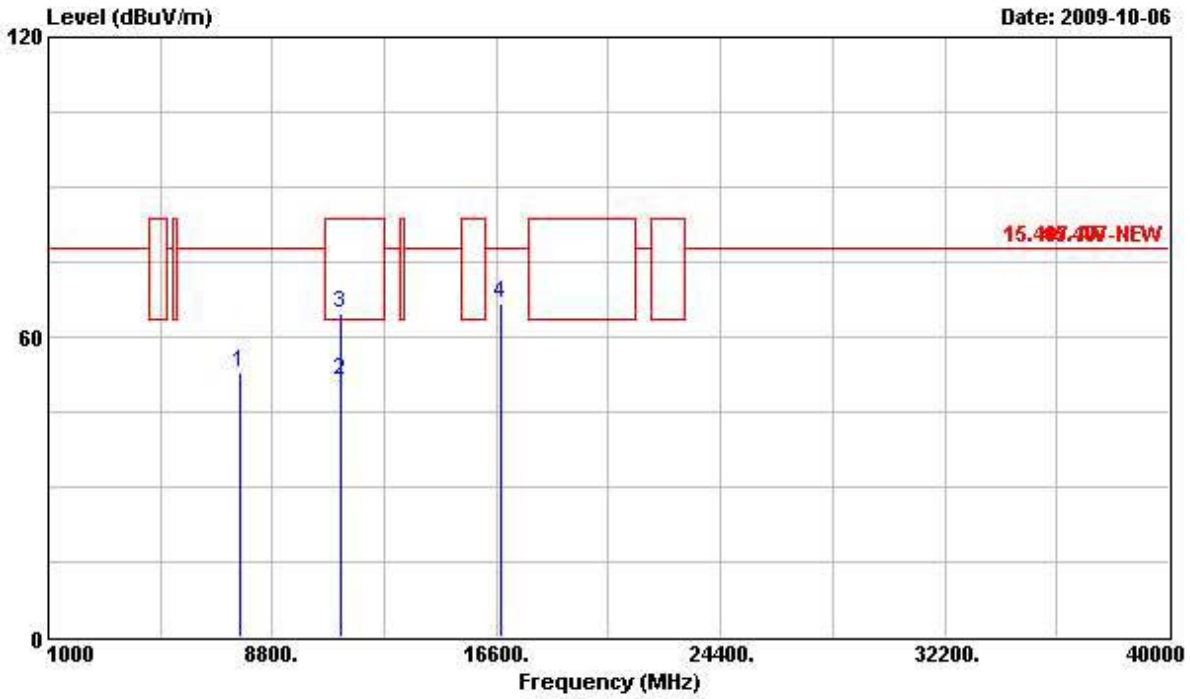
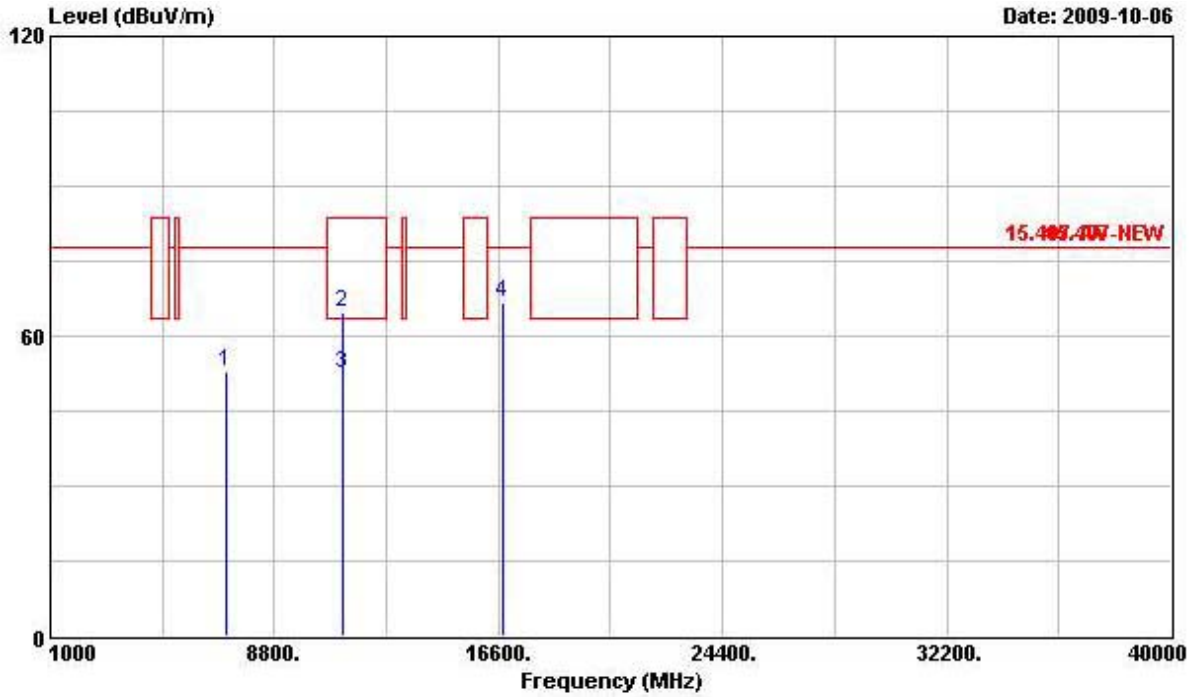
Final Test Date	Oct. 06, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n CH 110 (20MHz)

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7688.000	52.95	-24.89	77.84	43.55	38.01	5.71	34.32	Peak
2	11160.000	51.45	-12.09	63.54	37.40	40.44	7.05	33.44	Average
3	11160.000	64.74	-18.80	83.54	50.69	40.44	7.05	33.44	Peak
4	16740.000	66.70	-11.14	77.84	47.41	43.56	8.37	32.64	Peak

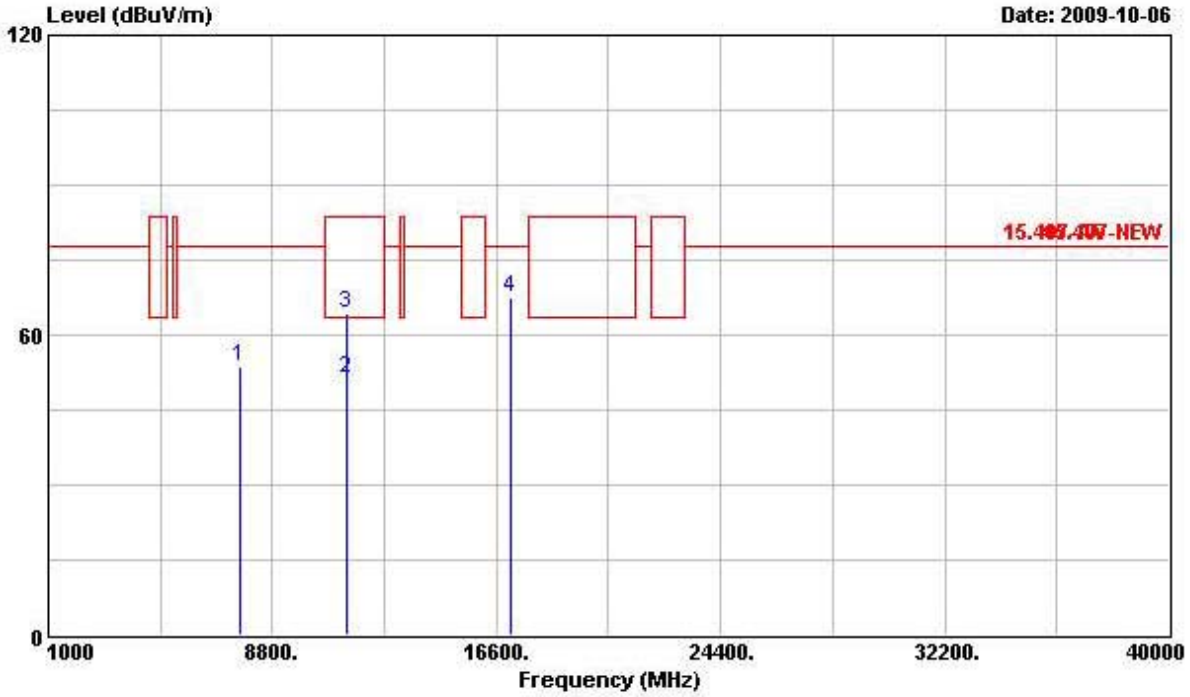
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7088.000	52.74	-25.10	77.84	43.59	37.82	5.61	34.28	Peak
2	11160.000	64.78	-18.76	83.54	50.73	40.44	7.05	33.44	Peak
3	11160.000	52.36	-11.18	63.54	38.31	40.44	7.05	33.44	Average
4	16740.000	66.60	-11.24	77.84	47.31	43.56	8.37	32.64	Peak

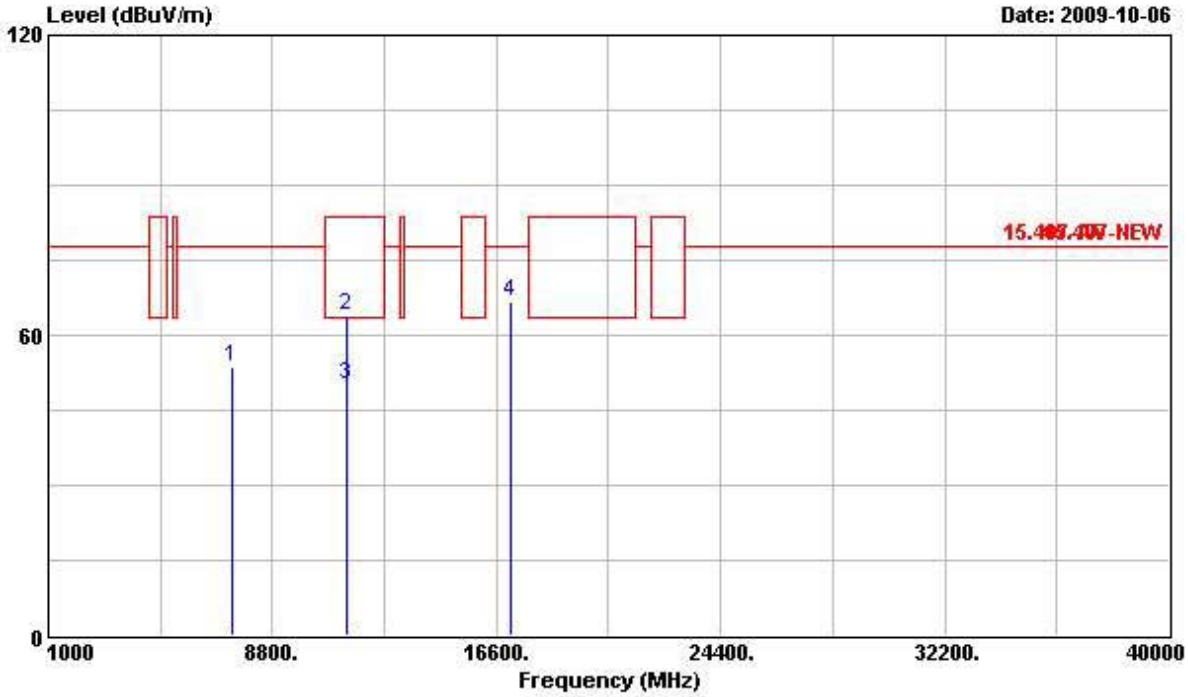
Final Test Date	Oct. 06, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n CH 140 (20MHz)

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7670.000	53.62	-24.22	77.84	44.23	38.00	5.71	34.32	Peak
2	11400.000	51.47	-12.07	63.54	37.80	40.56	6.71	33.60	Average
3	11400.000	64.47	-19.07	83.54	50.80	40.56	6.71	33.60	Peak
4	17100.000	67.40	-10.44	77.84	47.43	43.64	8.61	32.28	Peak

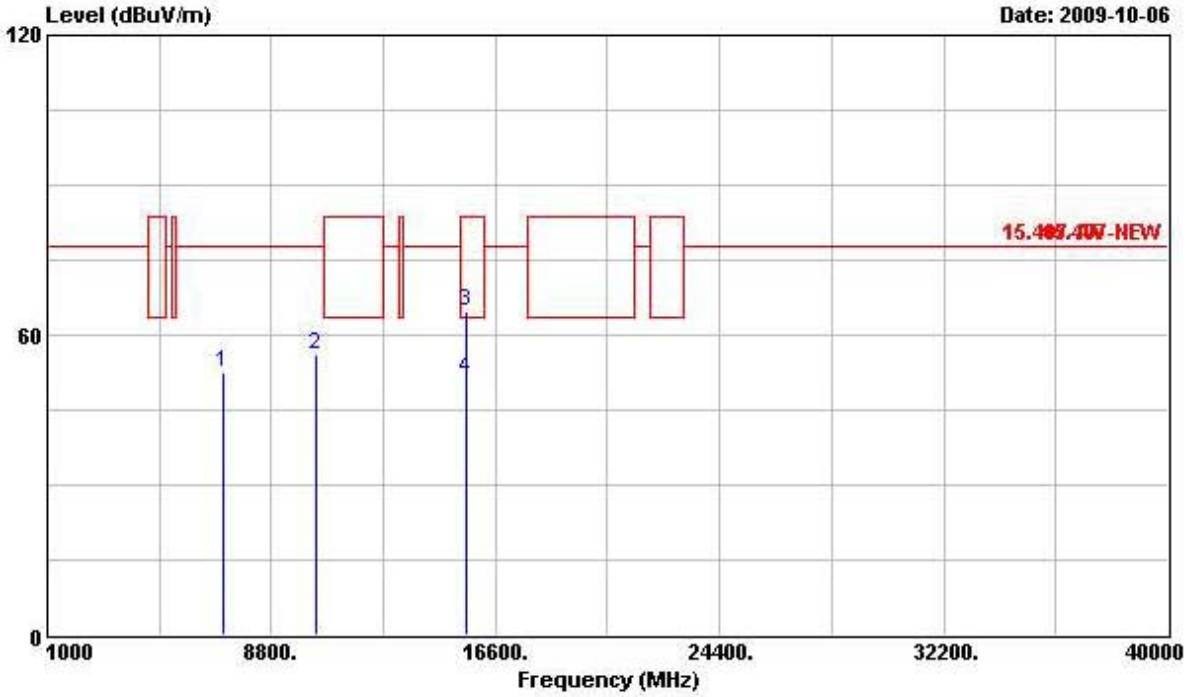
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7430.000	53.54	-24.30	77.84	44.29	37.89	5.65	34.29	Peak
2	11400.000	64.07	-19.47	83.54	50.40	40.56	6.71	33.60	Peak
3	11400.000	50.17	-13.37	63.54	36.50	40.56	6.71	33.60	Average
4	17100.000	66.77	-11.07	77.84	46.80	43.64	8.61	32.28	Peak

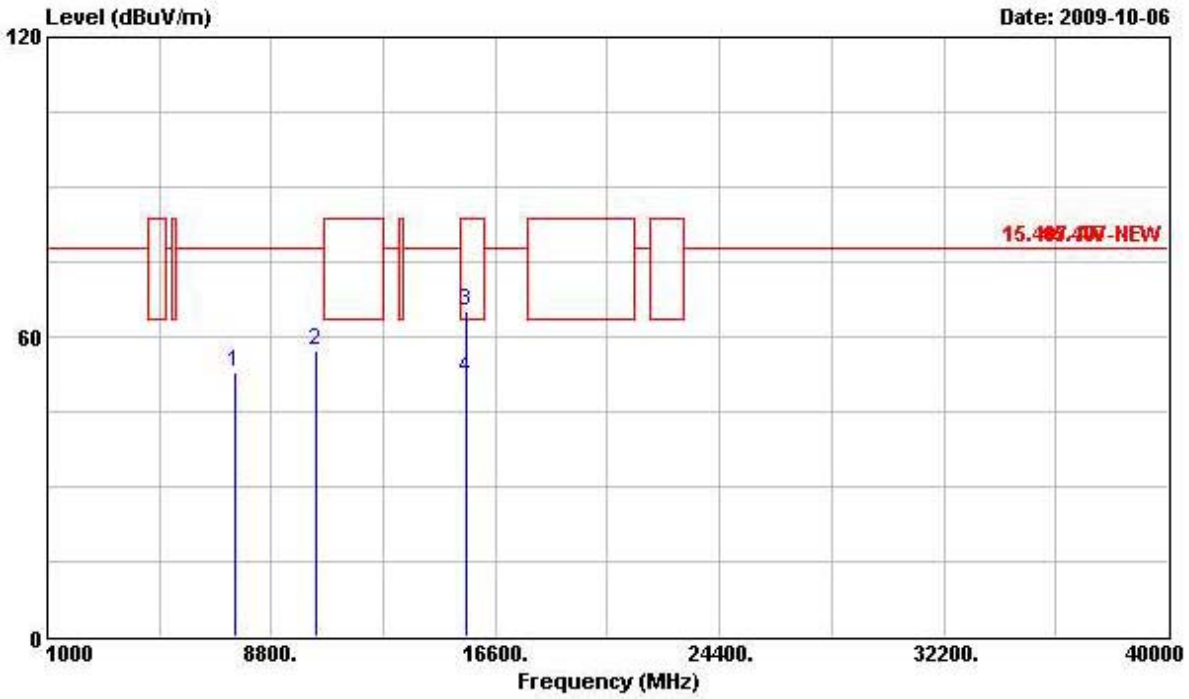
Final Test Date	Oct. 06, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n CH 38 (40MHz)

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7130.000	52.51	-25.33	77.84	43.35	37.83	5.61	34.28	Peak
2	10380.000	55.98	-21.86	77.84	43.32	40.03	6.75	34.12	Peak
3	15570.000	64.60	-18.94	83.54	46.21	42.81	8.45	32.87	Peak
4	15570.000	51.42	-12.12	63.54	33.03	42.81	8.45	32.87	Average

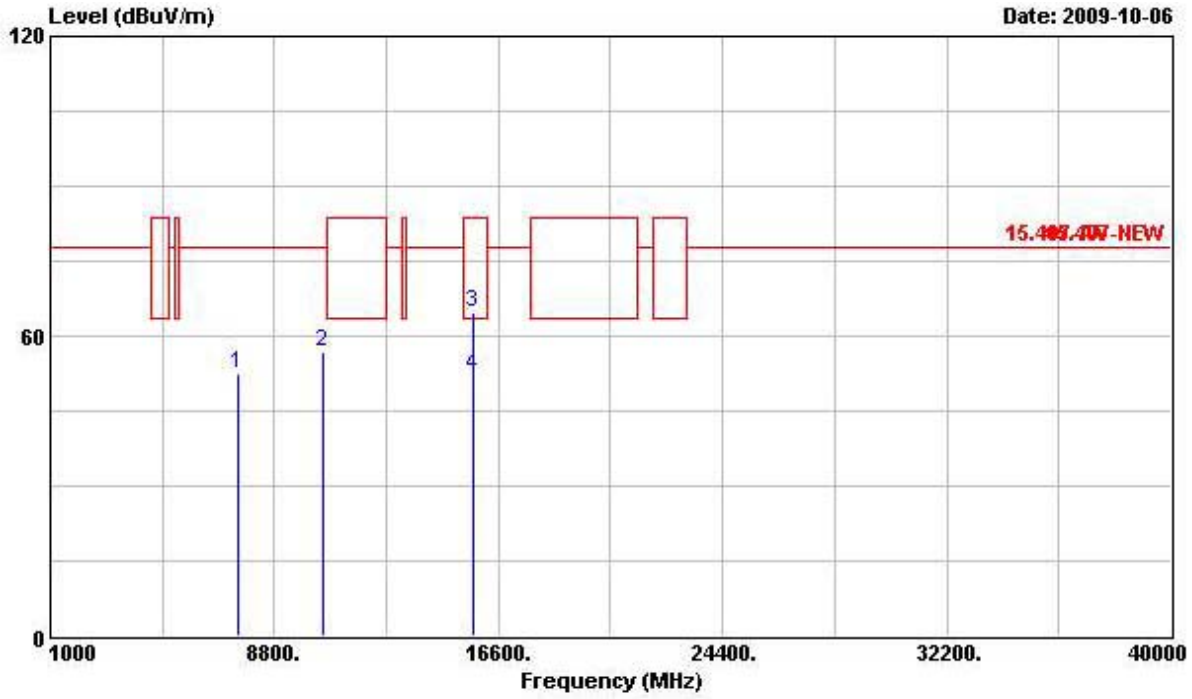
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7510.000	52.74	-25.10	77.84	43.47	37.91	5.66	34.30	Peak
2	10380.000	57.10	-20.74	77.84	44.44	40.03	6.75	34.12	Peak
3	15570.000	65.11	-18.43	83.54	46.72	42.81	8.45	32.87	Peak
4	15570.000	51.73	-11.81	63.54	33.34	42.81	8.45	32.87	Average

