



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 36 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15530.80	52.57	74.00	-21.43	44.06	6.13	37.67	35.29	Peak	100	180	HORIZONTAL
2	15534.80	39.47	54.00	-14.53	30.96	6.13	37.67	35.29	Average	100	180	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15545.80	38.96	54.00	-15.04	30.45	6.13	37.69	35.31	Average	100	327	VERTICAL
2	15586.40	52.03	74.00	-21.97	43.62	6.13	37.61	35.33	Peak	100	327	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 40 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) (3TX)

**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	15596.40	53.63	74.00	-20.37	45.24	6.13	37.60	35.34	Peak	158	159	HORIZONTAL
2	15598.20	41.20	54.00	-12.80	32.81	6.13	37.60	35.34	Average	158	159	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	15598.20	40.64	54.00	-13.36	32.25	6.13	37.60	35.34	Average	163	286	VERTICAL
2	15603.60	54.07	74.00	-19.93	45.68	6.13	37.60	35.34	Peak	163	286	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 48 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15719.40	49.13	54.00	-4.87	40.90	6.14	37.48	35.39	Average	127	183	HORIZONTAL
2	15724.60	63.64	74.00	-10.36	55.41	6.14	37.48	35.39	Peak	127	183	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	15717.00	45.55	54.00	-8.45	37.32	6.14	37.48	35.39	Average	100	68	VERTICAL
2	15721.00	60.19	74.00	-13.81	51.96	6.14	37.48	35.39	Peak	100	68	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS16 20MHz Ch 36 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15537.92	39.62	54.00	-14.38	31.15	6.13	37.65	35.31	Average	100	172	HORIZONTAL
2	15538.60	54.53	74.00	-19.47	46.06	6.13	37.65	35.31	Peak	100	172	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	15539.70	58.14	74.00	-15.86	49.63	6.13	37.69	35.31	Peak	100	288	VERTICAL
2	15540.48	41.49	54.00	-12.51	32.98	6.13	37.69	35.31	Average	100	288	VERTICAL

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Wen Chao	<b>Configurations</b>	IEEE 802.11n MCS16 20MHz Ch 40 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Apr. 27, 2012	<b>Test Mode</b>	Mode 1 (Ant. 6 Dipole antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1 15600.32	52.08	74.00	-21.92	43.69	6.13	37.60	35.34	Peak	100	280	HORIZONTAL	
2 15601.09	38.22	54.00	-15.78	29.83	6.13	37.60	35.34	Average	100	280	HORIZONTAL	

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1 15598.58	38.09	54.00	-15.91	29.70	6.13	37.60	35.34	Average	100	158	VERTICAL	
2 15602.05	51.85	74.00	-22.15	43.46	6.13	37.60	35.34	Peak	100	158	VERTICAL	



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS16 20MHz Ch 48 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	15720.34	62.74	74.00	-11.26	54.51	6.14	37.48	35.39	Peak	135	162	HORIZONTAL
2	15721.98	44.74	54.00	-9.26	36.51	6.14	37.48	35.39	Average	135	162	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	15714.24	59.09	74.00	-14.91	50.85	6.14	37.48	35.38	Peak	100	251	VERTICAL
2	15717.40	43.46	54.00	-10.54	35.23	6.14	37.48	35.39	Average	100	251	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 38 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) (1TX)

**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	10380.52	49.02	68.30	-19.28	41.26	4.98	38.38	35.60 Peak	100	69	HORIZONTAL
2	15560.00	37.81	54.00	-16.19	29.36	6.13	37.63	35.31 Average	100	111	HORIZONTAL
3	15570.32	51.59	74.00	-22.41	43.16	6.13	37.63	35.33 Peak	100	111	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	10385.88	49.39	68.30	-18.91	41.63	4.98	38.38	35.60 Peak	100	169	VERTICAL
2	15569.96	52.19	74.00	-21.81	43.74	6.13	37.65	35.33 Peak	100	70	VERTICAL
3	15570.52	37.93	54.00	-16.07	29.48	6.13	37.65	35.33 Average	100	70	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 46 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) (1TX)

**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	10459.52	49.62	68.30	-18.68	41.77	5.00	38.39	35.54	Peak	100	28	HORIZONTAL
2	15691.20	53.83	54.00	-0.17	45.58	6.14	37.49	35.38	Average	128	154	HORIZONTAL
3	15694.60	69.99	74.00	-4.01	61.74	6.14	37.49	35.38	Peak	128	154	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	10463.96	49.78	68.30	-18.52	41.93	5.00	38.39	35.54	Peak	100	120	VERTICAL
2	15693.30	47.11	54.00	-6.89	38.86	6.14	37.49	35.38	Average	100	66	VERTICAL
3	15695.70	62.10	74.00	-11.90	53.85	6.14	37.49	35.38	Peak	100	66	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 38 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	15557.40	51.31	74.00	-22.69	42.86	6.13	37.63	35.31	Peak	100	157	HORIZONTAL
2	15559.60	37.80	54.00	-16.20	29.35	6.13	37.63	35.31	Average	100	157	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	15565.40	37.82	54.00	-16.18	29.37	6.13	37.65	35.33	Average	100	43	VERTICAL
2	15577.80	51.26	74.00	-22.74	42.85	6.13	37.61	35.33	Peak	100	43	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 46 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	15688.40	53.78	54.00	-0.22	45.50	6.14	37.51	35.37	Average	144	163	HORIZONTAL
2	15689.40	67.22	74.00	-6.78	58.94	6.14	37.51	35.37	Peak	144	163	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	15696.80	47.50	54.00	-6.50	39.25	6.14	37.49	35.38	Average	100	82	VERTICAL
2	15698.00	60.30	74.00	-13.70	52.05	6.14	37.49	35.38	Peak	100	82	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 40MHz Ch 38 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15562.80	37.83	54.00	-16.17	29.38	6.13	37.63	35.31	Average	100	220	HORIZONTAL
2	15563.80	50.52	74.00	-23.48	42.09	6.13	37.63	35.33	Peak	100	220	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	15535.00	37.76	54.00	-16.24	29.19	6.13	37.73	35.29	Average	100	102	VERTICAL
2	15547.60	51.11	74.00	-22.89	42.60	6.13	37.69	35.31	Peak	100	102	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 40MHz Ch 46 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	15690.60	64.89	74.00	-9.11	56.61	6.14	37.51	35.37	Peak	145	163	HORIZONTAL
2	15691.80	51.29	54.00	-2.71	43.04	6.14	37.49	35.38	Average	145	163	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	15694.20	47.22	54.00	-6.78	38.97	6.14	37.49	35.38	Average	124	83	VERTICAL
2	15706.80	61.33	74.00	-12.67	53.06	6.14	37.49	35.38	Peak	124	83	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 38 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
1	15521.00	52.33	74.00	-21.67	43.82	6.13	37.67	35.29	Peak	100	98	HORIZONTAL
2	15535.20	38.33	54.00	-15.67	29.82	6.13	37.67	35.29	Average	100	98	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
1	15521.00	51.95	74.00	-22.05	43.38	6.13	37.73	35.29	Peak	100	220	VERTICAL
2	15523.40	38.42	54.00	-15.58	29.85	6.13	37.73	35.29	Average	100	220	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 46 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15689.20	49.81	54.00	-4.19	41.53	6.14	37.51	35.37	Average	147	157	HORIZONTAL
2	15708.00	63.62	74.00	-10.38	55.37	6.14	37.49	35.38	Peak	147	157	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	15701.00	46.16	54.00	-7.84	37.91	6.14	37.49	35.38	Average	132	76	VERTICAL
2	15701.20	59.52	74.00	-14.48	51.27	6.14	37.49	35.38	Peak	132	76	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 40MHz Ch 38 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15520.80	38.40	54.00	-15.60	29.89	6.13	37.67	35.29	Average	100	144	HORIZONTAL
2	15544.20	51.64	74.00	-22.36	43.17	6.13	37.65	35.31	Peak	100	144	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	15523.60	38.54	54.00	-15.46	29.97	6.13	37.73	35.29	Average	100	249	VERTICAL
2	15561.40	51.97	74.00	-22.03	43.50	6.13	37.65	35.31	Peak	100	249	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 40MHz Ch 46 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15694.60	46.63	54.00	-7.37	38.38	6.14	37.49	35.38	Average	129	154	HORIZONTAL
2	15695.00	60.76	74.00	-13.24	52.51	6.14	37.49	35.38	Peak	129	154	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	15691.40	45.72	54.00	-8.28	37.47	6.14	37.49	35.38	Average	131	76	VERTICAL
2	15695.00	60.45	74.00	-13.55	52.20	6.14	37.49	35.38	Peak	131	76	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS16 40MHz Ch 38 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Antenna Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	15568.34	38.42	54.00	-15.58	29.99	6.13	37.63	35.33	Average	100	265	HORIZONTAL
2	15571.12	52.32	74.00	-21.68	43.89	6.13	37.63	35.33	Peak	100	265	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Antenna Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	15565.48	38.38	54.00	-15.62	29.93	6.13	37.65	35.33	Average	100	125	VERTICAL
2	15566.48	52.19	74.00	-21.81	43.74	6.13	37.65	35.33	Peak	100	125	VERTICAL

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Wen Chao	<b>Configurations</b>	IEEE 802.11n MCS16 40MHz Ch 46 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Apr. 27, 2012	<b>Test Mode</b>	Mode 1 (Ant. 6 Dipole antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Antenna Factor	Preamp Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	15687.32	54.86	74.00	-19.14	46.58	6.14	37.51	35.37	Peak	100	226	HORIZONTAL
2	15690.32	40.55	54.00	-13.45	32.27	6.14	37.51	35.37	Average	100	226	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Antenna Factor	Preamp Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	15687.44	42.15	54.00	-11.85	33.87	6.14	37.51	35.37	Average	116	58	VERTICAL
2	15689.24	57.24	74.00	-16.76	48.96	6.14	37.51	35.37	Peak	116	58	VERTICAL

**Note:**

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

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

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 36 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) (1TX)

**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	15537.80	40.17	54.00	-13.83	31.68	6.13	37.65	35.29	Average	100	319	HORIZONTAL
2	15540.84	54.66	74.00	-19.34	46.19	6.13	37.65	35.31	Peak	100	319	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	15535.00	39.32	54.00	-14.68	30.75	6.13	37.73	35.29	Average	100	330	VERTICAL
2	15536.22	54.15	74.00	-19.85	45.58	6.13	37.73	35.29	Peak	100	330	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 40 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15598.80	60.40	74.00	-13.60	52.01	6.13	37.60	35.34	Peak	100	322	HORIZONTAL
2	15601.26	45.72	54.00	-8.28	37.33	6.13	37.60	35.34	Average	100	322	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15602.50	58.65	74.00	-15.35	50.26	6.13	37.60	35.34	Peak	100	329	VERTICAL
2	15603.46	43.66	54.00	-10.34	35.27	6.13	37.60	35.34	Average	100	329	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 48 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15719.94	48.03	54.00	-5.97	39.80	6.14	37.48	35.39	Average	100	323	HORIZONTAL
2	15720.32	63.02	74.00	-10.98	54.79	6.14	37.48	35.39	Peak	100	323	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15722.70	47.06	54.00	-6.94	38.83	6.14	37.48	35.39	Average	131	323	VERTICAL
2	15723.86	62.32	74.00	-11.68	54.09	6.14	37.48	35.39	Peak	131	323	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 36 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
1	15536.00	59.94	74.00	-14.06	51.43	6.13	37.67	35.29	Peak	100	330	HORIZONTAL
2	15536.30	45.69	54.00	-8.31	37.18	6.13	37.67	35.29	Average	100	330	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
1	15536.70	57.53	74.00	-16.47	48.96	6.13	37.73	35.29	Peak	101	348	VERTICAL
2	15538.30	43.52	54.00	-10.48	35.01	6.13	37.69	35.31	Average	101	348	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 40 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15601.40	50.41	54.00	-3.59	42.02	6.13	37.60	35.34	Average	100	332	HORIZONTAL
2	15602.60	64.02	74.00	-9.98	55.63	6.13	37.60	35.34	Peak	100	332	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	15595.50	44.17	54.00	-9.83	35.78	6.13	37.60	35.34	Average	102	350	VERTICAL
2	15595.90	59.03	74.00	-14.97	50.64	6.13	37.60	35.34	Peak	102	350	VERTICAL

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Wen Chao	<b>Configurations</b>	IEEE 802.11n MCS0 20MHz Ch 48 / Chain 1 + Chain 2
<b>Test Date</b>	Apr. 27, 2012	<b>Test Mode</b>	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor				
MHz	dBuV/m	dBuV/m	dB	dB	dBuV	dB	dB/m	dB		cm	deg	
1 15720.00	65.28	74.00	-8.72	57.05	6.14	37.48	35.39	Peak		100	329	HORIZONTAL
2 15720.70	51.19	54.00	-2.81	42.96	6.14	37.48	35.39	Average		100	329	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor				
MHz	dBuV/m	dBuV/m	dB	dB	dBuV	dB	dB/m	dB		cm	deg	
1 15719.80	46.77	54.00	-7.23	38.54	6.14	37.48	35.39	Average		100	331	VERTICAL
2 15720.40	61.48	74.00	-12.52	53.25	6.14	37.48	35.39	Peak		100	331	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 36 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	15535.90	52.69	74.00	-21.31	44.18	6.13	37.67	35.29	Peak	100	40	HORIZONTAL
2	15537.90	39.21	54.00	-14.79	30.74	6.13	37.65	35.31	Average	100	40	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	15532.30	38.39	54.00	-15.61	29.82	6.13	37.73	35.29	Average	100	360	VERTICAL
2	15539.10	51.48	74.00	-22.52	42.97	6.13	37.69	35.31	Peak	100	360	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 40 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
1	15594.00	53.73	74.00	-20.27	45.34	6.13	37.60	35.34	Peak	100	330	HORIZONTAL
2	15598.30	39.55	54.00	-14.45	31.16	6.13	37.60	35.34	Average	100	330	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
1	15601.20	38.17	54.00	-15.83	29.78	6.13	37.60	35.34	Average	100	0	VERTICAL
2	15601.30	51.31	74.00	-22.69	42.92	6.13	37.60	35.34	Peak	100	0	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 48 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
1	15716.50	52.13	74.00	-21.87	43.90	6.14	37.48	35.39	Peak	100	33 HORIZONTAL
2	15725.70	38.74	54.00	-15.26	30.53	6.14	37.46	35.39	Average	100	33 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
1	15714.80	53.12	74.00	-20.88	44.88	6.14	37.48	35.38	Peak	100	335 VERTICAL
2	15722.90	39.32	54.00	-14.68	31.09	6.14	37.48	35.39	Average	100	335 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 36 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor				
1	15555.60	52.12	74.00	-21.88	43.67	6.13	37.63	35.31	Peak	100	155	HORIZONTAL
2	15583.60	39.30	54.00	-14.70	30.89	6.13	37.61	35.33	Average	100	155	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor				
1	15569.40	52.28	74.00	-21.72	43.83	6.13	37.65	35.33	Peak	100	22	VERTICAL
2	15586.00	39.33	54.00	-14.67	30.92	6.13	37.61	35.33	Average	100	22	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 40 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15602.40	48.07	54.00	-5.93	39.68	6.13	37.60	35.34	Average	100	27	HORIZONTAL
2	15602.60	60.95	74.00	-13.05	52.56	6.13	37.60	35.34	Peak	100	27	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	15598.80	57.19	74.00	-16.81	48.80	6.13	37.60	35.34	Peak	100	26	VERTICAL
2	15600.20	44.17	54.00	-9.83	35.78	6.13	37.60	35.34	Average	100	26	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 48 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15714.60	48.34	54.00	-5.66	40.10	6.14	37.48	35.38	Average	100	29	HORIZONTAL
2	15715.20	63.29	74.00	-10.71	55.05	6.14	37.48	35.38	Peak	100	29	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	15717.80	43.27	54.00	-10.73	35.04	6.14	37.48	35.39	Average	100	30	VERTICAL
2	15719.00	56.35	74.00	-17.65	48.12	6.14	37.48	35.39	Peak	100	30	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 36 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15543.60	52.90	74.00	-21.10	44.43	6.13	37.65	35.31	Peak	100	60 HORIZONTAL
2	15588.80	39.35	54.00	-14.65	30.95	6.13	37.61	35.34	Average	100	60 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15530.00	52.00	74.00	-22.00	43.43	6.13	37.73	35.29	Peak	100	179 VERTICAL
2	15588.80	39.35	54.00	-14.65	30.95	6.13	37.61	35.34	Average	100	179 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 40 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dBuV	dB	dB/m				
1	15600.40	57.53	74.00	-16.47	49.14	6.13	37.60	35.34	Peak	100	30	HORIZONTAL
2	15601.20	44.79	54.00	-9.21	36.40	6.13	37.60	35.34	Average	100	30	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	15606.00	41.74	54.00	-12.26	33.37	6.13	37.58	35.34	Average	100	34	VERTICAL
2	15612.80	53.43	74.00	-20.57	45.06	6.13	37.58	35.34	Peak	100	34	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 48 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15715.20	44.37	54.00	-9.63	36.13	6.14	37.48	35.38	Average	100	13	HORIZONTAL
2	15727.20	56.91	74.00	-17.09	48.70	6.14	37.46	35.39	Peak	100	13	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	15718.20	41.20	54.00	-12.80	32.97	6.14	37.48	35.39	Average	100	346	VERTICAL
2	15720.80	53.97	74.00	-20.03	45.74	6.14	37.48	35.39	Peak	100	346	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 38 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB				
1	15565.64	51.72	74.00	-22.28	43.29	6.13	37.63	35.33	Peak	100	324	HORIZONTAL
2	15575.00	37.85	54.00	-16.15	29.44	6.13	37.61	35.33	Average	100	324	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB				
1	15565.06	51.82	74.00	-22.18	43.37	6.13	37.65	35.33	Peak	100	322	VERTICAL
2	15565.32	37.79	54.00	-16.21	29.34	6.13	37.65	35.33	Average	100	322	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 46 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) (1TX)

**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	15693.04	45.34	54.00	-8.66	37.09	6.14	37.49	35.38	Average	100	322	HORIZONTAL
2	15694.70	59.72	74.00	-14.28	51.47	6.14	37.49	35.38	Peak	100	322	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	15689.62	57.69	74.00	-16.31	49.41	6.14	37.51	35.37	Peak	100	313	VERTICAL
2	15692.42	43.43	54.00	-10.57	35.18	6.14	37.49	35.38	Average	100	313	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 38 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15549.40	37.63	54.00	-16.37	29.16	6.13	37.65	35.31	Average	100	337	HORIZONTAL
2	15557.10	50.95	74.00	-23.05	42.50	6.13	37.63	35.31	Peak	100	337	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	15549.20	37.67	54.00	-16.33	29.16	6.13	37.69	35.31	Average	100	191	VERTICAL
2	15555.70	50.81	74.00	-23.19	42.34	6.13	37.65	35.31	Peak	100	191	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 46 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15692.10	44.41	54.00	-9.59	36.16	6.14	37.49	35.38	Average	100	333	HORIZONTAL
2	15694.00	56.86	74.00	-17.14	48.61	6.14	37.49	35.38	Peak	100	333	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	15703.50	40.77	54.00	-13.23	32.52	6.14	37.49	35.38	Average	100	0	VERTICAL
2	15705.50	54.20	74.00	-19.80	45.95	6.14	37.49	35.38	Peak	100	0	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 40MHz Ch 38 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15524.00	38.09	54.00	-15.91	29.58	6.13	37.67	35.29	Average	100	266	HORIZONTAL
2	15536.60	51.18	74.00	-22.82	42.67	6.13	37.67	35.29	Peak	100	266	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	15532.20	38.19	54.00	-15.81	29.62	6.13	37.73	35.29	Average	100	160	VERTICAL
2	15565.20	51.00	74.00	-23.00	42.55	6.13	37.65	35.33	Peak	100	160	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 40MHz Ch 46 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15661.40	37.77	54.00	-16.23	29.46	6.14	37.53	35.36	Average	100	130	HORIZONTAL
2	15692.00	50.62	74.00	-23.38	42.37	6.14	37.49	35.38	Peak	100	130	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	15645.40	51.06	74.00	-22.94	42.74	6.14	37.54	35.36	Peak	100	234	VERTICAL
2	15661.60	37.73	54.00	-16.27	29.42	6.14	37.53	35.36	Average	100	234	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 38 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	15571.02	39.25	54.00	-14.75	30.82	6.13	37.63	35.33	Average	100	209	HORIZONTAL
2	15574.03	52.33	74.00	-21.67	43.92	6.13	37.61	35.33	Peak	100	209	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	15571.41	39.21	54.00	-14.79	30.76	6.13	37.65	35.33	Average	100	116	VERTICAL
2	15572.35	53.14	74.00	-20.86	44.73	6.13	37.61	35.33	Peak	100	116	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 46 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15690.80	42.95	54.00	-11.05	34.68	6.14	37.51	35.38	Average	100	28	HORIZONTAL
2	15690.80	54.14	74.00	-19.86	45.87	6.14	37.51	35.38	Peak	100	28	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	15698.20	53.04	74.00	-20.96	44.79	6.14	37.49	35.38	Peak	100	19	VERTICAL
2	15707.00	40.55	54.00	-13.45	32.30	6.14	37.49	35.38	Average	100	19	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 40MHz Ch 38 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor				
1	15580.40	53.72	74.00	-20.28	45.31	6.13	37.61	35.33	Peak	100	313	HORIZONTAL
2	15603.80	39.38	54.00	-14.62	30.99	6.13	37.60	35.34	Average	100	313	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor				
1	15559.00	52.09	74.00	-21.91	43.62	6.13	37.65	35.31	Peak	100	148	VERTICAL
2	15594.20	39.41	54.00	-14.59	31.02	6.13	37.60	35.34	Average	100	148	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 40MHz Ch 46 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15686.40	43.84	54.00	-10.16	35.56	6.14	37.51	35.37	Average	100	18	HORIZONTAL
2	15707.40	56.62	74.00	-17.38	48.37	6.14	37.49	35.38	Peak	100	18	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15691.20	52.98	74.00	-21.02	44.73	6.14	37.49	35.38	Peak	100	345	VERTICAL
2	15692.00	40.84	54.00	-13.16	32.59	6.14	37.49	35.38	Average	100	345	VERTICAL

