.49	34.03	0.00 Peak	100	348	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	5306.00	118.89	68.30			3.48	33.94	0.00 Peak	100	145	VERTICAL
2	5306.40	108.73	68.30			3.48	33.94	0.00 Average	100	145	VERTICAL
3	5360.00	51.94	54.00	-2.06	14.42	3.49	34.03	0.00 Average	100	145	VERTICAL
4	5382.00	64.12	74.00	-9.88	26.53	3.50	34.09	0.00 Peak	100	145	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	5327.00	106.98	68.30			3.49	33.97	0.00 Average	100	162	VERTICAL
2	5327.00	117.06	68.30			3.49	33.97	0.00 Peak	100	162	VERTICAL
3	5350.00	52.42	54.00	-1.58	14.90	3.49	34.03	0.00 Average	100	162	VERTICAL
4	5351.00	72.59	74.00	-1.41	35.07	3.49	34.03	0.00 Peak	100	162	VERTICAL

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

Temperature	25.6°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11n MCS0 20MHz Ch 100, 140 / Port 1 + Port 2 (2TX, 2RX)
Test Date	Nov. 28, 2011	Test Mode	Mode 6

Channel 100

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dB	dB/m	dB			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5453.00	56.98	74.00	-17.02	19.25	3.52	34.21	0.00	Peak	100	301 VERTICAL
2	5460.00	42.86	54.00	-11.14	5.13	3.52	34.21	0.00	Average	100	301 VERTICAL
3	5470.00	66.84	68.30	-1.46	29.08	3.52	34.24	0.00	Peak	100	301 VERTICAL
4	5503.40	100.75	68.30			3.54	34.28	0.00	Average	100	301 VERTICAL
5	5503.80	111.92	68.30			3.54	34.28	0.00	Peak	100	301 VERTICAL

Item 4, 5 are the fundamental frequency at 5500 MHz.

Channel 140

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dB	dB/m	dB			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5702.00	100.16	68.30			3.59	34.34	0.00	Average	106	242 VERTICAL
2	5702.60	110.89	68.30			3.59	34.34	0.00	Peak	106	242 VERTICAL
3	5730.60	67.09	68.30	-1.21	29.14	3.61	34.34	0.00	Peak	106	242 VERTICAL

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

Temperature	25.6°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11n MCS0 40MHz Ch 54, 62 / Port 1 + Port 2 (2TX, 2RX)
Test Date	Nov. 28, 2011	Test Mode	Mode 6

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	dB	dBuV	dB	dB	dB/m	dB	cm	deg
1	5277.20	105.86	68.30			3.47	33.88	0.00	Average	100	341 VERTICAL
2	5277.80	116.16	68.30			3.47	33.88	0.00	Peak	100	341 VERTICAL
3	5352.40	67.58	74.00	-6.42	30.06	3.49	34.03	0.00	Peak	100	341 VERTICAL
4	5360.20	52.11	54.00	-1.89	14.59	3.49	34.03	0.00	Average	100	341 VERTICAL

Item 1, 2 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	dB	dBuV	dB	dB	dB/m	dB	cm	deg
1	5326.40	109.10	68.30			3.49	33.97	0.00	Peak	100	162 VERTICAL
2	5327.20	99.50	68.30			3.49	33.97	0.00	Average	100	162 VERTICAL
3	5350.00	52.13	54.00	-1.87	14.61	3.49	34.03	0.00	Average	100	162 VERTICAL
4	5350.00	65.62	74.00	-8.38	28.10	3.49	34.03	0.00	Peak	100	162 VERTICAL

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

Temperature	25.6°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11n MCS0 40MHz Ch 102, 110, 134 / Port 1 + Port 2 (2TX, 2RX)
Test Date	Nov. 28, 2011	Test Mode	Mode 6

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	
MHz	dBuV/m	dBuV/m	dB									
1	5426.00	57.74	74.00	-16.26	20.07	3.52	34.15	0.00 Peak		100	301	VERTICAL
2	5440.00	45.45	54.00	-8.55	7.75	3.52	34.18	0.00 Average		100	301	VERTICAL
3	5470.00	66.87	68.30	-1.43	29.11	3.52	34.24	0.00 Peak		100	301	VERTICAL
4	5502.40	93.56	68.30			3.54	34.28	0.00 Average		100	301	VERTICAL
5	5502.40	104.77	68.30			3.54	34.28	0.00 Peak		100	301	VERTICAL

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

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	
MHz	dBuV/m	dBuV/m	dB									
1	5452.00	46.83	54.00	-7.17	9.10	3.52	34.21	0.00 Average		100	176	VERTICAL
2	5454.80	64.39	74.00	-9.61	26.66	3.52	34.21	0.00 Peak		100	176	VERTICAL
3	5467.20	63.71	68.30	-4.59	25.95	3.52	34.24	0.00 Peak		100	176	VERTICAL
4	5565.20	111.82	68.30			3.55	34.31	0.00 Peak		100	176	VERTICAL
5	5565.60	101.76	68.30			3.55	34.31	0.00 Average		100	176	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		cm	deg	
MHz	dBuV/m	dBuV/m	dB									
1	5667.60	111.36	68.30			3.59	34.33	0.00 Peak		102	224	VERTICAL
2	5668.00	101.29	68.30			3.59	34.33	0.00 Average		102	224	VERTICAL
3	5728.60	66.93	68.30	-1.37	28.99	3.60	34.34	0.00 Peak		102	224	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

Temperature	25.6°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11n MCS8 20MHz Ch 52, 60, 64 / Port 1 + Port 2 (2TX, 2RX)
Test Date	Nov. 28, 2011	Test Mode	Mode 6