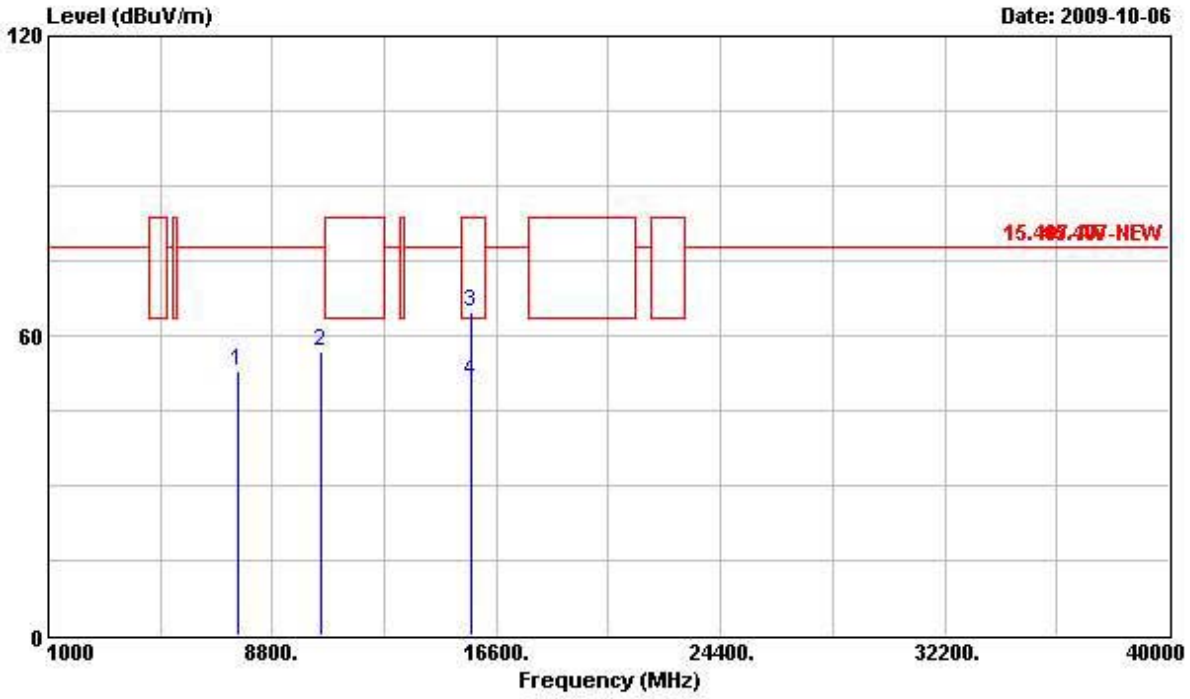
Final Test Date	Oct. 06, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n CH 46 (40MHz)

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7514.000	52.47	-25.37	77.84	43.20	37.91	5.66	34.30	Peak
2	10460.000	56.74	-21.10	77.84	43.90	40.07	6.82	34.05	Peak
3	15690.000	64.80	-18.74	83.54	46.50	42.84	8.46	33.00	Peak
4	15690.000	52.00	-11.54	63.54	33.70	42.84	8.46	33.00	Average

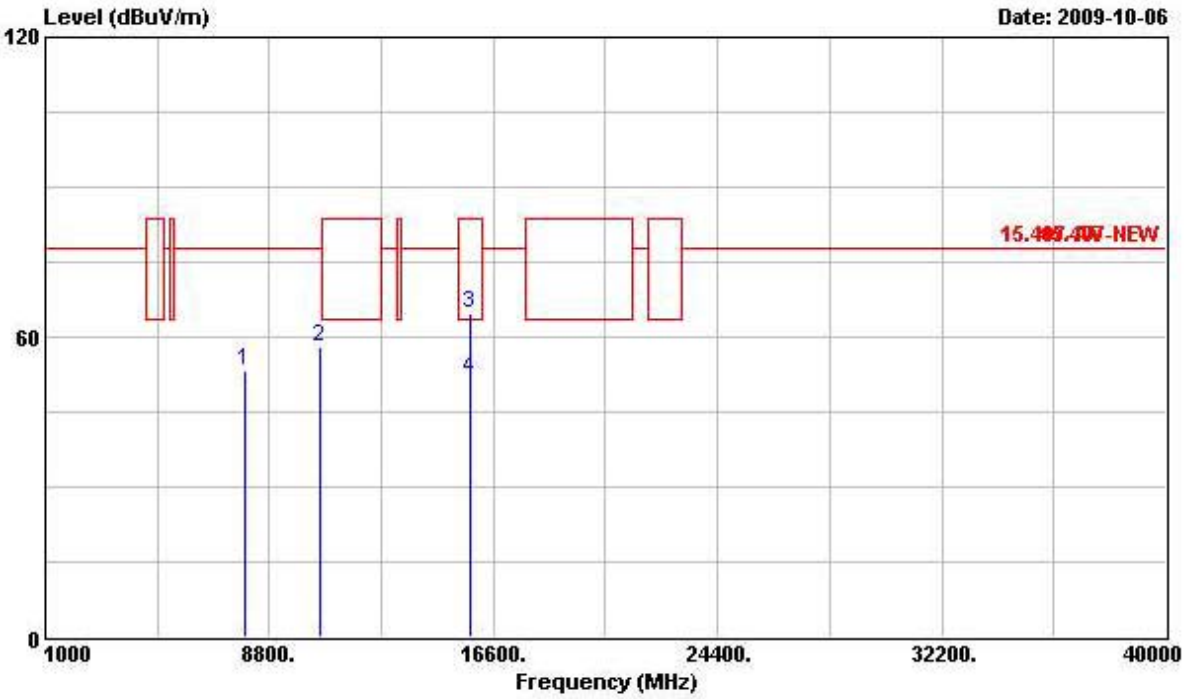
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7584.000	52.83	-25.01	77.84	43.51	37.95	5.68	34.31	Peak
2	10460.000	56.73	-21.11	77.84	43.89	40.07	6.82	34.05	Peak
3	15690.000	64.70	-18.84	83.54	46.40	42.84	8.46	33.00	Peak
4	15690.000	51.10	-12.44	63.54	32.80	42.84	8.46	33.00	Average

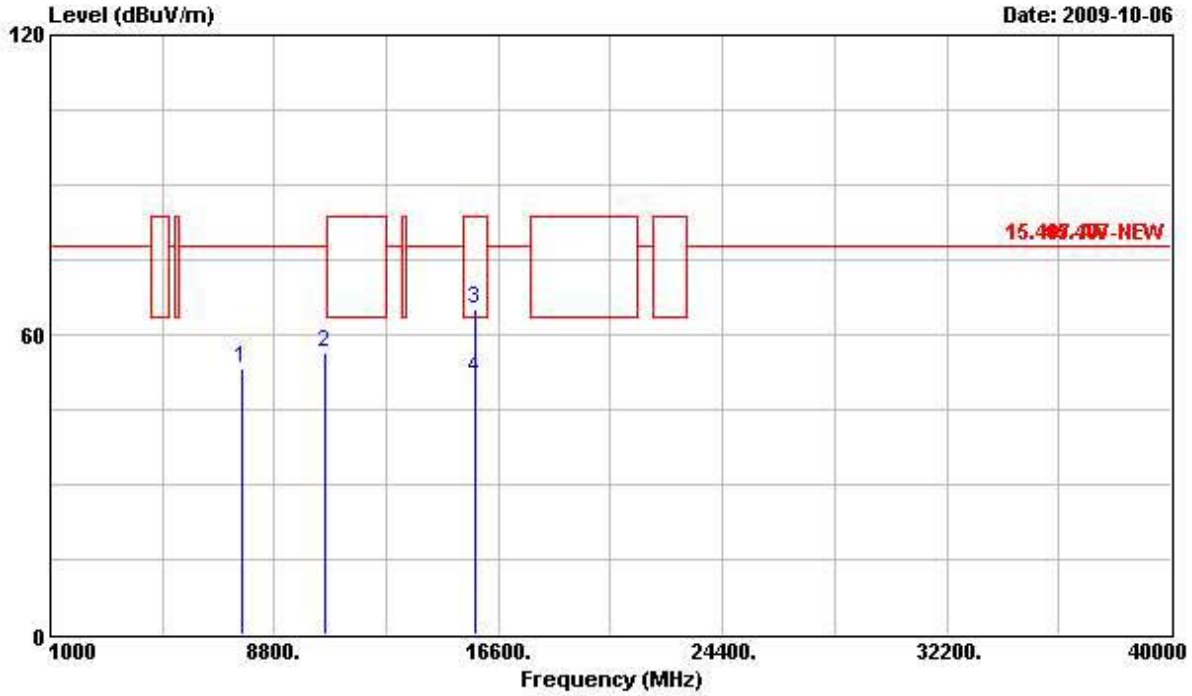
Final Test Date	Oct. 06, 2009	Test Site No.	03CH02-HY
Temperature	25.5℃	Humidity	52%
Test Engineer	Kobe	Configuration	802.11n CH 54 (40MHz)

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7948.000	53.40	-24.44	77.84	43.80	38.17	5.79	34.36	Peak
2	10540.000	58.13	-19.71	77.84	45.10	40.12	6.88	33.97	Peak
3	15810.000	64.89	-18.65	83.54	46.70	42.86	8.46	33.13	Peak
4	15810.000	51.59	-11.95	63.54	33.40	42.86	8.46	33.13	Average

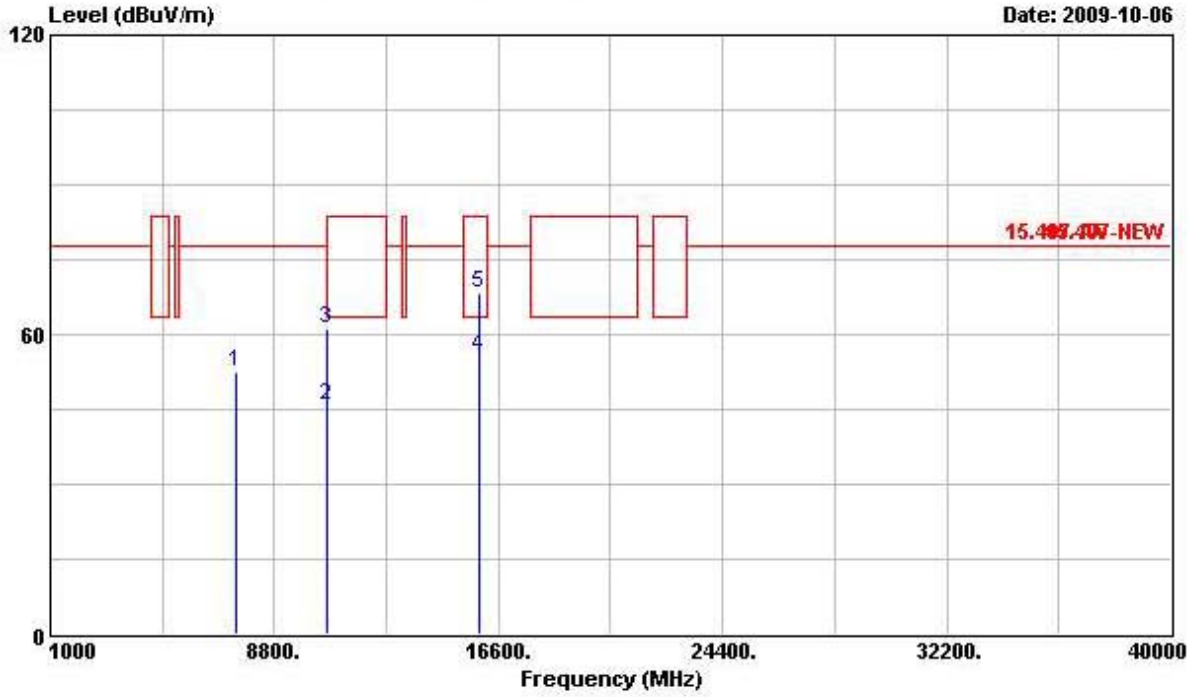
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7656.000	53.37	-24.47	77.84	43.98	38.00	5.71	34.32	Peak
2	10540.000	56.28	-21.56	77.84	43.25	40.12	6.88	33.97	Peak
3	15810.000	65.09	-18.45	83.54	46.90	42.86	8.46	33.13	Peak
4	15810.000	51.39	-12.15	63.54	33.20	42.86	8.46	33.13	Average

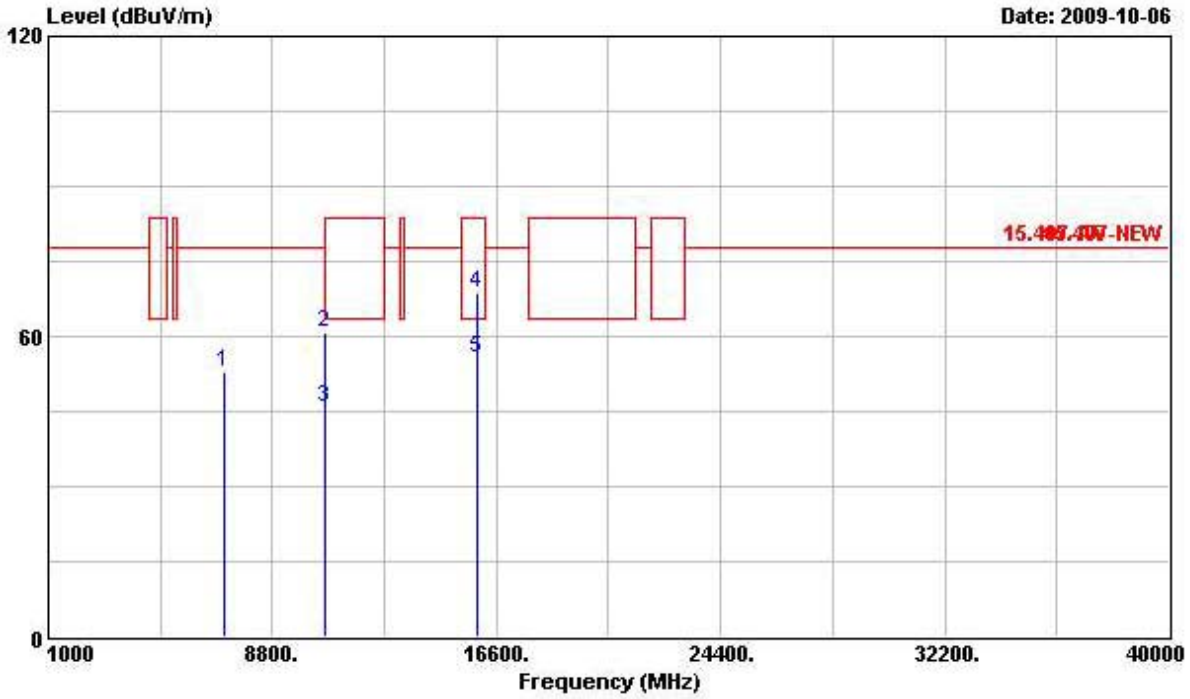
Final Test Date	Oct. 06, 2009	Test Site No.	03CH02-HY
Temperature	25.5℃	Humidity	52%
Test Engineer	Kobe	Configuration	802.11n CH 62 (40MHz)

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7478.000	52.66	-25.18	77.84	43.39	37.90	5.66	34.29	Peak
2	10620.000	45.83	-17.71	63.54	32.60	40.17	6.93	33.87	Average
3	10620.000	61.13	-22.41	83.54	47.90	40.17	6.93	33.87	Peak
4	15930.000	55.62	-7.92	63.54	37.50	42.89	8.47	33.24	Average
5	15930.000	68.32	-15.22	83.54	50.20	42.89	8.47	33.24	Peak

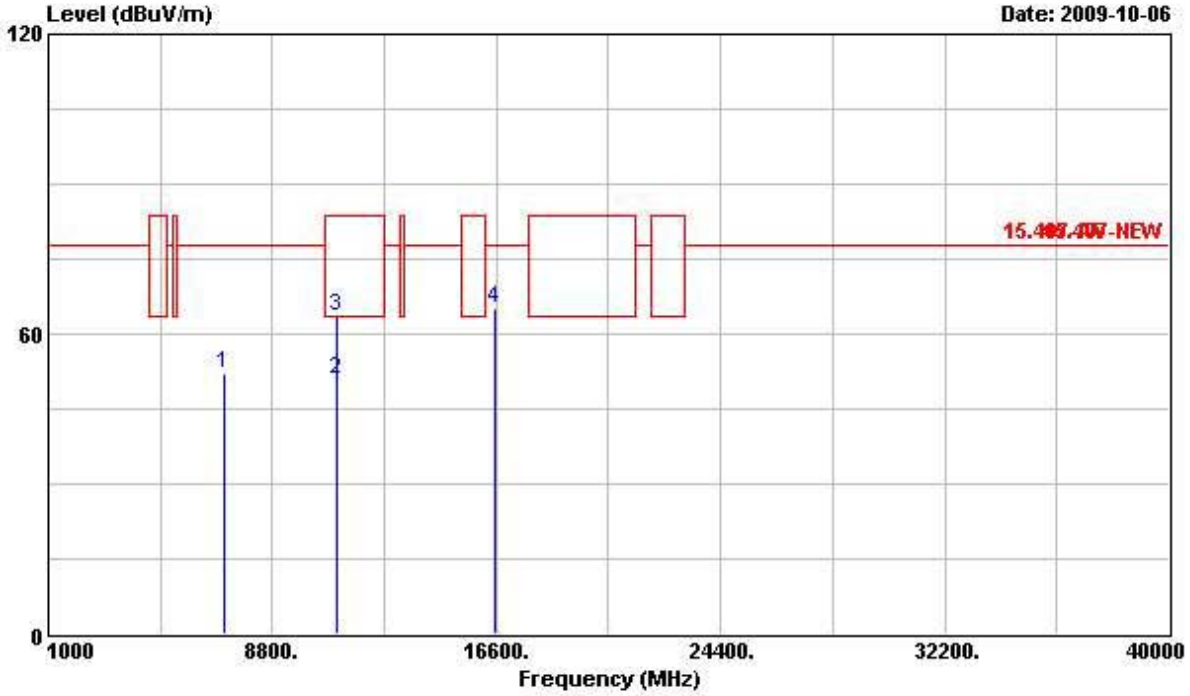
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7112.000	52.96	-24.88	77.84	43.81	37.82	5.61	34.28	Peak
2	10620.000	60.73	-22.81	83.54	47.50	40.17	6.93	33.87	Peak
3	10620.000	45.93	-17.61	63.54	32.70	40.17	6.93	33.87	Average
4	15930.000	68.52	-15.02	83.54	50.40	42.89	8.47	33.24	Peak
5	15930.000	55.62	-7.92	63.54	37.50	42.89	8.47	33.24	Average