**Note:**

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

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

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 36 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
1	15539.63	49.71	74.00	-24.29	41.24	6.13	37.65	35.31	Peak	100	212	HORIZONTAL
2	15540.45	36.52	54.00	-17.48	28.05	6.13	37.65	35.31	Average	100	212	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
1	15539.79	36.73	54.00	-17.27	28.22	6.13	37.69	35.31	Average	100	115	VERTICAL
2	15540.04	49.95	74.00	-24.05	41.44	6.13	37.69	35.31	Peak	100	115	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 40 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB		cm	deg	
1	15599.85	54.69	74.00	-19.31	46.30	6.13	37.60	35.34	Peak	100	13	HORIZONTAL
2	15600.45	40.14	54.00	-13.86	31.75	6.13	37.60	35.34	Average	100	13	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	15599.73	56.31	74.00	-17.69	47.92	6.13	37.60	35.34	Peak	100	326	VERTICAL
2	15599.97	42.66	54.00	-11.34	34.27	6.13	37.60	35.34	Average	100	326	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 48 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB		cm	deg	
1	15718.62	49.07	74.00	-24.93	40.84	6.14	37.48	35.39	Peak	100	82	HORIZONTAL
2	15726.76	37.91	54.00	-16.09	29.70	6.14	37.46	35.39	Average	100	82	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	15720.02	54.82	74.00	-19.18	46.59	6.14	37.48	35.39	Peak	100	321	VERTICAL
2	15720.21	41.41	54.00	-12.59	33.18	6.14	37.48	35.39	Average	100	321	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 36 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15540.28	36.47	54.00	-17.53	28.00	6.13	37.65	35.31	Average	100	279	HORIZONTAL
2	15540.45	49.18	74.00	-24.82	40.71	6.13	37.65	35.31	Peak	100	279	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	15539.96	36.70	54.00	-17.30	28.19	6.13	37.69	35.31	Average	100	108	VERTICAL
2	15540.23	49.08	74.00	-24.92	40.57	6.13	37.69	35.31	Peak	100	108	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 40 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	15600.06	49.12	74.00	-24.88	40.73	6.13	37.60	35.34	Peak	100	210	HORIZONTAL
2	15600.25	36.07	54.00	-17.93	27.68	6.13	37.60	35.34	Average	100	210	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	15599.50	49.78	74.00	-24.22	41.39	6.13	37.60	35.34	Peak	100	164	VERTICAL
2	15599.75	36.69	54.00	-17.31	28.30	6.13	37.60	35.34	Average	100	164	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 48 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15719.64	36.07	54.00	-17.93	27.84	6.14	37.48	35.39	Average	100	216	HORIZONTAL
2	15719.93	49.03	74.00	-24.97	40.80	6.14	37.48	35.39	Peak	100	216	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	15719.63	36.88	54.00	-17.12	28.65	6.14	37.48	35.39	Average	100	142	VERTICAL
2	15720.48	51.09	74.00	-22.91	42.86	6.14	37.48	35.39	Peak	100	142	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 36 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15540.01	36.26	54.00	-17.74	27.79	6.13	37.65	35.31	Average	100	252	HORIZONTAL
2	15540.03	49.62	74.00	-24.38	41.15	6.13	37.65	35.31	Peak	100	252	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	15540.16	36.37	54.00	-17.63	27.86	6.13	37.69	35.31	Average	100	126	VERTICAL
2	15540.34	49.12	74.00	-24.88	40.61	6.13	37.69	35.31	Peak	100	126	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 40 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	15599.96	48.72	74.00	-25.28	40.33	6.13	37.60	35.34	Peak	100	244	HORIZONTAL
2	15600.37	36.09	54.00	-17.91	27.70	6.13	37.60	35.34	Average	100	244	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	15600.04	49.64	74.00	-24.36	41.25	6.13	37.60	35.34	Peak	100	187	VERTICAL
2	15600.05	36.34	54.00	-17.66	27.95	6.13	37.60	35.34	Average	100	187	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 48 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15719.67	36.06	54.00	-17.94	27.83	6.14	37.48	35.39	Average	100	159	HORIZONTAL
2	15720.16	49.40	74.00	-24.60	41.17	6.14	37.48	35.39	Peak	100	159	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	15719.81	36.55	54.00	-17.45	28.32	6.14	37.48	35.39	Average	100	39	VERTICAL
2	15720.19	50.12	74.00	-23.88	41.89	6.14	37.48	35.39	Peak	100	39	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 36 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15539.83	38.56	54.00	-15.44	30.09	6.13	37.65	35.31	Average	100	228	HORIZONTAL
2	15540.47	52.24	74.00	-21.76	43.77	6.13	37.65	35.31	Peak	100	228	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	15539.65	51.38	74.00	-22.62	42.87	6.13	37.69	35.31	Peak	100	143	VERTICAL
2	15540.29	38.86	54.00	-15.14	30.35	6.13	37.69	35.31	Average	100	143	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 40 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
1	15600.18	51.40	74.00	-22.60	43.01	6.13	37.60	35.34	Peak	100	229	HORIZONTAL
2	15600.45	38.44	54.00	-15.56	30.05	6.13	37.60	35.34	Average	100	229	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
1	15599.69	38.75	54.00	-15.25	30.36	6.13	37.60	35.34	Average	100	148	VERTICAL
2	15600.10	51.03	74.00	-22.97	42.64	6.13	37.60	35.34	Peak	100	148	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 48 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	Over Limit		Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	15719.85	39.23	54.00	-14.77	31.00	6.14	37.48	35.39 Average	100	230	HORIZONTAL
2	15720.49	53.32	74.00	-20.68	45.09	6.14	37.48	35.39 Peak	100	230	HORIZONTAL

**Vertical**

Freq	Level	Limit		Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	Over Limit		Loss	Factor	Factor		cm	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	15720.10	39.48	54.00	-14.52	31.25	6.14	37.48	35.39 Average	100	125	VERTICAL
2	15720.12	51.99	74.00	-22.01	43.76	6.14	37.48	35.39 Peak	100	125	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 36 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	15539.88	50.86	74.00	-23.14	42.39	6.13	37.65	35.31	Peak	100	264	HORIZONTAL
2	15540.10	38.59	54.00	-15.41	30.12	6.13	37.65	35.31	Average	100	264	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	15539.89	51.22	74.00	-22.78	42.71	6.13	37.69	35.31	Peak	100	171	VERTICAL
2	15540.08	38.77	54.00	-15.23	30.26	6.13	37.69	35.31	Average	100	171	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 40 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Read	Cable			Preamp	A/Pos	T/Pos	Pol/Phase
		Line	Over Limit		Antenna	Loss Factor	Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15600.10	38.43	54.00	-15.57	30.04	6.13	37.60	35.34	Average	100	275 HORIZONTAL
2	15600.48	50.90	74.00	-23.10	42.51	6.13	37.60	35.34	Peak	100	275 HORIZONTAL

**Vertical**

Freq	Level	Limit		Read	Cable			Preamp	A/Pos	T/Pos	Pol/Phase
		Line	Over Limit		Antenna	Loss Factor	Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15599.62	38.71	54.00	-15.29	30.32	6.13	37.60	35.34	Average	100	92 VERTICAL
2	15599.87	50.79	74.00	-23.21	42.40	6.13	37.60	35.34	Peak	100	92 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 48 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB				
1	15719.58	51.94	74.00	-22.06	43.71	6.14	37.48	35.39	Peak	100	207	HORIZONTAL
2	15720.00	39.34	54.00	-14.66	31.11	6.14	37.48	35.39	Average	100	207	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				
1	15719.53	52.10	74.00	-21.90	43.87	6.14	37.48	35.39	Peak	100	119	VERTICAL
2	15719.99	39.81	54.00	-14.19	31.58	6.14	37.48	35.39	Average	100	119	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS16 20MHz Ch 36 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	15539.58	52.15	74.00	-21.85	43.68	6.13	37.65	35.31	Peak	100	228	HORIZONTAL
2	15539.74	39.07	54.00	-14.93	30.60	6.13	37.65	35.31	Average	100	228	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	15539.61	51.51	74.00	-22.49	43.00	6.13	37.69	35.31	Peak	100	131	VERTICAL
2	15539.64	39.41	54.00	-14.59	30.90	6.13	37.69	35.31	Average	100	131	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS16 20MHz Ch 40 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	Over Limit		Cable Loss	Antenna Factor	Preamp Factor		cm	deg	
1	15599.81	38.81	54.00	-15.19	30.42	6.13	37.60	35.34 Average	100	258	HORIZONTAL
2	15600.34	51.44	74.00	-22.56	43.05	6.13	37.60	35.34 Peak	100	258	HORIZONTAL

**Vertical**

Freq	Level	Limit		Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	Over Limit		Cable Loss	Antenna Factor	Preamp Factor		cm	deg	
1	15599.72	39.78	54.00	-14.22	31.39	6.13	37.60	35.34 Average	100	169	VERTICAL
2	15599.96	53.12	74.00	-20.88	44.73	6.13	37.60	35.34 Peak	100	169	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS16 20MHz Ch 48 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
1	15719.90	51.52	74.00	-22.48	43.29	6.14	37.48	35.39	Peak	100	233	HORIZONTAL
2	15720.46	38.86	54.00	-15.14	30.63	6.14	37.48	35.39	Average	100	233	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
1	15719.75	39.85	54.00	-14.15	31.62	6.14	37.48	35.39	Average	100	134	VERTICAL
2	15719.75	52.37	74.00	-21.63	44.14	6.14	37.48	35.39	Peak	100	134	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 38 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (1TX)

**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	15569.97	36.67	54.00	-17.33	28.24	6.13	37.63	35.33	Average	100	227	HORIZONTAL
2	15570.10	50.27	74.00	-23.73	41.84	6.13	37.63	35.33	Peak	100	227	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	15569.86	49.05	74.00	-24.95	40.60	6.13	37.65	35.33	Peak	100	153	VERTICAL
2	15570.05	36.77	54.00	-17.23	28.32	6.13	37.65	35.33	Average	100	153	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 46 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (1TX)

**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	15689.65	36.71	54.00	-17.29	28.43	6.14	37.51	35.37	Average	100	296	HORIZONTAL
2	15689.90	49.44	74.00	-24.56	41.16	6.14	37.51	35.37	Peak	100	296	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	15689.66	37.16	54.00	-16.84	28.88	6.14	37.51	35.37	Average	100	236	VERTICAL
2	15690.35	49.99	74.00	-24.01	41.71	6.14	37.51	35.37	Peak	100	236	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 38 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
1	15569.51	49.29	74.00	-24.71	40.86	6.13	37.63	35.33	Peak	100	248	HORIZONTAL
2	15569.72	36.47	54.00	-17.53	28.04	6.13	37.63	35.33	Average	100	248	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
1	15569.83	49.24	74.00	-24.76	40.79	6.13	37.65	35.33	Peak	100	305	VERTICAL
2	15570.13	36.64	54.00	-17.36	28.19	6.13	37.65	35.33	Average	100	305	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 46 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	15689.58	36.34	54.00	-17.66	28.06	6.14	37.51	35.37	Average	100	212	HORIZONTAL
2	15690.25	49.27	74.00	-24.73	40.99	6.14	37.51	35.37	Peak	100	212	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	15689.56	36.62	54.00	-17.38	28.34	6.14	37.51	35.37	Average	100	137	VERTICAL
2	15689.82	49.26	74.00	-24.74	40.98	6.14	37.51	35.37	Peak	100	137	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 40MHz Ch 38 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
1	15570.15	49.66	74.00	-24.34	41.23	6.13	37.63	35.33	Peak	100	236	HORIZONTAL
2	15570.30	36.46	54.00	-17.54	28.03	6.13	37.63	35.33	Average	100	236	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
1	15569.88	36.76	54.00	-17.24	28.31	6.13	37.65	35.33	Average	100	193	VERTICAL
2	15570.35	49.45	74.00	-24.55	41.00	6.13	37.65	35.33	Peak	100	193	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 40MHz Ch 46 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	15689.96	49.25	74.00	-24.75	40.97	6.14	37.51	35.37	Peak	100	181	HORIZONTAL
2	15690.19	36.41	54.00	-17.59	28.13	6.14	37.51	35.37	Average	100	181	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	15690.15	36.65	54.00	-17.35	28.37	6.14	37.51	35.37	Average	100	283	VERTICAL
2	15690.27	49.44	74.00	-24.56	41.16	6.14	37.51	35.37	Peak	100	283	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 38 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
1	15569.69	51.55	74.00	-22.45	43.12	6.13	37.63	35.33	Peak	100	197	HORIZONTAL
2	15570.36	38.48	54.00	-15.52	30.05	6.13	37.63	35.33	Average	100	197	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m		cm	deg	
1	15569.57	51.51	74.00	-22.49	43.06	6.13	37.65	35.33	Peak	100	142	VERTICAL
2	15570.34	38.64	54.00	-15.36	30.19	6.13	37.65	35.33	Average	100	142	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 46 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	Over Limit		Loss	Factor	Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	15689.95	39.40	54.00	-14.60	31.12	6.14	37.51	35.37	Average	100	229 HORIZONTAL
2	15690.28	52.32	74.00	-21.68	44.04	6.14	37.51	35.37	Peak	100	229 HORIZONTAL

**Vertical**

Freq	Level	Limit		Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	Over Limit		Loss	Factor	Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	15689.75	52.28	74.00	-21.72	44.00	6.14	37.51	35.37	Peak	100	170 VERTICAL
2	15690.34	39.57	54.00	-14.43	31.29	6.14	37.51	35.37	Average	100	170 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 40MHz Ch 38 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15570.03	38.68	54.00	-15.32	30.25	6.13	37.63	35.33	Average	100	212	HORIZONTAL
2	15570.23	51.21	74.00	-22.79	42.78	6.13	37.63	35.33	Peak	100	212	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	15569.80	52.02	74.00	-21.98	43.57	6.13	37.65	35.33	Peak	100	162	VERTICAL
2	15569.95	38.85	54.00	-15.15	30.40	6.13	37.65	35.33	Average	100	162	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 40MHz Ch 46 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor				
1	15690.06	52.03	74.00	-21.97	43.75	6.14	37.51	35.37	Peak	100	218	HORIZONTAL
2	15690.37	39.45	54.00	-14.55	31.17	6.14	37.51	35.37	Average	100	218	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor				
1	15689.95	51.89	74.00	-22.11	43.61	6.14	37.51	35.37	Peak	100	153	VERTICAL
2	15690.09	39.36	54.00	-14.64	31.08	6.14	37.51	35.37	Average	100	153	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS16 40MHz Ch 38 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	15569.97	39.32	54.00	-14.68	30.89	6.13	37.63	35.33	Average	100	206	HORIZONTAL
2	15570.31	52.24	74.00	-21.76	43.81	6.13	37.63	35.33	Peak	100	206	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	15569.94	39.29	54.00	-14.71	30.84	6.13	37.65	35.33	Average	100	123	VERTICAL
2	15570.24	52.01	74.00	-21.99	43.56	6.13	37.65	35.33	Peak	100	123	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS16 40MHz Ch 46 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) (3TX)

**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	15689.85	39.09	54.00	-14.91	30.81	6.14	37.51	35.37 Average	100	229	HORIZONTAL
2	15689.89	51.62	74.00	-22.38	43.34	6.14	37.51	35.37 Peak	100	229	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	15689.90	39.54	54.00	-14.46	31.26	6.14	37.51	35.37 Average	100	173	VERTICAL
2	15690.21	53.07	74.00	-20.93	44.79	6.14	37.51	35.37 Peak	100	173	VERTICAL

**Note:**

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

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

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 36 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (1TX)

**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	10358.06	49.85	68.30	-18.45	42.13	4.97	38.37	35.62	Peak	100	104	HORIZONTAL
2	15537.50	38.79	54.00	-15.21	30.28	6.13	37.67	35.29	Average	100	285	HORIZONTAL
3	15541.00	52.82	74.00	-21.18	44.35	6.13	37.65	35.31	Peak	100	285	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	10358.13	50.20	68.30	-18.10	42.48	4.97	38.37	35.62	Peak	100	202	VERTICAL
2	15541.42	52.75	74.00	-21.25	44.24	6.13	37.69	35.31	Peak	100	39	VERTICAL
3	15541.90	38.88	54.00	-15.12	30.37	6.13	37.69	35.31	Average	100	39	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 40 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (1TX)

**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	10401.18	49.85	68.30	-18.45	42.07	4.98	38.38	35.58 Peak	100	282	HORIZONTAL
2	15596.60	42.91	54.00	-11.09	34.52	6.13	37.60	35.34 Average	125	156	HORIZONTAL
3	15597.18	58.71	74.00	-15.29	50.32	6.13	37.60	35.34 Peak	125	156	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	10397.87	50.31	68.30	-17.99	42.53	4.98	38.38	35.58 Peak	100	293	VERTICAL
2	15595.50	55.22	74.00	-18.78	46.83	6.13	37.60	35.34 Peak	100	222	VERTICAL
3	15598.22	40.75	54.00	-13.25	32.36	6.13	37.60	35.34 Average	100	222	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 48 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (1TX)

**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	10481.34	50.55	68.30	-17.75	42.68	5.00	38.39	35.52	Peak	100	51	HORIZONTAL
2	15725.60	49.59	54.00	-4.41	41.38	6.14	37.46	35.39	Average	154	140	HORIZONTAL
3	15727.40	65.32	74.00	-8.68	57.11	6.14	37.46	35.39	Peak	154	140	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	10401.96	50.83	68.30	-17.47	43.05	4.98	38.38	35.58	Peak	100	341	VERTICAL
2	15717.02	46.66	54.00	-7.34	38.43	6.14	37.48	35.39	Average	100	220	VERTICAL
3	15717.92	61.56	74.00	-12.44	53.33	6.14	37.48	35.39	Peak	100	220	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 36 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15539.35	36.71	54.00	-17.29	28.24	6.13	37.65	35.31	Average	100	90	HORIZONTAL
2	15540.58	50.69	74.00	-23.31	42.22	6.13	37.65	35.31	Peak	100	90	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	15539.20	51.76	74.00	-22.24	43.25	6.13	37.69	35.31	Peak	100	297	VERTICAL
2	15540.85	37.85	54.00	-16.15	29.34	6.13	37.69	35.31	Average	100	297	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 40 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB				
1	15599.07	36.64	54.00	-17.36	28.25	6.13	37.60	35.34	Average	100	162	HORIZONTAL
2	15600.47	50.69	74.00	-23.31	42.30	6.13	37.60	35.34	Peak	100	162	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				
1	15599.61	37.66	54.00	-16.34	29.27	6.13	37.60	35.34	Average	100	249	VERTICAL
2	15600.36	51.35	74.00	-22.65	42.96	6.13	37.60	35.34	Peak	100	249	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 48 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15719.94	36.73	54.00	-17.27	28.50	6.14	37.48	35.39	Average	100	316	HORIZONTAL
2	15719.97	50.89	74.00	-23.11	42.66	6.14	37.48	35.39	Peak	100	316	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	15719.81	51.74	74.00	-22.26	43.51	6.14	37.48	35.39	Peak	100	255	VERTICAL
2	15720.37	37.85	54.00	-16.15	29.62	6.14	37.48	35.39	Average	100	255	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 36 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
1	15600.13	50.76	74.00	-23.24	42.37	6.13	37.60	35.34	Peak	100	243	HORIZONTAL
2	15600.75	36.61	54.00	-17.39	28.22	6.13	37.60	35.34	Average	100	243	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
1	15599.95	37.64	54.00	-16.36	29.25	6.13	37.60	35.34	Average	100	16	VERTICAL
2	15600.13	51.41	74.00	-22.59	43.02	6.13	37.60	35.34	Peak	100	16	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 40 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB				
1	15599.06	36.61	54.00	-17.39	28.22	6.13	37.60	35.34	Average	100	213	HORIZONTAL
2	15599.83	51.08	74.00	-22.92	42.69	6.13	37.60	35.34	Peak	100	213	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				
1	15599.63	37.67	54.00	-16.33	29.28	6.13	37.60	35.34	Average	100	51	VERTICAL
2	15599.86	51.46	74.00	-22.54	43.07	6.13	37.60	35.34	Peak	100	51	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 48 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15720.28	36.70	54.00	-17.30	28.47	6.14	37.48	35.39	Average	100	194	HORIZONTAL
2	15720.71	50.80	74.00	-23.20	42.57	6.14	37.48	35.39	Peak	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			
1	15719.14	50.36	74.00	-23.64	42.13	6.14	37.48	35.39	Peak	100	348	VERTICAL
2	15720.20	37.87	54.00	-16.13	29.64	6.14	37.48	35.39	Average	100	348	VERTICAL

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Wen Chao	<b>Configurations</b>	IEEE 802.11n MCS0 20MHz Ch 36 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Apr. 27, 2012	<b>Test Mode</b>	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor				
1	15539.91	54.23	74.00	-19.77	45.76	6.13	37.65	35.31	Peak	100	145	HORIZONTAL
2	15540.17	39.27	54.00	-14.73	30.80	6.13	37.65	35.31	Average	100	145	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor				
1	15539.90	39.36	54.00	-14.64	30.85	6.13	37.69	35.31	Average	100	267	VERTICAL
2	15539.91	53.32	74.00	-20.68	44.81	6.13	37.69	35.31	Peak	100	267	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 40 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	Over Limit		Cable Loss	Antenna Factor	Preamp Factor		cm	deg	
1	15599.74	39.31	54.00	-14.69	30.92	6.13	37.60	35.34 Average	100	25	HORIZONTAL
2	15600.19	53.78	74.00	-20.22	45.39	6.13	37.60	35.34 Peak	100	25	HORIZONTAL