Channel 52

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	5119.40	40.36	54.00	-13.64	3.32	3.43	33.61	0.00	Average	100	42 VERTICAL
2	5119.40	51.93	74.00	-22.07	14.89	3.43	33.61	0.00	Peak	100	42 VERTICAL
3	5256.40	105.65	68.30			3.46	33.85	0.00	Average	100	42 VERTICAL
4	5264.20	117.07	68.30			3.46	33.88	0.00	Peak	100	42 VERTICAL
5	5360.20	49.02	54.00	-4.98	11.50	3.49	34.03	0.00	Average	100	42 VERTICAL
6	5380.60	60.30	74.00	-13.70	22.74	3.50	34.06	0.00	Peak	100	42 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				
MHz	dBuV/m	dBuV/m	dB						cm	deg		
1	5297.60	116.78	68.30				3.48	33.94	0.00	Peak	100	41 VERTICAL
2	5306.40	106.36	68.30				3.48	33.94	0.00	Average	100	41 VERTICAL
3	5360.40	49.63	54.00	-4.37	12.11	3.49	34.03	0.00	Average	100	41 VERTICAL	
4	5381.20	61.78	74.00	-12.22	24.22	3.50	34.06	0.00	Peak	100	41 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				
MHz	dBuV/m	dBuV/m	dB						cm	deg		
1	5323.00	115.62	68.30				3.49	33.97	0.00	Peak	100	46 VERTICAL
2	5326.60	104.75	68.30				3.49	33.97	0.00	Average	100	46 VERTICAL
3	5350.00	52.97	54.00	-1.03	15.45	3.49	34.03	0.00	Average	100	46 VERTICAL	
4	5350.00	68.30	74.00	-5.70	30.78	3.49	34.03	0.00	Peak	100	46 VERTICAL	

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

Temperature	25.6°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11n MCS8 20MHz Ch 100, 140 / Port 1 + Port 2 (2TX, 2RX)
Test Date	Nov. 28, 2011	Test Mode	Mode 6

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	5450.20	61.09	74.00	-12.91	23.36	3.52	34.21	0.00 Peak	100	136	VERTICAL
2	5451.60	44.28	54.00	-9.72	6.55	3.52	34.21	0.00 Average	100	136	VERTICAL
3	5470.00	64.02	68.30	-4.28	26.26	3.52	34.24	0.00 Peak	100	136	VERTICAL
4	5496.00	104.31	68.30			3.53	34.26	0.00 Average	100	136	VERTICAL
5	5496.40	116.64	68.30			3.53	34.26	0.00 Peak	100	136	VERTICAL

Item 4, 5 are the fundamental frequency at 5500 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	5694.80	102.22	68.30			3.59	34.34	0.00 Average	114	219	VERTICAL
2	5704.40	113.98	68.30			3.59	34.34	0.00 Peak	114	219	VERTICAL
3	5725.00	66.81	68.30	-1.49	28.87	3.60	34.34	0.00 Peak	114	219	VERTICAL

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

Temperature	25.6°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11n MCS8 40MHz Ch 54, 62 / Port 1 + Port 2 (2TX, 2RX)
Test Date	Nov. 28, 2011	Test Mode	Mode 6

Channel 54

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	5283.60	114.22	68.30			3.47	33.91	0.00	Peak	102	34 VERTICAL
2	5286.80	104.12	68.30			3.47	33.91	0.00	Average	102	34 VERTICAL
3	5358.40	49.75	54.00	-4.25	12.23	3.49	34.03	0.00	Average	102	34 VERTICAL
4	5362.80	69.54	74.00	-4.46	32.02	3.49	34.03	0.00	Peak	102	34 VERTICAL

Item 1, 2 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	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5293.20	96.62	68.30			3.47	33.91	0.00	Average	104	40 VERTICAL
2	5323.60	106.79	68.30			3.49	33.97	0.00	Peak	104	40 VERTICAL
3	5350.00	52.34	54.00	-1.66	14.82	3.49	34.03	0.00	Average	104	40 VERTICAL
4	5350.00	66.06	74.00	-7.94	28.54	3.49	34.03	0.00	Peak	104	40 VERTICAL

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

Temperature	25.6°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11n MCS8 40MHz Ch 102, 110, 134 / Port 1 + Port 2 (2TX, 2RX)
Test Date	Nov. 28, 2011	Test Mode	Mode 6

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	
MHz	dBuV/m	dBuV/m	dB									
1	5436.00	47.38	54.00	-6.62	9.68	3.52	34.18	0.00	Average	104	232	VERTICAL
2	5437.60	60.91	74.00	-13.09	23.21	3.52	34.18	0.00	Peak	104	232	VERTICAL
3	5469.60	67.30	68.30	-1.00	29.54	3.52	34.24	0.00	Peak	104	232	VERTICAL
4	5493.20	97.36	68.30			3.53	34.26	0.00	Average	104	232	VERTICAL
5	5494.40	107.46	68.30			3.53	34.26	0.00	Peak	104	232	VERTICAL

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

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	
MHz	dBuV/m	dBuV/m	dB									
1	5458.00	57.47	74.00	-16.53	19.74	3.52	34.21	0.00	Peak	103	76	VERTICAL
2	5460.00	44.55	54.00	-9.45	6.82	3.52	34.21	0.00	Average	103	76	VERTICAL
3	5470.00	58.28	68.30	-10.02	20.52	3.52	34.24	0.00	Peak	103	76	VERTICAL
4	5534.40	97.68	68.30			3.55	34.30	0.00	Average	103	76	VERTICAL
5	5536.40	107.66	68.30			3.55	34.31	0.00	Peak	103	76	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		cm	deg		
MHz	dBuV/m	dBuV/m	dB										
1	5681.20	109.70	68.30				3.59	34.33	0.00	Peak	104	221	VERTICAL
2	5683.20	99.69	68.30				3.59	34.33	0.00	Average	104	221	VERTICAL
3	5726.60	66.67	68.30	-1.63	28.73	3.60	34.34	0.00	Peak	104	221	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



Temperature	25.6°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11a Ch 52, 60, 64 / Chain 1 (1TX, 2RX)
Test Date	Nov. 28, 2011	Test Mode	Mode 6

Channel 52

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBm			Cable Loss	Antenna Factor	Preamp Factor			
1	5143.40	51.34	74.00	-22.66	14.24	3.43	33.67	0.00 Peak	100	302	VERTICAL
2	5147.00	39.56	54.00	-14.44	2.46	3.43	33.67	0.00 Average	100	302	VERTICAL
3	5266.00	115.46	68.30			3.46	33.88	0.00 Peak	100	302	VERTICAL
4	5267.20	105.51	68.30			3.46	33.88	0.00 Average	100	302	VERTICAL
5	5350.00	51.18	54.00	-2.82	13.66	3.49	34.03	0.00 Average	100	302	VERTICAL
6	5350.60	62.09	74.00	-11.91	24.57	3.49	34.03	0.00 Peak	100	302	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	dBm			Cable Loss	Antenna Factor	Preamp Factor			
1	5293.20	107.32	68.30			3.47	33.91	0.00 Average	100	10	VERTICAL
2	5294.40	116.57	68.30			3.47	33.91	0.00 Peak	100	10	VERTICAL
3	5353.60	63.73	74.00	-10.27	26.21	3.49	34.03	0.00 Peak	100	10	VERTICAL
4	5395.60	50.45	54.00	-3.55	12.86	3.50	34.09	0.00 Average	100	10	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	dBm			Cable Loss	Antenna Factor	Preamp Factor			
1	5326.80	106.32	68.30			3.49	33.97	0.00 Average	100	303	VERTICAL
2	5327.20	115.73	68.30			3.49	33.97	0.00 Peak	100	303	VERTICAL
3	5350.00	52.58	54.00	-1.42	15.06	3.49	34.03	0.00 Average	100	303	VERTICAL
4	5350.20	67.92	74.00	-6.08	30.40	3.49	34.03	0.00 Peak	100	303	VERTICAL