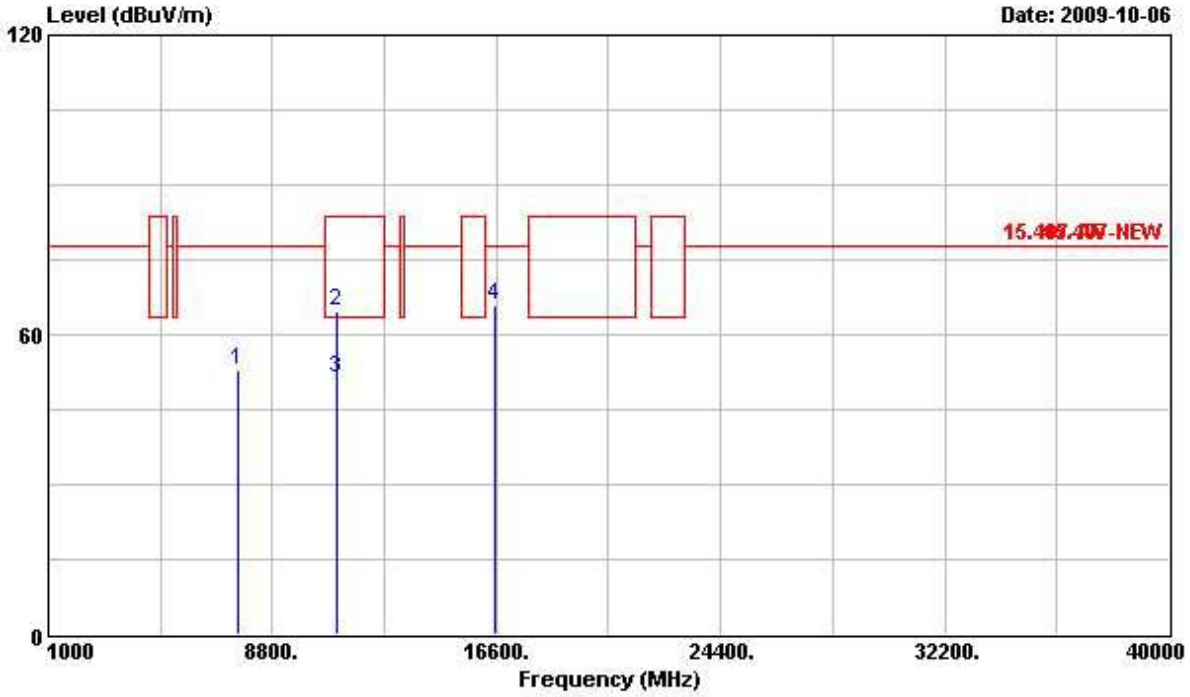
Final Test Date	Oct. 06, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n CH 102 (40MHz)

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7156.000	52.19	-25.65	77.84	43.02	37.83	5.62	34.28	Peak
2	11020.000	50.83	-12.71	63.54	36.69	40.41	7.13	33.40	Average
3	11020.000	63.73	-19.81	83.54	49.59	40.41	7.13	33.40	Peak
4	16530.000	65.33	-12.51	77.84	46.31	43.51	8.27	32.76	Peak

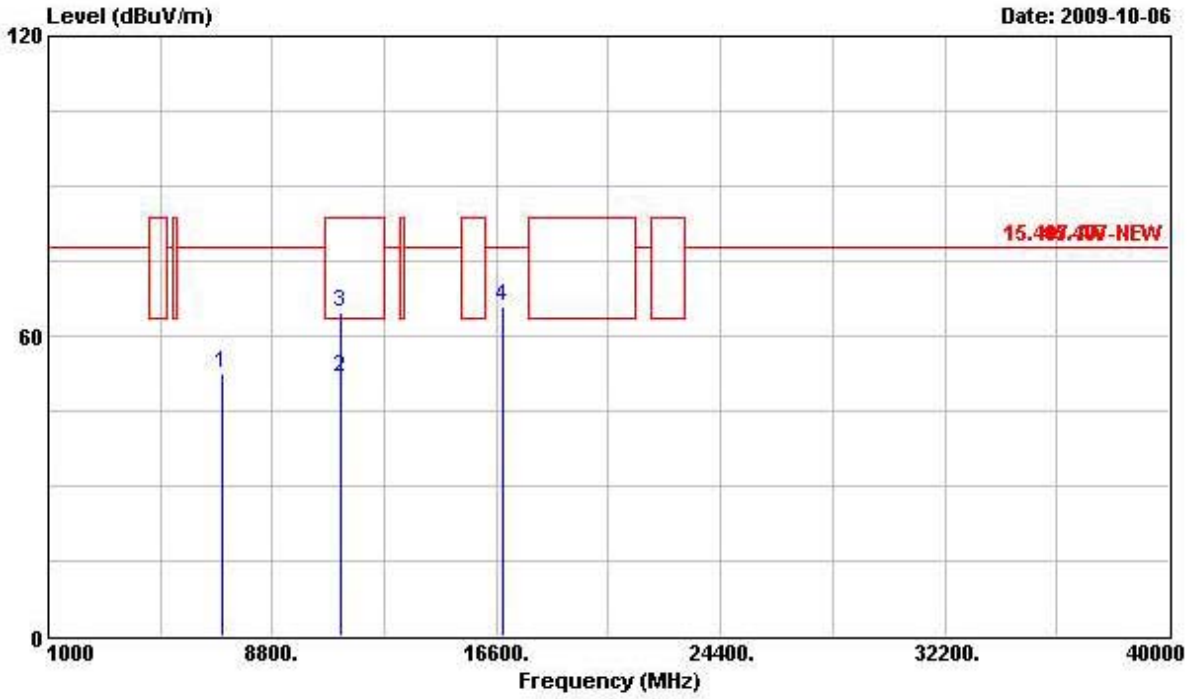
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7620.000	52.95	-24.89	77.84	43.60	37.97	5.69	34.31	Peak
2	11020.000	64.73	-18.81	83.54	50.59	40.41	7.13	33.40	Peak
3	11020.000	51.33	-12.21	63.54	37.19	40.41	7.13	33.40	Average
4	16530.000	66.03	-11.81	77.84	47.01	43.51	8.27	32.76	Peak

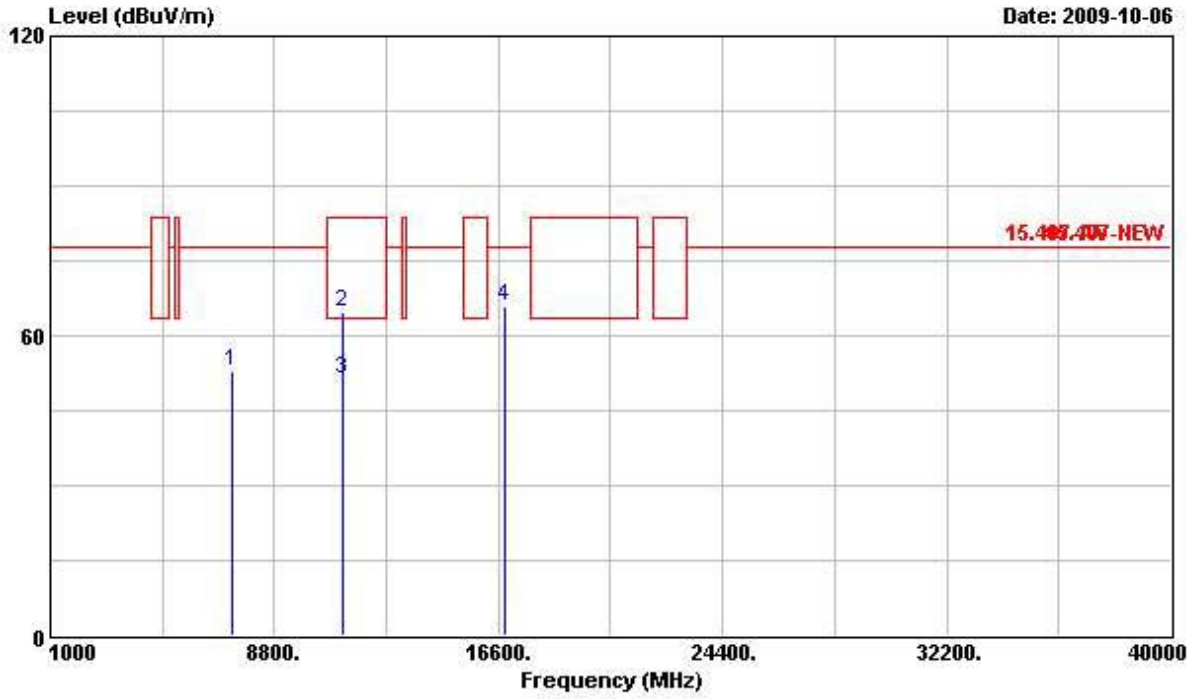
Final Test Date	Oct. 06, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n CH 110 (40MHz)

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7074.000	52.44	-25.40	77.84	43.30	37.81	5.61	34.28	Peak
2	11200.000	51.75	-11.79	63.54	37.80	40.47	6.96	33.48	Average
3	11200.000	64.55	-18.99	83.54	50.60	40.47	6.96	33.48	Peak
4	16800.000	65.74	-12.10	77.84	46.20	43.61	8.47	32.54	Peak

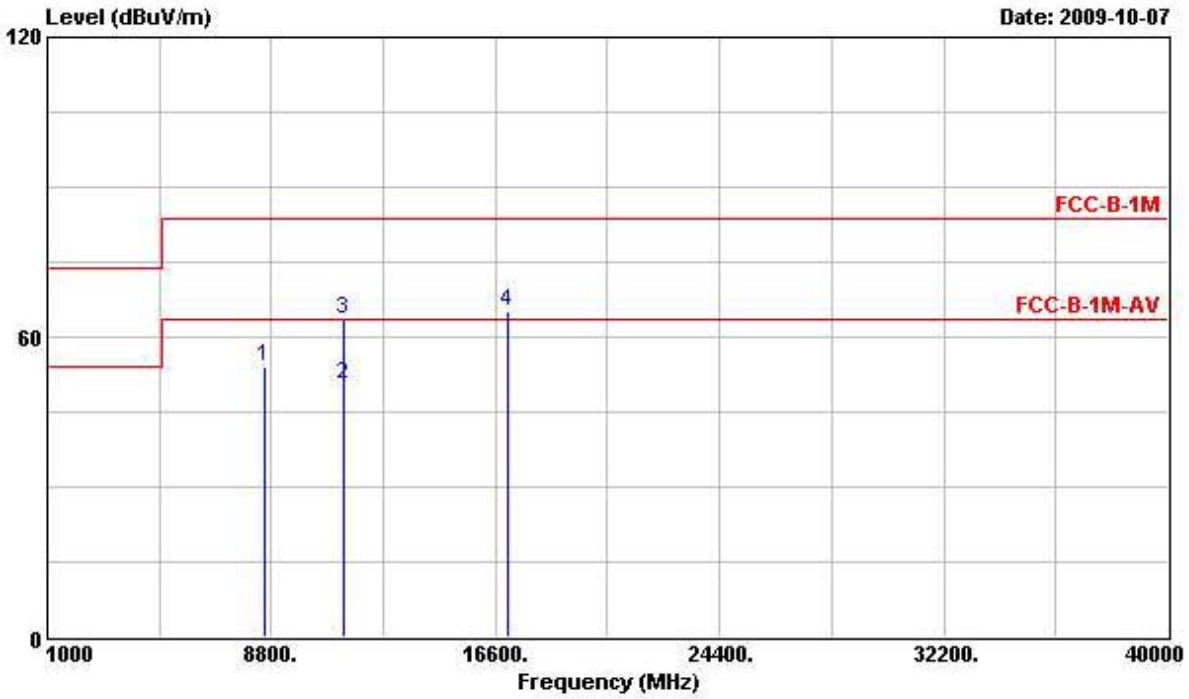
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7310.000	53.01	-24.83	77.84	43.80	37.86	5.64	34.29	Peak
2	11200.000	64.65	-18.89	83.54	50.70	40.47	6.96	33.48	Peak
3	11200.000	51.45	-12.09	63.54	37.50	40.47	6.96	33.48	Average
4	16800.000	65.84	-12.00	77.84	46.30	43.61	8.47	32.54	Peak

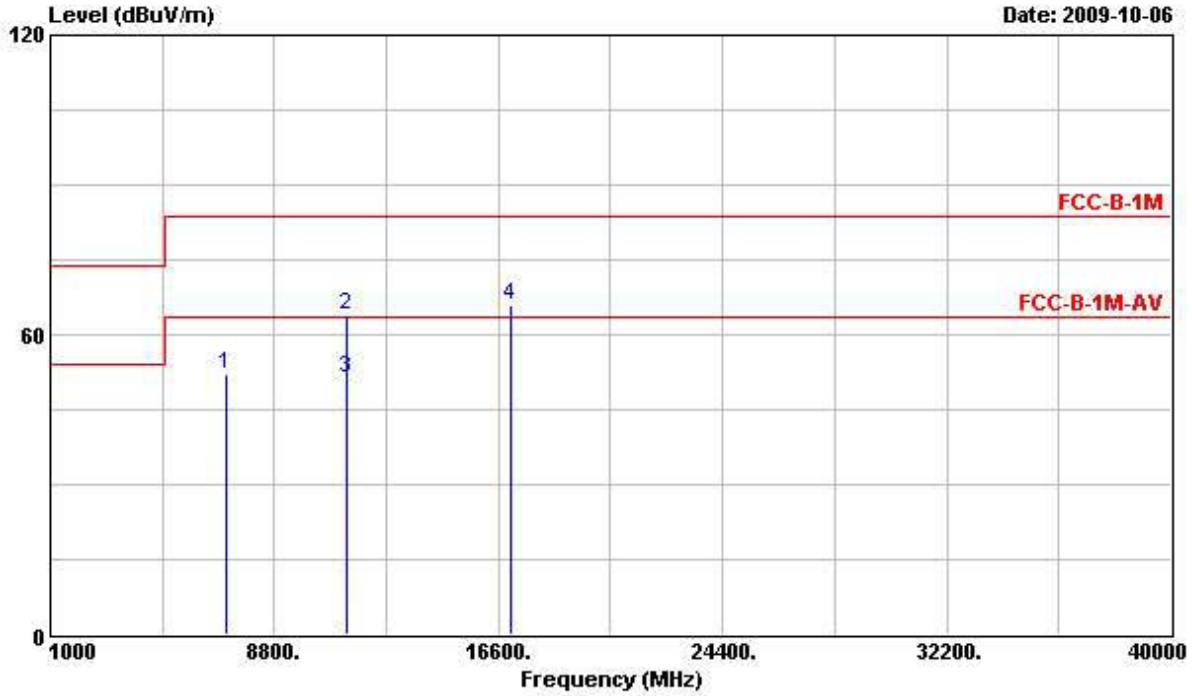
Final Test Date	Oct. 07, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n CH 134 (40MHz)

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8540.000	53.96	-29.58	83.54	43.80	38.46	5.96	34.26	Peak
2	11340.000	50.57	-12.97	63.54	36.80	40.53	6.80	33.56	Average
3	11340.000	63.47	-20.07	83.54	49.70	40.53	6.80	33.56	Peak
4	17010.000	65.15	-18.39	83.54	45.12	43.69	8.65	32.31	Peak

Vertical

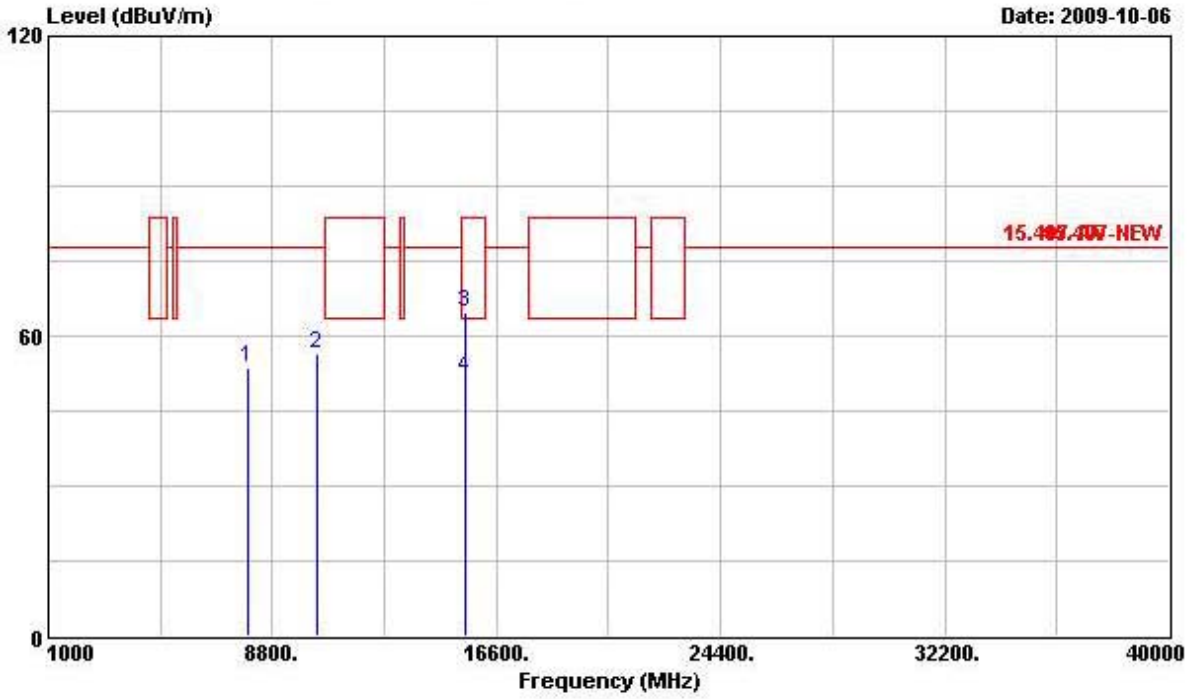


	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7130.000	52.26	-31.28	83.54	43.10	37.83	5.61	34.28	Peak
2	11340.000	63.87	-19.67	83.54	50.10	40.53	6.80	33.56	Peak
3	11340.000	51.37	-12.17	63.54	37.60	40.53	6.80	33.56	Average
4	17010.000	65.83	-17.71	83.54	45.80	43.69	8.65	32.31	Peak

For Two Chain:

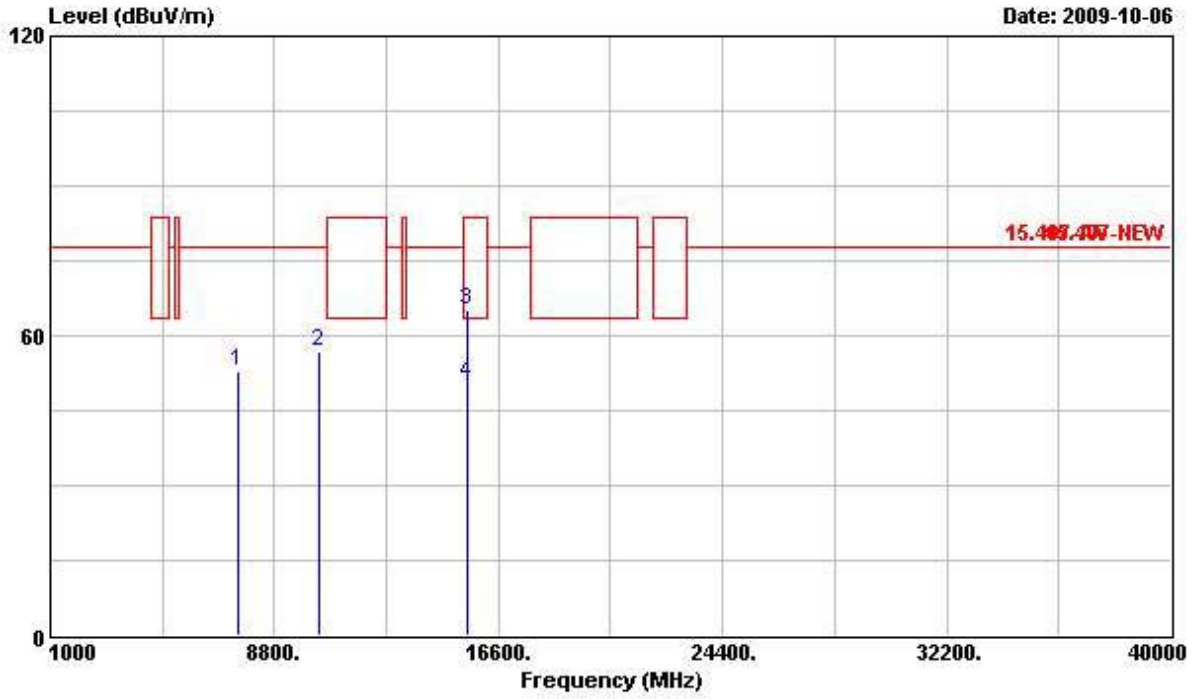
Final Test Date	Oct. 06, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n CH 36 (20MHz)

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7944.000	53.63	-24.21	77.84	44.04	38.16	5.79	34.36	Peak
2	10360.000	56.53	-21.31	77.84	43.94	40.02	6.71	34.14	Peak
3	15540.000	64.67	-18.87	83.54	46.25	42.81	8.45	32.84	Peak
4	15540.000	51.68	-11.86	63.54	33.26	42.81	8.45	32.84	Average

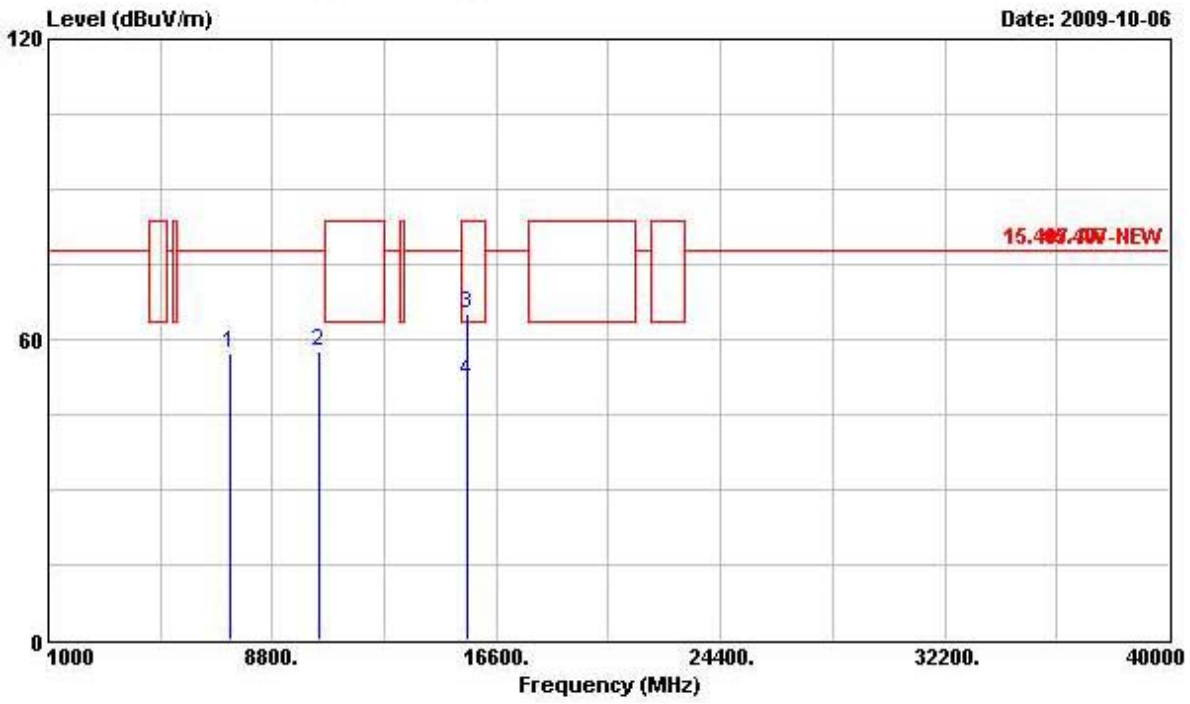
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7506.000	53.07	-24.77	77.84	43.80	37.91	5.66	34.30	Peak
2	10360.000	56.84	-21.00	77.84	44.25	40.02	6.71	34.14	Peak
3	15540.000	65.14	-18.40	83.54	46.72	42.81	8.45	32.84	Peak
4	15540.000	50.53	-13.01	63.54	32.11	42.81	8.45	32.84	Average

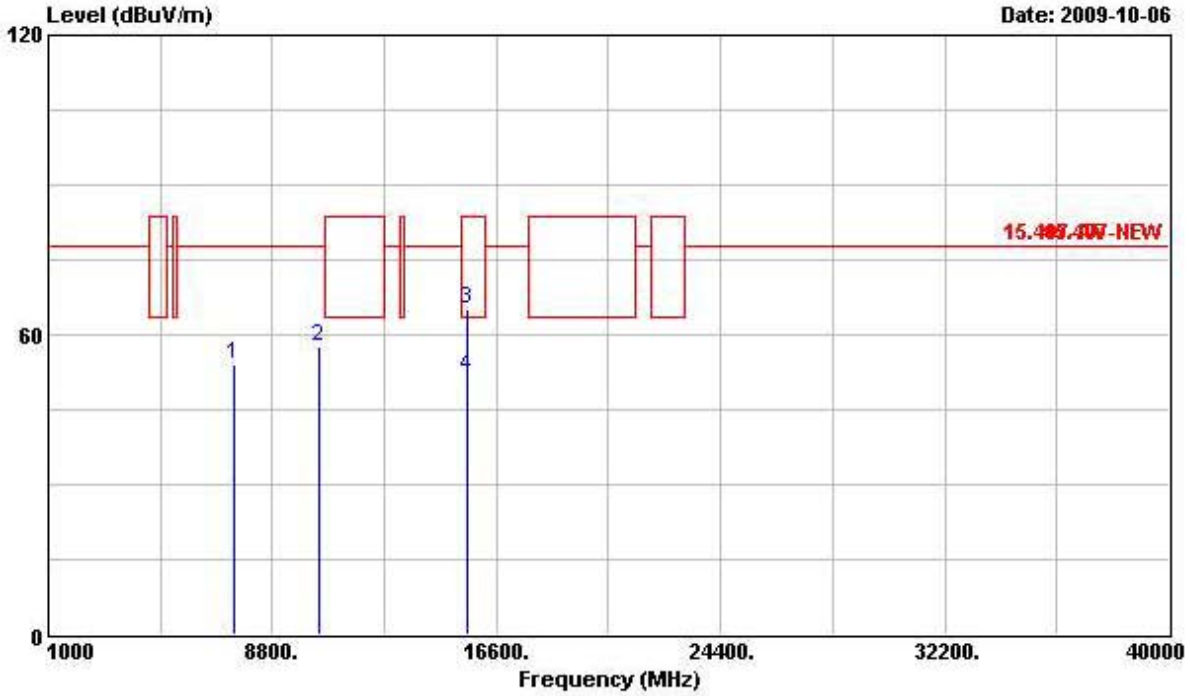
Final Test Date	Oct. 06, 2009	Test Site No.	03CH02-HY
Temperature	25.5℃	Humidity	52%
Test Engineer	Kobe	Configuration	802.11n CH 40 (20MHz)

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7316.000	57.12	-20.72	77.84	47.90	37.87	5.64	34.29	Peak
2	10400.000	57.79	-20.05	77.84	45.10	40.04	6.75	34.10	Peak
3	15600.000	65.27	-18.27	83.54	46.92	42.82	8.45	32.92	Peak
4	15600.000	51.59	-11.95	63.54	33.24	42.82	8.45	32.92	Average

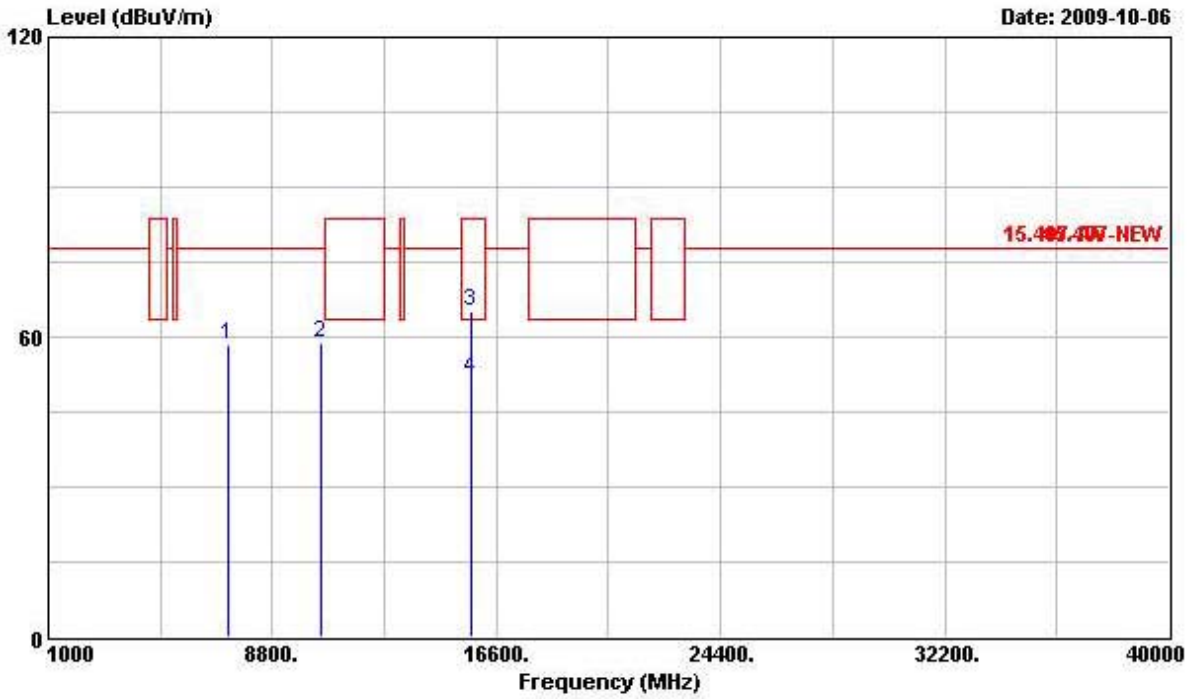
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7468.000	54.01	-23.83	77.84	44.75	37.89	5.66	34.29	Peak
2	10400.000	57.48	-20.36	77.84	44.79	40.04	6.75	34.10	Peak
3	15600.000	65.32	-18.22	83.54	46.97	42.82	8.45	32.92	Peak
4	15600.000	51.56	-11.98	63.54	33.21	42.82	8.45	32.92	Average

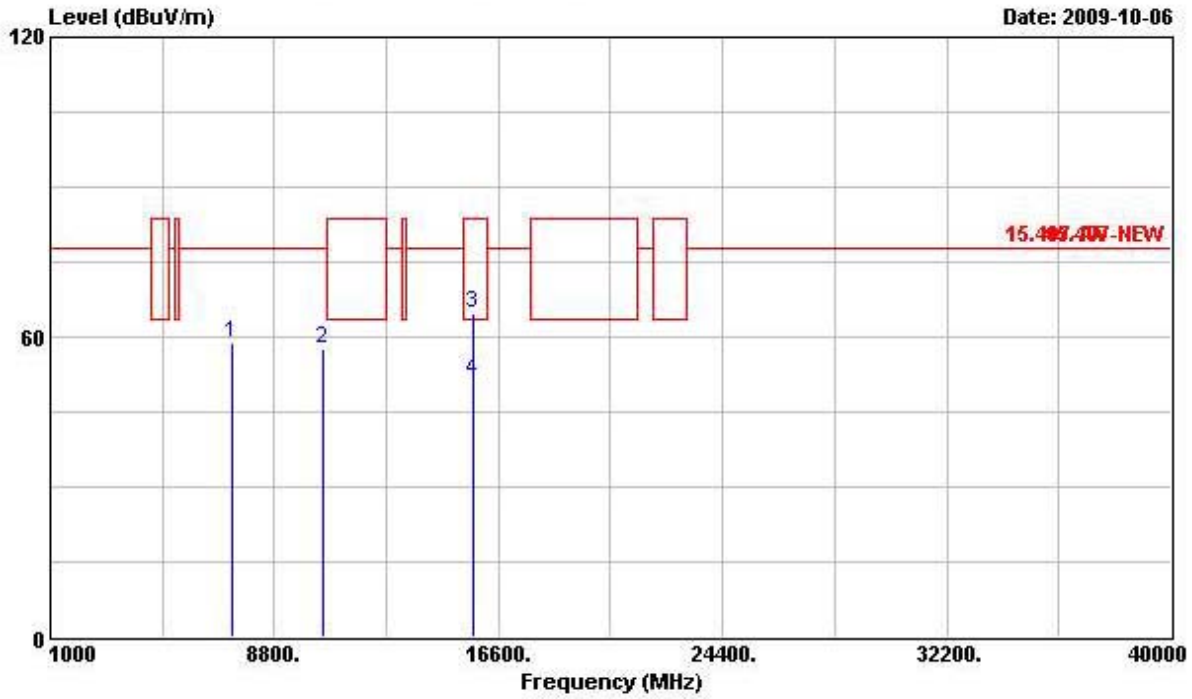
Final Test Date	Oct. 06, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n CH 48 (20MHz)

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7238.000	58.46	-19.38	77.84	49.27	37.85	5.63	34.29	Peak
2	10480.000	58.95	-18.89	77.84	46.07	40.09	6.82	34.03	Peak
3	15720.000	65.14	-18.40	83.54	46.87	42.84	8.46	33.03	Peak
4	15720.000	51.69	-11.85	63.54	33.42	42.84	8.46	33.03	Average

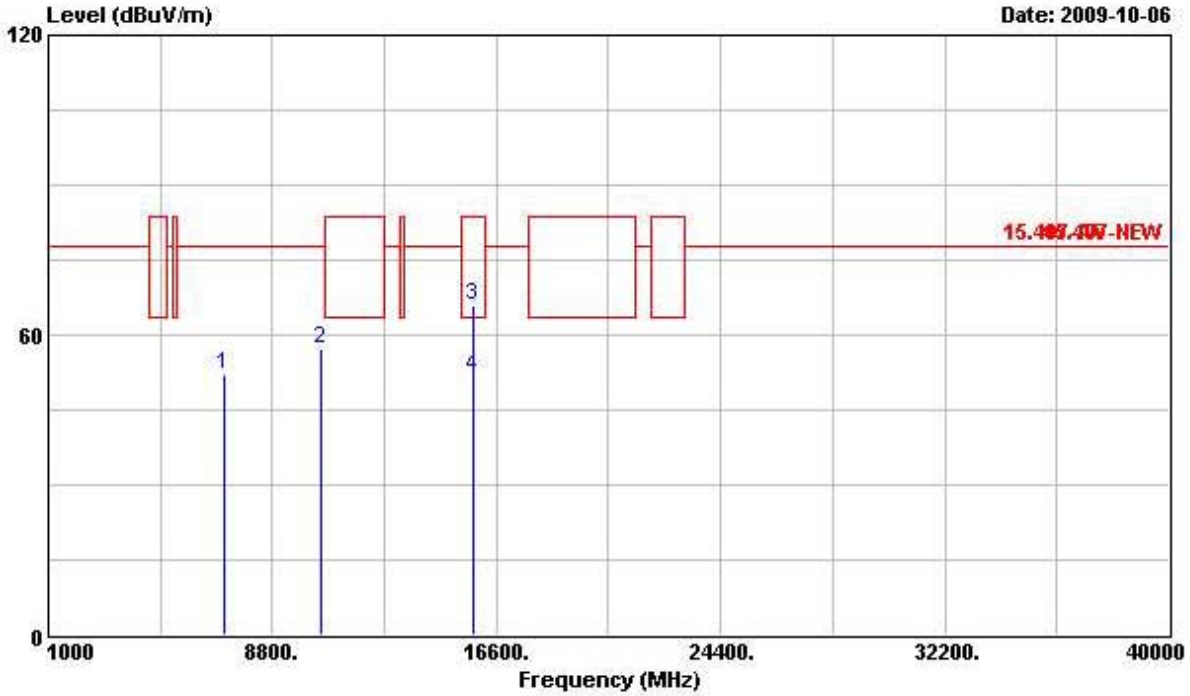
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7306.000	58.72	-19.12	77.84	49.51	37.86	5.64	34.29	Peak
2	10480.000	57.65	-20.19	77.84	44.77	40.09	6.82	34.03	Peak
3	15720.000	64.93	-18.61	83.54	46.66	42.84	8.46	33.03	Peak
4	15720.000	51.49	-12.05	63.54	33.22	42.84	8.46	33.03	Average

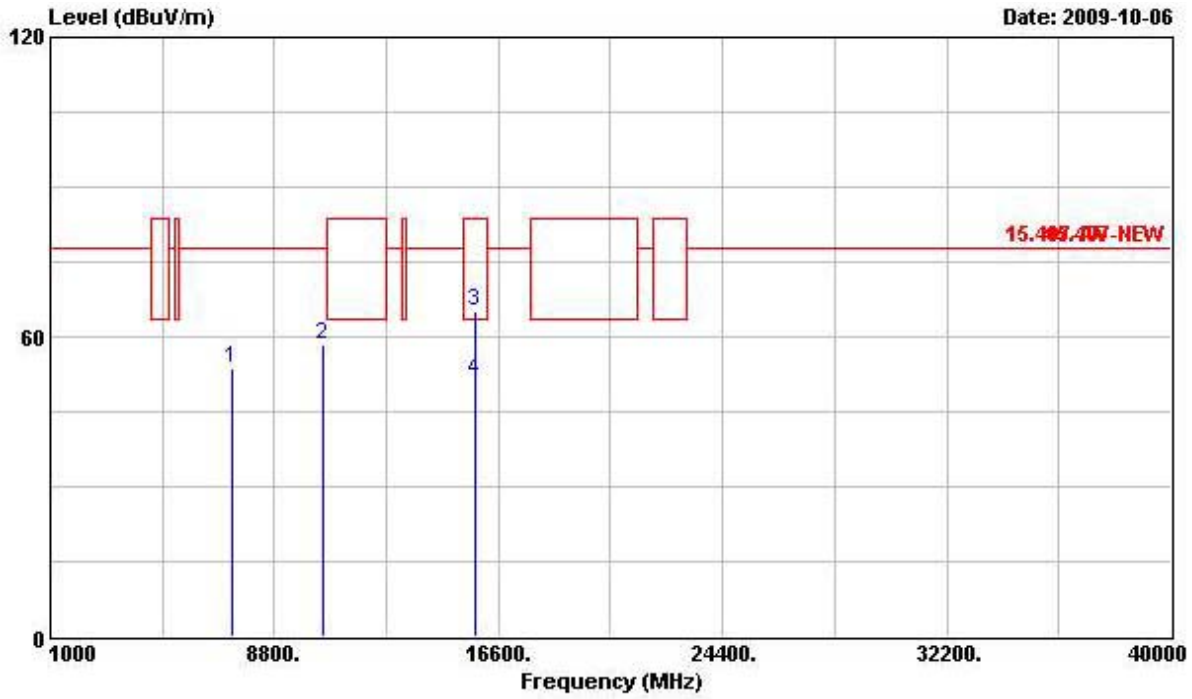
Final Test Date	Oct. 06, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n CH 52 (20MHz)