**Vertical**

Freq	Level	Limit		Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	Over Limit		Cable Loss	Antenna Factor	Preamp Factor		cm	deg	
1	15599.70	39.34	54.00	-14.66	30.95	6.13	37.60	35.34 Average	100	108	VERTICAL
2	15599.70	53.22	74.00	-20.78	44.83	6.13	37.60	35.34 Peak	100	108	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 48 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dBuV	dB	dB/m				
1	15719.94	53.09	74.00	-20.91	44.86	6.14	37.48	35.39	Peak	100	337	HORIZONTAL
2	15720.20	38.74	54.00	-15.26	30.51	6.14	37.48	35.39	Average	100	337	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	15720.11	38.74	54.00	-15.26	30.51	6.14	37.48	35.39	Average	100	211	VERTICAL
2	15720.28	53.47	74.00	-20.53	45.24	6.14	37.48	35.39	Peak	100	211	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 36 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15540.03	39.18	54.00	-14.82	30.71	6.13	37.65	35.31	Average	100	4	HORIZONTAL
2	15540.40	52.99	74.00	-21.01	44.52	6.13	37.65	35.31	Peak	100	4	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	15539.84	52.90	74.00	-21.10	44.39	6.13	37.69	35.31	Peak	100	84	VERTICAL
2	15540.01	39.20	54.00	-14.80	30.69	6.13	37.69	35.31	Average	100	84	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 40 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	15599.66	39.22	54.00	-14.78	30.83	6.13	37.60	35.34	Average	100	36	HORIZONTAL
2	15599.79	53.08	74.00	-20.92	44.69	6.13	37.60	35.34	Peak	100	36	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	15599.57	53.33	74.00	-20.67	44.94	6.13	37.60	35.34	Peak	100	114	VERTICAL
2	15599.86	39.24	54.00	-14.76	30.85	6.13	37.60	35.34	Average	100	114	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 48 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	15720.31	38.76	54.00	-15.24	30.53	6.14	37.48	35.39	Average	100	293	HORIZONTAL
2	15720.43	53.10	74.00	-20.90	44.87	6.14	37.48	35.39	Peak	100	293	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	15719.55	53.02	74.00	-20.98	44.79	6.14	37.48	35.39	Peak	100	158	VERTICAL
2	15720.26	38.76	54.00	-15.24	30.53	6.14	37.48	35.39	Average	100	158	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS16 20MHz Ch 36 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	15539.86	51.40	74.00	-22.60	42.93	6.13	37.65	35.31	Peak	100	292	HORIZONTAL
2	15540.48	37.66	54.00	-16.34	29.19	6.13	37.65	35.31	Average	100	292	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	15541.76	51.75	74.00	-22.25	43.24	6.13	37.69	35.31	Peak	100	121	VERTICAL
2	15543.08	37.65	54.00	-16.35	29.14	6.13	37.69	35.31	Average	100	121	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS16 20MHz Ch 40 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
1	15600.64	51.68	74.00	-22.32	43.29	6.13	37.60	35.34	Peak	100	332	HORIZONTAL
2	15604.54	38.07	54.00	-15.93	29.68	6.13	37.60	35.34	Average	100	332	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
1	15595.70	37.64	54.00	-16.36	29.25	6.13	37.60	35.34	Average	100	73	VERTICAL
2	15600.20	51.25	74.00	-22.75	42.86	6.13	37.60	35.34	Peak	100	73	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS16 20MHz Ch 48 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	15721.98	37.14	54.00	-16.86	28.91	6.14	37.48	35.39	Average	100	282	HORIZONTAL
2	15724.00	50.90	74.00	-23.10	42.67	6.14	37.48	35.39	Peak	100	282	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	15719.74	50.99	74.00	-23.01	42.76	6.14	37.48	35.39	Peak	100	212	VERTICAL
2	15721.98	37.13	54.00	-16.87	28.90	6.14	37.48	35.39	Average	100	212	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 38 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (1TX)

**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	10382.27	49.84	68.30	-18.46	42.08	4.98	38.38	35.60 Average	100	163	HORIZONTAL
2	15570.18	53.16	74.00	-20.84	44.73	6.13	37.63	35.33 Peak	100	268	HORIZONTAL
3	15571.99	38.52	54.00	-15.48	30.11	6.13	37.61	35.33 Average	100	268	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	10381.08	50.52	68.30	-17.78	42.76	4.98	38.38	35.60 Peak	100	111	VERTICAL
2	15568.61	52.76	74.00	-21.24	44.31	6.13	37.65	35.33 Peak	100	147	VERTICAL
3	15569.50	38.59	54.00	-15.41	30.14	6.13	37.65	35.33 Average	100	147	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 46 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10457.96	50.12	68.30	-18.18	42.27	5.00	38.39	35.54	Peak	100	228 HORIZONTAL
2	15687.59	38.46	54.00	-15.54	30.18	6.14	37.51	35.37	Average	100	100 HORIZONTAL
3	15691.02	52.66	74.00	-21.34	44.39	6.14	37.51	35.38	Peak	100	100 HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10461.40	50.60	68.30	-17.70	42.75	5.00	38.39	35.54	Peak	100	42 VERTICAL
2	15688.42	52.89	74.00	-21.11	44.61	6.14	37.51	35.37	Peak	100	345 VERTICAL
3	15692.18	38.35	54.00	-15.65	30.10	6.14	37.49	35.38	Average	100	345 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 38 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15570.13	51.89	74.00	-22.11	43.46	6.13	37.63	35.33	Peak	100	233	HORIZONTAL
2	15570.78	36.72	54.00	-17.28	28.29	6.13	37.63	35.33	Average	100	233	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15569.01	36.71	54.00	-17.29	28.26	6.13	37.65	35.33	Average	100	30	VERTICAL
2	15569.10	50.82	74.00	-23.18	42.37	6.13	37.65	35.33	Peak	100	30	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 46 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dBuV	dB	dB/m				
1	15689.92	51.78	74.00	-22.22	43.50	6.14	37.51	35.37	Peak	100	120	HORIZONTAL
2	15690.94	36.84	54.00	-17.16	28.57	6.14	37.51	35.38	Average	100	120	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	15689.08	38.25	54.00	-15.75	29.97	6.14	37.51	35.37	Average	100	270	VERTICAL
2	15689.85	51.90	74.00	-22.10	43.62	6.14	37.51	35.37	Peak	100	270	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 40MHz Ch 38 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB				
1	15569.19	50.80	74.00	-23.20	42.37	6.13	37.63	35.33	Peak	100	74	HORIZONTAL
2	15570.90	36.70	54.00	-17.30	28.27	6.13	37.63	35.33	Average	100	74	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				
1	15569.08	50.91	74.00	-23.09	42.46	6.13	37.65	35.33	Peak	100	140	VERTICAL
2	15569.34	36.70	54.00	-17.30	28.25	6.13	37.65	35.33	Average	100	140	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 40MHz Ch 46 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor				
1	15689.38	50.51	74.00	-23.49	42.23	6.14	37.51	35.37	Peak	100	353	HORIZONTAL
2	15690.35	36.81	54.00	-17.19	28.53	6.14	37.51	35.37	Average	100	353	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor				
1	15689.28	50.94	74.00	-23.06	42.66	6.14	37.51	35.37	Peak	100	188	VERTICAL
2	15690.37	37.81	54.00	-16.19	29.53	6.14	37.51	35.37	Average	100	188	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 38 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Read	Cable			Preamp	A/Pos	T/Pos	Pol/Phase
		Line	Over Limit		Antenna	Loss Factor	Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15569.77	39.46	54.00	-14.54	31.03	6.13	37.63	35.33	Average	100	181 HORIZONTAL
2	15570.12	53.65	74.00	-20.35	45.22	6.13	37.63	35.33	Peak	100	181 HORIZONTAL

**Vertical**

Freq	Level	Limit		Read	Cable			Preamp	A/Pos	T/Pos	Pol/Phase
		Line	Over Limit		Antenna	Loss Factor	Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15569.54	39.42	54.00	-14.58	30.97	6.13	37.65	35.33	Average	100	324 VERTICAL
2	15569.91	53.28	74.00	-20.72	44.83	6.13	37.65	35.33	Peak	100	324 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 46 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor				
1	15690.39	53.36	74.00	-20.64	45.08	6.14	37.51	35.37	Peak	100	116	HORIZONTAL
2	15690.40	39.02	54.00	-14.98	30.74	6.14	37.51	35.37	Average	100	116	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor				
1	15690.06	53.46	74.00	-20.54	45.18	6.14	37.51	35.37	Peak	100	26	VERTICAL
2	15690.13	39.03	54.00	-14.97	30.75	6.14	37.51	35.37	Average	100	26	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 40MHz Ch 38 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor				
1	15569.57	53.45	74.00	-20.55	45.02	6.13	37.63	35.33	Peak	100	245	HORIZONTAL
2	15569.79	39.58	54.00	-14.42	31.15	6.13	37.63	35.33	Average	100	245	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor				
1	15569.77	53.95	74.00	-20.05	45.50	6.13	37.65	35.33	Peak	100	90	VERTICAL
2	15570.21	39.62	54.00	-14.38	31.17	6.13	37.65	35.33	Average	100	90	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 40MHz Ch 46 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB				
1	15690.38	53.33	74.00	-20.67	45.05	6.14	37.51	35.37	Peak	100	213	HORIZONTAL
2	15690.46	39.06	54.00	-14.94	30.78	6.14	37.51	35.37	Average	100	213	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				
1	15689.66	53.03	74.00	-20.97	44.75	6.14	37.51	35.37	Peak	100	57	VERTICAL
2	15690.24	39.10	54.00	-14.90	30.82	6.14	37.51	35.37	Average	100	57	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS16 40MHz Ch 38 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	dB	cm	deg		
1	15568.08	37.92	54.00	-16.08	29.49	6.13	37.63	35.33	Average	100	234	HORIZONTAL
2	15568.98	52.08	74.00	-21.92	43.65	6.13	37.63	35.33	Peak	100	234	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	dB	cm	deg		
1	15565.98	51.59	74.00	-22.41	43.14	6.13	37.65	35.33	Peak	100	132	VERTICAL
2	15568.08	38.17	54.00	-15.83	29.72	6.13	37.65	35.33	Average	100	132	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS16 40MHz Ch 46 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15685.92	37.83	54.00	-16.17	29.55	6.14	37.51	35.37	Average	100	292	HORIZONTAL
2	15690.80	51.74	74.00	-22.26	43.47	6.14	37.51	35.38	Peak	100	292	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	15690.90	37.81	54.00	-16.19	29.54	6.14	37.51	35.38	Average	100	187	VERTICAL
2	15692.48	51.90	74.00	-22.10	43.65	6.14	37.49	35.38	Peak	100	187	VERTICAL

**Note:**

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

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

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 36 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
1	15540.02	53.60	74.00	-20.40	45.13	6.13	37.65	35.31	Peak	100	204 HORIZONTAL
2	15540.43	40.64	54.00	-13.36	32.17	6.13	37.65	35.31	Average	100	204 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	15540.28	54.39	74.00	-19.61	45.88	6.13	37.69	35.31	Peak	100	138 VERTICAL
2	15540.76	40.86	54.00	-13.14	32.35	6.13	37.69	35.31	Average	100	138 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 40 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) (1TX)

**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	15599.63	42.04	54.00	-11.96	33.65	6.13	37.60	35.34	Average	100	218	HORIZONTAL
2	15599.64	54.06	74.00	-19.94	45.67	6.13	37.60	35.34	Peak	100	218	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15599.59	54.17	74.00	-19.83	45.78	6.13	37.60	35.34	Peak	100	92	VERTICAL
2	15600.01	41.72	54.00	-12.28	33.33	6.13	37.60	35.34	Average	100	92	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 48 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) (1TX)

**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	15719.88	40.41	54.00	-13.59	32.18	6.14	37.48	35.39	Average	100	215	HORIZONTAL
2	15719.91	53.04	74.00	-20.96	44.81	6.14	37.48	35.39	Peak	100	215	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	15720.14	40.97	54.00	-13.03	32.74	6.14	37.48	35.39	Average	100	119	VERTICAL
2	15720.30	55.02	74.00	-18.98	46.79	6.14	37.48	35.39	Peak	100	119	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 36 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15539.23	39.63	54.00	-14.37	31.16	6.13	37.65	35.31	Average	100	315	HORIZONTAL
2	15539.70	53.41	74.00	-20.59	44.94	6.13	37.65	35.31	Peak	100	315	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	15539.17	39.57	54.00	-14.43	31.06	6.13	37.69	35.31	Average	100	64	VERTICAL
2	15540.19	53.61	74.00	-20.39	45.10	6.13	37.69	35.31	Peak	100	64	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 40 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
1	15599.21	54.34	74.00	-19.66	45.95	6.13	37.60	35.34	Peak	100	319	HORIZONTAL
2	15600.11	40.28	54.00	-13.72	31.89	6.13	37.60	35.34	Average	100	319	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
1	15600.04	40.63	54.00	-13.37	32.24	6.13	37.60	35.34	Average	100	175	VERTICAL
2	15600.05	54.50	74.00	-19.50	46.11	6.13	37.60	35.34	Peak	100	175	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 48 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) (2TX)

**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	15719.11	39.21	54.00	-14.79	30.98	6.14	37.48	35.39	Average	100	107	HORIZONTAL
2	15719.27	53.21	74.00	-20.79	44.98	6.14	37.48	35.39	Peak	100	107	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Line	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15719.00	38.87	54.00	-15.13	30.64	6.14	37.48	35.39	Average	100	265	VERTICAL
2	15719.34	52.60	74.00	-21.40	44.37	6.14	37.48	35.39	Peak	100	265	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 36 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor				
1	15539.18	53.39	74.00	-20.61	44.92	6.13	37.65	35.31	Peak	100	68	HORIZONTAL
2	15539.28	39.60	54.00	-14.40	31.13	6.13	37.65	35.31	Average	100	68	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor				
1	15539.27	39.30	54.00	-14.70	30.79	6.13	37.69	35.31	Average	100	240	VERTICAL
2	15539.56	53.26	74.00	-20.74	44.75	6.13	37.69	35.31	Peak	100	240	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 40 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor			
1	15599.73	53.58	74.00	-20.42	45.19	6.13	37.60	35.34	Peak	100	64 HORIZONTAL
2	15600.08	40.23	54.00	-13.77	31.84	6.13	37.60	35.34	Average	100	64 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	15599.29	54.43	74.00	-19.57	46.04	6.13	37.60	35.34	Peak	100	174 VERTICAL
2	15600.41	40.13	54.00	-13.87	31.74	6.13	37.60	35.34	Average	100	174 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 48 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15719.21	38.81	54.00	-15.19	30.58	6.14	37.48	35.39	Average	100	159	HORIZONTAL
2	15720.40	52.78	74.00	-21.22	44.55	6.14	37.48	35.39	Peak	100	159	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	15719.07	38.95	54.00	-15.05	30.72	6.14	37.48	35.39	Average	100	335	VERTICAL
2	15720.95	52.91	74.00	-21.09	44.68	6.14	37.48	35.39	Peak	100	335	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 36 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	15538.65	39.73	54.00	-14.27	31.26	6.13	37.65	35.31	Average	100	40	HORIZONTAL
2	15541.32	53.24	74.00	-20.76	44.77	6.13	37.65	35.31	Peak	100	40	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	15538.21	40.37	54.00	-13.63	31.86	6.13	37.69	35.31	Average	100	334	VERTICAL
2	15540.06	55.12	74.00	-18.88	46.61	6.13	37.69	35.31	Peak	100	334	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 40 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15598.42	54.98	74.00	-19.02	46.59	6.13	37.60	35.34	Peak	100	60	HORIZONTAL
2	15600.11	40.57	54.00	-13.43	32.18	6.13	37.60	35.34	Average	100	60	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15598.61	55.34	74.00	-18.66	46.95	6.13	37.60	35.34	Peak	100	328	VERTICAL
2	15600.10	40.17	54.00	-13.83	31.78	6.13	37.60	35.34	Average	100	328	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 48 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) (3TX)

**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	15718.45	38.78	54.00	-15.22	30.55	6.14	37.48	35.39	Average	100	223 HORIZONTAL
2	15721.58	52.74	74.00	-21.26	44.51	6.14	37.48	35.39	Peak	100	223 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	15719.21	38.92	54.00	-15.08	30.69	6.14	37.48	35.39	Average	100	30 VERTICAL
2	15722.07	52.97	74.00	-21.03	44.74	6.14	37.48	35.39	Peak	100	30 VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 36 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15539.29	39.45	54.00	-14.55	30.98	6.13	37.65	35.31	Average	100	31	HORIZONTAL
2	15541.62	53.56	74.00	-20.44	45.09	6.13	37.65	35.31	Peak	100	31	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	15539.41	39.48	54.00	-14.52	30.97	6.13	37.69	35.31	Average	100	265	VERTICAL
2	15541.23	53.07	74.00	-20.93	44.56	6.13	37.69	35.31	Peak	100	265	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 40 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15598.03	39.64	54.00	-14.36	31.25	6.13	37.60	35.34	Average	100	237	HORIZONTAL
2	15602.02	53.14	74.00	-20.86	44.75	6.13	37.60	35.34	Peak	100	237	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	15600.12	39.83	54.00	-14.17	31.44	6.13	37.60	35.34	Average	100	162	VERTICAL
2	15600.98	54.02	74.00	-19.98	45.63	6.13	37.60	35.34	Peak	100	162	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 48 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15720.37	52.57	74.00	-21.43	44.34	6.14	37.48	35.39	Peak	100	294	HORIZONTAL
2	15721.61	38.99	54.00	-15.01	30.76	6.14	37.48	35.39	Average	100	294	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15717.56	53.25	74.00	-20.75	45.02	6.14	37.48	35.39	Peak	100	111	VERTICAL
2	15719.06	38.82	54.00	-15.18	30.59	6.14	37.48	35.39	Average	100	111	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 38 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) (1TX)

**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	15570.16	40.94	54.00	-13.06	32.51	6.13	37.63	35.33	Average	100	215	HORIZONTAL
2	15570.20	54.36	74.00	-19.64	45.93	6.13	37.63	35.33	Peak	100	215	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	15572.28	40.75	54.00	-13.25	32.34	6.13	37.61	35.33	Average	100	81	VERTICAL
2	15572.36	53.64	74.00	-20.36	45.23	6.13	37.61	35.33	Peak	100	81	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 46 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) (1TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
1	15689.98	53.59	74.00	-20.41	45.31	6.14	37.51	35.37	Peak	100	269	HORIZONTAL
2	15690.00	41.11	54.00	-12.89	32.83	6.14	37.51	35.37	Average	100	269	HORIZONTAL

**Vertical**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m				
1	15689.77	40.69	54.00	-13.31	32.41	6.14	37.51	35.37	Average	100	111	VERTICAL
2	15689.88	53.50	74.00	-20.50	45.22	6.14	37.51	35.37	Peak	100	111	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 38 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	15569.13	39.26	54.00	-14.74	30.83	6.13	37.63	35.33	Average	100	129	HORIZONTAL
2	15570.52	53.86	74.00	-20.14	45.43	6.13	37.63	35.33	Peak	100	129	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	15569.39	39.25	54.00	-14.75	30.80	6.13	37.65	35.33	Average	100	205	VERTICAL
2	15571.00	54.17	74.00	-19.83	45.72	6.13	37.65	35.33	Peak	100	205	VERTICAL

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Wen Chao	<b>Configurations</b>	IEEE 802.11n MCS0 40MHz Ch 46 / Chain 1 + Chain 2
<b>Test Date</b>	Apr. 27, 2012	<b>Test Mode</b>	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	15689.46	52.87	74.00	-21.13	44.59	6.14	37.51	35.37	Peak	100	54	HORIZONTAL
2	15689.55	39.01	54.00	-14.99	30.73	6.14	37.51	35.37	Average	100	54	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	15689.08	52.98	74.00	-21.02	44.70	6.14	37.51	35.37	Peak	100	255	VERTICAL
2	15689.11	38.97	54.00	-15.03	30.69	6.14	37.51	35.37	Average	100	255	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 40MHz Ch 38 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15569.10	39.54	54.00	-14.46	31.11	6.13	37.63	35.33	Average	100	235	HORIZONTAL
2	15570.14	53.37	74.00	-20.63	44.94	6.13	37.63	35.33	Peak	100	235	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	15570.66	39.59	54.00	-14.41	31.14	6.13	37.65	35.33	Average	100	21	VERTICAL
2	15570.95	53.62	74.00	-20.38	45.17	6.13	37.65	35.33	Peak	100	21	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 40MHz Ch 46 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) (2TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15689.31	39.14	54.00	-14.86	30.86	6.14	37.51	35.37	Average	100	158	HORIZONTAL
2	15690.63	52.87	74.00	-21.13	44.59	6.14	37.51	35.37	Peak	100	158	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	15689.17	53.47	74.00	-20.53	45.19	6.14	37.51	35.37	Peak	100	291	VERTICAL
2	15689.37	39.11	54.00	-14.89	30.83	6.14	37.51	35.37	Average	100	291	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 38 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15568.28	39.35	54.00	-14.65	30.92	6.13	37.63	35.33	Average	100	322	HORIZONTAL
2	15572.08	54.03	74.00	-19.97	45.62	6.13	37.61	35.33	Peak	100	322	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	15567.64	53.95	74.00	-20.05	45.50	6.13	37.65	35.33	Peak	100	103	VERTICAL
2	15568.53	39.41	54.00	-14.59	30.96	6.13	37.65	35.33	Average	100	103	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 46 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15687.86	39.16	54.00	-14.84	30.88	6.14	37.51	35.37	Average	100	28	HORIZONTAL
2	15692.50	52.77	74.00	-21.23	44.52	6.14	37.49	35.38	Peak	100	28	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	15691.11	52.69	74.00	-21.31	44.44	6.14	37.49	35.38	Peak	100	176	VERTICAL
2	15692.30	39.07	54.00	-14.93	30.82	6.14	37.49	35.38	Average	100	176	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 40MHz Ch 38 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15571.45	39.31	54.00	-14.69	30.88	6.13	37.63	35.33	Average	100	235	HORIZONTAL
2	15572.16	53.41	74.00	-20.59	45.00	6.13	37.61	35.33	Peak	100	235	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	15568.24	39.35	54.00	-14.65	30.90	6.13	37.65	35.33	Average	100	325	VERTICAL
2	15569.35	52.94	74.00	-21.06	44.49	6.13	37.65	35.33	Peak	100	325	VERTICAL



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 40MHz Ch 46 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) (3TX)

**Horizontal**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	15687.66	39.07	54.00	-14.93	30.79	6.14	37.51	35.37	Average	100	216	HORIZONTAL
2	15691.40	53.18	74.00	-20.82	44.93	6.14	37.49	35.38	Peak	100	216	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	15688.69	53.63	74.00	-20.37	45.35	6.14	37.51	35.37	Peak	100	83	VERTICAL
2	15692.49	39.18	54.00	-14.82	30.93	6.14	37.49	35.38	Average	100	83	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). 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

1. The test procedure is the same as section 4.6.3, only the frequency range investigated is limited to 100MHz around bandedges.
2. 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

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Wen Chao	<b>Configurations</b>	IEEE 802.11n MCS0 20MHz Ch 36,40,48 / Chain 1
<b>Test Date</b>	Apr. 27, 2012	<b>Test Mode</b>	Mode 1 (Ant. 6 Dipole antenna / 8dBi) ( 1TX )

##### Channel 36

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5149.80	68.08	74.00	-5.92	30.98	3.43	33.67	0.00	Peak	100	137 VERTICAL
2	5150.00	52.74	54.00	-1.26	15.64	3.43	33.67	0.00	Average	100	137 VERTICAL
3	5173.60	101.50				3.44	33.70	0.00	Average	100	137 VERTICAL
4	5174.60	112.34				3.44	33.70	0.00	Peak	100	137 VERTICAL

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

##### Channel 40

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5150.00	47.22	54.00	-6.78	10.12	3.43	33.67	0.00	Average	100	203 VERTICAL
2	5150.00	64.08	74.00	-9.92	26.98	3.43	33.67	0.00	Peak	100	203 VERTICAL
3	5192.40	101.41				3.44	33.73	0.00	Average	100	203 VERTICAL
4	5194.00	111.30				3.44	33.73	0.00	Peak	100	203 VERTICAL