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



Temperature	25.6°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11a Ch 100, 140 / Chain 1 (1TX, 2RX)
Test Date	Nov. 28, 2011	Test Mode	Mode 6

Channel 100

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	5460.00	46.03	54.00	-7.97	8.30	3.52	34.21	0.00 Average	106	180	VERTICAL
2	5460.00	63.75	74.00	-10.25	26.02	3.52	34.21	0.00 Peak	106	180	VERTICAL
3	5469.60	66.89	68.30	-1.41	29.13	3.52	34.24	0.00 Peak	106	180	VERTICAL
4	5493.00	117.50	68.30			3.53	34.26	0.00 Peak	106	180	VERTICAL
5	5493.40	106.66	68.30			3.53	34.26	0.00 Average	106	180	VERTICAL

Item 4, 5 are the fundamental frequency at 5500 MHz.

Channel 140

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	5692.80	114.84	68.30			3.59	34.34	0.00 Peak	133	170	VERTICAL
2	5693.40	104.62	68.30			3.59	34.34	0.00 Average	133	170	VERTICAL
3	5725.80	67.16	68.30	-1.14	29.22	3.60	34.34	0.00 Peak	133	170	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



Temperature	25.6°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11a Ch 52, 60, 64 / Chain 1 + Chain 2
Test Date	Nov. 28, 2011	Test Mode	Mode 6

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	5141.00	39.15	54.00	-14.85	2.08	3.43	33.64	0.00	Average	100	84 VERTICAL
2	5148.20	51.63	74.00	-22.37	14.53	3.43	33.67	0.00	Peak	100	84 VERTICAL
3	5264.80	103.78	68.30			3.46	33.88	0.00	Average	100	84 VERTICAL
4	5265.40	113.94	68.30			3.46	33.88	0.00	Peak	100	84 VERTICAL
5	5356.00	56.98	74.00	-17.02	19.46	3.49	34.03	0.00	Peak	100	84 VERTICAL
6	5360.20	45.88	54.00	-8.12	8.36	3.49	34.03	0.00	Average	100	84 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	5296.80	103.65	68.30			3.48	33.94	0.00	Average	100	102 VERTICAL
2	5296.80	113.62	68.30			3.48	33.94	0.00	Peak	100	102 VERTICAL
3	5350.80	59.62	74.00	-14.38	22.10	3.49	34.03	0.00	Peak	100	102 VERTICAL
4	5360.00	48.71	54.00	-5.29	11.19	3.49	34.03	0.00	Average	100	102 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	5326.60	105.06	68.30			3.49	33.97	0.00	Average	100	89 VERTICAL
2	5326.80	115.35	68.30			3.49	33.97	0.00	Peak	100	89 VERTICAL
3	5350.00	69.30	74.00	-4.70	31.78	3.49	34.03	0.00	Peak	100	89 VERTICAL
4	5350.80	50.52	54.00	-3.48	13.00	3.49	34.03	0.00	Average	100	89 VERTICAL

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

Temperature	25.6°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11a Ch 100, 140 / Chain 1 + Chain 2
Test Date	Nov. 28, 2011	Test Mode	Mode 6

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	dB									
1	5458.20	65.80	74.00	-8.20	28.07	3.52	34.21	0.00	Peak	100	134	VERTICAL
2	5460.00	45.48	54.00	-8.52	7.75	3.52	34.21	0.00	Average	100	134	VERTICAL
3	5469.20	66.82	68.30	-1.48	29.06	3.52	34.24	0.00	Peak	100	134	VERTICAL
4	5505.00	103.79	68.30			3.54	34.28	0.00	Average	100	134	VERTICAL
5	5505.20	114.11	68.30			3.54	34.28	0.00	Peak	100	134	VERTICAL

Item 4, 5 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	dB										
1	5694.00	102.73	68.30				3.59	34.34	0.00	Average	116	147	VERTICAL
2	5694.60	113.54	68.30				3.59	34.34	0.00	Peak	116	147	VERTICAL
3	5725.60	66.76	68.30	-1.54	28.82	3.60	34.34	0.00	Peak	116	147	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

Temperature	25.6°C	Humidity			56%				
Test Engineer	Robert Chang	Configurations			IEEE 802.11n MCS0 20MHz Ch 52, 60, 64 / Port 1 + Port 2 (2TX, 2RX)				
Test Date	Dec. 23, 2011	Test Mode			Mode 9				

Channel 52

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	dB/m	cm	deg	
1	5136.20	54.48	74.00	-19.52	17.41	3.43	33.64	0.00 Peak	175	303	HORIZONTAL
2	5144.00	41.42	54.00	-12.58	4.32	3.43	33.67	0.00 Average	175	303	HORIZONTAL
3	5254.00	106.27	68.30			3.46	33.85	0.00 Average	175	303	HORIZONTAL
4	5255.80	116.13	68.30			3.46	33.85	0.00 Peak	175	303	HORIZONTAL
5	5354.20	59.05	74.00	-14.95	21.53	3.49	34.03	0.00 Peak	175	303	HORIZONTAL
6	5360.20	48.41	54.00	-5.59	10.89	3.49	34.03	0.00 Average	175	303	HORIZONTAL

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			
MHz	dBuV/m	dBuV/m	dB	dB	dBuV	dB	dB	dB/m	cm	deg	
1	5306.80	107.53	68.30			3.48	33.94	0.00 Average	174	310	HORIZONTAL
2	5307.20	117.02	68.30			3.48	33.94	0.00 Peak	174	310	HORIZONTAL
3	5350.40	61.75	74.00	-12.25	24.23	3.49	34.03	0.00 Peak	174	310	HORIZONTAL
4	5360.00	49.76	54.00	-4.24	12.24	3.49	34.03	0.00 Average	174	310	HORIZONTAL