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7116.000	51.99	-25.85	77.84	42.84	37.82	5.61	34.28	Peak
2	10520.000	57.28	-20.56	77.84	44.32	40.11	6.85	34.00	Peak
3	15780.000	65.77	-17.77	83.54	47.56	42.86	8.46	33.11	Peak
4	15780.000	51.68	-11.86	63.54	33.47	42.86	8.46	33.11	Average

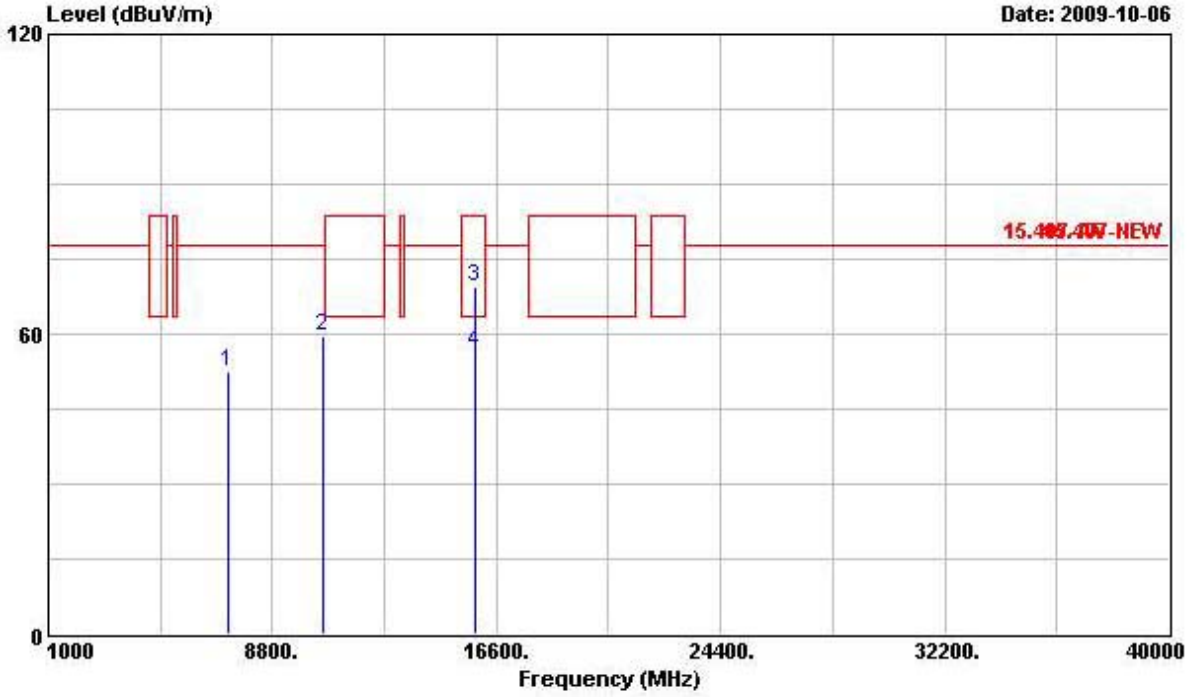
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7306.000	53.87	-23.97	77.84	44.66	37.86	5.64	34.29	Peak
2	10520.000	58.60	-19.24	77.84	45.64	40.11	6.85	34.00	Peak
3	15780.000	65.24	-18.30	83.54	47.03	42.86	8.46	33.11	Peak
4	15780.000	51.42	-12.12	63.54	33.21	42.86	8.46	33.11	Average

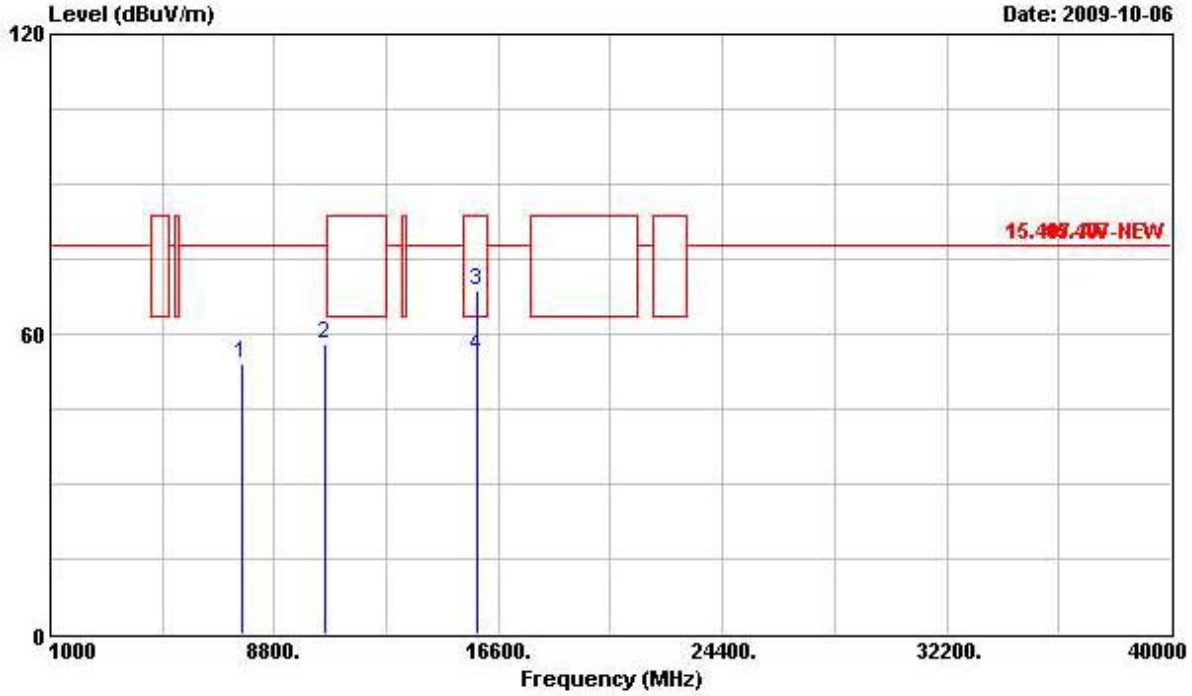
Final Test Date	Oct. 06, 2009	Test Site No.	03CH02-HY
Temperature	25.5℃	Humidity	52%
Test Engineer	Kobe	Configuration	802.11n CH 56 (20MHz)

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7244.000	52.55	-25.29	77.84	43.36	37.85	5.63	34.29	Peak
2	10560.000	59.76	-18.08	77.84	46.69	40.13	6.88	33.94	Peak
3	15840.000	69.36	-14.18	83.54	51.19	42.87	8.46	33.16	Peak
4	15840.000	56.41	-7.13	63.54	38.24	42.87	8.46	33.16	Average

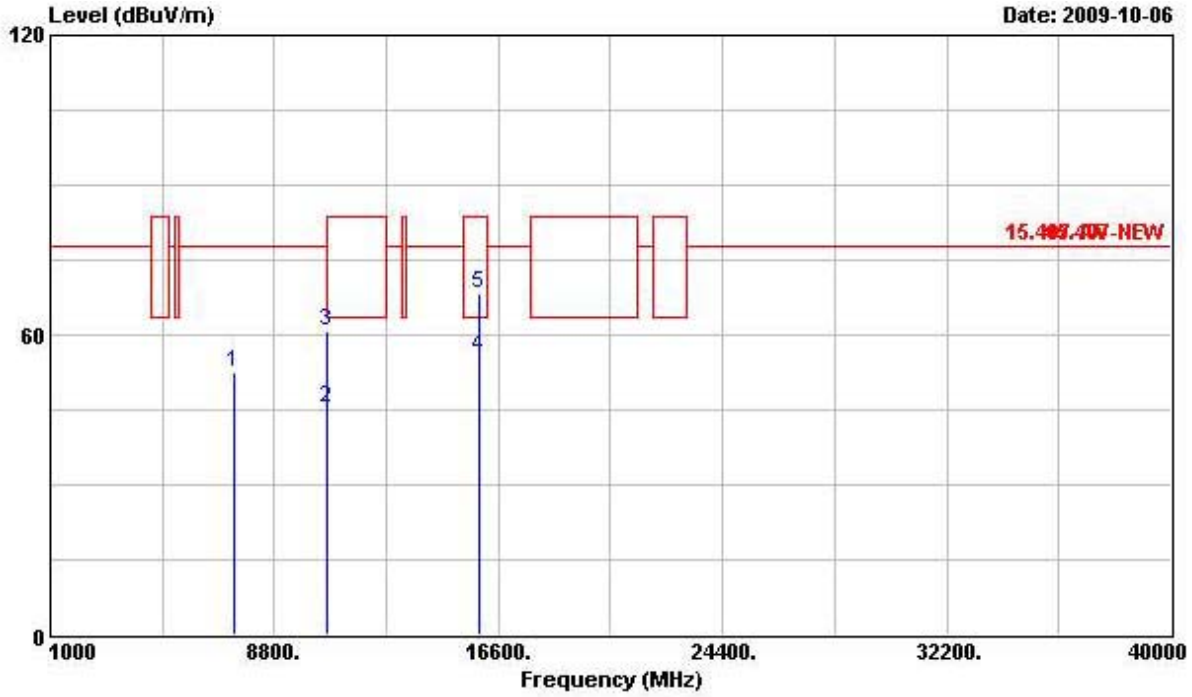
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7678.000	53.93	-23.91	77.84	44.53	38.01	5.71	34.32	Peak
2	10560.000	58.19	-19.65	77.84	45.12	40.13	6.88	33.94	Peak
3	15840.000	68.68	-14.86	83.54	50.51	42.87	8.46	33.16	Peak
4	15840.000	55.71	-7.83	63.54	37.54	42.87	8.46	33.16	Average

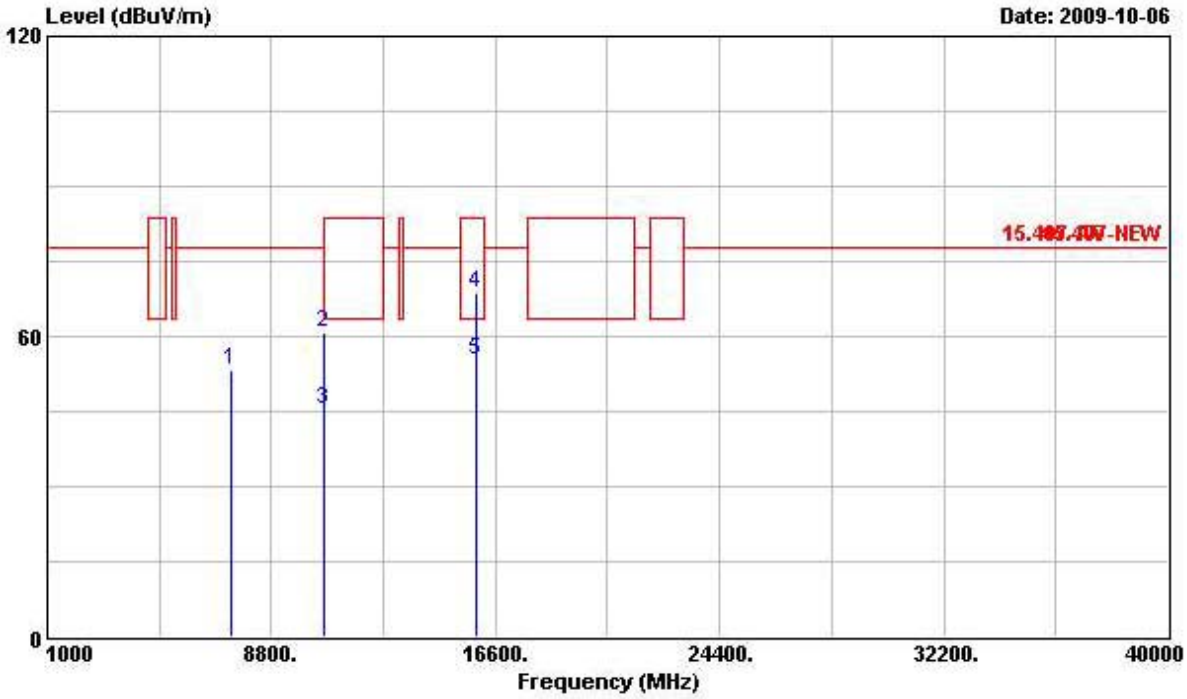
Final Test Date	Oct. 06, 2009	Test Site No.	03CH02-HY
Temperature	25.5℃	Humidity	52%
Test Engineer	Kobe	Configuration	802.11n CH 64 (20MHz)

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7428.000	52.56	-25.28	77.84	43.31	37.89	5.65	34.29	Peak
2	10640.000	45.42	-18.12	63.54	32.15	40.18	6.93	33.84	Average
3	10640.000	60.95	-22.59	83.54	47.68	40.18	6.93	33.84	Peak
4	15960.000	55.66	-7.88	63.54	37.59	42.89	8.47	33.29	Average
5	15960.000	68.44	-15.10	83.54	50.37	42.89	8.47	33.29	Peak

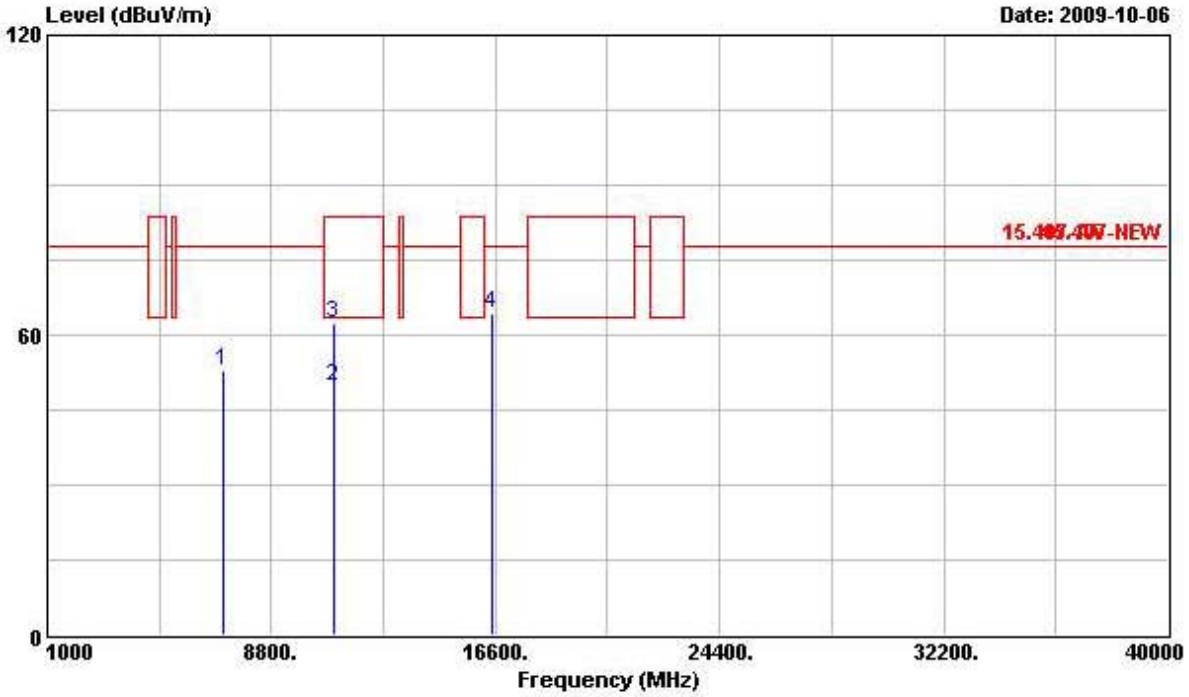
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7390.000	53.18	-24.66	77.84	43.94	37.88	5.65	34.29	Peak
2	10640.000	60.98	-22.56	83.54	47.71	40.18	6.93	33.84	Peak
3	10640.000	45.41	-18.13	63.54	32.14	40.18	6.93	33.84	Average
4	15960.000	68.50	-15.04	83.54	50.43	42.89	8.47	33.29	Peak
5	15960.000	55.31	-8.23	63.54	37.24	42.89	8.47	33.29	Average

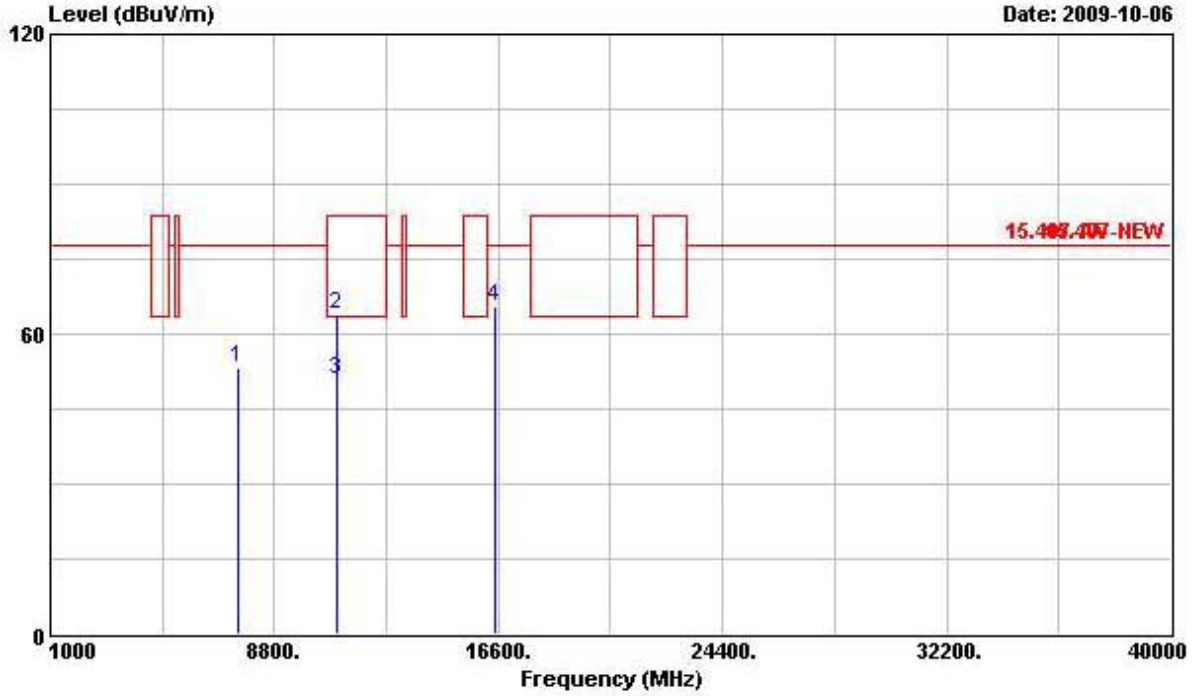
Final Test Date	Oct. 06, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n CH 100 (20MHz)