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

##### Channel 48

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5144.60	53.63	74.00	-20.37	16.53	3.43	33.67	0.00	Peak	100	141 VERTICAL
2	5150.00	40.14	54.00	-13.86	3.04	3.43	33.67	0.00	Average	100	141 VERTICAL
3	5245.40	114.34				3.46	33.82	0.00	Peak	100	141 VERTICAL
4	5248.40	103.74				3.46	33.85	0.00	Average	100	141 VERTICAL
5	5362.00	61.65	74.00	-12.35	24.13	3.49	34.03	0.00	Peak	100	141 VERTICAL
6	5379.40	46.36	54.00	-7.64	8.80	3.50	34.06	0.00	Average	100	141 VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 36,40,48 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) ( 2TX )

### Channel 36

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	5148.00	70.82	74.00	-3.18	33.72	3.43	33.67	0.00 Peak	100	193	VERTICAL
2	5149.80	52.44	54.00	-1.56	15.34	3.43	33.67	0.00 Average	100	193	VERTICAL
3	5185.80	103.78				3.44	33.73	0.00 Average	100	193	VERTICAL
4	5186.40	114.05				3.44	33.73	0.00 Peak	100	193	VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
1	5148.00	58.74	74.00	-15.26	21.64	3.43	33.67	0.00 Peak	100	101	VERTICAL
2	5150.00	43.11	54.00	-10.89	6.01	3.43	33.67	0.00 Average	100	101	VERTICAL
3	5192.40	115.08				3.44	33.73	0.00 Peak	100	101	VERTICAL
4	5192.80	105.49				3.44	33.73	0.00 Average	100	101	VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
1	5150.00	39.20	54.00	-14.80	2.10	3.43	33.67	0.00 Average	101	231	VERTICAL
2	5150.00	50.37	74.00	-23.63	13.27	3.43	33.67	0.00 Peak	101	231	VERTICAL
3	5247.20	116.01				3.46	33.85	0.00 Peak	101	231	VERTICAL
4	5248.00	106.30				3.46	33.85	0.00 Average	101	231	VERTICAL
5	5423.60	62.91	74.00	-11.09	25.25	3.51	34.15	0.00 Peak	101	231	VERTICAL
6	5440.00	51.58	54.00	-2.42	13.88	3.52	34.18	0.00 Average	101	231	VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 36,40,48 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) ( 2TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5149.20	66.26	74.00	-7.74	29.16	3.43	33.67	0.00 Peak	100	197	VERTICAL
2	5150.00	52.34	54.00	-1.66	15.24	3.43	33.67	0.00 Average	100	197	VERTICAL
3	5201.20	105.75				3.45	33.76	0.00 Peak	100	197	VERTICAL
4	5203.60	94.88				3.45	33.76	0.00 Average	100	197	VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5148.40	68.35	74.00	-5.65	31.25	3.43	33.67	0.00 Peak	100	193	VERTICAL
2	5150.00	52.32	54.00	-1.68	15.22	3.43	33.67	0.00 Average	100	193	VERTICAL
3	5187.00	101.82				3.44	33.73	0.00 Average	100	193	VERTICAL
4	5187.40	112.57				3.44	33.73	0.00 Peak	100	193	VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5148.80	58.00	74.00	-16.00	20.90	3.43	33.67	0.00 Peak	100	196	VERTICAL
2	5150.00	43.90	54.00	-10.10	6.80	3.43	33.67	0.00 Average	100	196	VERTICAL
3	5206.00	103.33				3.45	33.76	0.00 Average	100	196	VERTICAL
4	5207.60	114.38				3.45	33.76	0.00 Peak	100	196	VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 36,40,48 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) ( 3TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5147.20	72.31	74.00	-1.69	35.21	3.43	33.67	0.00	Peak	100	157 VERTICAL
2	5148.40	52.89	54.00	-1.11	15.79	3.43	33.67	0.00	Average	100	157 VERTICAL
3	5185.20	114.51				3.44	33.73	0.00	Peak	100	157 VERTICAL
4	5185.80	104.68				3.44	33.73	0.00	Average	100	157 VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5150.00	47.62	54.00	-6.38	10.52	3.43	33.67	0.00	Average	100	136 VERTICAL
2	5150.00	63.93	74.00	-10.07	26.83	3.43	33.67	0.00	Peak	100	136 VERTICAL
3	5192.00	106.97				3.44	33.73	0.00	Average	100	136 VERTICAL
4	5192.00	116.83				3.44	33.73	0.00	Peak	100	136 VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5149.40	53.03	74.00	-20.97	15.93	3.43	33.67	0.00	Peak	100	137 VERTICAL
2	5150.00	41.94	54.00	-12.06	4.84	3.43	33.67	0.00	Average	100	137 VERTICAL
3	5242.40	106.13				3.46	33.82	0.00	Average	100	137 VERTICAL
4	5242.40	115.84				3.46	33.82	0.00	Peak	100	137 VERTICAL
5	5360.20	47.59	54.00	-6.41	10.07	3.49	34.03	0.00	Average	100	137 VERTICAL
6	5363.80	59.95	74.00	-14.05	22.43	3.49	34.03	0.00	Peak	100	137 VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 36,40,48 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) ( 3TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor				
1	5149.00	67.81	74.00	-6.19	30.71	3.43	33.67	0.00	Peak	100	135	VERTICAL
2	5150.00	52.53	54.00	-1.47	15.43	3.43	33.67	0.00	Average	100	135	VERTICAL
3	5176.40	101.71				3.44	33.70	0.00	Average	100	135	VERTICAL
4	5178.20	114.19				3.44	33.73	0.00	Peak	100	135	VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor				
1	5150.00	45.64	54.00	-8.36	8.54	3.43	33.67	0.00	Average	100	137	VERTICAL
2	5150.00	60.29	74.00	-13.71	23.19	3.43	33.67	0.00	Peak	100	137	VERTICAL
3	5202.00	105.66				3.45	33.76	0.00	Average	100	137	VERTICAL
4	5203.60	116.91				3.45	33.76	0.00	Peak	100	137	VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor				
1	5149.40	52.54	74.00	-21.46	15.44	3.43	33.67	0.00	Peak	100	278	VERTICAL
2	5150.00	40.60	54.00	-13.40	3.50	3.43	33.67	0.00	Average	100	278	VERTICAL
3	5244.80	105.53				3.46	33.82	0.00	Average	100	278	VERTICAL
4	5246.60	116.63				3.46	33.85	0.00	Peak	100	278	VERTICAL
5	5360.20	47.71	54.00	-6.29	10.19	3.49	34.03	0.00	Average	100	278	VERTICAL
6	5363.20	61.97	74.00	-12.03	24.45	3.49	34.03	0.00	Peak	100	278	VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS16 20MHz Ch 36,40,48 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) ( 3TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5149.80	69.33	74.00	-4.67	32.23	3.43	33.67	0.00	Peak	100	268 VERTICAL
2	5150.00	52.53	54.00	-1.47	15.43	3.43	33.67	0.00	Average	100	268 VERTICAL
3	5187.00	114.42				3.44	33.73	0.00	Peak	100	268 VERTICAL
4	5187.20	102.44				3.44	33.73	0.00	Average	100	268 VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5120.00	45.39	54.00	-8.61	8.35	3.43	33.61	0.00	Average	100	264 VERTICAL
2	5147.60	64.45	74.00	-9.55	27.35	3.43	33.67	0.00	Peak	100	264 VERTICAL
3	5192.40	104.48				3.44	33.73	0.00	Average	100	264 VERTICAL
4	5192.80	115.61				3.44	33.73	0.00	Peak	100	264 VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5114.00	55.42	74.00	-18.58	18.39	3.42	33.61	0.00	Peak	100	309 VERTICAL
2	5120.00	42.97	54.00	-11.03	5.93	3.43	33.61	0.00	Average	100	309 VERTICAL
3	5246.00	115.88				3.46	33.85	0.00	Peak	100	309 VERTICAL
4	5247.20	104.14				3.46	33.85	0.00	Average	100	309 VERTICAL
5	5371.60	60.37	74.00	-13.63	22.82	3.49	34.06	0.00	Peak	100	309 VERTICAL
6	5374.00	46.79	54.00	-7.21	9.23	3.50	34.06	0.00	Average	100	309 VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 38,46 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) ( 1TX )

**Channel 38**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBmV/m	dBmV/m	dB	dBmV	dB	dB/m	dB		
1	5150.00	49.07	54.00	-4.93	11.97	3.43	33.67	0.00	Average	100	142 VERTICAL
2	5150.00	63.10	74.00	-10.90	26.00	3.43	33.67	0.00	Peak	100	142 VERTICAL
3	5246.00	101.54				3.46	33.85	0.00	Average	100	142 VERTICAL
4	5247.00	111.94				3.46	33.85	0.00	Peak	100	142 VERTICAL
5	5360.00	49.40	54.00	-4.60	11.88	3.49	34.03	0.00	Average	100	142 VERTICAL
6	5361.00	65.35	74.00	-8.65	27.83	3.49	34.03	0.00	Peak	100	142 VERTICAL

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

**Channel 46**

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		MHz	dBmV/m	dBmV/m	dB	dBmV	dB	dB/m	dB		
1	5146.00	70.49	74.00	-3.51	33.39	3.43	33.67	0.00	Peak	101	226 VERTICAL
2	5150.00	52.91	54.00	-1.09	15.81	3.43	33.67	0.00	Average	101	226 VERTICAL
3	5175.60	106.14				3.44	33.70	0.00	Peak	101	226 VERTICAL
4	5176.40	95.67				3.44	33.70	0.00	Average	101	226 VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 38,46 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) ( 2TX )

**Channel 38**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5149.60	67.02	74.00	-6.98	29.92	3.43	33.67	0.00 Peak	100	197	VERTICAL
2	5150.00	52.42	54.00	-1.58	15.32	3.43	33.67	0.00 Average	100	197	VERTICAL
3	5206.80	103.46				3.45	33.76	0.00 Peak	100	197	VERTICAL
4	5207.20	93.91				3.45	33.76	0.00 Average	100	197	VERTICAL

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

**Channel 46**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5135.20	44.31	54.00	-9.69	7.24	3.43	33.64	0.00 Average	100	175	VERTICAL
2	5136.40	60.78	74.00	-13.22	23.71	3.43	33.64	0.00 Peak	100	175	VERTICAL
3	5240.40	101.95				3.46	33.82	0.00 Average	100	175	VERTICAL
4	5240.40	111.40				3.46	33.82	0.00 Peak	100	175	VERTICAL
5	5362.00	46.99	54.00	-7.01	9.47	3.49	34.03	0.00 Average	100	175	VERTICAL
6	5363.60	60.03	74.00	-13.97	22.51	3.49	34.03	0.00 Peak	100	175	VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 40MHz Ch 38,46 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) ( 2TX )

**Channel 38**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5149.20	66.26	74.00	-7.74	29.16	3.43	33.67	0.00 Peak	100	197	VERTICAL
2	5150.00	52.34	54.00	-1.66	15.24	3.43	33.67	0.00 Average	100	197	VERTICAL
3	5201.20	105.75				3.45	33.76	0.00 Peak	100	197	VERTICAL
4	5203.60	94.88				3.45	33.76	0.00 Average	100	197	VERTICAL

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

**Channel 46**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5139.60	57.26	74.00	-16.74	20.19	3.43	33.64	0.00 Peak	101	287	VERTICAL
2	5144.40	43.78	54.00	-10.22	6.68	3.43	33.67	0.00 Average	101	287	VERTICAL
3	5246.00	111.83				3.46	33.85	0.00 Peak	101	287	VERTICAL
4	5246.80	101.18				3.46	33.85	0.00 Average	101	287	VERTICAL
5	5400.40	48.81	54.00	-5.19	11.18	3.51	34.12	0.00 Average	101	287	VERTICAL
6	5403.60	61.11	74.00	-12.89	23.48	3.51	34.12	0.00 Peak	101	287	VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 38,46 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) ( 3TX )

**Channel 38**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	5148.80	67.75	74.00	-6.25	30.65	3.43	33.67	0.00	Peak	100	136	VERTICAL
2	5150.00	52.76	54.00	-1.24	15.66	3.43	33.67	0.00	Average	100	136	VERTICAL
3	5191.20	95.20				3.44	33.73	0.00	Average	100	136	VERTICAL
4	5192.00	104.96				3.44	33.73	0.00	Peak	100	136	VERTICAL

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

**Channel 46**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	5143.60	65.77	74.00	-8.23	28.67	3.43	33.67	0.00	Peak	100	127	VERTICAL
2	5146.00	50.69	54.00	-3.31	13.59	3.43	33.67	0.00	Average	100	127	VERTICAL
3	5244.80	115.53				3.46	33.82	0.00	Peak	100	127	VERTICAL
4	5245.20	105.53				3.46	33.82	0.00	Average	100	127	VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 40MHz Ch 38,46 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) ( 3TX )

**Channel 38**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5150.00	52.93	54.00	-1.07	15.83	3.43	33.67	0.00	Average	100	137 VERTICAL
2	5150.00	65.56	74.00	-8.44	28.46	3.43	33.67	0.00	Peak	100	137 VERTICAL
3	5193.60	107.13				3.44	33.73	0.00	Peak	100	137 VERTICAL
4	5195.20	95.48				3.45	33.76	0.00	Average	100	137 VERTICAL

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

**Channel 46**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5150.00	46.14	54.00	-7.86	9.04	3.43	33.67	0.00	Average	100	276 VERTICAL
2	5150.00	60.84	74.00	-13.16	23.74	3.43	33.67	0.00	Peak	100	276 VERTICAL
3	5240.00	102.62				3.46	33.82	0.00	Average	100	276 VERTICAL
4	5240.80	113.76				3.46	33.82	0.00	Peak	100	276 VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS16 40MHz Ch 38,46 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) ( 3TX )

**Channel 38**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5148.80	67.56	74.00	-6.44	30.46	3.43	33.67	0.00	Peak	100	264 VERTICAL
2	5150.00	52.87	54.00	-1.13	15.77	3.43	33.67	0.00	Average	100	264 VERTICAL
3	5188.00	107.74				3.44	33.73	0.00	Peak	100	264 VERTICAL
4	5193.60	96.34				3.44	33.73	0.00	Average	100	264 VERTICAL

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

**Channel 46**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5150.00	46.29	54.00	-7.71	9.19	3.43	33.67	0.00	Average	100	309 VERTICAL
2	5150.00	60.68	74.00	-13.32	23.58	3.43	33.67	0.00	Peak	100	309 VERTICAL
3	5246.00	113.61				3.46	33.85	0.00	Peak	100	309 VERTICAL
4	5247.60	101.75				3.46	33.85	0.00	Average	100	309 VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11a Ch 36,40,48 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) ( 1TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dBuV	dB	dB/m	Factor			
1	5150.00	52.65	54.00	-1.35	15.55	3.43	33.67	0.00	Average	100	138	VERTICAL
2	5150.00	69.58	74.00	-4.42	32.48	3.43	33.67	0.00	Peak	100	138	VERTICAL
3	5173.80	102.13				3.44	33.70	0.00	Average	100	138	VERTICAL
4	5174.60	112.31				3.44	33.70	0.00	Peak	100	138	VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dBuV	dB	dB/m	Factor			
1	5148.80	60.26	74.00	-13.74	23.16	3.43	33.67	0.00	Peak	100	141	VERTICAL
2	5150.00	44.01	54.00	-9.99	6.91	3.43	33.67	0.00	Average	100	141	VERTICAL
3	5203.60	101.42				3.45	33.76	0.00	Average	100	141	VERTICAL
4	5205.60	112.72				3.45	33.76	0.00	Peak	100	141	VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			dBuV	dB	dB/m	Factor			
1	5149.40	51.23	74.00	-22.77	14.13	3.43	33.67	0.00	Peak	100	142	VERTICAL
2	5150.00	40.02	54.00	-13.98	2.92	3.43	33.67	0.00	Average	100	142	VERTICAL
3	5246.60	113.69				3.46	33.85	0.00	Peak	100	142	VERTICAL
4	5247.20	103.89				3.46	33.85	0.00	Average	100	142	VERTICAL
5	5360.80	59.91	74.00	-14.09	22.39	3.49	34.03	0.00	Peak	100	142	VERTICAL
6	5361.40	46.69	54.00	-7.31	9.17	3.49	34.03	0.00	Average	100	142	VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11a Ch 36,40,48 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) ( 2TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor				
1	5149.60	52.44	54.00	-1.56	15.34	3.43	33.67	0.00	Average	100	132	VERTICAL
2	5149.60	69.42	74.00	-4.58	32.32	3.43	33.67	0.00	Peak	100	132	VERTICAL
3	5184.00	103.70				3.44	33.73	0.00	Average	100	132	VERTICAL
4	5184.00	112.96				3.44	33.73	0.00	Peak	100	132	VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor				
1	5148.00	62.02	74.00	-11.98	24.92	3.43	33.67	0.00	Peak	100	198	VERTICAL
2	5148.80	43.89	54.00	-10.11	6.79	3.43	33.67	0.00	Average	100	198	VERTICAL
3	5192.40	104.66				3.44	33.73	0.00	Average	100	198	VERTICAL
4	5192.80	114.56				3.44	33.73	0.00	Peak	100	198	VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor				
1	5150.00	39.06	54.00	-14.94	1.96	3.43	33.67	0.00	Average	100	234	VERTICAL
2	5150.00	51.18	74.00	-22.82	14.08	3.43	33.67	0.00	Peak	100	234	VERTICAL
3	5246.40	106.43				3.46	33.85	0.00	Average	100	234	VERTICAL
4	5246.40	115.87				3.46	33.85	0.00	Peak	100	234	VERTICAL
5	5418.00	61.37	74.00	-12.63	23.71	3.51	34.15	0.00	Peak	100	234	VERTICAL
6	5418.40	48.61	54.00	-5.39	10.95	3.51	34.15	0.00	Average	100	234	VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11a Ch 36,40,48 / Chain 1 + Chain 2 + + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 1 (Ant. 6 Dipole antenna / 8dBi) ( 3TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5146.20	71.95	74.00	-2.05	34.85	3.43	33.67	0.00	Peak	100	157 VERTICAL
2	5148.40	52.46	54.00	-1.54	15.36	3.43	33.67	0.00	Average	100	157 VERTICAL
3	5187.00	115.52				3.44	33.73	0.00	Peak	100	157 VERTICAL
4	5187.20	105.54				3.44	33.73	0.00	Average	100	157 VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5148.40	64.31	74.00	-9.69	27.21	3.43	33.67	0.00	Peak	100	135 VERTICAL
2	5149.60	46.21	54.00	-7.79	9.11	3.43	33.67	0.00	Average	100	135 VERTICAL
3	5197.60	107.72				3.45	33.76	0.00	Average	100	135 VERTICAL
4	5197.60	117.54				3.45	33.76	0.00	Peak	100	135 VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5120.00	42.32	54.00	-11.68	5.28	3.43	33.61	0.00	Average	100	135 VERTICAL
2	5136.80	55.90	74.00	-18.10	18.83	3.43	33.64	0.00	Peak	100	135 VERTICAL
3	5246.00	107.22				3.46	33.85	0.00	Average	100	135 VERTICAL
4	5246.60	117.31				3.46	33.85	0.00	Peak	100	135 VERTICAL
5	5359.00	60.77	74.00	-13.23	23.25	3.49	34.03	0.00	Peak	100	135 VERTICAL
6	5360.20	48.36	54.00	-5.64	10.84	3.49	34.03	0.00	Average	100	135 VERTICAL

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

### Note:

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

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

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Wen Chao	<b>Configurations</b>	IEEE 802.11n MCS0 20MHz Ch 36,40,48 / Chain 1
<b>Test Date</b>	Apr. 27, 2012	<b>Test Mode</b>	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) ( 1TX )