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			
MHz	dBuV/m	dBuV/m	dB	dB	dBuV	dB	dB	dB/m	cm	deg	
1	5314.00	105.33	68.30			3.48	33.97	0.00 Average	177	69	HORIZONTAL
2	5314.00	115.08	68.30			3.48	33.97	0.00 Peak	177	69	HORIZONTAL
3	5350.00	52.56	54.00	-1.44	15.04	3.49	34.03	0.00 Average	177	69	HORIZONTAL
4	5351.60	72.29	74.00	-1.71	34.77	3.49	34.03	0.00 Peak	177	69	HORIZONTAL

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

Temperature	25.6°C	Humidity	56%
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 20MHz Ch 100, 140 / Port 1 + Port 2 (2TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 9

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	dBuV	dB	dB	dB	dB/m	cm	deg	
1	5454.20	62.01	74.00	-11.99	24.30	3.52	34.19	0.00 Peak	167	68	HORIZONTAL
2	5460.00	44.19	54.00	-9.81	6.48	3.52	34.19	0.00 Average	167	68	HORIZONTAL
3	5469.00	66.44	68.30	-1.86	28.71	3.52	34.21	0.00 Peak	167	68	HORIZONTAL
4	5503.20	102.65	68.30			3.54	34.25	0.00 Average	167	68	HORIZONTAL
5	5503.60	113.77	68.30			3.54	34.25	0.00 Peak	167	68	HORIZONTAL

Item 4, 5 are the fundamental frequency at 5500 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	dBuV	dB	dB	dB	dB/m	cm	deg	
1	5692.00	99.64	68.30			3.59	34.34	0.00 Average	176	67	HORIZONTAL
2	5692.00	109.89	68.30			3.59	34.34	0.00 Peak	176	67	HORIZONTAL
3	5726.40	66.56	68.30	-1.74	28.62	3.60	34.34	0.00 Peak	176	67	HORIZONTAL

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



Temperature	25.6°C	Humidity	56%
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 40MHz Ch 54, 62 / Port 1 + Port 2 (2TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 9

Channel 54

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	5272.40	103.90	68.30			3.47	33.88	0.00	Average	173	324 HORIZONTAL
2	5274.00	114.15	68.30			3.47	33.88	0.00	Peak	173	324 HORIZONTAL
3	5360.00	50.44	54.00	-3.56	12.92	3.49	34.03	0.00	Average	173	324 HORIZONTAL
4	5362.80	65.05	74.00	-8.95	27.53	3.49	34.03	0.00	Peak	173	324 HORIZONTAL

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

Channel 62

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	5325.60	106.70	68.30			3.49	33.97	0.00	Peak	170	329 HORIZONTAL
2	5326.40	96.98	68.30			3.49	33.97	0.00	Average	170	329 HORIZONTAL
3	5350.00	52.68	54.00	-1.32	15.16	3.49	34.03	0.00	Average	170	329 HORIZONTAL
4	5353.20	67.41	74.00	-6.59	29.89	3.49	34.03	0.00	Peak	170	329 HORIZONTAL

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

Temperature	25.6°C	Humidity	56%
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 40MHz Ch 102, 110, 134 / Port 1 + Port 2 (2TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 9

Channel 102

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	5459.20	59.37	74.00	-14.63	21.64	3.52	34.21	0.00 Peak	166	69	HORIZONTAL
2	5460.00	45.57	54.00	-8.43	7.84	3.52	34.21	0.00 Average	166	69	HORIZONTAL
3	5466.40	67.21	68.30	-1.09	29.48	3.52	34.21	0.00 Peak	166	69	HORIZONTAL
4	5524.40	96.20	68.30			3.54	34.30	0.00 Average	166	69	HORIZONTAL
5	5526.00	106.50	68.30			3.54	34.30	0.00 Peak	166	69	HORIZONTAL

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

Channel 110

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	5452.00	46.00	54.00	-8.00	8.29	3.52	34.19	0.00 Average	166	62	HORIZONTAL
2	5455.60	62.96	74.00	-11.04	25.25	3.52	34.19	0.00 Peak	166	62	HORIZONTAL
3	5462.80	64.71	68.30	-3.59	27.00	3.52	34.19	0.00 Peak	166	62	HORIZONTAL
4	5547.20	112.46	68.30			3.55	34.29	0.00 Peak	166	62	HORIZONTAL
5	5567.20	102.05	68.30			3.55	34.31	0.00 Average	166	62	HORIZONTAL

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

Channel 134

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	5661.60	101.98	68.30			3.59	34.33	0.00 Average	176	68	HORIZONTAL
2	5682.80	112.87	68.30			3.59	34.33	0.00 Peak	176	68	HORIZONTAL
3	5725.40	67.23	68.30	-1.07	29.29	3.60	34.34	0.00 Peak	176	68	HORIZONTAL

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



Temperature	25.6°C	Humidity	56%
Test Engineer	Robert Chang	Configurations	IEEE 802.11a Ch 52, 60, 64 / Chain 1 + Chain 2 (2TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 9

Channel 52

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	5142.80	51.90	74.00	-22.10	14.83	3.43	33.64	0.00	Peak	108	0 VERTICAL
2	5144.00	39.07	54.00	-14.93	1.97	3.43	33.67	0.00	Average	108	0 VERTICAL
3	5266.60	113.81	68.30			3.46	33.88	0.00	Peak	108	0 VERTICAL
4	5267.20	103.85	68.30			3.46	33.88	0.00	Average	108	0 VERTICAL
5	5360.20	46.41	54.00	-7.59	8.89	3.49	34.03	0.00	Average	108	0 VERTICAL
6	5360.20	56.57	74.00	-17.43	19.05	3.49	34.03	0.00	Peak	108	0 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			Cable Loss	Antenna Factor	Preamp Factor			
1	5304.40	105.12	68.30			3.48	33.94	0.00	Average	178	301 HORIZONTAL
2	5304.40	114.94	68.30			3.48	33.94	0.00	Peak	178	301 HORIZONTAL
3	5386.40	46.92	54.00	-7.08	9.33	3.50	34.09	0.00	Average	178	301 HORIZONTAL
4	5386.80	59.34	74.00	-14.66	21.75	3.50	34.09	0.00	Peak	178	301 HORIZONTAL