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7106.000	52.98	-24.86	77.84	43.83	37.82	5.61	34.28	Peak
2	11000.000	49.65	-13.89	63.54	35.47	40.40	7.17	33.39	Average
3	11000.000	62.48	-21.06	83.54	48.30	40.40	7.17	33.39	Peak
4	16500.000	64.44	-13.40	77.84	45.48	43.50	8.24	32.78	Peak

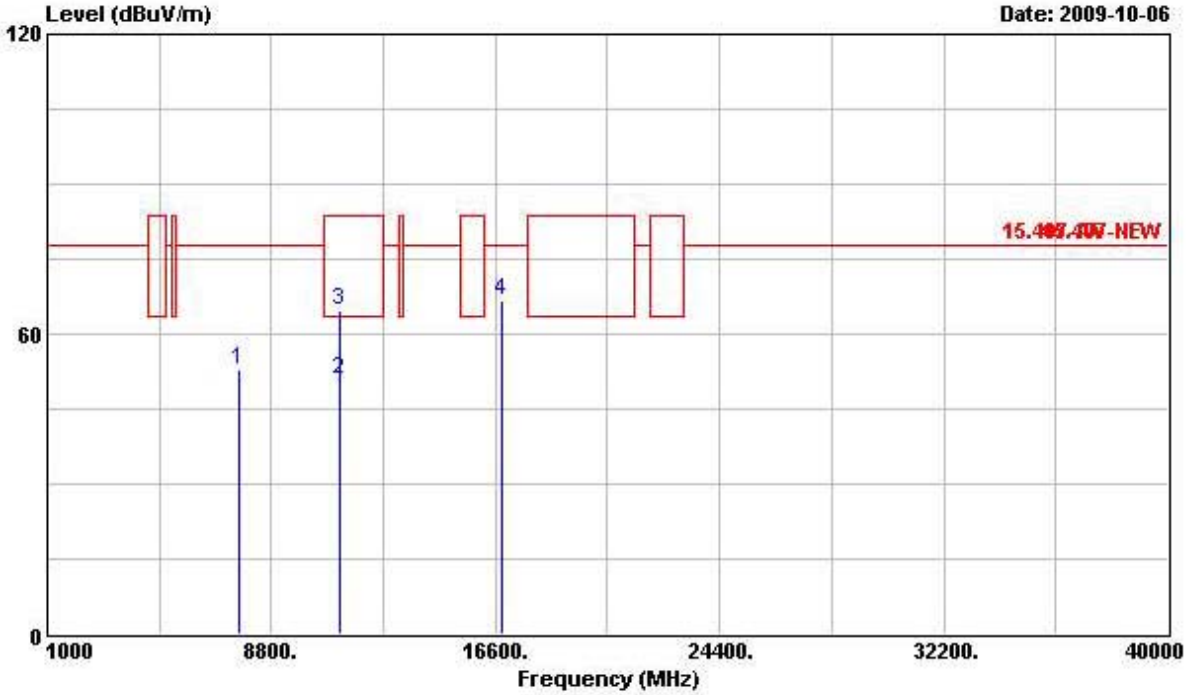
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7546.000	53.40	-24.44	77.84	44.10	37.93	5.67	34.30	Peak
2	11000.000	63.77	-19.77	83.54	49.59	40.40	7.17	33.39	Peak
3	11000.000	51.02	-12.52	63.54	36.84	40.40	7.17	33.39	Average
4	16500.000	65.60	-12.24	77.84	46.64	43.50	8.24	32.78	Peak

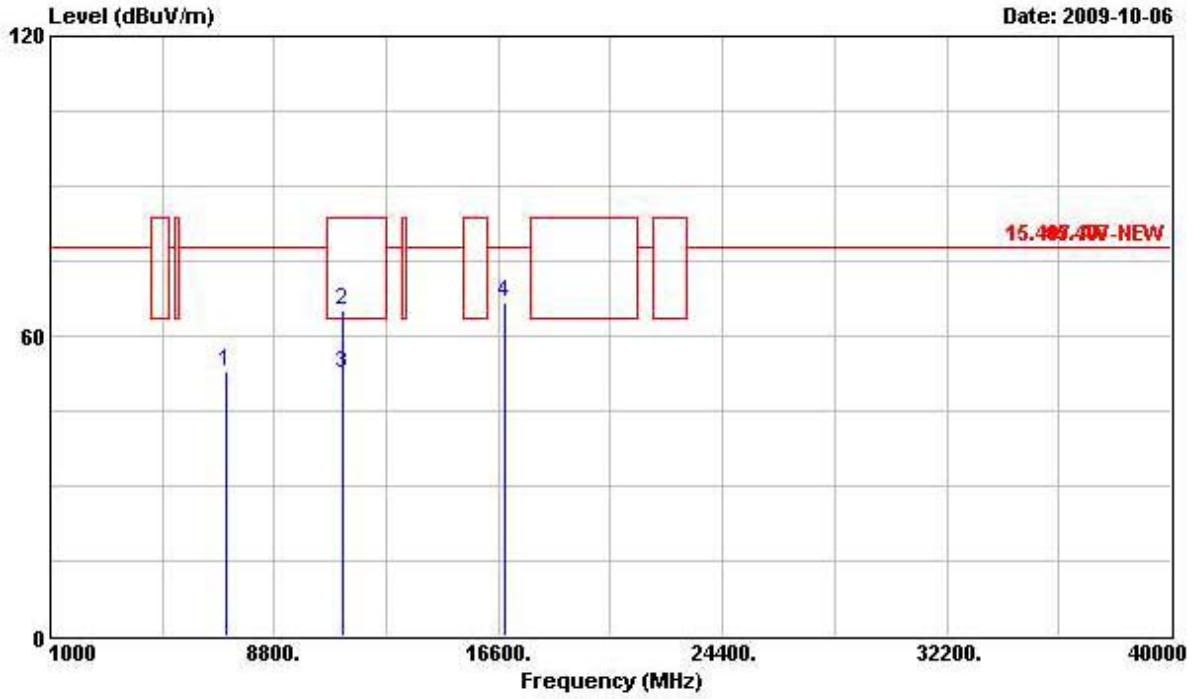
Final Test Date	Oct. 06, 2009	Test Site No.	03CH02-HY
Temperature	25.5℃	Humidity	52%
Test Engineer	Kobe	Configuration	802.11n CH 116 (20MHz)

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7688.000	53.01	-24.83	77.84	43.61	38.01	5.71	34.32	Peak
2	11160.000	51.06	-12.48	63.54	37.01	40.44	7.05	33.44	Average
3	11160.000	64.82	-18.72	83.54	50.77	40.44	7.05	33.44	Peak
4	@16800.000	66.78	-11.06	77.84	47.49	43.56	8.37	32.64	Peak

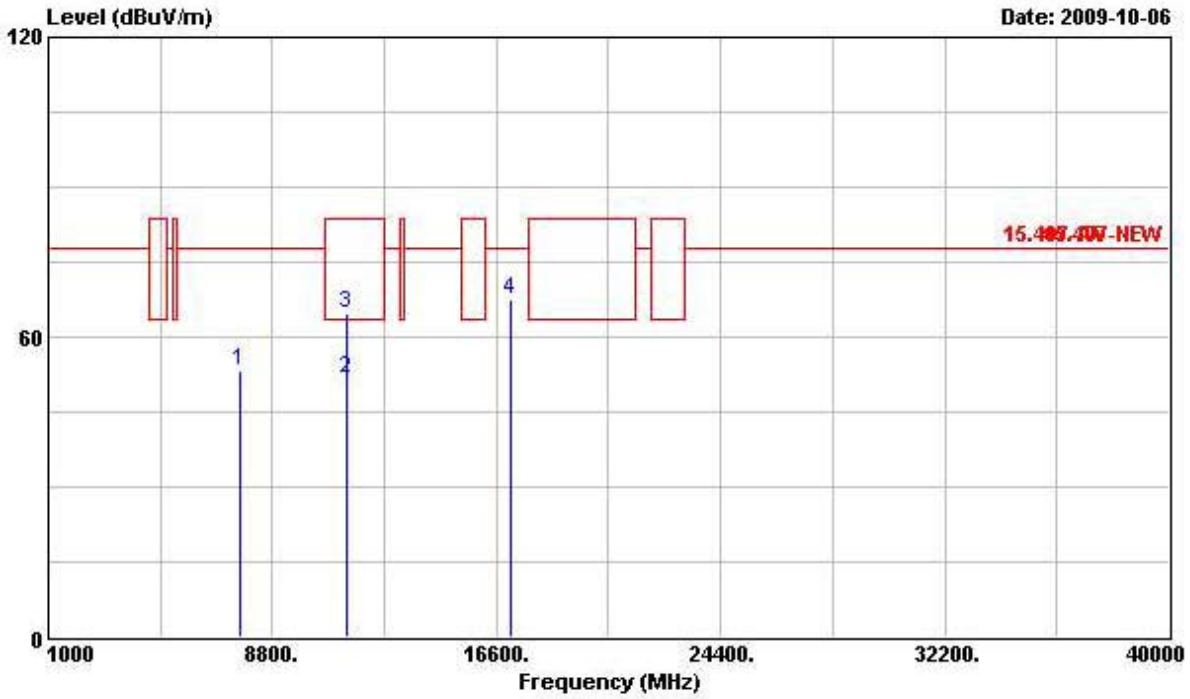
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7088.000	52.80	-25.04	77.84	43.65	37.82	5.61	34.28	Peak
2	11160.000	64.94	-18.60	83.54	50.89	40.44	7.05	33.44	Peak
3	@11160.000	52.44	-11.10	63.54	38.39	40.44	7.05	33.44	Average
4	16800.000	66.65	-11.19	77.84	47.36	43.56	8.37	32.64	Peak

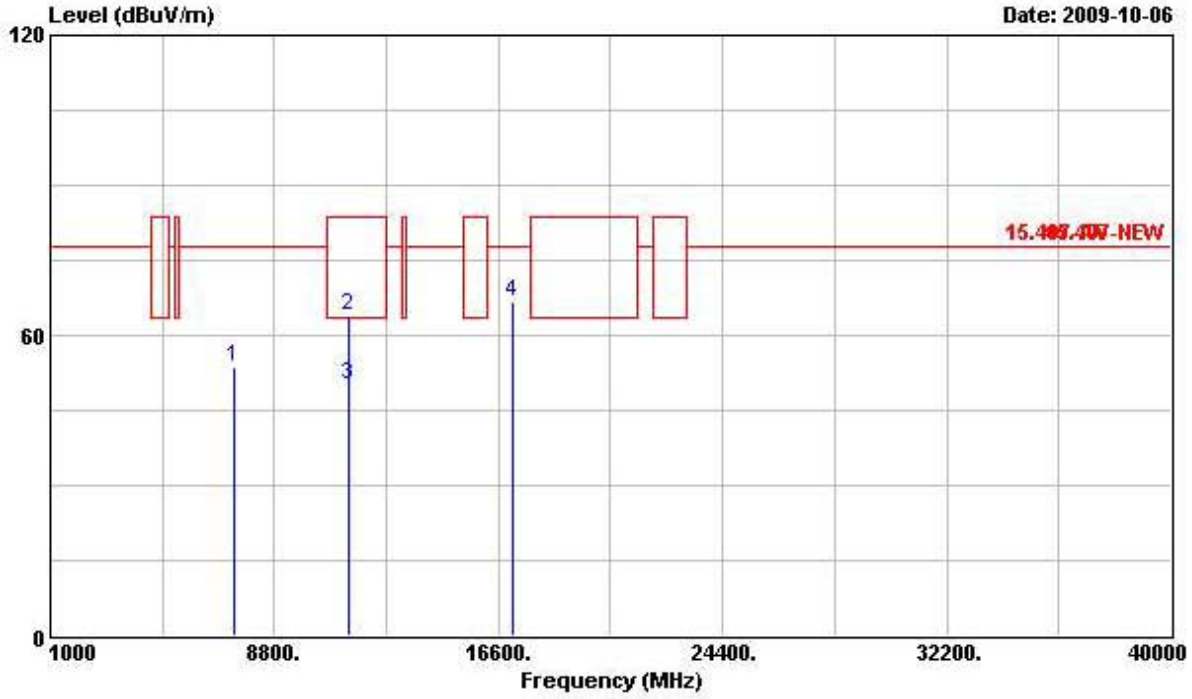
Final Test Date	Oct. 06, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n CH 140 (20MHz)

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7670.000	53.48	-24.36	77.84	44.09	38.00	5.71	34.32	Peak
2	11400.000	51.54	-12.00	63.54	37.87	40.56	6.71	33.60	Average
3	11400.000	64.55	-18.99	83.54	50.88	40.56	6.71	33.60	Peak
4	17100.000	67.48	-10.36	77.84	47.51	43.64	8.61	32.28	Peak

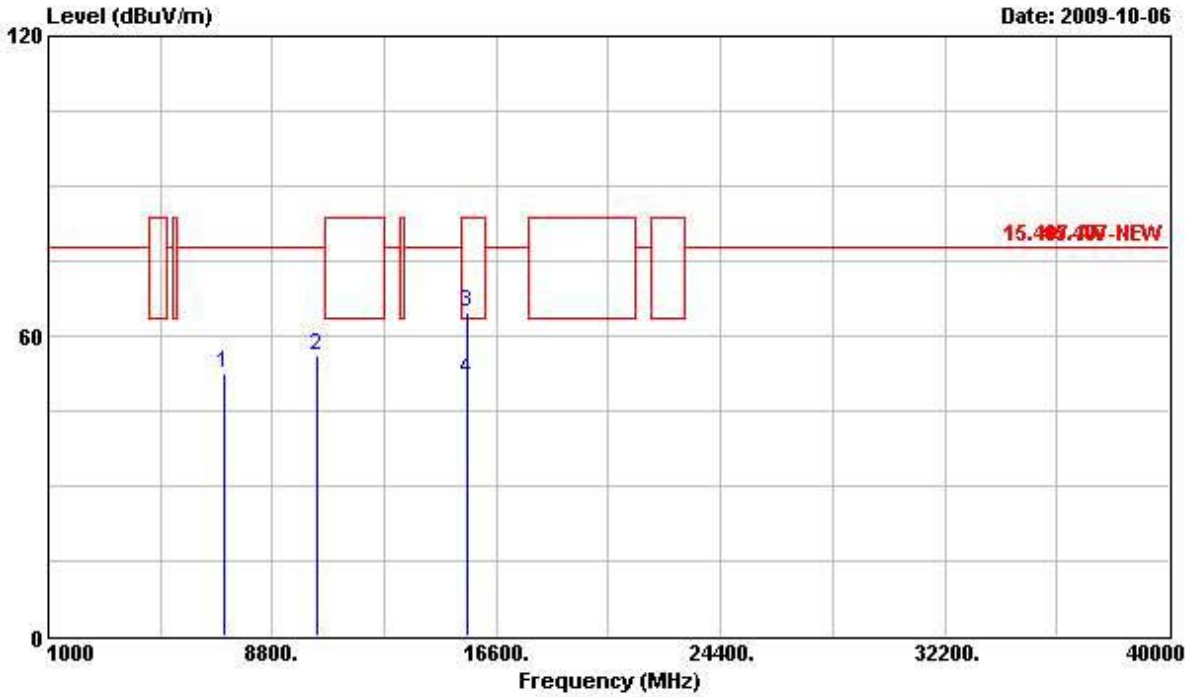
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7430.000	53.61	-24.23	77.84	44.36	37.89	5.65	34.29	Peak
2	11400.000	64.11	-19.43	83.54	50.44	40.56	6.71	33.60	Peak
3	11400.000	50.26	-13.28	63.54	36.59	40.56	6.71	33.60	Average
4	17100.000	66.83	-11.01	77.84	46.86	43.64	8.61	32.28	Peak

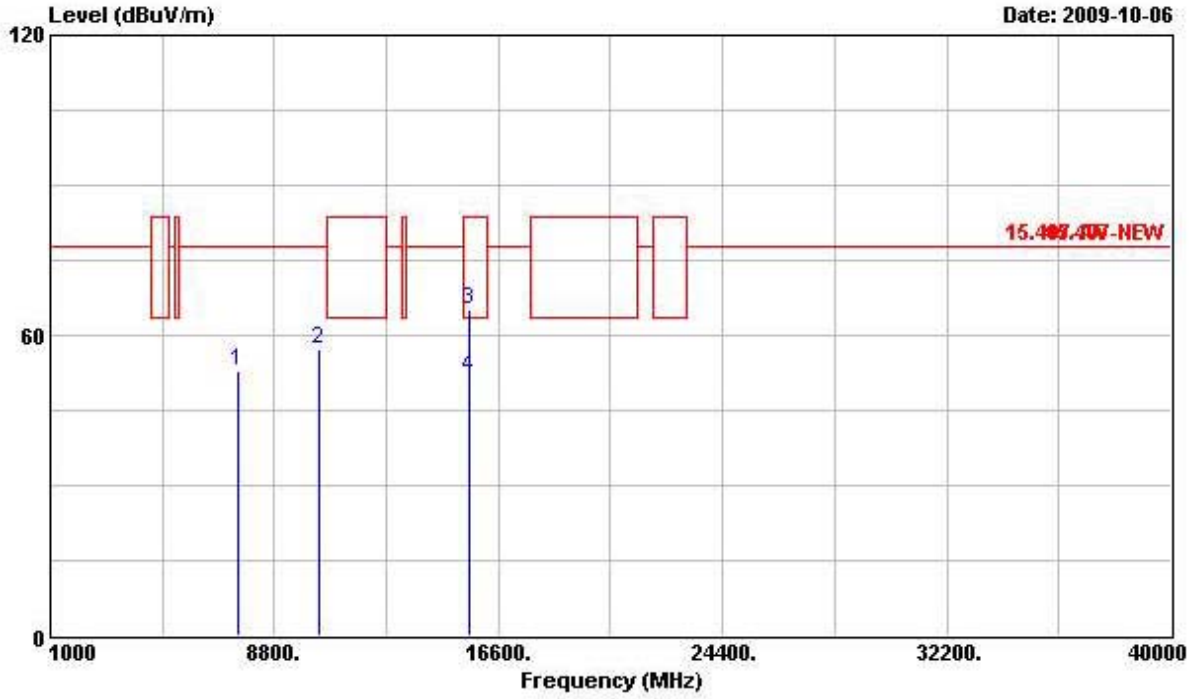
Final Test Date	Oct. 06, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n CH 38 (40MHz)

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7130.000	52.57	-25.27	77.84	43.41	37.83	5.61	34.28	Peak
2	10380.000	56.06	-21.78	77.84	43.40	40.03	6.75	34.12	Peak
3	15570.000	64.63	-18.91	83.54	46.24	42.81	8.45	32.87	Peak
4	15570.000	51.51	-12.03	63.54	33.12	42.81	8.45	32.87	Average