### Channel 36

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	5149.80	68.94	74.00	-5.06	31.84	3.43	33.67	0.00 Peak	175	40	HORIZONTAL
2	5150.00	52.45	54.00	-1.55	15.35	3.43	33.67	0.00 Average	175	40	HORIZONTAL
3	5184.60	110.00				3.44	33.73	0.00 Peak	175	40	HORIZONTAL
4	5186.80	99.17				3.44	33.73	0.00 Average	175	40	HORIZONTAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5148.40	65.04	74.00	-8.96	27.94	3.43	33.67	0.00 Peak	172	40	HORIZONTAL
2	5150.00	48.01	54.00	-5.99	10.91	3.43	33.67	0.00 Average	172	40	HORIZONTAL
3	5193.20	101.78				3.44	33.73	0.00 Average	172	40	HORIZONTAL
4	5195.20	112.26				3.45	33.76	0.00 Peak	172	40	HORIZONTAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5149.40	53.25	74.00	-20.75	16.15	3.43	33.67	0.00 Peak	156	39	HORIZONTAL
2	5150.00	40.79	54.00	-13.21	3.69	3.43	33.67	0.00 Average	156	39	HORIZONTAL
3	5235.20	112.00				3.46	33.82	0.00 Peak	156	39	HORIZONTAL
4	5247.20	101.82				3.46	33.85	0.00 Average	156	39	HORIZONTAL
5	5389.40	56.60	74.00	-17.40	19.01	3.50	34.09	0.00 Peak	156	39	HORIZONTAL
6	5390.00	44.18	54.00	-9.82	6.59	3.50	34.09	0.00 Average	156	39	HORIZONTAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 36,40,48 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) ( 2TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor				
1	5143.60	71.64	74.00	-2.36	34.54	3.43	33.67	0.00	Peak	173	12	HORIZONTAL
2	5146.20	51.52	54.00	-2.48	14.42	3.43	33.67	0.00	Average	173	12	HORIZONTAL
3	5183.40	102.44				3.44	33.73	0.00	Average	173	12	HORIZONTAL
4	5186.20	113.08				3.44	33.73	0.00	Peak	173	12	HORIZONTAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor				
1	5150.00	49.07	54.00	-4.93	11.97	3.43	33.67	0.00	Average	180	14	HORIZONTAL
2	5150.00	68.42	74.00	-5.58	31.32	3.43	33.67	0.00	Peak	180	14	HORIZONTAL
3	5193.20	104.44				3.44	33.73	0.00	Average	180	14	HORIZONTAL
4	5193.60	114.69				3.44	33.73	0.00	Peak	180	14	HORIZONTAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor				
1	5103.80	54.56	74.00	-19.44	17.56	3.42	33.58	0.00	Peak	171	16	HORIZONTAL
2	5120.00	41.71	54.00	-12.29	4.67	3.43	33.61	0.00	Average	171	16	HORIZONTAL
3	5245.40	115.24				3.46	33.82	0.00	Peak	171	16	HORIZONTAL
4	5246.00	104.84				3.46	33.85	0.00	Average	171	16	HORIZONTAL
5	5363.20	56.57	74.00	-17.43	19.05	3.49	34.03	0.00	Peak	171	16	HORIZONTAL
6	5380.60	43.73	54.00	-10.27	6.17	3.50	34.06	0.00	Average	171	16	HORIZONTAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 36,40,48 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) ( 2TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor				
1	5148.40	68.07	74.00	-5.93	30.97	3.43	33.67	0.00	Peak	172	6	HORIZONTAL
2	5150.00	52.40	54.00	-1.60	15.30	3.43	33.67	0.00	Average	172	6	HORIZONTAL
3	5173.80	99.72				3.44	33.70	0.00	Average	172	6	HORIZONTAL
4	5176.20	111.04				3.44	33.70	0.00	Peak	172	6	HORIZONTAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor				
1	5111.60	43.79	54.00	-10.21	6.76	3.42	33.61	0.00	Average	175	3	HORIZONTAL
2	5112.40	56.27	74.00	-17.73	19.24	3.42	33.61	0.00	Peak	175	3	HORIZONTAL
3	5192.40	99.47				3.44	33.73	0.00	Average	175	3	HORIZONTAL
4	5204.40	112.21				3.45	33.76	0.00	Peak	175	3	HORIZONTAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor				
1	5149.40	52.01	74.00	-21.99	14.91	3.43	33.67	0.00	Peak	108	310	VERTICAL
2	5150.00	39.81	54.00	-14.19	2.71	3.43	33.67	0.00	Average	108	310	VERTICAL
3	5233.40	98.50				3.46	33.82	0.00	Average	108	310	VERTICAL
4	5235.20	109.53				3.46	33.82	0.00	Peak	108	310	VERTICAL
5	5350.00	41.77	54.00	-12.23	4.25	3.49	34.03	0.00	Average	108	310	VERTICAL
6	5350.00	53.06	74.00	-20.94	15.54	3.49	34.03	0.00	Peak	108	310	VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 36,40,48 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) ( 3TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5150.00	52.47	54.00	-1.53	15.37	3.43	33.67	0.00	Average	173	313 HORIZONTAL
2	5150.00	69.54	74.00	-4.46	32.44	3.43	33.67	0.00	Peak	173	313 HORIZONTAL
3	5181.00	112.16				3.44	33.73	0.00	Peak	173	313 HORIZONTAL
4	5181.20	102.03				3.44	33.73	0.00	Average	173	313 HORIZONTAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5150.00	49.94	54.00	-4.06	12.84	3.43	33.67	0.00	Average	170	307 HORIZONTAL
2	5150.00	67.11	74.00	-6.89	30.01	3.43	33.67	0.00	Peak	170	307 HORIZONTAL
3	5193.60	108.27				3.44	33.73	0.00	Average	170	307 HORIZONTAL
4	5194.40	118.20				3.44	33.73	0.00	Peak	170	307 HORIZONTAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5120.00	45.43	54.00	-8.57	8.39	3.43	33.61	0.00	Average	168	302 HORIZONTAL
2	5128.40	57.51	74.00	-16.49	20.44	3.43	33.64	0.00	Peak	168	302 HORIZONTAL
3	5231.60	107.00				3.46	33.82	0.00	Average	168	302 HORIZONTAL
4	5231.60	116.74				3.46	33.82	0.00	Peak	168	302 HORIZONTAL
5	5360.20	45.74	54.00	-8.26	8.22	3.49	34.03	0.00	Average	168	302 HORIZONTAL
6	5362.60	57.92	74.00	-16.08	20.40	3.49	34.03	0.00	Peak	168	302 HORIZONTAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 36,40,48 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) ( 3TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5150.00	52.38	54.00	-1.62	15.28	3.43	33.67	0.00	Average	181	289 HORIZONTAL
2	5150.00	67.86	74.00	-6.14	30.76	3.43	33.67	0.00	Peak	181	289 HORIZONTAL
3	5172.60	112.79				3.44	33.70	0.00	Peak	181	289 HORIZONTAL
4	5178.60	101.11				3.44	33.73	0.00	Average	181	289 HORIZONTAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5150.00	49.33	54.00	-4.67	12.23	3.43	33.67	0.00	Average	173	292 HORIZONTAL
2	5150.00	62.78	74.00	-11.22	25.68	3.43	33.67	0.00	Peak	173	292 HORIZONTAL
3	5192.00	116.76				3.44	33.73	0.00	Peak	173	292 HORIZONTAL
4	5193.20	106.04				3.44	33.73	0.00	Average	173	292 HORIZONTAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5120.00	45.88	54.00	-8.12	8.84	3.43	33.61	0.00	Average	185	38 HORIZONTAL
2	5138.60	57.01	74.00	-16.99	19.94	3.43	33.64	0.00	Peak	185	38 HORIZONTAL
3	5247.20	105.16				3.46	33.85	0.00	Average	185	38 HORIZONTAL
4	5247.80	116.33				3.46	33.85	0.00	Peak	185	38 HORIZONTAL
5	5359.00	58.47	74.00	-15.53	20.95	3.49	34.03	0.00	Peak	185	38 HORIZONTAL
6	5360.20	46.37	54.00	-7.63	8.85	3.49	34.03	0.00	Average	185	38 HORIZONTAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 38,46 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) ( 1TX )

**Channel 38**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5145.60	68.14	74.00	-5.86	31.04	3.43	33.67	0.00 Peak	174	41	HORIZONTAL
2	5150.00	52.82	54.00	-1.18	15.72	3.43	33.67	0.00 Average	174	41	HORIZONTAL
3	5175.60	102.20				3.44	33.70	0.00 Peak	174	41	HORIZONTAL
4	5176.80	92.27				3.44	33.70	0.00 Average	174	41	HORIZONTAL

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

**Channel 46**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5148.80	69.37	74.00	-4.63	32.27	3.43	33.67	0.00 Peak	176	34	HORIZONTAL
2	5150.00	52.02	54.00	-1.98	14.92	3.43	33.67	0.00 Average	176	34	HORIZONTAL
3	5246.80	99.41				3.46	33.85	0.00 Average	176	34	HORIZONTAL
4	5246.80	109.76				3.46	33.85	0.00 Peak	176	34	HORIZONTAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 38,46 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) ( 2TX )

**Channel 38**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5150.00	52.85	54.00	-1.15	15.75	3.43	33.67	0.00	Average	169	343 HORIZONTAL
2	5150.00	68.46	74.00	-5.54	31.36	3.43	33.67	0.00	Peak	169	343 HORIZONTAL
3	5172.40	102.86				3.44	33.70	0.00	Peak	169	343 HORIZONTAL
4	5172.80	93.22				3.44	33.70	0.00	Average	169	343 HORIZONTAL

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

**Channel 46**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5148.00	52.92	54.00	-1.08	15.82	3.43	33.67	0.00	Average	165	249 HORIZONTAL
2	5148.40	69.85	74.00	-4.15	32.75	3.43	33.67	0.00	Peak	165	249 HORIZONTAL
3	5245.60	112.23				3.46	33.85	0.00	Peak	165	249 HORIZONTAL
4	5246.40	102.03				3.46	33.85	0.00	Average	165	249 HORIZONTAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 40MHz Ch 38,46 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) ( 2TX )

**Channel 38**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5150.00	52.69	54.00	-1.31	15.59	3.43	33.67	0.00	Average	175	0 HORIZONTAL
2	5150.00	66.70	74.00	-7.30	29.60	3.43	33.67	0.00	Peak	175	0 HORIZONTAL
3	5175.20	92.29				3.44	33.70	0.00	Average	175	0 HORIZONTAL
4	5199.20	104.43				3.45	33.76	0.00	Peak	175	0 HORIZONTAL

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

**Channel 46**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5150.00	49.79	54.00	-4.21	12.69	3.43	33.67	0.00	Average	100	293 VERTICAL
2	5150.00	61.77	74.00	-12.23	24.67	3.43	33.67	0.00	Peak	100	293 VERTICAL
3	5198.80	100.12				3.45	33.76	0.00	Peak	100	293 VERTICAL
4	5201.20	89.09				3.45	33.76	0.00	Average	100	293 VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 38,46 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) ( 3TX )

**Channel 38**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5150.00	52.90	54.00	-1.10	15.80	3.43	33.67	0.00	Average	163	293 HORIZONTAL
2	5150.00	68.61	74.00	-5.39	31.51	3.43	33.67	0.00	Peak	163	293 HORIZONTAL
3	5200.80	93.90				3.45	33.76	0.00	Average	163	293 HORIZONTAL
4	5200.80	103.97				3.45	33.76	0.00	Peak	163	293 HORIZONTAL

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

**Channel 46**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5148.80	51.97	54.00	-2.03	14.87	3.43	33.67	0.00	Average	168	44 HORIZONTAL
2	5149.60	69.61	74.00	-4.39	32.51	3.43	33.67	0.00	Peak	168	44 HORIZONTAL
3	5247.20	105.60				3.46	33.85	0.00	Average	168	44 HORIZONTAL
4	5247.60	115.11				3.46	33.85	0.00	Peak	168	44 HORIZONTAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 40MHz Ch 38,46 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) ( 3TX )

**Channel 38**

Freq	Level	Limit		Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	Over Limit		Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5146.00	67.05	74.00	-6.95	29.95	3.43	33.67	0.00 Peak	170	35 HORIZONTAL
2	5150.00	52.41	54.00	-1.59	15.31	3.43	33.67	0.00 Average	170	35 HORIZONTAL
3	5173.60	105.94				3.44	33.70	0.00 Peak	170	35 HORIZONTAL
4	5205.60	94.15				3.45	33.76	0.00 Average	170	35 HORIZONTAL

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

**Channel 46**

Freq	Level	Limit		Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	Over Limit		Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5150.00	51.98	54.00	-2.02	14.88	3.43	33.67	0.00 Average	175	41 HORIZONTAL
2	5150.00	65.40	74.00	-8.60	28.30	3.43	33.67	0.00 Peak	175	41 HORIZONTAL
3	5213.20	114.58				3.45	33.79	0.00 Peak	175	41 HORIZONTAL
4	5244.40	103.61				3.46	33.82	0.00 Average	175	41 HORIZONTAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11a Ch 36,40,48 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) ( 1TX )

### Channel 36

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	5148.60	71.32	74.00	-2.68	34.22	3.43	33.67	0.00	Peak	110	357 VERTICAL
2	5150.00	52.92	54.00	-1.08	15.82	3.43	33.67	0.00	Average	110	357 VERTICAL
3	5186.60	109.74				3.44	33.73	0.00	Peak	110	357 VERTICAL
4	5186.80	99.47				3.44	33.73	0.00	Average	110	357 VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
1	5150.00	47.65	54.00	-6.35	10.55	3.43	33.67	0.00	Average	174	40 HORIZONTAL
2	5150.00	65.33	74.00	-8.67	28.23	3.43	33.67	0.00	Peak	174	40 HORIZONTAL
3	5193.20	102.13				3.44	33.73	0.00	Average	174	40 HORIZONTAL
4	5194.40	112.29				3.44	33.73	0.00	Peak	174	40 HORIZONTAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
1	5147.00	54.03	74.00	-19.97	16.93	3.43	33.67	0.00	Peak	154	39 HORIZONTAL
2	5150.00	40.51	54.00	-13.49	3.41	3.43	33.67	0.00	Average	154	39 HORIZONTAL
3	5245.40	112.32				3.46	33.82	0.00	Peak	154	39 HORIZONTAL
4	5246.00	102.08				3.46	33.85	0.00	Average	154	39 HORIZONTAL
5	5383.00	57.88	74.00	-16.12	20.29	3.50	34.09	0.00	Peak	154	39 HORIZONTAL
6	5390.00	44.31	54.00	-9.69	6.72	3.50	34.09	0.00	Average	154	39 HORIZONTAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11a Ch 36,40,48 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) ( 2TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5149.40	45.87	54.00	-8.13	8.77	3.43	33.67	0.00	Average	166	33 HORIZONTAL
2	5149.60	65.15	74.00	-8.85	28.05	3.43	33.67	0.00	Peak	166	33 HORIZONTAL
3	5173.60	108.38				3.44	33.70	0.00	Peak	166	33 HORIZONTAL
4	5173.80	98.83				3.44	33.70	0.00	Average	166	33 HORIZONTAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5145.40	61.82	74.00	-12.18	24.72	3.43	33.67	0.00	Peak	100	341 VERTICAL
2	5150.00	43.59	54.00	-10.41	6.49	3.43	33.67	0.00	Average	100	341 VERTICAL
3	5186.00	95.35				3.44	33.73	0.00	Average	100	341 VERTICAL
4	5186.00	105.09				3.44	33.73	0.00	Peak	100	341 VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5079.60	42.47	54.00	-11.53	5.51	3.41	33.55	0.00	Average	173	43 HORIZONTAL
2	5079.60	51.36	74.00	-22.64	14.40	3.41	33.55	0.00	Peak	173	43 HORIZONTAL
3	5246.40	100.13				3.46	33.85	0.00	Average	173	43 HORIZONTAL
4	5246.40	109.21				3.46	33.85	0.00	Peak	173	43 HORIZONTAL
5	5399.60	46.88	54.00	-7.12	9.25	3.51	34.12	0.00	Average	173	43 HORIZONTAL
6	5400.40	57.22	74.00	-16.78	19.59	3.51	34.12	0.00	Peak	173	43 HORIZONTAL

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

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Wen Chao	<b>Configurations</b>	IEEE 802.11a Ch 36,40,48 / Chain 1 + Chain 2 + + Chain 3
<b>Test Date</b>	Apr. 27, 2012	<b>Test Mode</b>	Mode 2 (Ant. 7 Patch antenna / 2.3dBi) ( 3TX )

**Channel 36**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	5149.20	69.50	74.00	-4.50	32.40	3.43	33.67	0.00	Peak	181	38	HORIZONTAL
2	5150.00	51.92	54.00	-2.08	14.82	3.43	33.67	0.00	Average	181	38	HORIZONTAL
3	5184.80	102.41				3.44	33.73	0.00	Average	181	38	HORIZONTAL
4	5185.20	112.33				3.44	33.73	0.00	Peak	181	38	HORIZONTAL

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

**Channel 40**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	5149.60	48.37	54.00	-5.63	11.27	3.43	33.67	0.00	Average	148	49	HORIZONTAL
2	5149.60	67.50	74.00	-6.50	30.40	3.43	33.67	0.00	Peak	148	49	HORIZONTAL
3	5199.20	107.79				3.45	33.76	0.00	Average	148	49	HORIZONTAL
4	5199.20	117.83				3.45	33.76	0.00	Peak	148	49	HORIZONTAL

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

**Channel 48**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	4960.00	46.24	54.00	-7.76	9.54	3.37	33.33	0.00	Average	168	310	HORIZONTAL
2	4986.00	57.96	74.00	-16.04	21.22	3.38	33.36	0.00	Peak	168	310	HORIZONTAL
3	5238.00	106.65				3.46	33.82	0.00	Average	168	310	HORIZONTAL
4	5238.00	116.52				3.46	33.82	0.00	Peak	168	310	HORIZONTAL
5	5360.00	59.15	74.00	-14.85	21.63	3.49	34.03	0.00	Peak	168	310	HORIZONTAL
6	5406.00	46.67	54.00	-7.33	9.04	3.51	34.12	0.00	Average	168	310	HORIZONTAL

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

**Note:**

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

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 36,40,48 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) ( 1TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5150.00	52.65	54.00	-1.35	15.55	3.43	33.67	0.00	Average	100	9 VERTICAL
2	5150.00	71.06	74.00	-2.94	33.96	3.43	33.67	0.00	Peak	100	9 VERTICAL
3	5186.73	113.75				3.44	33.73	0.00	Peak	100	9 VERTICAL
4	5187.05	103.47				3.44	33.73	0.00	Average	100	9 VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5148.72	71.29	74.00	-2.71	34.19	3.43	33.67	0.00	Peak	100	355 VERTICAL
2	5150.00	52.38	54.00	-1.62	15.28	3.43	33.67	0.00	Average	100	355 VERTICAL
3	5195.51	108.46				3.45	33.76	0.00	Average	100	355 VERTICAL
4	5198.72	118.73				3.45	33.76	0.00	Peak	100	355 VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5144.23	45.42	54.00	-8.58	8.32	3.43	33.67	0.00	Average	100	347 VERTICAL
2	5144.23	58.99	74.00	-15.01	21.89	3.43	33.67	0.00	Peak	100	347 VERTICAL
3	5233.27	109.23				3.46	33.82	0.00	Average	100	347 VERTICAL
4	5234.23	120.19				3.46	33.82	0.00	Peak	100	347 VERTICAL
5	5354.33	50.14	54.00	-3.86	12.62	3.49	34.03	0.00	Average	100	347 VERTICAL
6	5368.27	63.65	74.00	-10.35	26.10	3.49	34.06	0.00	Peak	100	347 VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 36,40,48 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) ( 2TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	4996.80	60.30	74.00	-13.70	23.51	3.39	33.40	0.00	Peak	100	2 VERTICAL
2	5000.00	52.26	54.00	-1.74	15.47	3.39	33.40	0.00	Average	100	2 VERTICAL
3	5181.60	102.68				3.44	33.73	0.00	Average	100	2 VERTICAL
4	5183.21	111.30				3.44	33.73	0.00	Peak	100	2 VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	4996.80	58.79	74.00	-15.21	22.00	3.39	33.40	0.00	Peak	100	351 VERTICAL
2	5000.00	52.08	54.00	-1.92	15.29	3.39	33.40	0.00	Average	100	351 VERTICAL
3	5191.99	101.90				3.44	33.73	0.00	Average	100	351 VERTICAL
4	5191.99	111.16				3.44	33.73	0.00	Peak	100	351 VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5000.00	52.62	54.00	-1.38	15.83	3.39	33.40	0.00	Average	100	358 VERTICAL
2	5000.00	58.92	74.00	-15.08	22.13	3.39	33.40	0.00	Peak	100	358 VERTICAL
3	5231.99	112.09				3.46	33.82	0.00	Peak	100	358 VERTICAL
4	5233.59	103.50				3.46	33.82	0.00	Average	100	358 VERTICAL
5	5400.00	52.86	54.00	-1.14	15.23	3.51	34.12	0.00	Average	100	358 VERTICAL
6	5400.00	60.81	74.00	-13.19	23.18	3.51	34.12	0.00	Peak	100	358 VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 36,40,48 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) ( 2TX )

### Channel 36

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	5000.00	52.05	54.00	-1.95	15.26	3.39	33.40	0.00	Average	100	348 VERTICAL
2	5000.00	57.85	74.00	-16.15	21.06	3.39	33.40	0.00	Peak	100	348 VERTICAL
3	5183.21	99.95				3.44	33.73	0.00	Average	100	348 VERTICAL
4	5184.81	109.90				3.44	33.73	0.00	Peak	100	348 VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
1	5000.00	52.08	54.00	-1.92	15.29	3.39	33.40	0.00	Average	100	1 VERTICAL
2	5000.00	58.71	74.00	-15.29	21.92	3.39	33.40	0.00	Peak	100	1 VERTICAL
3	5193.59	99.96				3.44	33.73	0.00	Average	100	1 VERTICAL
4	5204.81	110.38				3.45	33.76	0.00	Peak	100	1 VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
1	5000.00	52.99	54.00	-1.01	16.20	3.39	33.40	0.00	Average	100	357 VERTICAL
2	5000.00	59.56	74.00	-14.44	22.77	3.39	33.40	0.00	Peak	100	357 VERTICAL
3	5231.99	100.69				3.46	33.82	0.00	Average	100	357 VERTICAL
4	5233.59	111.86				3.46	33.82	0.00	Peak	100	357 VERTICAL
5	5440.00	52.95	54.00	-1.05	15.25	3.52	34.18	0.00	Average	100	357 VERTICAL
6	5440.00	59.93	74.00	-14.07	22.23	3.52	34.18	0.00	Peak	100	357 VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 36,40,48 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) ( 3TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5000.00	52.85	54.00	-1.15	16.06	3.39	33.40	0.00	Average	100	355 VERTICAL
2	5000.00	59.33	74.00	-14.67	22.54	3.39	33.40	0.00	Peak	100	355 VERTICAL
3	5185.80	110.45				3.44	33.73	0.00	Peak	100	355 VERTICAL
4	5187.20	101.16				3.44	33.73	0.00	Average	100	355 VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5000.00	51.47	54.00	-2.53	14.68	3.39	33.40	0.00	Average	100	352 VERTICAL
2	5000.00	59.21	74.00	-14.79	22.42	3.39	33.40	0.00	Peak	100	352 VERTICAL
3	5120.00	52.88	54.00	-1.12	15.84	3.43	33.61	0.00	Average	100	352 VERTICAL
4	5120.00	61.59	74.00	-12.41	24.55	3.43	33.61	0.00	Peak	100	352 VERTICAL
5	5192.80	100.37				3.44	33.73	0.00	Average	100	352 VERTICAL
6	5194.20	109.44				3.44	33.73	0.00	Peak	100	352 VERTICAL

Item 5, 6 are the fundamental frequency at 5200 MHz.

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5000.00	52.31	54.00	-1.69	15.52	3.39	33.40	0.00	Average	100	3 VERTICAL
2	5000.00	60.45	74.00	-13.55	23.66	3.39	33.40	0.00	Peak	100	3 VERTICAL
3	5120.00	52.99	54.00	-1.01	15.95	3.43	33.61	0.00	Average	100	3 VERTICAL
4	5120.00	61.23	74.00	-12.77	24.19	3.43	33.61	0.00	Peak	100	3 VERTICAL
5	5231.30	109.60				3.46	33.82	0.00	Peak	100	3 VERTICAL
6	5232.80	100.41				3.46	33.82	0.00	Average	100	3 VERTICAL

Item 5, 6 are the fundamental frequency at 5240 MHz.



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 36,40,48 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) ( 3TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5000.00	52.92	54.00	-1.08	16.13	3.39	33.40	0.00	Average	100	2 VERTICAL
2	5000.00	60.52	74.00	-13.48	23.73	3.39	33.40	0.00	Peak	100	2 VERTICAL
3	5184.30	98.75				3.44	33.73	0.00	Average	100	2 VERTICAL
4	5184.30	109.97				3.44	33.73	0.00	Peak	100	2 VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5000.00	52.94	54.00	-1.06	16.15	3.39	33.40	0.00	Average	100	356 VERTICAL
2	5000.00	59.61	74.00	-14.39	22.82	3.39	33.40	0.00	Peak	100	356 VERTICAL
3	5192.80	97.37				3.44	33.73	0.00	Average	100	356 VERTICAL
4	5192.80	107.61				3.44	33.73	0.00	Peak	100	356 VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5000.00	51.65	54.00	-2.35	14.86	3.39	33.40	0.00	Average	100	352 VERTICAL
2	5000.00	58.99	74.00	-15.01	22.20	3.39	33.40	0.00	Peak	100	352 VERTICAL
3	5120.00	52.99	54.00	-1.01	15.95	3.43	33.61	0.00	Average	100	352 VERTICAL
4	5120.00	62.13	74.00	-11.87	25.09	3.43	33.61	0.00	Peak	100	352 VERTICAL
5	5232.80	97.63				3.46	33.82	0.00	Average	100	352 VERTICAL
6	5240.00	109.21				3.46	33.82	0.00	Peak	100	352 VERTICAL

Item 5, 6 are the fundamental frequency at 5240 MHz.