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			Cable Loss	Antenna Factor	Preamp Factor			
1	5318.80	114.53	68.30			3.48	33.97	0.00	Peak	172	306 HORIZONTAL
2	5324.00	104.73	68.30			3.49	33.97	0.00	Average	172	306 HORIZONTAL
3	5350.00	49.91	54.00	-4.09	12.39	3.49	34.03	0.00	Average	172	306 HORIZONTAL
4	5352.40	67.90	74.00	-6.10	30.38	3.49	34.03	0.00	Peak	172	306 HORIZONTAL

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

Temperature	25.6°C	Humidity	56%
Test Engineer	Robert Chang	Configurations	IEEE 802.11a Ch 100, 140 / Chain 1 + Chain 2 (2TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 9

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	5457.00	61.20	74.00	-12.80	23.47	3.52	34.21	0.00 Peak	103	360	VERTICAL
2	5460.00	43.25	54.00	-10.75	5.52	3.52	34.21	0.00 Average	103	360	VERTICAL
3	5468.60	66.98	68.30	-1.32	29.22	3.52	34.24	0.00 Peak	103	360	VERTICAL
4	5496.00	101.60	68.30			3.53	34.26	0.00 Average	103	360	VERTICAL
5	5496.20	111.91	68.30			3.53	34.26	0.00 Peak	103	360	VERTICAL

Item 4, 5 are the fundamental frequency at 5500 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	5695.80	99.50	68.30			3.59	34.34	0.00 Average	100	1	VERTICAL
2	5705.60	109.78	68.30			3.60	34.34	0.00 Peak	100	1	VERTICAL
3	5726.40	66.88	68.30	-1.42	28.94	3.60	34.34	0.00 Peak	100	1	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



Temperature	25.6°C	Humidity	56%
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 20MHz Ch 52, 60, 64 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 12

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	5149.52	55.72	74.00	-18.28	18.62	3.43	33.67	0.00 Peak	125	360	VERTICAL
2	5150.00	42.99	54.00	-11.01	5.89	3.43	33.67	0.00 Average	125	360	VERTICAL
3	5266.25	109.45	68.30			3.46	33.88	0.00 Average	125	360	VERTICAL
4	5266.73	120.42	68.30			3.46	33.88	0.00 Peak	125	360	VERTICAL
5	5350.48	64.49	74.00	-9.51	26.97	3.49	34.03	0.00 Peak	125	360	VERTICAL
6	5353.85	52.77	54.00	-1.23	15.25	3.49	34.03	0.00 Average	125	360	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	5307.21	107.74	68.30			3.48	33.94	0.00 Average	110	360	VERTICAL
2	5307.69	117.36	68.30			3.48	33.94	0.00 Peak	110	360	VERTICAL
3	5380.29	64.62	74.00	-9.38	27.06	3.50	34.06	0.00 Peak	110	360	VERTICAL
4	5381.25	52.18	54.00	-1.82	14.62	3.50	34.06	0.00 Average	110	360	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	5326.73	107.73	68.30			3.49	33.97	0.00 Average	123	358	VERTICAL
2	5327.37	117.80	68.30			3.49	33.97	0.00 Peak	123	358	VERTICAL
3	5350.00	70.61	74.00	-3.39	33.09	3.49	34.03	0.00 Peak	123	358	VERTICAL
4	5351.60	52.12	54.00	-1.88	14.60	3.49	34.03	0.00 Average	123	358	VERTICAL

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



Temperature	25.6°C	Humidity	56%
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 20MHz Ch 100, 140 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 12

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	5417.05	48.70	54.00	-5.30	11.04	3.51	34.15	0.00	Average	118	360 VERTICAL
2	5419.62	62.55	74.00	-11.45	24.89	3.51	34.15	0.00	Peak	118	360 VERTICAL
3	5467.44	67.04	68.30	-1.26	29.28	3.52	34.24	0.00	Peak	118	360 VERTICAL
4	5505.45	116.81	68.30			3.54	34.28	0.00	Peak	118	360 VERTICAL
5	5507.05	106.29	68.30			3.54	34.28	0.00	Average	118	360 VERTICAL

Item 4, 5 are the fundamental frequency at 5500 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	5705.77	113.40	68.30				3.60	34.34	0.00	Peak	113	0 VERTICAL
2	5707.05	102.41	68.30				3.60	34.34	0.00	Average	113	0 VERTICAL
3	5725.16	67.21	68.30	-1.09	29.27	3.60	34.34	0.00	Peak	113	0 VERTICAL	

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



Temperature	25.6°C	Humidity	56%
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 40MHz Ch 54, 62 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 12

Channel 54

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
1	5283.78	118.80	68.30			3.47	33.91	0.00	Peak	125	360 VERTICAL
2	5286.03	107.84	68.30			3.47	33.91	0.00	Average	125	360 VERTICAL
3	5350.00	52.59	54.00	-1.41	15.07	3.49	34.03	0.00	Average	125	360 VERTICAL
4	5350.00	66.22	74.00	-7.78	28.70	3.49	34.03	0.00	Peak	125	360 VERTICAL

Item 1, 2 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	dBuV/m			Loss	Factor	Factor			
1	5325.71	107.65	68.30			3.49	33.97	0.00	Peak	111	360 VERTICAL
2	5326.99	97.71	68.30			3.49	33.97	0.00	Average	111	360 VERTICAL
3	5350.00	52.84	54.00	-1.16	15.32	3.49	34.03	0.00	Average	111	360 VERTICAL
4	5350.00	67.49	74.00	-6.51	29.97	3.49	34.03	0.00	Peak	111	360 VERTICAL

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

Temperature	25.6°C	Humidity	56%
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 40MHz Ch 102, 110, 134 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 12

Channel 102

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	dB	dB/m	cm	deg	
1	5460.00	47.78	54.00	-6.22	10.05	3.52	34.21	0.00 Average	116	358	VERTICAL
2	5460.00	61.05	74.00	-12.95	23.32	3.52	34.21	0.00 Peak	116	358	VERTICAL
3	5470.00	66.35	68.30	-1.95	28.59	3.52	34.24	0.00 Peak	116	358	VERTICAL
4	5524.10	108.78	68.30			3.54	34.30	0.00 Peak	116	358	VERTICAL
5	5526.03	97.94	68.30			3.54	34.30	0.00 Average	116	358	VERTICAL

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

Channel 110

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	dB	dB/m	cm	deg	
1	5453.27	51.85	54.00	-2.15	14.12	3.52	34.21	0.00 Average	119	360	VERTICAL
2	5457.76	66.29	74.00	-7.71	28.56	3.52	34.21	0.00 Peak	119	360	VERTICAL
3	5469.68	66.98	68.30	-1.32	29.22	3.52	34.24	0.00 Peak	119	360	VERTICAL
4	5536.22	107.29	68.30			3.55	34.31	0.00 Average	119	360	VERTICAL
5	5541.67	118.16	68.30			3.55	34.31	0.00 Peak	119	360	VERTICAL