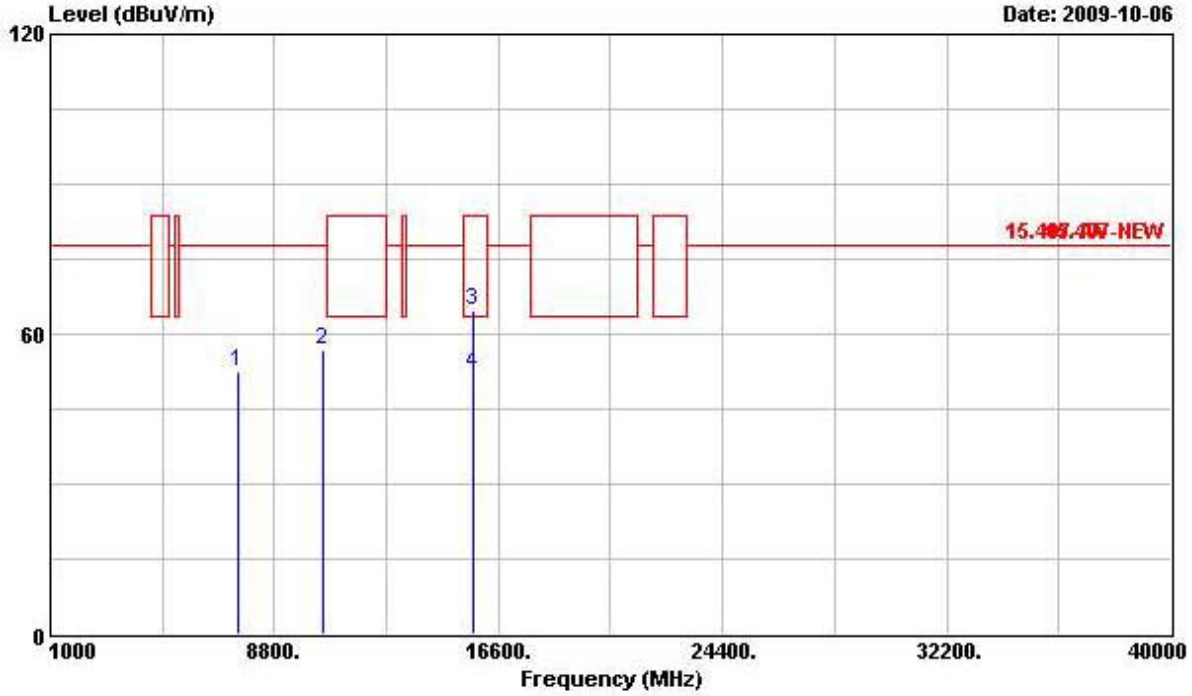
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7510.000	52.88	-24.96	77.84	43.61	37.91	5.66	34.30	Peak
2	10380.000	57.19	-20.65	77.84	44.53	40.03	6.75	34.12	Peak
3	15570.000	65.02	-18.52	83.54	46.63	42.81	8.45	32.87	Peak
4	15570.000	51.66	-11.88	63.54	33.27	42.81	8.45	32.87	Average

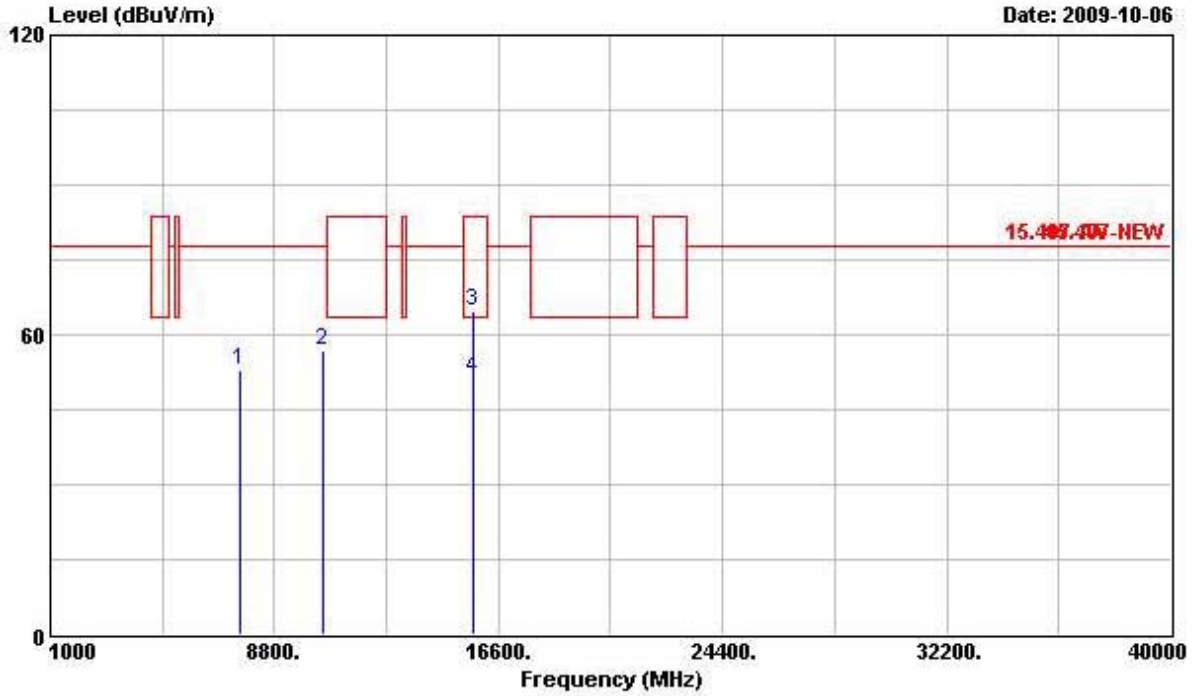
Final Test Date	Oct. 06, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n CH 46 (40MHz)

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7514.000	52.53	-25.31	77.84	43.26	37.91	5.66	34.30	Peak
2	10460.000	56.83	-21.01	77.84	43.99	40.07	6.82	34.05	Peak
3	15690.000	64.88	-18.66	83.54	46.58	42.84	8.46	33.00	Peak
4	15690.000	52.05	-11.49	63.54	33.75	42.84	8.46	33.00	Average

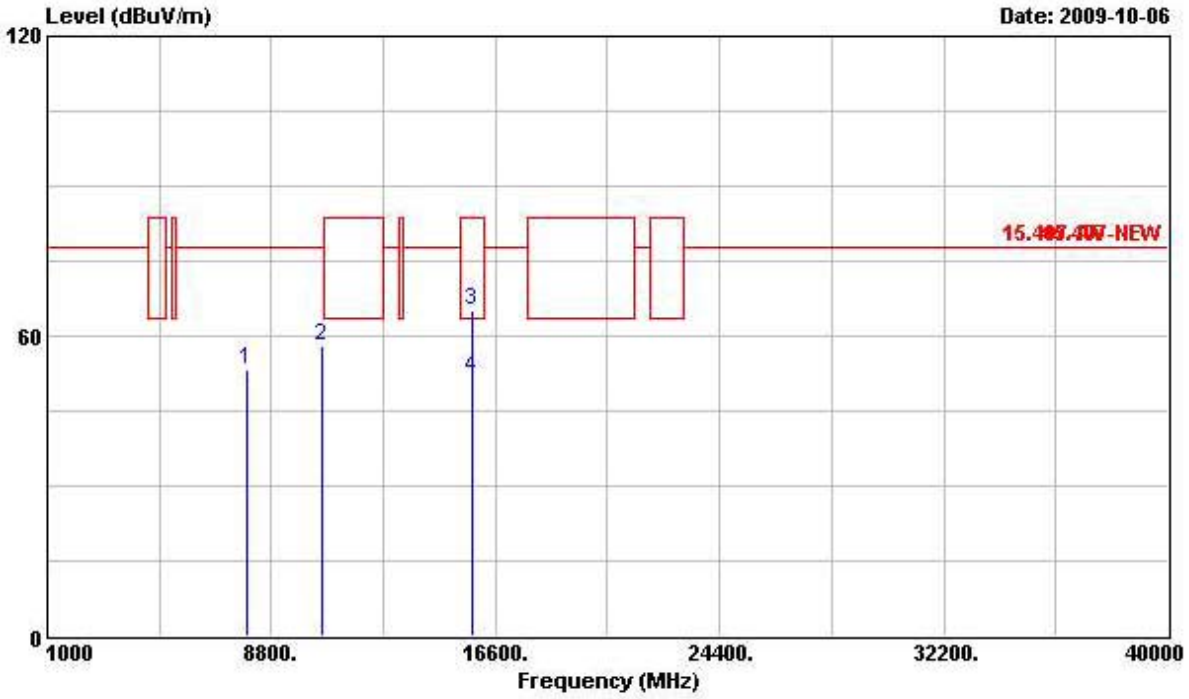
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7584.000	52.87	-24.97	77.84	43.55	37.95	5.68	34.31	Peak
2	10460.000	56.87	-20.97	77.84	44.03	40.07	6.82	34.05	Peak
3	15690.000	64.77	-18.77	83.54	46.47	42.84	8.46	33.00	Peak
4	15690.000	51.19	-12.35	63.54	32.89	42.84	8.46	33.00	Average

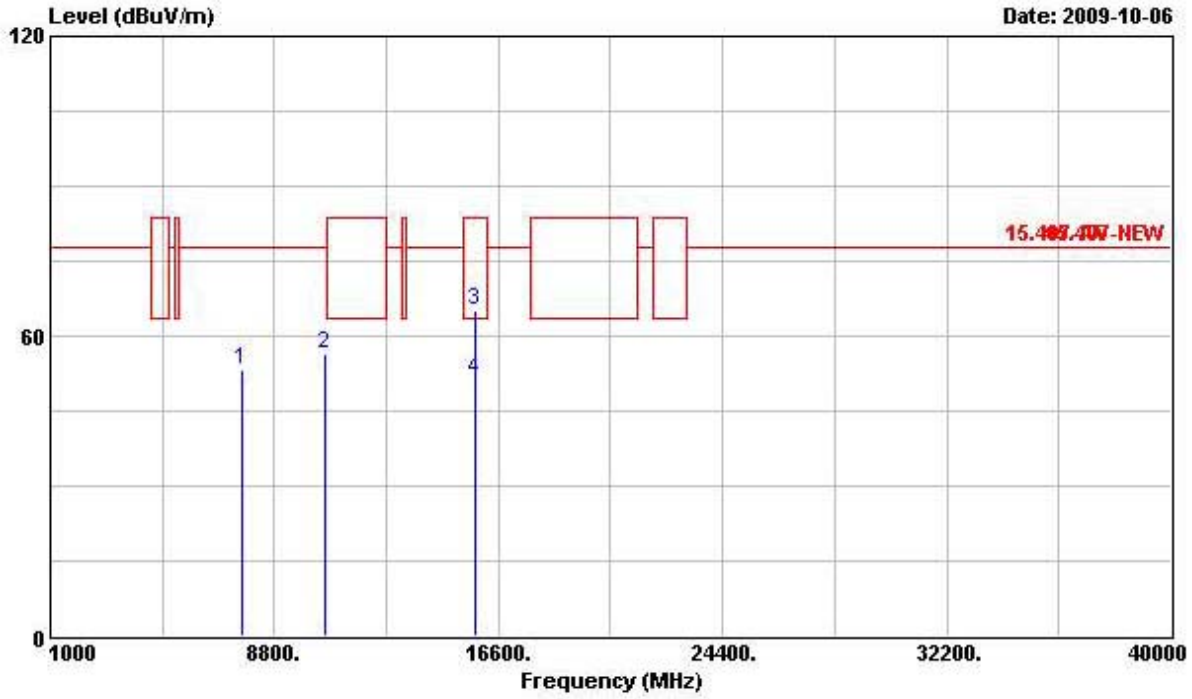
Final Test Date	Oct. 06, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n CH 54 (40MHz)

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7948.000	53.48	-24.36	77.84	43.88	38.17	5.79	34.36	Peak
2	10540.000	58.08	-19.76	77.84	45.05	40.12	6.88	33.97	Peak
3	15810.000	64.97	-18.57	83.54	46.78	42.86	8.46	33.13	Peak
4	15810.000	51.62	-11.92	63.54	33.43	42.86	8.46	33.13	Average

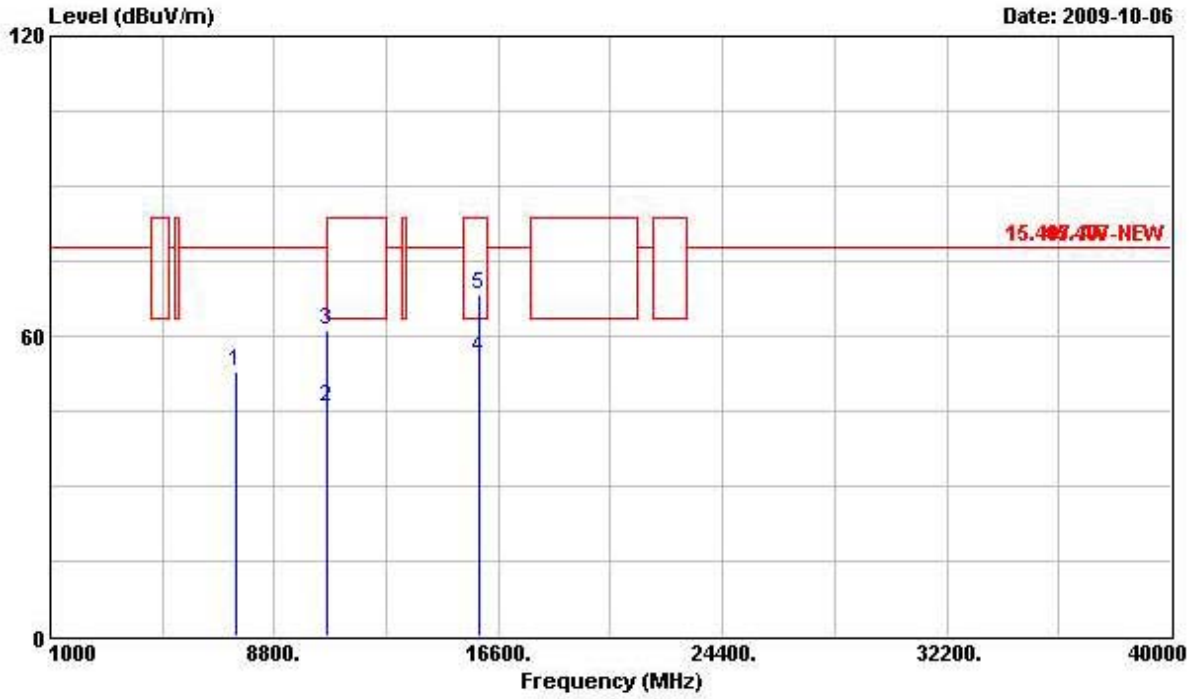
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7656.000	53.43	-24.41	77.84	44.04	38.00	5.71	34.32	Peak
2	10540.000	56.34	-21.50	77.84	43.31	40.12	6.88	33.97	Peak
3	15810.000	65.15	-18.39	83.54	46.96	42.86	8.46	33.13	Peak
4	15810.000	51.46	-12.08	63.54	33.27	42.86	8.46	33.13	Average

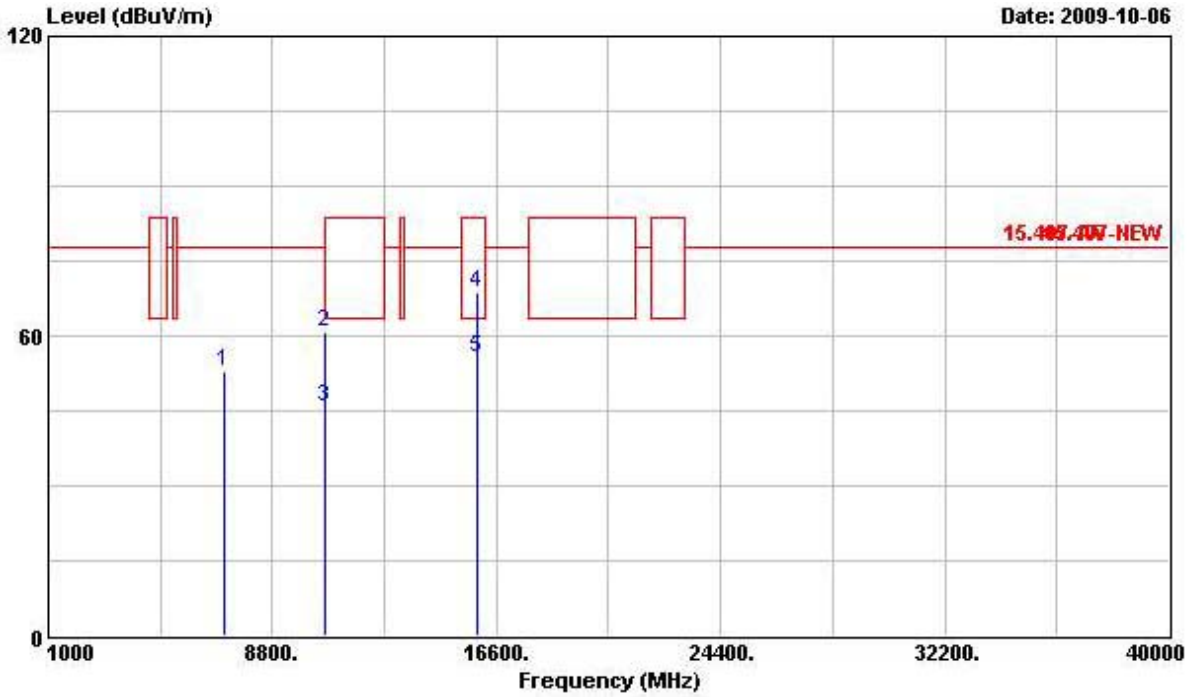
Final Test Date	Oct. 06, 2009	Test Site No.	03CH02-HY
Temperature	25.5℃	Humidity	52%
Test Engineer	Kobe	Configuration	802.11n CH 62 (40MHz)

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7478.000	52.74	-25.10	77.84	43.47	37.90	5.66	34.29	Peak
2	10620.000	45.89	-17.65	63.54	32.66	40.17	6.93	33.87	Average
3	10620.000	61.17	-22.37	83.54	47.94	40.17	6.93	33.87	Peak
4	15930.000	55.64	-7.90	63.54	37.52	42.89	8.47	33.24	Average
5	15930.000	68.35	-15.19	83.54	50.23	42.89	8.47	33.24	Peak