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Wen Chao	<b>Configurations</b>	IEEE 802.11n MCS16 20MHz Ch 36,40,48 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Apr. 27, 2012	<b>Test Mode</b>	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) ( 3TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
MHz		dBuV/m	dBuV/m	dB					cm	deg	
1	4919.90	51.43	54.00	-2.57	14.85	3.35	33.23	0.00	Average	100	167 VERTICAL
2	4919.90	57.52	74.00	-16.48	20.94	3.35	33.23	0.00	Peak	100	167 VERTICAL
3	5184.30	94.85				3.44	33.73	0.00	Average	100	167 VERTICAL
4	5185.80	106.23				3.44	33.73	0.00	Peak	100	167 VERTICAL
5	5439.70	62.03	74.00	-11.97	24.33	3.52	34.18	0.00	Peak	100	167 VERTICAL
6	5441.20	52.86	54.00	-1.14	15.16	3.52	34.18	0.00	Average	100	167 VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
MHz		dBuV/m	dBuV/m	dB					cm	deg	
1	4919.90	50.47	54.00	-3.53	13.89	3.35	33.23	0.00	Average	100	166 VERTICAL
2	4986.50	61.18	74.00	-12.82	24.43	3.38	33.37	0.00	Peak	100	166 VERTICAL
3	5192.80	106.91				3.44	33.73	0.00	Peak	100	166 VERTICAL
4	5204.30	95.36				3.45	33.76	0.00	Average	100	166 VERTICAL
5	5435.40	62.74	74.00	-11.26	25.04	3.52	34.18	0.00	Peak	100	166 VERTICAL
6	5439.70	52.80	54.00	-1.20	15.10	3.52	34.18	0.00	Average	100	166 VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
MHz		dBuV/m	dBuV/m	dB					cm	deg	
1	4919.90	50.46	54.00	-3.54	13.88	3.35	33.23	0.00	Average	100	167 VERTICAL
2	4919.90	56.66	74.00	-17.34	20.08	3.35	33.23	0.00	Peak	100	167 VERTICAL
3	5237.10	96.98				3.46	33.82	0.00	Average	100	167 VERTICAL
4	5237.10	107.25				3.46	33.82	0.00	Peak	100	167 VERTICAL
5	5439.70	52.53	54.00	-1.47	14.83	3.52	34.18	0.00	Average	100	167 VERTICAL
6	5439.70	62.10	74.00	-11.90	24.40	3.52	34.18	0.00	Peak	100	167 VERTICAL

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

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Wen Chao	<b>Configurations</b>	IEEE 802.11n MCS0 40MHz Ch 38,46 / Chain 1
<b>Test Date</b>	Apr. 27, 2012	<b>Test Mode</b>	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) ( 1TX )

### Channel 38

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	5146.47	68.22	74.00	-5.78	31.12	3.43	33.67	0.00 Peak	100	355	VERTICAL
2	5150.00	52.99	54.00	-1.01	15.89	3.43	33.67	0.00 Average	100	355	VERTICAL
3	5197.37	96.28				3.45	33.76	0.00 Average	100	355	VERTICAL
4	5197.69	106.68				3.45	33.76	0.00 Peak	100	355	VERTICAL

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

### Channel 46

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
MHz	dBuV/m	dBuV/m	dB						cm	deg	
1	5149.04	57.35	74.00	-16.65	20.25	3.43	33.67	0.00 Peak	100	47	HORIZONTAL
2	5150.00	42.47	54.00	-11.53	5.37	3.43	33.67	0.00 Average	100	47	HORIZONTAL
3	5183.59	92.91				3.44	33.73	0.00 Peak	100	47	HORIZONTAL
4	5188.40	82.16				3.44	33.73	0.00 Average	100	47	HORIZONTAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 38,46 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) ( 2TX )

**Channel 38**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5150.00	52.46	54.00	-1.54	15.36	3.43	33.67	0.00	Average	100	354 VERTICAL
2	5150.00	64.37	74.00	-9.63	27.27	3.43	33.67	0.00	Peak	100	354 VERTICAL
3	5195.77	99.30				3.45	33.76	0.00	Average	100	354 VERTICAL
4	5196.41	109.43				3.45	33.76	0.00	Peak	100	354 VERTICAL

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

**Channel 46**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5000.00	51.69	54.00	-2.31	14.90	3.39	33.40	0.00	Average	100	348 VERTICAL
2	5000.00	57.37	74.00	-16.63	20.58	3.39	33.40	0.00	Peak	100	348 VERTICAL
3	5247.63	100.34				3.46	33.85	0.00	Average	100	348 VERTICAL
4	5247.63	108.94				3.46	33.85	0.00	Peak	100	348 VERTICAL
5	5439.17	52.13	54.00	-1.87	14.43	3.52	34.18	0.00	Average	100	348 VERTICAL
6	5440.00	61.25	74.00	-12.75	23.55	3.52	34.18	0.00	Peak	100	348 VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 40MHz Ch 38,46 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) ( 2TX )

**Channel 38**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5150.00	52.50	54.00	-1.50	15.40	3.43	33.67	0.00	Average	100	1 VERTICAL
2	5150.00	64.38	74.00	-9.62	27.28	3.43	33.67	0.00	Peak	100	1 VERTICAL
3	5180.06	108.00				3.44	33.73	0.00	Peak	100	1 VERTICAL
4	5197.37	95.34				3.45	33.76	0.00	Average	100	1 VERTICAL

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

**Channel 46**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5000.00	51.80	54.00	-2.20	15.01	3.39	33.40	0.00	Average	100	350 VERTICAL
2	5000.00	56.40	74.00	-17.60	19.61	3.39	33.40	0.00	Peak	100	350 VERTICAL
3	5215.58	97.41				3.45	33.79	0.00	Average	100	350 VERTICAL
4	5223.59	107.03				3.46	33.79	0.00	Peak	100	350 VERTICAL
5	5439.17	52.52	54.00	-1.48	14.82	3.52	34.18	0.00	Average	100	350 VERTICAL
6	5440.00	60.56	74.00	-13.44	22.86	3.52	34.18	0.00	Peak	100	350 VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 38,46 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) ( 3TX )

**Channel 38**

Freq	Level	Limit		Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	Over Limit		Loss	Factor	Factor		cm	deg	
1	5000.00	52.91	54.00	-1.09	16.12	3.39	33.40	0.00 Average	100	355	VERTICAL
2	5000.00	59.08	74.00	-14.92	22.29	3.39	33.40	0.00 Peak	100	355	VERTICAL
3	5201.60	105.30				3.45	33.76	0.00 Peak	100	355	VERTICAL
4	5203.00	96.53				3.45	33.76	0.00 Average	100	355	VERTICAL

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

**Channel 46**

Freq	Level	Limit		Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	Over Limit		Loss	Factor	Factor		cm	deg	
1	5000.00	52.85	54.00	-1.15	16.06	3.39	33.40	0.00 Average	100	355	VERTICAL
2	5000.00	59.45	74.00	-14.55	22.66	3.39	33.40	0.00 Peak	100	355	VERTICAL
3	5215.50	107.13				3.45	33.79	0.00 Peak	100	355	VERTICAL
4	5217.00	98.14				3.45	33.79	0.00 Average	100	355	VERTICAL

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

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Wen Chao	<b>Configurations</b>	IEEE 802.11n MCS8 40MHz Ch 38,46 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Apr. 27, 2012	<b>Test Mode</b>	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) ( 3TX )

### Channel 38

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	5120.00	52.97	54.00	-1.03	15.93	3.43	33.61	0.00 Average	100	352	VERTICAL
2	5120.00	60.47	74.00	-13.53	23.43	3.43	33.61	0.00 Peak	100	352	VERTICAL
3	5197.20	95.42				3.45	33.76	0.00 Average	100	352	VERTICAL
4	5197.20	106.50				3.45	33.76	0.00 Peak	100	352	VERTICAL

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

### Channel 46

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	5120.00	52.83	54.00	-1.17	15.79	3.43	33.61	0.00 Average	100	353	VERTICAL
2	5120.00	61.31	74.00	-12.69	24.27	3.43	33.61	0.00 Peak	100	353	VERTICAL
3	5231.40	105.80				3.46	33.82	0.00 Peak	100	353	VERTICAL
4	5243.00	95.43				3.46	33.82	0.00 Average	100	353	VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS16 40MHz Ch 38,46 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) ( 3TX )

**Channel 38**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	4919.90	50.86	54.00	-3.14	14.28	3.35	33.23	0.00	Average	100	166 VERTICAL
2	4919.90	57.04	74.00	-16.96	20.46	3.35	33.23	0.00	Peak	100	166 VERTICAL
3	5200.10	102.15				3.45	33.76	0.00	Peak	100	166 VERTICAL
4	5204.50	91.71				3.45	33.76	0.00	Average	100	166 VERTICAL
5	5439.70	52.85	54.00	-1.15	15.15	3.52	34.18	0.00	Average	100	166 VERTICAL
6	5439.70	62.97	74.00	-11.03	25.27	3.52	34.18	0.00	Peak	100	166 VERTICAL

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

**Channel 46**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	4919.90	51.57	54.00	-2.43	14.99	3.35	33.23	0.00	Average	100	165 VERTICAL
2	4919.90	57.78	74.00	-16.22	21.20	3.35	33.23	0.00	Peak	100	165 VERTICAL
3	5243.00	103.86				3.46	33.82	0.00	Peak	100	165 VERTICAL
4	5245.90	92.57				3.46	33.85	0.00	Average	100	165 VERTICAL
5	5439.70	52.83	54.00	-1.17	15.13	3.52	34.18	0.00	Average	100	165 VERTICAL
6	5439.70	62.09	74.00	-11.91	24.39	3.52	34.18	0.00	Peak	100	165 VERTICAL

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

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Wen Chao	<b>Configurations</b>	IEEE 802.11a Ch 36,40,48 / Chain 1
<b>Test Date</b>	Apr. 27, 2012	<b>Test Mode</b>	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) ( 1TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz		dBuV/m	dBuV/m							cm	deg	
1	5150.00	52.51	54.00	-1.49	15.41	3.43	33.67	0.00	Average	100	355	VERTICAL
2	5150.00	67.24	74.00	-6.76	30.14	3.43	33.67	0.00	Peak	100	355	VERTICAL
3	5185.29	115.23				3.44	33.73	0.00	Peak	100	355	VERTICAL
4	5186.25	104.79				3.44	33.73	0.00	Average	100	355	VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz		dBuV/m	dBuV/m							cm	deg	
1	5150.00	52.75	54.00	-1.25	15.65	3.43	33.67	0.00	Average	100	10	VERTICAL
2	5150.00	66.35	74.00	-7.65	29.25	3.43	33.67	0.00	Peak	100	10	VERTICAL
3	5202.56	109.42				3.45	33.76	0.00	Average	100	10	VERTICAL
4	5202.56	119.07				3.45	33.76	0.00	Peak	100	10	VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz		dBuV/m	dBuV/m							cm	deg	
1	5150.00	46.18	54.00	-7.82	9.08	3.43	33.67	0.00	Average	100	360	VERTICAL
2	5150.00	57.01	74.00	-16.99	19.91	3.43	33.67	0.00	Peak	100	360	VERTICAL
3	5242.89	120.04				3.46	33.82	0.00	Peak	100	360	VERTICAL
4	5246.73	109.44				3.46	33.85	0.00	Average	100	360	VERTICAL
5	5350.00	59.93	74.00	-14.07	22.41	3.49	34.03	0.00	Peak	100	360	VERTICAL
6	5380.29	49.80	54.00	-4.20	12.24	3.50	34.06	0.00	Average	100	360	VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11a Ch 36,40,48 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) ( 2TX )

**Channel 36**

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	4996.80	59.56	74.00	-14.44	22.77	3.39	33.40	0.00 Peak	100	349	VERTICAL
2	5000.00	52.50	54.00	-1.50	15.71	3.39	33.40	0.00 Average	100	349	VERTICAL
3	5181.60	102.90				3.44	33.73	0.00 Average	100	349	VERTICAL
4	5183.21	112.28				3.44	33.73	0.00 Peak	100	349	VERTICAL

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

**Channel 40**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
1	5000.00	52.47	54.00	-1.53	15.68	3.39	33.40	0.00 Average	100	349	VERTICAL
2	5000.00	58.40	74.00	-15.60	21.61	3.39	33.40	0.00 Peak	100	349	VERTICAL
3	5195.19	102.20				3.45	33.76	0.00 Average	100	349	VERTICAL
4	5195.19	111.51				3.45	33.76	0.00 Peak	100	349	VERTICAL

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

**Channel 48**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
1	5000.00	52.52	54.00	-1.48	15.73	3.39	33.40	0.00 Average	100	358	VERTICAL
2	5000.00	58.01	74.00	-15.99	21.22	3.39	33.40	0.00 Peak	100	358	VERTICAL
3	5235.19	103.76				3.46	33.82	0.00 Average	100	358	VERTICAL
4	5244.81	112.44				3.46	33.82	0.00 Peak	100	358	VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11a Ch 36,40,48 / Chain 1 + Chain 2 + + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 3 (Ant. 8 Panel antenna / 10.5dBi) ( 3TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5000.00	52.72	54.00	-1.28	15.93	3.39	33.40	0.00	Average	100	3 VERTICAL
2	5000.00	60.33	74.00	-13.67	23.54	3.39	33.40	0.00	Peak	100	3 VERTICAL
3	5120.00	52.71	54.00	-1.29	15.67	3.43	33.61	0.00	Average	100	3 VERTICAL
4	5120.00	61.58	74.00	-12.42	24.54	3.43	33.61	0.00	Peak	100	3 VERTICAL
5	5178.60	99.86				3.44	33.73	0.00	Average	100	3 VERTICAL
6	5178.60	108.86				3.44	33.73	0.00	Peak	100	3 VERTICAL

Item 5, 6 are the fundamental frequency at 5180 MHz.

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5000.00	52.94	54.00	-1.06	16.15	3.39	33.40	0.00	Average	100	3 VERTICAL
2	5000.00	60.58	74.00	-13.42	23.79	3.39	33.40	0.00	Peak	100	3 VERTICAL
3	5120.00	52.86	54.00	-1.14	15.82	3.43	33.61	0.00	Average	100	3 VERTICAL
4	5120.00	61.24	74.00	-12.76	24.20	3.43	33.61	0.00	Peak	100	3 VERTICAL
5	5197.10	100.97				3.45	33.76	0.00	Average	100	3 VERTICAL
6	5205.80	110.11				3.45	33.76	0.00	Peak	100	3 VERTICAL

Item 5, 6 are the fundamental frequency at 5200 MHz.

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5000.00	52.83	54.00	-1.17	16.04	3.39	33.40	0.00	Average	100	356 VERTICAL
2	5000.00	59.55	74.00	-14.45	22.76	3.39	33.40	0.00	Peak	100	356 VERTICAL
3	5232.80	100.71				3.46	33.82	0.00	Average	100	356 VERTICAL
4	5232.80	109.54				3.46	33.82	0.00	Peak	100	356 VERTICAL

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

Note:

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

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

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Wen Chao	<b>Configurations</b>	IEEE 802.11n MCS0 20MHz Ch 36,40,48 / Chain 1
<b>Test Date</b>	Apr. 27, 2012	<b>Test Mode</b>	Mode 4 (Ant. 9 Yagi antenna / 8dBi) ( 1TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5150.00	52.42	54.00	-1.58	15.32	3.43	33.67	0.00	Average	107	350 VERTICAL
2	5150.00	68.41	74.00	-5.59	31.31	3.43	33.67	0.00	Peak	107	350 VERTICAL
3	5187.00	103.23				3.44	33.73	0.00	Average	107	350 VERTICAL
4	5188.00	112.92				3.44	33.73	0.00	Peak	107	350 VERTICAL
5	5401.00	52.06	54.00	-1.94	14.43	3.51	34.12	0.00	Average	107	350 VERTICAL
6	5402.00	65.29	74.00	-8.71	27.66	3.51	34.12	0.00	Peak	107	350 VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5147.00	67.97	74.00	-6.03	30.87	3.43	33.67	0.00	Peak	104	0 VERTICAL
2	5150.00	52.67	54.00	-1.33	15.57	3.43	33.67	0.00	Average	104	0 VERTICAL
3	5203.00	118.68				3.45	33.76	0.00	Peak	104	0 VERTICAL
4	5206.00	107.80				3.45	33.76	0.00	Average	104	0 VERTICAL
5	5352.00	48.81	54.00	-5.19	11.29	3.49	34.03	0.00	Average	104	0 VERTICAL
6	5352.00	60.14	74.00	-13.86	22.62	3.49	34.03	0.00	Peak	104	0 VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	4990.00	61.88	74.00	-12.12	25.10	3.38	33.40	0.00	Peak	103	1 VERTICAL
2	4992.00	47.36	54.00	-6.64	10.57	3.39	33.40	0.00	Average	103	1 VERTICAL
3	5244.00	118.02				3.46	33.82	0.00	Peak	103	1 VERTICAL
4	5247.00	107.76				3.46	33.85	0.00	Average	103	1 VERTICAL
5	5367.00	49.38	54.00	-4.62	11.83	3.49	34.06	0.00	Average	103	1 VERTICAL
6	5369.00	61.66	74.00	-12.34	24.11	3.49	34.06	0.00	Peak	103	1 VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 36,40,48 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) ( 2TX )

**Channel 36**

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	5051.00	59.31	74.00	-14.69	22.42	3.40	33.49	0.00	Peak	116	320 VERTICAL
2	5080.00	49.31	54.00	-4.69	12.35	3.41	33.55	0.00	Average	116	320 VERTICAL
3	5186.00	104.31				3.44	33.73	0.00	Average	116	320 VERTICAL
4	5187.00	113.84				3.44	33.73	0.00	Peak	116	320 VERTICAL
5	5380.00	60.50	74.00	-13.50	22.94	3.50	34.06	0.00	Peak	116	320 VERTICAL
6	5400.00	52.53	54.00	-1.47	14.90	3.51	34.12	0.00	Average	116	320 VERTICAL

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

**Channel 40**

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	4988.00	63.06	74.00	-10.94	26.31	3.38	33.37	0.00	Peak	100	331 VERTICAL
2	5000.00	50.66	54.00	-3.34	13.87	3.39	33.40	0.00	Average	100	331 VERTICAL
3	5208.00	102.29				3.45	33.76	0.00	Average	100	331 VERTICAL
4	5208.00	111.59				3.45	33.76	0.00	Peak	100	331 VERTICAL
5	5361.00	60.25	74.00	-13.75	22.73	3.49	34.03	0.00	Peak	100	331 VERTICAL
6	5400.00	50.74	54.00	-3.26	13.11	3.51	34.12	0.00	Average	100	331 VERTICAL

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

**Channel 48**

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	5080.00	51.27	54.00	-2.73	14.31	3.41	33.55	0.00	Average	105	333 VERTICAL
2	5080.00	60.47	74.00	-13.53	23.51	3.41	33.55	0.00	Peak	105	333 VERTICAL
3	5236.00	104.24				3.46	33.82	0.00	Average	105	333 VERTICAL
4	5237.00	114.23				3.46	33.82	0.00	Peak	105	333 VERTICAL
5	5400.00	51.89	54.00	-2.11	14.26	3.51	34.12	0.00	Average	105	333 VERTICAL
6	5401.00	60.77	74.00	-13.23	23.14	3.51	34.12	0.00	Peak	105	333 VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 36,40,48 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) ( 2TX )

**Channel 36**

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	5000.00	48.19	54.00	-5.81	11.40	3.39	33.40	0.00	Average	107	355 VERTICAL
2	5000.00	59.29	74.00	-14.71	22.50	3.39	33.40	0.00	Peak	107	355 VERTICAL
3	5187.00	100.82				3.44	33.73	0.00	Average	107	355 VERTICAL
4	5187.00	111.33				3.44	33.73	0.00	Peak	107	355 VERTICAL
5	5396.00	62.44	74.00	-11.56	24.85	3.50	34.09	0.00	Peak	107	355 VERTICAL
6	5400.00	52.46	54.00	-1.54	14.83	3.51	34.12	0.00	Average	107	355 VERTICAL

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

**Channel 40**

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	5080.00	48.05	54.00	-5.95	11.09	3.41	33.55	0.00	Average	104	359 VERTICAL
2	5080.00	56.65	74.00	-17.35	19.69	3.41	33.55	0.00	Peak	104	359 VERTICAL
3	5206.00	100.31				3.45	33.76	0.00	Average	104	359 VERTICAL
4	5206.00	111.26				3.45	33.76	0.00	Peak	104	359 VERTICAL
5	5400.00	51.80	54.00	-2.20	14.17	3.51	34.12	0.00	Average	104	359 VERTICAL
6	5400.00	62.48	74.00	-11.52	24.85	3.51	34.12	0.00	Peak	104	359 VERTICAL

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

**Channel 48**

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	5080.00	47.93	54.00	-6.07	10.97	3.41	33.55	0.00	Average	105	360 VERTICAL
2	5080.00	56.44	74.00	-17.56	19.48	3.41	33.55	0.00	Peak	105	360 VERTICAL
3	5232.00	111.28				3.46	33.82	0.00	Peak	105	360 VERTICAL
4	5246.00	100.74				3.46	33.85	0.00	Average	105	360 VERTICAL
5	5400.00	51.29	54.00	-2.71	13.66	3.51	34.12	0.00	Average	105	360 VERTICAL
6	5401.00	61.49	74.00	-12.51	23.86	3.51	34.12	0.00	Peak	105	360 VERTICAL