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

Channel 134

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB	dB/m	cm	deg	
1	5653.01	103.90	68.30			3.58	34.33	0.00 Average	114	360	VERTICAL
2	5660.06	115.12	68.30			3.59	34.33	0.00 Peak	114	360	VERTICAL
3	5726.60	66.67	68.30	-1.63	28.73	3.60	34.34	0.00 Peak	114	360	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



Temperature	25.6°C	Humidity	56%
Test Engineer	Robert Chang	Configurations	IEEE 802.11a Ch 52, 60, 64 / Chain 1 (2TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 12

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	5137.98	56.09	74.00	-17.91	19.02	3.43	33.64	0.00	Peak	125	360 VERTICAL
2	5150.00	42.89	54.00	-11.11	5.79	3.43	33.67	0.00	Average	125	360 VERTICAL
3	5262.40	120.22	68.30			3.46	33.85	0.00	Peak	125	360 VERTICAL
4	5265.29	109.65	68.30			3.46	33.88	0.00	Average	125	360 VERTICAL
5	5353.37	52.82	54.00	-1.18	15.30	3.49	34.03	0.00	Average	125	360 VERTICAL
6	5353.37	65.52	74.00	-8.48	28.00	3.49	34.03	0.00	Peak	125	360 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	5306.09	116.95	68.30			3.48	33.94	0.00	Peak	123	359 VERTICAL
2	5306.73	107.64	68.30			3.48	33.94	0.00	Average	123	359 VERTICAL
3	5381.73	52.51	54.00	-1.49	14.95	3.50	34.06	0.00	Average	123	359 VERTICAL
4	5383.65	66.36	74.00	-7.64	28.77	3.50	34.09	0.00	Peak	123	359 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	5323.21	117.83	68.30			3.49	33.97	0.00	Peak	124	360 VERTICAL
2	5326.41	108.48	68.30			3.49	33.97	0.00	Average	124	360 VERTICAL
3	5350.00	52.12	54.00	-1.88	14.60	3.49	34.03	0.00	Average	124	360 VERTICAL
4	5352.56	71.01	74.00	-2.99	33.49	3.49	34.03	0.00	Peak	124	360 VERTICAL

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



Temperature	25.6°C	Humidity	56%
Test Engineer	Robert Chang	Configurations	IEEE 802.11a Ch 100, 140 / Chain 1 (2TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 12

Channel 100

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Antenna Factor	Preamp Factor			
1	5416.73	51.49	54.00	-2.51	13.83	3.51	34.15	0.00	Average	120	360 VERTICAL
2	5418.17	65.50	74.00	-8.50	27.84	3.51	34.15	0.00	Peak	120	360 VERTICAL
3	5469.84	66.62	68.30			3.52	34.24	0.00	Peak	120	360 VERTICAL
4	5504.81	117.67	68.30			3.54	34.28	0.00	Peak	120	360 VERTICAL
5	5506.73	106.88	68.30	38.58	69.06	3.54	34.28	0.00	Average	120	360 VERTICAL

Item 4, 5 are the fundamental frequency at 5500 MHz.

Channel 140

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Antenna Factor	Preamp Factor			
1	5702.72	114.69	68.30			3.59	34.34	0.00	Average	124	360 VERTICAL
2	5706.09	103.49	68.30			3.60	34.34	0.00	Average	124	360 VERTICAL
3	5725.64	66.37	68.30	-1.93	28.43	3.60	34.34	0.00	Average	124	360 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

Temperature	25.6°C	Humidity	56%
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 20MHz Ch 52, 60, 64 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 15

Channel 52

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	dB	dB/m	cm	deg	
1	5146.15	54.82	74.00	-19.18	17.72	3.43	33.67	0.00 Peak	150	260	HORIZONTAL
2	5150.00	40.94	54.00	-13.06	3.84	3.43	33.67	0.00 Average	150	260	HORIZONTAL
3	5258.56	118.22	68.30			3.46	33.85	0.00 Peak	150	260	HORIZONTAL
4	5267.21	107.47	68.30			3.46	33.88	0.00 Average	150	260	HORIZONTAL
5	5350.00	62.60	74.00	-11.40	25.08	3.49	34.03	0.00 Peak	150	260	HORIZONTAL
6	5353.85	51.07	54.00	-2.93	13.55	3.49	34.03	0.00 Average	150	260	HORIZONTAL

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			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB	dB/m	cm	deg	
1	5306.09	107.59	68.30			3.48	33.94	0.00 Average	171	259	HORIZONTAL
2	5306.09	118.21	68.30			3.48	33.94	0.00 Peak	171	259	HORIZONTAL
3	5352.56	66.52	74.00	-7.48	29.00	3.49	34.03	0.00 Peak	171	259	HORIZONTAL
4	5383.01	50.57	54.00	-3.43	12.98	3.50	34.09	0.00 Average	171	259	HORIZONTAL

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			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB	dB/m	cm	deg	
1	5318.08	115.47	68.30			3.48	33.97	0.00 Peak	169	260	HORIZONTAL
2	5322.24	105.21	68.30			3.48	33.97	0.00 Average	169	260	HORIZONTAL
3	5350.00	52.83	54.00	-1.17	15.31	3.49	34.03	0.00 Average	169	260	HORIZONTAL
4	5350.16	68.49	74.00	-5.51	30.97	3.49	34.03	0.00 Peak	169	260	HORIZONTAL

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



Temperature	25.6°C	Humidity	56%
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 20MHz Ch 100, 140 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 15

Channel 100

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	5457.12	63.05	74.00	-10.95	25.34	3.52	34.19	0.00 Peak	160	266	HORIZONTAL
2	5460.00	46.21	54.00	-7.79	8.50	3.52	34.19	0.00 Average	160	266	HORIZONTAL
3	5470.00	66.77	68.30	-1.53	29.04	3.52	34.21	0.00 Peak	160	266	HORIZONTAL
4	5493.11	101.89	68.30			3.53	34.23	0.00 Average	160	266	HORIZONTAL
5	5506.25	113.05	68.30			3.54	34.25	0.00 Peak	160	266	HORIZONTAL

Item 4, 5 are the fundamental frequency at 5500 MHz.

Channel 140

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	5693.11	112.26	68.30			3.59	34.34	0.00 Peak	154	263	HORIZONTAL
2	5693.43	101.01	68.30			3.59	34.34	0.00 Average	154	263	HORIZONTAL
3	5725.48	66.84	68.30	-1.46	28.90	3.60	34.34	0.00 Peak	154	263	HORIZONTAL

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



Temperature	25.6°C	Humidity	56%
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 40MHz Ch 54, 62 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 15

Channel 54

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
1	5286.67	105.24	68.30			3.47	33.91	0.00	Average	152	260 HORIZONTAL
2	5286.99	115.98	68.30			3.47	33.91	0.00	Peak	152	260 HORIZONTAL
3	5350.00	50.69	54.00	-3.31	13.17	3.49	34.03	0.00	Average	152	260 HORIZONTAL
4	5350.96	71.23	74.00	-2.77	33.71	3.49	34.03	0.00	Peak	152	260 HORIZONTAL

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			
1	5300.39	107.88	68.30			3.48	33.94	0.00	Peak	170	262 HORIZONTAL
2	5323.46	97.34	68.30			3.49	33.97	0.00	Average	170	262 HORIZONTAL
3	5350.00	52.51	54.00	-1.49	14.99	3.49	34.03	0.00	Average	170	262 HORIZONTAL
4	5351.28	66.73	74.00	-7.27	29.21	3.49	34.03	0.00	Peak	170	262 HORIZONTAL

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

Temperature	25.6°C	Humidity	56%
Test Engineer	Robert Chang	Configurations	IEEE 802.11n MCS0 40MHz Ch 102, 110, 134 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 15

Channel 102

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	5460.00	47.33	54.00	-6.67	9.62	3.52	34.19	0.00 Average	183	271	HORIZONTAL
2	5460.00	61.95	74.00	-12.05	24.24	3.52	34.19	0.00 Peak	183	271	HORIZONTAL
3	5469.68	67.27	68.30	-1.03	29.54	3.52	34.21	0.00 Peak	183	271	HORIZONTAL
4	5526.35	107.23	68.30			3.55	34.27	0.00 Peak	183	271	HORIZONTAL
5	5526.67	96.21	68.30			3.55	34.27	0.00 Average	183	271	HORIZONTAL

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

Channel 110

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	5459.36	60.35	74.00	-13.65	22.64	3.52	34.19	0.00 Peak	162	262	HORIZONTAL
2	5460.00	46.77	54.00	-7.23	9.06	3.52	34.19	0.00 Average	162	262	HORIZONTAL
3	5469.04	60.87	68.30	-7.43	23.14	3.52	34.21	0.00 Peak	162	262	HORIZONTAL
4	5564.10	101.93	68.30			3.55	34.31	0.00 Average	162	262	HORIZONTAL
5	5565.71	112.54	68.30			3.55	34.31	0.00 Peak	162	262	HORIZONTAL

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

Channel 134

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	5655.26	112.73	68.30			3.59	34.33	0.00 Peak	173	264	HORIZONTAL
2	5657.50	102.15	68.30			3.59	34.33	0.00 Average	173	264	HORIZONTAL
3	5725.00	66.79	68.30	-1.51	28.85	3.60	34.34	0.00 Peak	173	264	HORIZONTAL

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



Temperature	25.6°C	Humidity	56%
Test Engineer	Robert Chang	Configurations	IEEE 802.11a Ch 52, 60, 64 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 15

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	5143.27	53.84	74.00	-20.16	16.77	3.43	33.64	0.00	Peak	170	260 HORIZONTAL
2	5147.12	40.91	54.00	-13.09	3.81	3.43	33.67	0.00	Average	170	260 HORIZONTAL
3	5265.29	117.53	68.30			3.46	33.88	0.00	Peak	170	260 HORIZONTAL
4	5266.73	106.97	68.30			3.46	33.88	0.00	Average	170	260 HORIZONTAL
5	5353.85	61.92	74.00	-12.08	24.40	3.49	34.03	0.00	Peak	170	260 HORIZONTAL
6	5355.29	50.97	54.00	-3.03	13.45	3.49	34.03	0.00	Average	170	260 HORIZONTAL

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	5293.59	117.81	68.30			3.47	33.91	0.00	Peak	151	260 HORIZONTAL
2	5304.81	108.12	68.30			3.48	33.94	0.00	Average	151	260 HORIZONTAL
3	5351.60	65.48	74.00	-8.52	27.96	3.49	34.03	0.00	Peak	151	260 HORIZONTAL
4	5382.85	51.34	54.00	-2.66	13.75	3.50	34.09	0.00	Average	151	260 HORIZONTAL

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	5324.17	106.35	68.30			3.49	33.97	0.00	Average	150	262 HORIZONTAL
2	5325.45	116.51	68.30			3.49	33.97	0.00	Peak	150	262 HORIZONTAL
3	5350.00	52.42	54.00	-1.58	14.90	3.49	34.03	0.00	Average	150	262 HORIZONTAL
4	5350.00	70.01	74.00	-3.99	32.49	3.49	34.03	0.00	Peak	150	262 HORIZONTAL

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



Temperature	25.6°C	Humidity	56%
Test Engineer	Robert Chang	Configurations	IEEE 802.11a Ch 100, 140 / Chain 1 (1TX, 2RX)
Test Date	Dec. 23, 2011	Test Mode	Mode 15

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	5456.96	62.64	74.00	-11.36	24.93	3.52	34.19	0.00 Peak	188	265	HORIZONTAL
2	5460.00	46.38	54.00	-7.62	8.67	3.52	34.19	0.00 Average	188	265	HORIZONTAL
3	5469.52	67.26	68.30	-1.04	29.53	3.52	34.21	0.00 Peak	188	265	HORIZONTAL
4	5493.43	103.32	68.30			3.53	34.23	0.00 Average	188	265	HORIZONTAL
5	5495.99	114.10	68.30			3.53	34.23	0.00 Peak	188	265	HORIZONTAL

Item 4, 5 are the fundamental frequency at 5500 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	5693.43	102.39	68.30			3.59	34.34	0.00 Average	151	265	HORIZONTAL
2	5694.71	113.69	68.30			3.59	34.34	0.00 Peak	151	265	HORIZONTAL
3	5725.16	67.05	68.30	-1.25	29.11	3.60	34.34	0.00 Peak	151	265	HORIZONTAL

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

4.8. Frequency Stability Measurement

4.8.1. Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emissions is maintained within the band of operation under all conditions of normal operation as specified in the user's manual or $\pm 20\text{ppm}$ (IEEE 802.11n specification).