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

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Wen Chao	<b>Configurations</b>	IEEE 802.11n MCS0 20MHz Ch 36,40,48 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Apr. 27, 2012	<b>Test Mode</b>	Mode 4 (Ant. 9 Yagi antenna / 8dBi) ( 3TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
MHz	dBuV/m	dBuV/m	dB						cm	deg	
1	4919.91	59.47	74.00	-14.53	22.89	3.35	33.23	0.00 Peak	103	4	VERTICAL
2	4919.98	51.59	54.00	-2.41	15.01	3.35	33.23	0.00 Average	103	4	VERTICAL
3	5177.00	102.87				3.44	33.70	0.00 Average	103	4	VERTICAL
4	5177.20	113.16				3.44	33.70	0.00 Peak	103	4	VERTICAL
5	5439.95	62.36	74.00	-11.64	24.66	3.52	34.18	0.00 Peak	103	4	VERTICAL
6	5439.98	52.82	54.00	-1.18	15.12	3.52	34.18	0.00 Average	103	4	VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
MHz	dBuV/m	dBuV/m	dB						cm	deg	
1	4919.82	59.47	74.00	-14.53	22.89	3.35	33.23	0.00 Peak	103	3	VERTICAL
2	4919.95	51.57	54.00	-2.43	14.99	3.35	33.23	0.00 Average	103	3	VERTICAL
3	5206.20	114.54				3.45	33.76	0.00 Peak	103	3	VERTICAL
4	5207.20	104.35				3.45	33.76	0.00 Average	103	3	VERTICAL
5	5439.99	52.53	54.00	-1.47	14.83	3.52	34.18	0.00 Average	103	3	VERTICAL
6	5440.18	62.54	74.00	-11.46	24.84	3.52	34.18	0.00 Peak	103	3	VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
MHz	dBuV/m	dBuV/m	dB						cm	deg	
1	5120.00	43.47	54.00	-10.53	6.43	3.43	33.61	0.00 Average	100	3	HORIZONTAL
2	5120.00	53.42	74.00	-20.58	16.38	3.43	33.61	0.00 Peak	100	3	HORIZONTAL
3	5232.00	107.20				3.46	33.82	0.00 Peak	100	3	HORIZONTAL
4	5232.80	96.69				3.46	33.82	0.00 Average	100	3	HORIZONTAL
5	5439.97	52.87	54.00	-1.13	15.18	3.52	34.17	0.00 Average	100	3	VERTICAL
6	5440.05	59.71	74.00	-14.29	22.02	3.52	34.17	0.00 Peak	100	3	VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 36,40,48 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) ( 3TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	4919.95	59.97	74.00	-14.03	23.39	3.35	33.23	0.00	Peak	103	4 VERTICAL
2	4919.98	51.65	54.00	-2.35	15.07	3.35	33.23	0.00	Average	103	4 VERTICAL
3	5183.80	113.64				3.44	33.73	0.00	Peak	103	4 VERTICAL
4	5185.00	102.05				3.44	33.73	0.00	Average	103	4 VERTICAL
5	5439.97	52.88	54.00	-1.12	15.18	3.52	34.18	0.00	Average	103	4 VERTICAL
6	5440.09	62.69	74.00	-11.31	24.99	3.52	34.18	0.00	Peak	103	4 VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	4919.92	59.75	74.00	-14.25	23.17	3.35	33.23	0.00	Peak	103	4 VERTICAL
2	4919.97	51.55	54.00	-2.45	14.97	3.35	33.23	0.00	Average	103	4 VERTICAL
3	5202.40	102.97				3.45	33.76	0.00	Average	103	4 VERTICAL
4	5208.20	115.55				3.45	33.76	0.00	Peak	103	4 VERTICAL
5	5439.98	52.99	54.00	-1.01	15.29	3.52	34.18	0.00	Average	103	4 VERTICAL
6	5440.08	63.01	74.00	-10.99	25.31	3.52	34.18	0.00	Peak	103	4 VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5079.98	50.84	54.00	-3.16	13.88	3.41	33.55	0.00	Average	105	0 VERTICAL
2	5080.24	61.22	74.00	-12.78	24.26	3.41	33.55	0.00	Peak	105	0 VERTICAL
3	5232.40	115.63				3.46	33.82	0.00	Peak	105	0 VERTICAL
4	5233.00	103.18				3.46	33.82	0.00	Average	105	0 VERTICAL
5	5439.87	61.61	74.00	-12.39	23.91	3.52	34.18	0.00	Peak	105	0 VERTICAL
6	5439.95	51.82	54.00	-2.18	14.12	3.52	34.18	0.00	Average	105	0 VERTICAL

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

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Wen Chao	<b>Configurations</b>	IEEE 802.11n MCS16 20MHz Ch 36,40,48 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Apr. 27, 2012	<b>Test Mode</b>	Mode 4 (Ant. 9 Yagi antenna / 8dBi) ( 3TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5120.00	51.40	54.00	-2.60	14.36	3.43	33.61	0.00	Average	103	354 VERTICAL
2	5120.00	59.55	74.00	-14.45	22.51	3.43	33.61	0.00	Peak	103	354 VERTICAL
3	5186.00	100.29				3.44	33.73	0.00	Average	103	354 VERTICAL
4	5188.00	111.42				3.44	33.73	0.00	Peak	103	354 VERTICAL
5	5400.00	52.76	54.00	-1.24	15.13	3.51	34.12	0.00	Average	103	354 VERTICAL
6	5400.00	60.17	74.00	-13.83	22.54	3.51	34.12	0.00	Peak	103	354 VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	4920.00	48.23	54.00	-5.77	11.65	3.35	33.23	0.00	Average	102	349 VERTICAL
2	5120.00	57.64	74.00	-16.36	20.60	3.43	33.61	0.00	Peak	102	349 VERTICAL
3	5202.00	111.29				3.45	33.76	0.00	Peak	102	349 VERTICAL
4	5204.00	99.54				3.45	33.76	0.00	Average	102	349 VERTICAL
5	5376.00	60.09	74.00	-13.91	22.53	3.50	34.06	0.00	Peak	102	349 VERTICAL
6	5440.00	52.59	54.00	-1.41	14.89	3.52	34.18	0.00	Average	102	349 VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	4920.00	46.89	54.00	-7.11	10.31	3.35	33.23	0.00	Average	102	349 VERTICAL
2	5146.00	56.77				3.43	33.67	0.00	Average	102	349 VERTICAL
3	5235.08	111.19				3.46	33.82	0.00	Peak	102	349 VERTICAL
4	5235.92	97.68				3.46	33.82	0.00	Average	102	349 VERTICAL
5	5439.97	52.51	54.00	-1.49	14.81	3.52	34.18	0.00	Average	102	349 VERTICAL
6	5440.00	60.15	74.00	-13.85	22.45	3.52	34.18	0.00	Peak	102	349 VERTICAL

Item 2,3,4 are the fundamental frequency at 5240 MHz.



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 38,46 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) ( 1TX )

**Channel 38**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5148.80	66.88	74.00	-7.12	29.78	3.43	33.67	0.00 Peak	103	0	VERTICAL
2	5150.00	52.85	54.00	-1.15	15.75	3.43	33.67	0.00 Average	103	0	VERTICAL
3	5200.40	107.53				3.45	33.76	0.00 Peak	103	0	VERTICAL
4	5202.40	97.03				3.45	33.76	0.00 Average	103	0	VERTICAL

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

**Channel 46**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5150.00	52.85	54.00	-1.15	15.75	3.43	33.67	0.00 Average	104	357	VERTICAL
2	5150.00	66.44	74.00	-7.56	29.34	3.43	33.67	0.00 Peak	104	357	VERTICAL
3	5214.00	115.06				3.45	33.79	0.00 Peak	104	357	VERTICAL
4	5216.00	104.72				3.45	33.79	0.00 Average	104	357	VERTICAL
5	5380.00	51.90	54.00	-2.10	14.34	3.50	34.06	0.00 Average	104	357	VERTICAL
6	5382.00	64.03	74.00	-9.97	26.44	3.50	34.09	0.00 Peak	104	357	VERTICAL

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

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Wen Chao	<b>Configurations</b>	IEEE 802.11n MCS0 40MHz Ch 38,46 / Chain 1 + Chain 2
<b>Test Date</b>	Apr. 27, 2012	<b>Test Mode</b>	Mode 4 (Ant. 9 Yagi antenna / 8dBi) ( 2TX )

### Channel 38

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		dB	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5000.00	52.68	54.00	-1.32	15.89	3.39	33.40	0.00	Average	106	3 VERTICAL
2	5000.00	60.76	74.00	-13.24	23.97	3.39	33.40	0.00	Peak	106	3 VERTICAL
3	5147.00	70.34	74.00	-3.66	33.24	3.43	33.67	0.00	Peak	106	3 VERTICAL
4	5148.00	52.84	54.00	-1.16	15.74	3.43	33.67	0.00	Average	106	3 VERTICAL
5	5205.00	99.71				3.45	33.76	0.00	Average	106	3 VERTICAL
6	5205.00	109.41				3.45	33.76	0.00	Peak	106	3 VERTICAL
7	5400.00	51.55	54.00	-2.45	13.92	3.51	34.12	0.00	Average	106	3 VERTICAL
8	5401.00	61.31	74.00	-12.69	23.68	3.51	34.12	0.00	Peak	106	3 VERTICAL

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

### Channel 46

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		dB	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5079.49	50.89	54.00	-3.11	13.93	3.41	33.55	0.00	Average	105	5 VERTICAL
2	5080.00	60.59	74.00	-13.41	23.63	3.41	33.55	0.00	Peak	105	5 VERTICAL
3	5245.22	101.86				3.46	33.82	0.00	Average	105	5 VERTICAL
4	5246.83	113.12				3.46	33.85	0.00	Peak	105	5 VERTICAL
5	5399.98	50.26	54.00	-3.74	12.63	3.51	34.12	0.00	Average	105	5 VERTICAL
6	5400.05	61.48	74.00	-12.52	23.85	3.51	34.12	0.00	Peak	105	5 VERTICAL
7	5439.86	59.91	74.00	-14.09	22.21	3.52	34.18	0.00	Peak	105	5 VERTICAL
8	5439.98	50.12	54.00	-3.88	12.42	3.52	34.18	0.00	Average	105	5 VERTICAL

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

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Wen Chao	<b>Configurations</b>	IEEE 802.11n MCS8 40MHz Ch 38,46 / Chain 1 + Chain 2
<b>Test Date</b>	Apr. 27, 2012	<b>Test Mode</b>	Mode 4 (Ant. 9 Yagi antenna / 8dBi) ( 2TX )

### Channel 38

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	5149.00	66.52	74.00	-7.48	29.42	3.43	33.67	0.00 Peak	106	358	VERTICAL
2	5150.00	52.37	54.00	-1.63	15.27	3.43	33.67	0.00 Average	106	358	VERTICAL
3	5194.00	108.87				3.44	33.73	0.00 Peak	106	358	VERTICAL
4	5205.00	97.39				3.45	33.76	0.00 Average	106	358	VERTICAL
5	5400.00	50.35	54.00	-3.65	12.72	3.51	34.12	0.00 Average	106	358	VERTICAL
6	5401.00	61.44	74.00	-12.56	23.81	3.51	34.12	0.00 Peak	106	358	VERTICAL

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

### Channel 46

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
MHz	dBuV/m	dBuV/m	dB						cm	deg	
1	5080.00	47.60	54.00	-6.40	10.64	3.41	33.55	0.00 Average	105	359	VERTICAL
2	5080.00	56.97	74.00	-17.03	20.01	3.41	33.55	0.00 Peak	105	359	VERTICAL
3	5216.00	109.01				3.45	33.79	0.00 Peak	105	359	VERTICAL
4	5245.00	98.22				3.46	33.82	0.00 Average	105	359	VERTICAL
5	5400.00	51.56	54.00	-2.44	13.93	3.51	34.12	0.00 Average	105	359	VERTICAL
6	5400.00	61.97	74.00	-12.03	24.34	3.51	34.12	0.00 Peak	105	359	VERTICAL

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

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Wen Chao	<b>Configurations</b>	IEEE 802.11n MCS0 40MHz Ch 38,46 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Apr. 27, 2012	<b>Test Mode</b>	Mode 4 (Ant. 9 Yagi antenna / 8dBi) ( 3TX )

### Channel 38

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	5144.40	70.97	74.00	-3.03	33.87	3.43	33.67	0.00 Peak	105	0	VERTICAL
2	5145.60	52.99	54.00	-1.01	15.89	3.43	33.67	0.00 Average	105	0	VERTICAL
3	5194.80	100.34				3.45	33.76	0.00 Average	105	0	VERTICAL
4	5196.00	110.55				3.45	33.76	0.00 Peak	105	0	VERTICAL
5	5439.97	52.90	54.00	-1.10	15.20	3.52	34.18	0.00 Average	105	0	VERTICAL
6	5440.02	60.93	74.00	-13.07	23.23	3.52	34.18	0.00 Peak	105	0	VERTICAL

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

### Channel 46

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
MHz		dBuV/m	dBuV/m	dB					cm	deg	
1	5120.00	43.28	54.00	-10.72	6.24	3.43	33.61	0.00 Average	100	3	HORIZONTAL
2	5120.00	53.80	74.00	-20.20	16.76	3.43	33.61	0.00 Peak	100	3	HORIZONTAL
3	5233.40	93.97				3.46	33.82	0.00 Average	100	3	HORIZONTAL
4	5234.00	104.70				3.46	33.82	0.00 Peak	100	3	HORIZONTAL
5	5440.00	52.97	54.00	-1.03	15.28	3.52	34.17	0.00 Average	100	3	HORIZONTAL
6	5440.00	57.62	74.00	-16.38	19.93	3.52	34.17	0.00 Peak	100	3	HORIZONTAL

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

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Wen Chao	<b>Configurations</b>	IEEE 802.11n MCS8 40MHz Ch 38,46 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Apr. 27, 2012	<b>Test Mode</b>	Mode 4 (Ant. 9 Yagi antenna / 8dBi) ( 3TX )

### Channel 38

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	5148.80	66.67	74.00	-7.33	29.57	3.43	33.67	0.00	Peak	105	1 VERTICAL
2	5149.60	52.39	54.00	-1.61	15.29	3.43	33.67	0.00	Average	105	1 VERTICAL
3	5186.80	111.22				3.44	33.73	0.00	Peak	105	1 VERTICAL
4	5207.20	98.65				3.45	33.76	0.00	Average	105	1 VERTICAL
5	5440.00	51.70	54.00	-2.30	14.00	3.52	34.18	0.00	Average	105	1 VERTICAL
6	5440.00	58.71	74.00	-15.29	21.01	3.52	34.18	0.00	Peak	105	1 VERTICAL

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

### Channel 46

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	5079.88	61.52	74.00	-12.48	24.56	3.41	33.55	0.00	Peak	105	0 VERTICAL
2	5079.93	51.03	54.00	-2.97	14.07	3.41	33.55	0.00	Average	105	0 VERTICAL
3	5216.20	113.26				3.45	33.79	0.00	Peak	105	0 VERTICAL
4	5218.00	101.19				3.45	33.79	0.00	Average	105	0 VERTICAL
5	5439.98	52.61	54.00	-1.39	14.91	3.52	34.18	0.00	Average	105	0 VERTICAL
6	5440.15	61.21	74.00	-12.79	23.51	3.52	34.18	0.00	Peak	105	0 VERTICAL

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

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Wen Chao	<b>Configurations</b>	IEEE 802.11n MCS16 40MHz Ch 38,46 / Chain 1 + Chain 2 + Chain 3
<b>Test Date</b>	Apr. 27, 2012	<b>Test Mode</b>	Mode 4 (Ant. 9 Yagi antenna / 8dBi) ( 3TX )

### Channel 38

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		dB	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5150.00	50.33	54.00	-3.67	13.23	3.43	33.67	0.00	Average	102	354 VERTICAL
2	5150.00	63.39	74.00	-10.61	26.29	3.43	33.67	0.00	Peak	102	354 VERTICAL
3	5200.00	106.21				3.45	33.76	0.00	Peak	102	354 VERTICAL
4	5204.00	94.88				3.45	33.76	0.00	Average	102	354 VERTICAL
5	5440.00	52.92	54.00	-1.08	15.22	3.52	34.18	0.00	Average	102	354 VERTICAL
6	5440.00	60.13	74.00	-13.87	22.43	3.52	34.18	0.00	Peak	102	354 VERTICAL

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

### Channel 46

Freq	Level	Limit		Over Line Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		dB	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dB	dBuV	dB	dB/m	dB	cm	deg	
1	4920.00	47.91	54.00	-6.09	11.33	3.35	33.23	0.00	Average	102	349 VERTICAL
2	5120.00	57.06	74.00	-16.94	20.02	3.43	33.61	0.00	Peak	102	349 VERTICAL
3	5222.00	96.65				3.46	33.79	0.00	Average	102	349 VERTICAL
4	5240.00	107.55				3.46	33.82	0.00	Peak	102	349 VERTICAL
5	5360.00	59.17	74.00	-14.83	21.65	3.49	34.03	0.00	Peak	102	349 VERTICAL
6	5440.00	52.70	54.00	-1.30	15.00	3.52	34.18	0.00	Average	102	349 VERTICAL

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

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Wen Chao	<b>Configurations</b>	IEEE 802.11a Ch 36,40,48 / Chain 1
<b>Test Date</b>	Apr. 27, 2012	<b>Test Mode</b>	Mode 4 (Ant. 9 Yagi antenna / 8dBi) ( 1TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB							cm	deg	
1	5148.00	68.90	74.00	-5.10	31.80	3.43	33.67	0.00	Peak	107	354	VERTICAL
2	5150.00	52.67	54.00	-1.33	15.57	3.43	33.67	0.00	Average	107	354	VERTICAL
3	5186.00	104.11				3.44	33.73	0.00	Average	107	354	VERTICAL
4	5186.00	113.92				3.44	33.73	0.00	Peak	107	354	VERTICAL
5	5365.00	52.27	54.00	-1.73	14.72	3.49	34.06	0.00	Average	107	354	VERTICAL
6	5365.00	64.38	74.00	-9.62	26.83	3.49	34.06	0.00	Peak	107	354	VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB							cm	deg	
1	5148.00	68.29	74.00	-5.71	31.19	3.43	33.67	0.00	Peak	103	4	VERTICAL
2	5150.00	52.79	54.00	-1.21	15.69	3.43	33.67	0.00	Average	103	4	VERTICAL
3	5195.00	119.30				3.45	33.76	0.00	Peak	103	4	VERTICAL
4	5202.00	108.67				3.45	33.76	0.00	Average	103	4	VERTICAL
5	5365.00	49.05	54.00	-4.95	11.50	3.49	34.06	0.00	Average	103	4	VERTICAL
6	5365.00	62.26	74.00	-11.74	24.71	3.49	34.06	0.00	Peak	103	4	VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB							cm	deg	
1	4991.00	62.75	74.00	-11.25	25.96	3.39	33.40	0.00	Peak	104	1	VERTICAL
2	4992.00	47.85	54.00	-6.15	11.06	3.39	33.40	0.00	Average	104	1	VERTICAL
3	5245.00	118.02				3.46	33.82	0.00	Peak	104	1	VERTICAL
4	5246.00	108.19				3.46	33.85	0.00	Average	104	1	VERTICAL
5	5350.00	49.31	54.00	-4.69	11.79	3.49	34.03	0.00	Average	104	1	VERTICAL
6	5361.00	63.07	74.00	-10.93	25.55	3.49	34.03	0.00	Peak	104	1	VERTICAL

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

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Wen Chao	<b>Configurations</b>	IEEE 802.11a Ch 36,40,48 / Chain 1 + Chain 2
<b>Test Date</b>	Apr. 27, 2012	<b>Test Mode</b>	Mode 4 (Ant. 9 Yagi antenna / 8dBi) ( 2TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
MHz	dBuV/m	dBuV/m	dB						cm	deg	
1	5120.00	50.57	54.00	-3.43	13.53	3.43	33.61	0.00	Average	105	341 VERTICAL
2	5120.00	59.86	74.00	-14.14	22.82	3.43	33.61	0.00	Peak	105	341 VERTICAL
3	5172.00	101.35				3.44	33.70	0.00	Average	105	341 VERTICAL
4	5173.00	110.71				3.44	33.70	0.00	Peak	105	341 VERTICAL
5	5400.00	52.75	54.00	-1.25	15.12	3.51	34.12	0.00	Average	105	341 VERTICAL
6	5400.00	61.73	74.00	-12.27	24.10	3.51	34.12	0.00	Peak	105	341 VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
MHz	dBuV/m	dBuV/m	dB						cm	deg	
1	5080.00	48.12	54.00	-5.88	11.16	3.41	33.55	0.00	Average	114	331 VERTICAL
2	5080.00	57.03	74.00	-16.97	20.07	3.41	33.55	0.00	Peak	114	331 VERTICAL
3	5207.00	104.47				3.45	33.76	0.00	Average	114	331 VERTICAL
4	5207.00	113.78				3.45	33.76	0.00	Peak	114	331 VERTICAL
5	5400.00	51.79	54.00	-2.21	14.16	3.51	34.12	0.00	Average	114	331 VERTICAL
6	5400.00	61.56	74.00	-12.44	23.93	3.51	34.12	0.00	Peak	114	331 VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
MHz	dBuV/m	dBuV/m	dB						cm	deg	
1	5080.00	48.92	54.00	-5.08	11.96	3.41	33.55	0.00	Average	102	331 VERTICAL
2	5105.00	59.17	74.00	-14.83	22.17	3.42	33.58	0.00	Peak	102	331 VERTICAL
3	5245.00	104.43				3.46	33.82	0.00	Average	102	331 VERTICAL
4	5245.00	113.56				3.46	33.82	0.00	Peak	102	331 VERTICAL
5	5383.00	63.72	74.00	-10.28	26.13	3.50	34.09	0.00	Peak	102	331 VERTICAL
6	5400.00	52.23	54.00	-1.77	14.60	3.51	34.12	0.00	Average	102	331 VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11a Ch 36,40,48 / Chain 1 + Chain 2 + + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 4 (Ant. 9 Yagi antenna / 8dBi) ( 3TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5000.06	52.18	54.00	-1.82	15.39	3.39	33.40	0.00	Average	103	0 VERTICAL
2	5081.09	61.16	74.00	-12.84	24.20	3.41	33.55	0.00	Peak	103	0 VERTICAL
3	5175.19	115.94				3.44	33.70	0.00	Peak	103	0 VERTICAL
4	5184.81	107.18				3.44	33.73	0.00	Average	103	0 VERTICAL
5	5439.17	51.94	54.00	-2.06	14.24	3.52	34.18	0.00	Average	103	0 VERTICAL
6	5439.17	58.68	74.00	-15.32	20.98	3.52	34.18	0.00	Peak	103	0 VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	4919.23	51.03	54.00	-2.97	14.45	3.35	33.23	0.00	Average	103	5 VERTICAL
2	4919.82	59.77	74.00	-14.23	23.19	3.35	33.23	0.00	Peak	103	5 VERTICAL
3	5201.60	105.36				3.45	33.76	0.00	Average	103	5 VERTICAL
4	5204.80	116.76				3.45	33.76	0.00	Peak	103	5 VERTICAL
5	5440.00	64.45	74.00	-9.55	26.75	3.52	34.18	0.00	Peak	103	5 VERTICAL
6	5440.77	52.65	54.00	-1.35	14.95	3.52	34.18	0.00	Average	103	5 VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	4919.23	51.28	54.00	-2.72	14.70	3.35	33.23	0.00	Average	103	5 VERTICAL
2	4919.23	56.70	74.00	-17.30	20.12	3.35	33.23	0.00	Peak	103	5 VERTICAL
3	5246.41	104.90				3.46	33.85	0.00	Average	103	5 VERTICAL
4	5246.41	113.73				3.46	33.85	0.00	Peak	103	5 VERTICAL
5	5440.77	52.82	54.00	-1.18	15.12	3.52	34.18	0.00	Average	103	5 VERTICAL
6	5453.59	58.36	74.00	-15.64	20.63	3.52	34.21	0.00	Peak	103	5 VERTICAL