4.8.2. Measuring Instruments and Setting

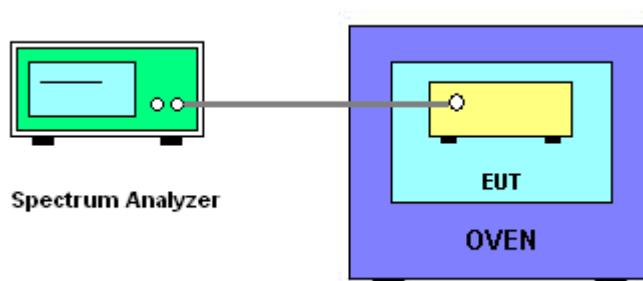
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Entire absence of modulation emissions bandwidth
RB	10 kHz
VB	10 kHz
Sweep Time	Auto

4.8.3. Test Procedures

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. EUT have transmitted absence of modulation signal and fixed channelize.
3. Set the spectrum analyzer span to view the entire absence of modulation emissions bandwidth.
4. Set RBW = 10 kHz, VBW = 10 kHz with peak detector and maxhold settings.
5. fc is declaring of channel frequency. Then the frequency error formula is $(fc-f)/fc \times 10^6$ ppm and the limit is less than $\pm 20\text{ppm}$ (IEEE 802.11n specification).
6. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value
7. Extreme temperature rule is $-30^\circ\text{C} \sim 50^\circ\text{C}$.

4.8.4. Test Setup Layout



4.8.5. Test Deviation

There is no deviation with the original standard.

4.8.6. EUT Operation during Test

The EUT was programmed to be in continuously un-modulation transmitting mode.

4.8.7. Test Result of Frequency Stability

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)
(V)	5300
126.50	5299.9883
110.00	5299.9985
93.50	5300.0050
Max. Deviation (MHz)	0.009900
Max. Deviation (ppm)	1.87

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)
(°C)	5300
-30	5300.0002
-20	5300.0002
-10	5300.0001
0	5300.0000
10	5299.9986
20	5299.9988
30	5299.9987
40	5299.9988
50	5299.9989
Max. Deviation (MHz)	0.001400
Max. Deviation (ppm)	0.2642

4.9. Antenna Requirements

4.9.1. 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.

4.9.2. 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
EMI Test Receiver	R&S	ESCS 30	100377	9kHz ~ 2.75GHz	Sep. 14, 2011	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Nov. 14, 2011	Conduction (CO01-CB)
V- LISN	Schwarzbeck	NSLK 8127	8127-478	9K ~ 30MHz	Nov. 30, 2011	Conduction (CO01-CB)
BILOG ANTENNA	Schaffner	CBL6112D	22021	20MHz ~ 2GHz	Jan. 11, 2012	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz~18GHz	Nov. 25, 2011	Radiation (03CH01-CB)
Horn Antenna	SCHWARZBEAK	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Nov. 22, 2011	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8447D	2944A10991	0.1MHz ~ 1.3GHz	Nov. 17, 2011	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Nov. 29, 2011	Radiation (03CH01-CB)
Pre-Amplifier	WM	TF-130N-R1	923365	26.5GHz ~ 40GHz	Jul. 29, 2011	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSP40	100056	9KHz~40GHz	Nov. 03, 2011	Radiation (05CH01-CB)
EMI Test Receiver	R&S	ESCS 30	100355	9KHz ~ 2.75GHz	Mar. 22, 2011	Radiation (03CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9 kHz - 30 MHz	Sep. 09, 2010*	Radiation (03CH01-CB)
Turn Table	INN CO	CO 2000	N/A	0 ~ 360 degree	N/A	Radiation (03CH01-CB)
Antenna Mast	INN CO	CO2000	N/A	1 m - 4 m	N/A	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-1	N/A	30 MHz - 1 GHz	Nov. 17, 2011	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-1	N/A	1 GHz – 26.5 GHz	Nov. 17, 2011	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-2	N/A	1 GHz – 26.5 GHz	Nov. 17, 2011	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-3	N/A	1 GHz - 40 GHz	Nov. 17, 2011	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-4	N/A	1 GHz - 40 GHz	Nov. 17, 2011	Radiation (03CH01-CB)
Signal analyzer	R&S	FSV40	100979	9KHz~40GHz	Sep. 26, 2011	Conducted (TH01-CB)
Temp. and Humidity Chamber	Ten Billion	TTH-D3SP	TBN-931011	-30~100 degree	May. 20, 2011	Conducted (TH01-CB)
Thermo-Hygro Meter	N/A	HC 520	#1	15~70 degree	Nov. 02, 2011	Conducted (TH01-CB)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
RF Power Divider	HP	11636A	00306	2GHz ~ 18GHz	N/A	Conducted (TH01-CB)
RF Power Splitter	Anaren	44100	1839	2GHz ~ 18GHz	N/A	Conducted (TH01-CB)
RF Power Splitter	Anaren	42100	17930	2GHz ~ 18GHz	N/A	Conducted (TH01-CB)
RF Cable-high	Woken	High Cable-7	-	1 GHz – 26.5 GHz	Nov. 17, 2011	Conducted (TH01-CB)
RF Cable-high	Woken	High Cable-8	-	1 GHz – 26.5 GHz	Nov. 17, 2011	Conducted (TH01-CB)
RF Cable-high	Woken	High Cable-9	-	1 GHz – 26.5 GHz	Nov. 17, 2011	Conducted (TH01-CB)
RF Cable-high	Woken	High Cable-10	-	1 GHz – 26.5 GHz	Nov. 17, 2011	Conducted (TH01-CB)
RF Cable-high	Woken	High Cable-11	-	1 GHz – 26.5 GHz	Nov. 17, 2011	Conducted (TH01-CB)
RF Cable-high	Woken	High Cable-12	-	1 GHz – 26.5 GHz	Nov. 17, 2011	Conducted (TH01-CB)
RF Cable-high	Woken	High Cable-13	-	1 GHz – 26.5 GHz	Nov. 17, 2011	Conducted (TH01-CB)
Power Sensor	Anritsu	MA2411B	0917223	300MHz~40GHz	Nov. 01, 2011	Conducted (TH01-CB)
Power Meter	Anritsu	ML2495A	1035008	300MHz~40GHz	Nov. 01, 2011	Conducted (TH01-CB)

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

“*” Calibration Interval of instruments listed above is two years.

NCR means Non-Calibration required.