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

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

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 36,40,48 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) ( 1TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5150.00	52.70	54.00	-1.30	15.60	3.43	33.67	0.00	Average	100	146 VERTICAL
2	5150.00	68.14	74.00	-5.86	31.04	3.43	33.67	0.00	Peak	100	146 VERTICAL
3	5182.60	109.63				3.44	33.73	0.00	Peak	100	146 VERTICAL
4	5184.00	99.46				3.44	33.73	0.00	Average	100	146 VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5149.60	62.20	74.00	-11.80	25.10	3.43	33.67	0.00	Peak	101	213 VERTICAL
2	5150.00	47.12	54.00	-6.88	10.02	3.43	33.67	0.00	Average	101	213 VERTICAL
3	5192.80	102.48				3.44	33.73	0.00	Average	101	213 VERTICAL
4	5194.00	112.97				3.44	33.73	0.00	Peak	101	213 VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5150.00	43.23	54.00	-10.77	6.13	3.43	33.67	0.00	Average	100	144 VERTICAL
2	5150.00	53.89	74.00	-20.11	16.79	3.43	33.67	0.00	Peak	100	144 VERTICAL
3	5233.40	101.84				3.46	33.82	0.00	Average	100	144 VERTICAL
4	5234.00	112.45				3.46	33.82	0.00	Peak	100	144 VERTICAL
5	5350.00	43.98	54.00	-10.02	6.46	3.49	34.03	0.00	Average	100	144 VERTICAL
6	5350.00	54.71	74.00	-19.29	17.19	3.49	34.03	0.00	Peak	100	144 VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 36,40,48 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) ( 2TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5148.40	69.68	74.00	-4.32	32.58	3.43	33.67	0.00	Peak	100	213 VERTICAL
2	5150.00	52.22	54.00	-1.78	15.12	3.43	33.67	0.00	Average	100	213 VERTICAL
3	5186.80	110.92				3.44	33.73	0.00	Peak	100	213 VERTICAL
4	5187.40	100.76				3.44	33.73	0.00	Average	100	213 VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5148.00	67.84	74.00	-6.16	30.74	3.43	33.67	0.00	Peak	100	214 VERTICAL
2	5150.00	48.15	54.00	-5.85	11.05	3.43	33.67	0.00	Average	100	214 VERTICAL
3	5192.00	103.64				3.44	33.73	0.00	Average	100	214 VERTICAL
4	5192.40	113.30				3.44	33.73	0.00	Peak	100	214 VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5143.00	55.56	74.00	-18.44	18.49	3.43	33.64	0.00	Peak	100	214 VERTICAL
2	5150.00	42.21	54.00	-11.79	5.11	3.43	33.67	0.00	Average	100	214 VERTICAL
3	5248.00	102.49				3.46	33.85	0.00	Average	100	214 VERTICAL
4	5248.00	112.44				3.46	33.85	0.00	Peak	100	214 VERTICAL
5	5440.00	44.26	54.00	-9.74	6.56	3.52	34.18	0.00	Average	100	214 VERTICAL
6	5441.00	54.18	74.00	-19.82	16.48	3.52	34.18	0.00	Peak	100	214 VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 36,40,48 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) ( 2TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5150.00	52.46	54.00	-1.54	15.36	3.43	33.67	0.00	Average	100	214 VERTICAL
2	5150.00	67.52	74.00	-6.48	30.42	3.43	33.67	0.00	Peak	100	214 VERTICAL
3	5184.80	110.53				3.44	33.73	0.00	Peak	100	214 VERTICAL
4	5186.80	99.53				3.44	33.73	0.00	Average	100	214 VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5150.00	47.10	54.00	-6.90	10.00	3.43	33.67	0.00	Average	100	213 VERTICAL
2	5150.00	62.36	74.00	-11.64	25.26	3.43	33.67	0.00	Peak	100	213 VERTICAL
3	5192.80	102.66				3.44	33.73	0.00	Average	100	213 VERTICAL
4	5194.40	114.08				3.44	33.73	0.00	Peak	100	213 VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5150.00	41.75	54.00	-12.25	4.65	3.43	33.67	0.00	Average	100	305 HORIZONTAL
2	5150.00	54.19	74.00	-19.81	17.09	3.43	33.67	0.00	Peak	100	305 HORIZONTAL
3	5236.00	110.74				3.46	33.82	0.00	Peak	100	305 HORIZONTAL
4	5238.40	98.12				3.46	33.82	0.00	Average	100	305 HORIZONTAL
5	5401.20	58.16	74.00	-15.84	20.53	3.51	34.12	0.00	Peak	100	305 HORIZONTAL
6	5407.60	44.47	54.00	-9.53	6.84	3.51	34.12	0.00	Average	100	305 HORIZONTAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 20MHz Ch 36,40,48 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) ( 3TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5148.60	72.54	74.00	-1.46	35.44	3.43	33.67	0.00	Peak	100	214 VERTICAL
2	5150.00	52.93	54.00	-1.07	15.83	3.43	33.67	0.00	Average	100	214 VERTICAL
3	5187.40	102.03				3.44	33.73	0.00	Average	100	214 VERTICAL
4	5188.00	112.06				3.44	33.73	0.00	Peak	100	214 VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5148.40	63.71	74.00	-10.29	26.61	3.43	33.67	0.00	Peak	100	214 VERTICAL
2	5150.00	45.55	54.00	-8.45	8.45	3.43	33.67	0.00	Average	100	214 VERTICAL
3	5207.20	113.22				3.45	33.76	0.00	Peak	100	214 VERTICAL
4	5207.60	103.64				3.45	33.76	0.00	Average	100	214 VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5147.00	41.71	54.00	-12.29	4.61	3.43	33.67	0.00	Average	100	144 VERTICAL
2	5147.60	54.58	74.00	-19.42	17.48	3.43	33.67	0.00	Peak	100	144 VERTICAL
3	5246.60	112.58				3.46	33.85	0.00	Peak	100	144 VERTICAL
4	5247.20	102.54				3.46	33.85	0.00	Average	100	144 VERTICAL
5	5359.60	54.51	74.00	-19.49	16.99	3.49	34.03	0.00	Peak	100	144 VERTICAL
6	5360.20	42.58	54.00	-11.42	5.06	3.49	34.03	0.00	Average	100	144 VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 20MHz Ch 36,40,48 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) ( 3TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5149.80	67.62	74.00	-6.38	30.52	3.43	33.67	0.00	Peak	100	145 VERTICAL
2	5150.00	52.64	54.00	-1.36	15.54	3.43	33.67	0.00	Average	100	145 VERTICAL
3	5177.40	111.14				3.44	33.70	0.00	Peak	100	145 VERTICAL
4	5188.40	100.09				3.44	33.73	0.00	Average	100	145 VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5147.60	60.22	74.00	-13.78	23.12	3.43	33.67	0.00	Peak	100	144 VERTICAL
2	5150.00	44.73	54.00	-9.27	7.63	3.43	33.67	0.00	Average	100	144 VERTICAL
3	5192.40	112.77				3.44	33.73	0.00	Peak	100	144 VERTICAL
4	5192.80	102.08				3.44	33.73	0.00	Average	100	144 VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5120.00	42.66	54.00	-11.34	5.62	3.43	33.61	0.00	Average	100	213 VERTICAL
2	5120.00	53.85	74.00	-20.15	16.81	3.43	33.61	0.00	Peak	100	213 VERTICAL
3	5244.80	101.23				3.46	33.82	0.00	Average	100	213 VERTICAL
4	5246.00	112.66				3.46	33.85	0.00	Peak	100	213 VERTICAL
5	5350.00	40.98	54.00	-13.02	3.46	3.49	34.03	0.00	Average	100	213 VERTICAL
6	5350.00	52.84	74.00	-21.16	15.32	3.49	34.03	0.00	Peak	100	213 VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 38,46 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) ( 1TX )

**Channel 38**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5150.00	52.38	54.00	-1.62	15.28	3.43	33.67	0.00	Average	100	145 VERTICAL
2	5150.00	65.12	74.00	-8.88	28.02	3.43	33.67	0.00	Peak	100	145 VERTICAL
3	5178.80	102.81				3.44	33.73	0.00	Peak	100	145 VERTICAL
4	5204.00	91.95				3.45	33.76	0.00	Average	100	145 VERTICAL

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

**Channel 46**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5150.00	52.09	54.00	-1.91	14.99	3.43	33.67	0.00	Average	100	143 VERTICAL
2	5150.00	67.04	74.00	-6.96	29.94	3.43	33.67	0.00	Peak	100	143 VERTICAL
3	5214.80	110.03				3.45	33.79	0.00	Peak	100	143 VERTICAL
4	5215.60	99.67				3.45	33.79	0.00	Average	100	143 VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 38,46 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) ( 2TX )

**Channel 38**

Freq	Level	Limit		Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	Over Limit		Cable Loss	Antenna Factor	Preamp Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5148.00	69.83	74.00	-4.17	32.73	3.43	33.67	0.00 Peak	100	214	VERTICAL
2	5150.00	52.83	54.00	-1.17	15.73	3.43	33.67	0.00 Average	100	214	VERTICAL
3	5187.60	104.01				3.44	33.73	0.00 Peak	100	214	VERTICAL
4	5188.80	93.25				3.44	33.73	0.00 Average	100	214	VERTICAL

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

**Channel 46**

Freq	Level	Limit		Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	Over Limit		Cable Loss	Antenna Factor	Preamp Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5150.00	50.44	54.00	-3.56	13.34	3.43	33.67	0.00 Average	131	213	VERTICAL
2	5150.00	64.12	74.00	-9.88	27.02	3.43	33.67	0.00 Peak	131	213	VERTICAL
3	5213.60	100.61				3.45	33.79	0.00 Average	131	213	VERTICAL
4	5213.60	110.57				3.45	33.79	0.00 Peak	131	213	VERTICAL

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

<b>Temperature</b>	25°C	<b>Humidity</b>	65%
<b>Test Engineer</b>	Wen Chao	<b>Configurations</b>	IEEE 802.11n MCS8 40MHz Ch 38,46 / Chain 1 + Chain 2
<b>Test Date</b>	Apr. 27, 2012	<b>Test Mode</b>	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) ( 2TX )

### Channel 38

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	5149.60	65.97	74.00	-8.03	28.87	3.43	33.67	0.00 Peak	100	213	VERTICAL
2	5150.00	52.82	54.00	-1.18	15.72	3.43	33.67	0.00 Average	100	213	VERTICAL
3	5192.80	93.39				3.44	33.73	0.00 Average	100	213	VERTICAL
4	5196.40	104.52				3.45	33.76	0.00 Peak	100	213	VERTICAL

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

### Channel 46

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
MHz	dBuV/m	dBuV/m	dB						cm	deg	
1	5149.20	65.08	74.00	-8.92	27.98	3.43	33.67	0.00 Peak	100	214	VERTICAL
2	5150.00	50.80	54.00	-3.20	13.70	3.43	33.67	0.00 Average	100	214	VERTICAL
3	5241.60	109.39				3.46	33.82	0.00 Peak	100	214	VERTICAL
4	5242.00	98.20				3.46	33.82	0.00 Average	100	214	VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS0 40MHz Ch 38,46 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) ( 3TX )

**Channel 38**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5150.00	52.77	54.00	-1.23	15.67	3.43	33.67	0.00	Average	100	145 VERTICAL
2	5150.00	68.56	74.00	-5.44	31.46	3.43	33.67	0.00	Peak	100	145 VERTICAL
3	5191.20	93.27				3.44	33.73	0.00	Average	100	145 VERTICAL
4	5192.00	103.28				3.44	33.73	0.00	Peak	100	145 VERTICAL

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

**Channel 46**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			dBuV	dB	dB/m			
1	5148.80	49.97	54.00	-4.03	12.87	3.43	33.67	0.00	Average	100	213 VERTICAL
2	5149.60	65.80	74.00	-8.20	28.70	3.43	33.67	0.00	Peak	100	213 VERTICAL
3	5247.20	109.80				3.46	33.85	0.00	Peak	100	213 VERTICAL
4	5247.60	100.48				3.46	33.85	0.00	Average	100	213 VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11n MCS8 40MHz Ch 38,46 / Chain 1 + Chain 2 + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) ( 3TX )

**Channel 38**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5150.00	52.44	54.00	-1.56	15.34	3.43	33.67	0.00	Average	100	144 VERTICAL
2	5150.00	65.40	74.00	-8.60	28.30	3.43	33.67	0.00	Peak	100	144 VERTICAL
3	5192.40	104.65				3.44	33.73	0.00	Peak	100	144 VERTICAL
4	5193.20	93.66				3.44	33.73	0.00	Average	100	144 VERTICAL

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

**Channel 46**

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5150.00	48.86	54.00	-5.14	11.76	3.43	33.67	0.00	Average	100	147 VERTICAL
2	5150.00	63.33	74.00	-10.67	26.23	3.43	33.67	0.00	Peak	100	147 VERTICAL
3	5216.00	99.00				3.45	33.79	0.00	Average	100	147 VERTICAL
4	5216.40	111.35				3.45	33.79	0.00	Peak	100	147 VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11a Ch 36,40,48 / Chain 1
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) ( 1TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor			
1	5150.00	52.48	54.00	-1.52	15.38	3.43	33.67	0.00	Average	100	146 VERTICAL
2	5150.00	68.11	74.00	-5.89	31.01	3.43	33.67	0.00	Peak	100	146 VERTICAL
3	5184.00	111.08				3.44	33.73	0.00	Peak	100	146 VERTICAL
4	5185.80	100.18				3.44	33.73	0.00	Average	100	146 VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor			
1	5150.00	48.40	54.00	-5.60	11.30	3.43	33.67	0.00	Average	100	143 VERTICAL
2	5150.00	65.05	74.00	-8.95	27.95	3.43	33.67	0.00	Peak	100	143 VERTICAL
3	5204.40	103.28				3.45	33.76	0.00	Average	100	143 VERTICAL
4	5206.80	112.99				3.45	33.76	0.00	Peak	100	143 VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBm			Loss	Factor	Factor			
1	5150.00	43.28	54.00	-10.72	6.18	3.43	33.67	0.00	Average	100	144 VERTICAL
2	5150.00	54.55	74.00	-19.45	17.45	3.43	33.67	0.00	Peak	100	144 VERTICAL
3	5233.40	102.09				3.46	33.82	0.00	Average	100	144 VERTICAL
4	5233.40	111.10				3.46	33.82	0.00	Peak	100	144 VERTICAL
5	5350.00	43.39	54.00	-10.61	5.87	3.49	34.03	0.00	Average	100	144 VERTICAL
6	5350.00	53.07	74.00	-20.93	15.55	3.49	34.03	0.00	Peak	100	144 VERTICAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11a Ch 36,40,48 / Chain 1 + Chain 2
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) ( 2TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5149.40	70.40	74.00	-3.60	33.30	3.43	33.67	0.00	Peak	100	214 VERTICAL
2	5150.00	52.31	54.00	-1.69	15.21	3.43	33.67	0.00	Average	100	214 VERTICAL
3	5184.00	111.48				3.44	33.73	0.00	Peak	100	214 VERTICAL
4	5185.00	101.05				3.44	33.73	0.00	Average	100	214 VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5149.60	67.36	74.00	-6.64	30.26	3.43	33.67	0.00	Peak	100	214 VERTICAL
2	5150.00	47.42	54.00	-6.58	10.32	3.43	33.67	0.00	Average	100	214 VERTICAL
3	5194.80	105.05				3.45	33.76	0.00	Average	100	214 VERTICAL
4	5194.80	115.04				3.45	33.76	0.00	Peak	100	214 VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
1	5149.20	53.30	74.00	-20.70	16.20	3.43	33.67	0.00	Peak	100	303 HORIZONTAL
2	5150.00	41.63	54.00	-12.37	4.53	3.43	33.67	0.00	Average	100	303 HORIZONTAL
3	5234.40	101.08				3.46	33.82	0.00	Average	100	303 HORIZONTAL
4	5234.40	111.28				3.46	33.82	0.00	Peak	100	303 HORIZONTAL
5	5405.00	56.31	74.00	-17.69	18.68	3.51	34.12	0.00	Peak	100	303 HORIZONTAL
6	5405.20	44.28	54.00	-9.72	6.65	3.51	34.12	0.00	Average	100	303 HORIZONTAL

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



Temperature	25°C	Humidity	65%
Test Engineer	Wen Chao	Configurations	IEEE 802.11a Ch 36,40,48 / Chain 1 + Chain 2 + + Chain 3
Test Date	Apr. 27, 2012	Test Mode	Mode 5 (Ant. 5 Facade antenna / 2.5dBi) ( 3TX )

### Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor				
1	5150.00	52.63	54.00	-1.37	15.53	3.43	33.67	0.00	Average	100	146	VERTICAL
2	5150.00	70.02	74.00	-3.98	32.92	3.43	33.67	0.00	Peak	100	146	VERTICAL
3	5180.60	100.02				3.44	33.73	0.00	Average	100	146	VERTICAL
4	5180.60	109.73				3.44	33.73	0.00	Peak	100	146	VERTICAL

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

### Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor				
1	5144.00	60.84	74.00	-13.16	23.74	3.43	33.67	0.00	Peak	100	214	VERTICAL
2	5150.00	43.44	54.00	-10.56	6.34	3.43	33.67	0.00	Average	100	214	VERTICAL
3	5194.00	104.37				3.44	33.73	0.00	Average	100	214	VERTICAL
4	5194.00	114.08				3.44	33.73	0.00	Peak	100	214	VERTICAL

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

### Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			Remark	A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor				
1	5146.40	42.51	54.00	-11.49	5.41	3.43	33.67	0.00	Average	100	147	VERTICAL
2	5146.40	54.83	74.00	-19.17	17.73	3.43	33.67	0.00	Peak	100	147	VERTICAL
3	5234.60	113.03				3.46	33.82	0.00	Peak	100	147	VERTICAL
4	5235.20	102.73				3.46	33.82	0.00	Average	100	147	VERTICAL
5	5360.20	41.65	54.00	-12.35	4.13	3.49	34.03	0.00	Average	100	147	VERTICAL
6	5360.20	52.48	74.00	-21.52	14.96	3.49	34.03	0.00	Peak	100	147	VERTICAL

Item 3, 4 are the fundamental frequency at 5240 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

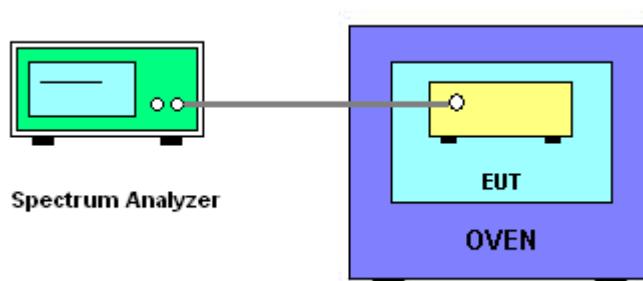
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

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)	5200
126.50	5199.9976
110.00	5199.9975
93.50	5200.0030
Max. Deviation (MHz)	0.005500
Max. Deviation (ppm)	1.06

##### Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)
(°C)	5200
-30	5200.0004
-20	5200.0005
-10	5200.0006
0	5200.0005
10	5199.9887
20	5199.9986
30	5199.9984
40	5199.9986
50	5199.9984
Max. Deviation (MHz)	0.011300
Max. Deviation (ppm)	2.17

## 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)
COND Cable	Woken	Cable	01	0.15MHz~30MHz	Dec. 4, 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 (03CH01-CB)
EMI Test Receiver	R&S	ESCS 30	100355	9KHz ~ 2.75GHz	Mar. 20, 2012	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)
Temp. and Humidity Chamber	Ten Billion	TTH-D3SP	TBN-931011	-30~100 degree	May 20, 2012	Conducted (TH01-CB)
Thermo-Hygro Meter	N/A	HC 520	#1	15~70 degree	Nov. 02, 2011	Conducted (TH01-CB)
Signal Generator	R&S	SMR40	100302	10MHz-40GHz	Nov. 22, 2011	Conducted (TH01-CB)
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)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
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.



## 6. TEST LOCATION

SHIJR	ADD : 6Fl., No. 106, Sec. 1, Shintai 5th Rd., Shijr City, Taipei, Taiwan 221, R.O.C. TEL : 886-2-2696-2468 FAX : 886-2-2696-2255
HWA YA	ADD : No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL : 886-3-327-3456 FAX : 886-3-318-0055
LINKOU	ADD : No. 30-2, Dingfu Tsuen, Linkou Shiang, Taipei, Taiwan 244, R.O.C TEL : 886-2-2601-1640 FAX : 886-2-2601-1695
DUNGHU	ADD : No. 3, Lane 238, Kangle St., Neihu Chiu, Taipei, Taiwan 114, R.O.C. TEL : 886-2-2631-4739 FAX : 886-2-2631-9740
JUNGHE	ADD : 7Fl., No. 758, Jungjeng Rd., Junghe City, Taipei, Taiwan 235, R.O.C. TEL : 886-2-8227-2020 FAX : 886-2-8227-2626
NEIHU	ADD : 4Fl., No. 339, Hsin Hu 2 <sup>nd</sup> Rd., Taipei 114, Taiwan, R.O.C. TEL : 886-2-2794-8886 FAX : 886-2-2794-9777
JHUBEI	ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C. TEL : 886-3-656-9065 FAX : 886-3-656-9085

## 7. TAF CERTIFICATE OF ACCREDITATION



Certificate No. : L1190-110702

財團法人全國認證基金會  
Taiwan Accreditation Foundation

### Certificate of Accreditation

This is to certify that

**Sportun International Inc.  
EMC & Wireless Communications Laboratory**  
No.52, Hwa Ya 1st Road, Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien,  
Taiwan, R.O.C.

**is accredited in respect of laboratory**

**Accreditation Criteria** : ISO/IEC 17025:2005  
**Accreditation Number** : 1190  
**Originally Accredited** : December 15, 2003  
**Effective Period** : January 10, 2010 to January 09, 2013  
**Accredited Scope** : Testing Field, see described in the Appendix  
**Specific Accreditation Program** : Accreditation Program for Designated Testing Laboratory for Commodities Inspection  
Accreditation Program for Telecommunication Equipment Testing Laboratory  
Accreditation Program for BSMI Mutual Recognition Arrangement with Foreign Authorities



Jay-San Chen  
President, Taiwan Accreditation Foundation  
Date : July 02, 2011

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The Appendix forms an integral part of this Certificate, which shall be invalid when used without the Appendix