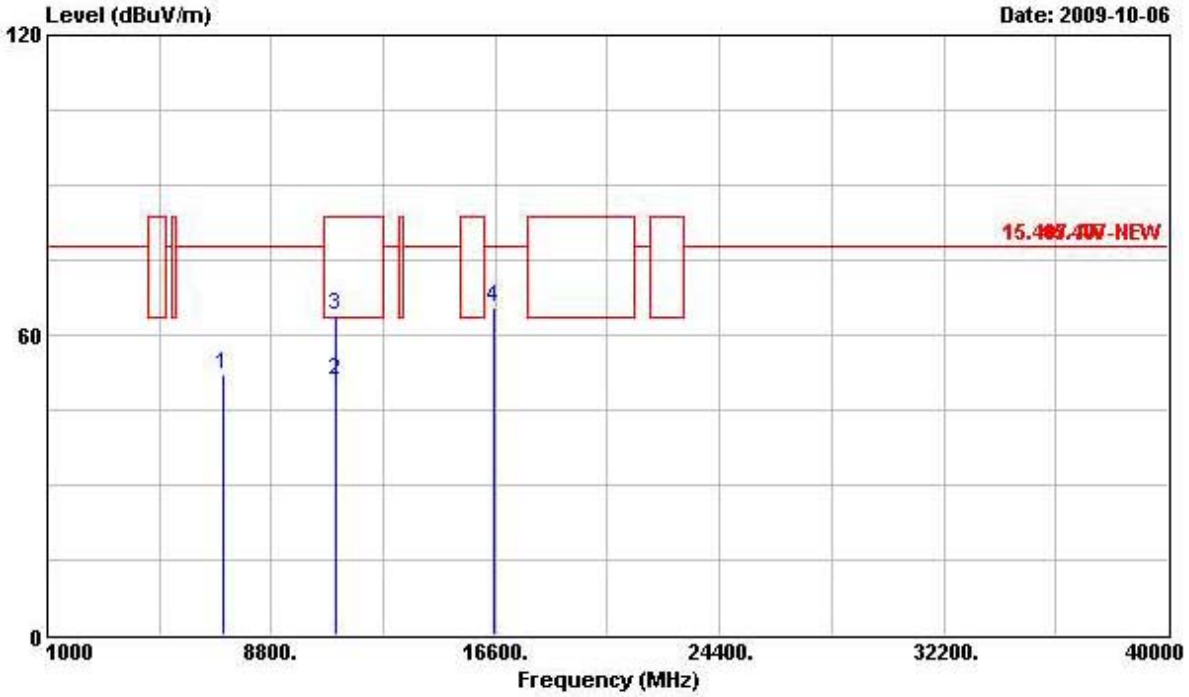
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7112.000	53.00	-24.84	77.84	43.85	37.82	5.61	34.28	Peak
2	10620.000	60.78	-22.76	83.54	47.55	40.17	6.93	33.87	Peak
3	10620.000	45.98	-17.56	63.54	32.75	40.17	6.93	33.87	Average
4	15930.000	68.59	-14.95	83.54	50.47	42.89	8.47	33.24	Peak
5	15930.000	55.68	-7.86	63.54	37.56	42.89	8.47	33.24	Average

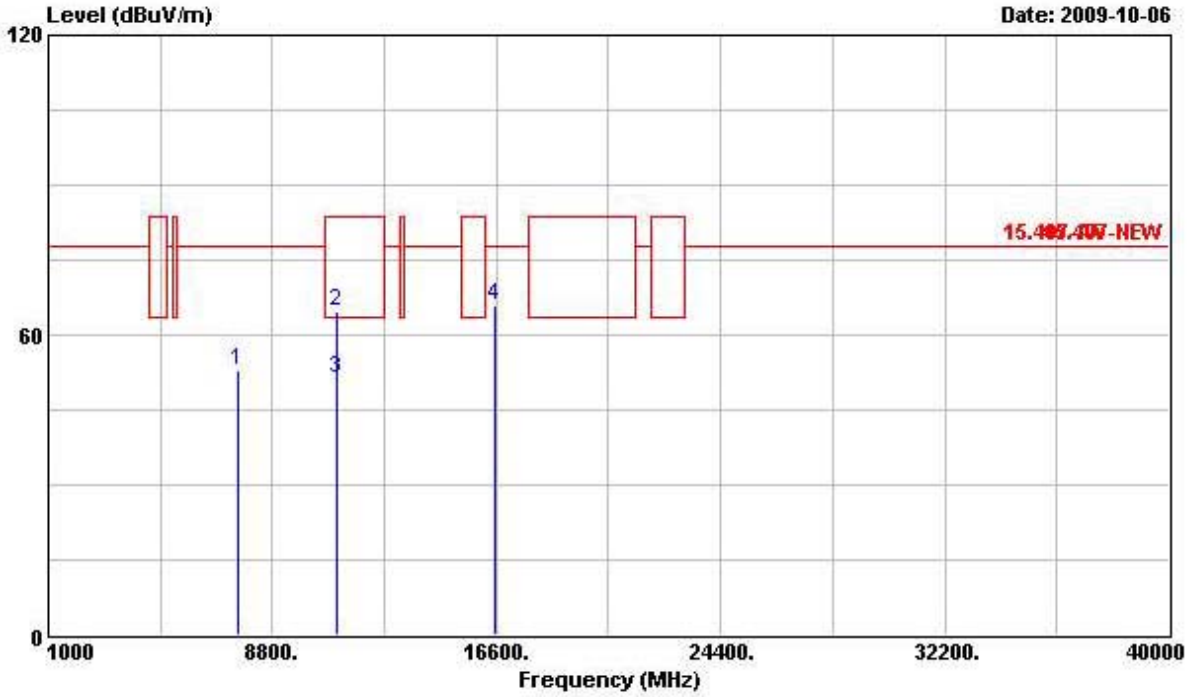
Final Test Date	Oct. 06, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n CH 102 (40MHz)

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7156.000	52.25	-25.59	77.84	43.08	37.83	5.62	34.28	Peak
2	11020.000	50.85	-12.69	63.54	36.71	40.41	7.13	33.40	Average
3	11020.000	63.77	-19.77	83.54	49.63	40.41	7.13	33.40	Peak
4	16530.000	65.37	-12.47	77.84	46.35	43.51	8.27	32.76	Peak

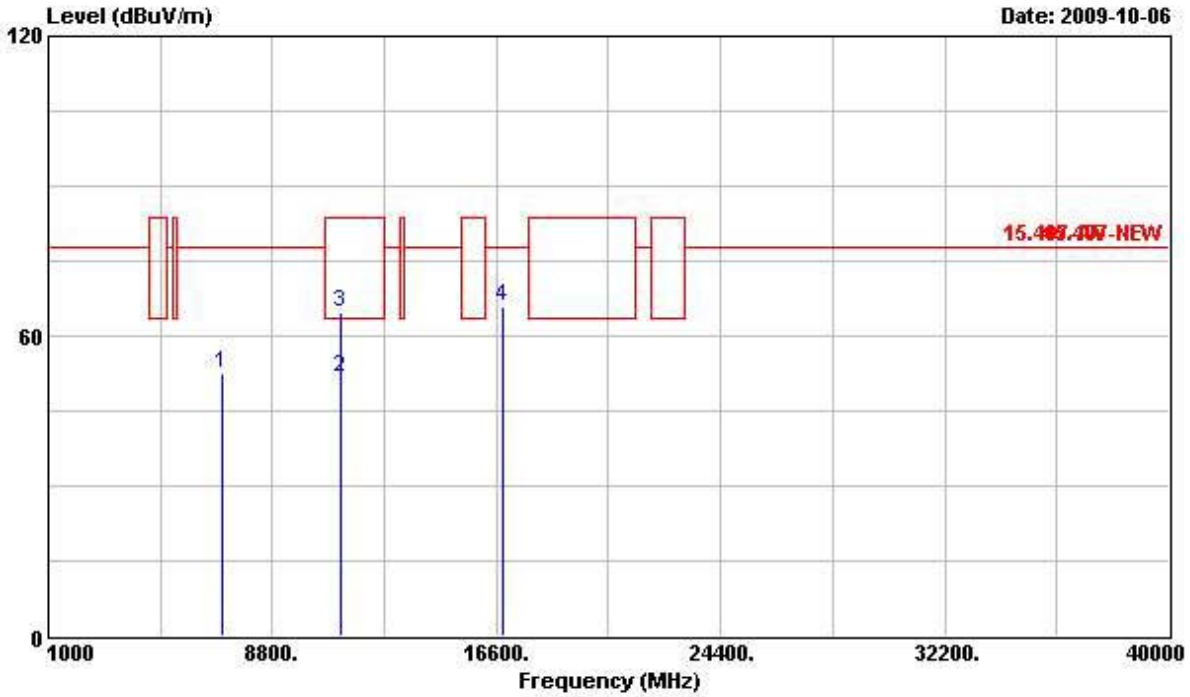
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7620.000	53.04	-24.80	77.84	43.69	37.97	5.69	34.31	Peak
2	11020.000	64.75	-18.79	83.54	50.61	40.41	7.13	33.40	Peak
3	11020.000	51.38	-12.16	63.54	37.24	40.41	7.13	33.40	Average
4	16530.000	66.10	-11.74	77.84	47.08	43.51	8.27	32.76	Peak

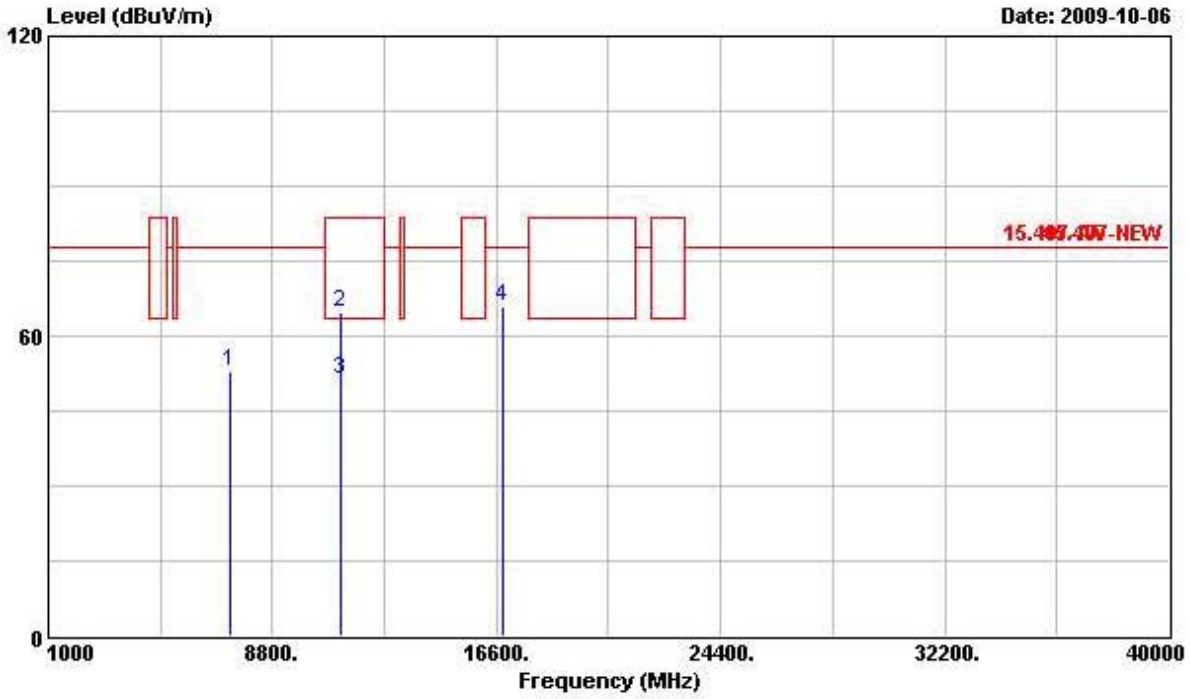
Final Test Date	Oct. 06, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n CH 110 (40MHz)

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7074.000	52.49	-25.35	77.84	43.35	37.81	5.61	34.28	Peak
2	@11200.000	51.79	-11.75	63.54	37.84	40.47	6.96	33.48	Average
3	11200.000	64.63	-18.91	83.54	50.68	40.47	6.96	33.48	Peak
4	16800.000	65.78	-12.06	77.84	46.24	43.61	8.47	32.54	Peak

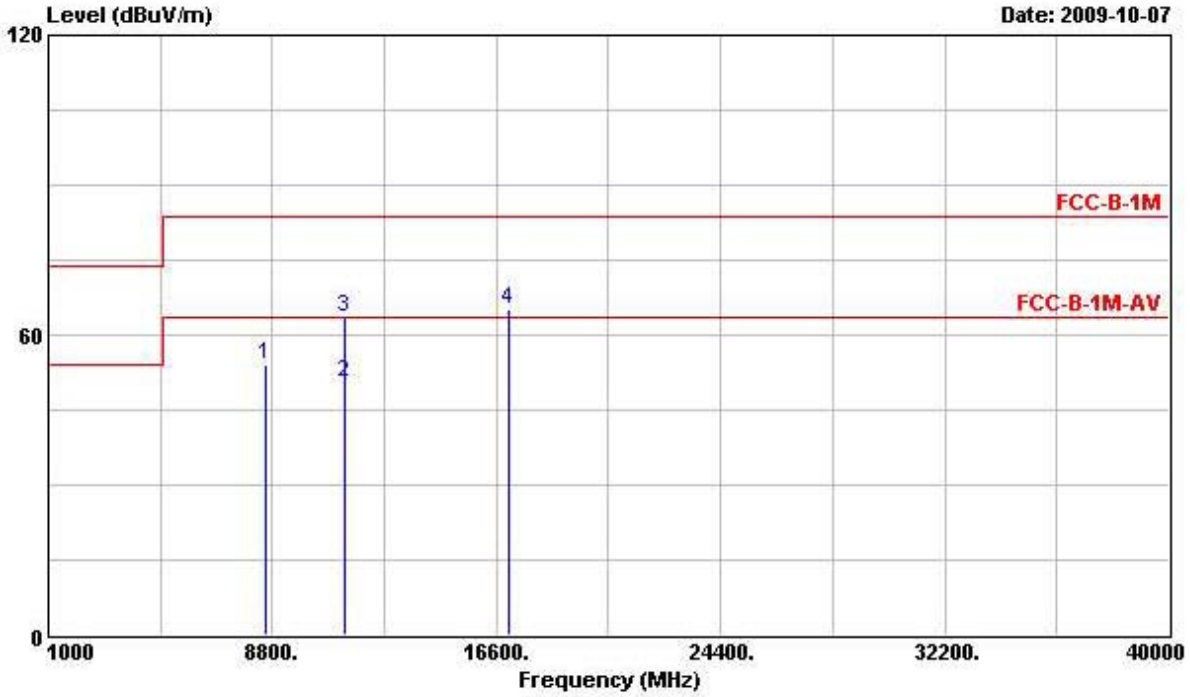
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7310.000	53.06	-24.78	77.84	43.85	37.86	5.64	34.29	Peak
2	11200.000	64.70	-18.84	83.54	50.75	40.47	6.96	33.48	Peak
3	11200.000	51.47	-12.07	63.54	37.52	40.47	6.96	33.48	Average
4	16800.000	65.87	-11.97	77.84	46.33	43.61	8.47	32.54	Peak

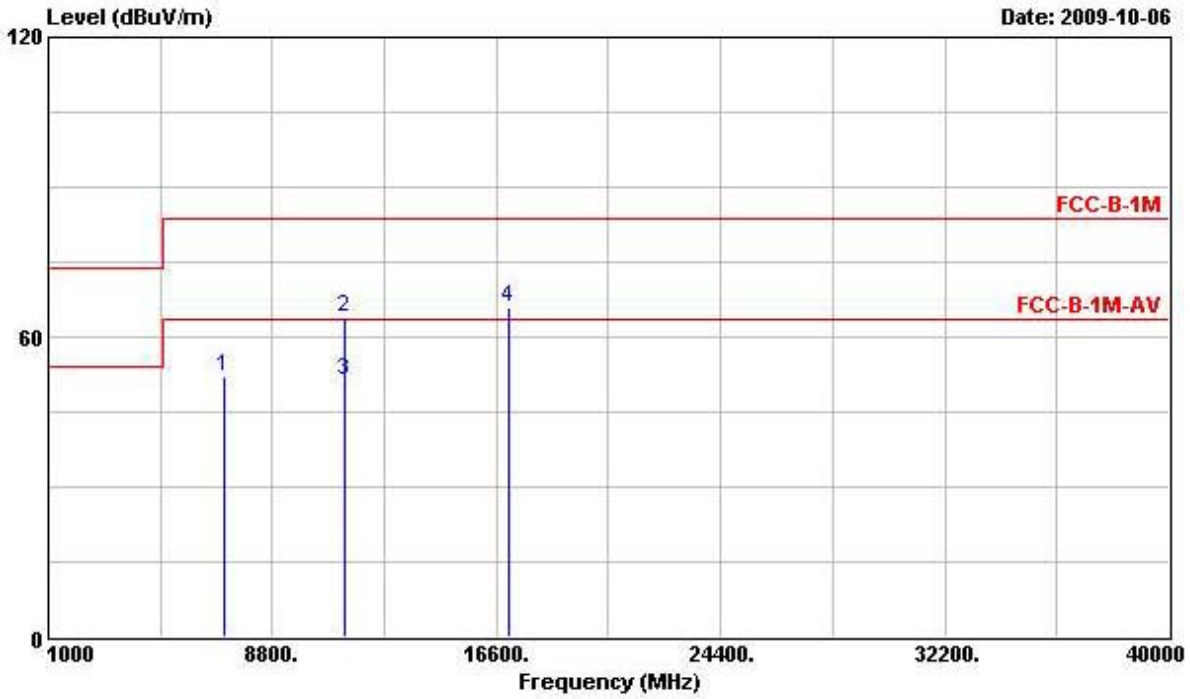
Final Test Date	Oct. 06, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n CH 134 (40MHz)

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8540.000	54.01	-29.53	83.54	43.85	38.46	5.96	34.26	Peak
2	11340.000	50.62	-12.92	63.54	36.85	40.53	6.80	33.56	Average
3	11340.000	63.53	-20.01	83.54	49.76	40.53	6.80	33.56	Peak
4	17010.000	65.12	-18.42	83.54	45.09	43.69	8.65	32.31	Peak

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7130.000	52.29	-31.25	83.54	43.13	37.83	5.61	34.28	Peak
2	11340.000	63.89	-19.65	83.54	50.12	40.53	6.80	33.56	Peak
3	11340.000	51.45	-12.09	63.54	37.68	40.53	6.80	33.56	Average
4	17010.000	65.88	-17.66	83.54	45.85	43.69	8.65	32.31	Peak

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.

The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade form 3m to 1m.

Distance extrapolation factor = 20 log (specific distance [3m] / test distance [1m]) (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor [9.54 dB].

3.7 Band Edge and Fundamental Emissions Measurement

3.7.1 Limit

For transmitters operating in the 5.15-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz (68.3dBuV/m at 3m). For transmitters operating in the 5.47-5.725 GHz band: all emissions outside of the 5.47-5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz (68.3dBuV/m at 3m). For transmitters operating in the 5.725-5.825 GHz band: all emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an EIRP of -17 dBm/MHz (78.3dBuV/m at 3m); for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an EIRP of -27 dBm/MHz (68.3dBuV/m at 3m). In addition, In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

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

3.7.2 Measuring Instruments and Setting

Please refer to section 4 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 / 1MHz for Peak, 1 MHz / 10Hz for Average
RB / VB (Emission in non-restricted band)	1 MHz /1 MHz for Peak

3.7.3 Test Procedures

1. The test procedure is the same as section 3.6.3, only the frequency range investigated is limited to 100MHz around band edges.
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.

3.7.4 Test Setup Layout

This test setup layout is the same as that shown in section 3.6.4.

3.7.5 Test Deviation

There is no deviation with the original standard.

3.7.6 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

3.7.7 Test Result of Band Edge and Fundamental Emissions

For Single Chain:

Final Test Date	Oct. 08, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11a CH 36, 40, 48

Channel 36

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5145.240	71.91	-11.63	83.54	30.92	36.21	4.78	0.00	Peak
2 @	5177.220	113.12			72.06	36.26	4.80	0.00	Peak
1 @	5149.860	58.71	-4.83	63.54	17.72	36.21	4.78	0.00	Average
2 @	5176.500	102.36			61.30	36.26	4.80	0.00	Average

An item 2 is Fundamental Emissions.

Channel 40

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5126.520	70.52	-13.02	83.54	29.55	36.19	4.78	0.00	Peak
2 @	5196.800	105.60			64.51	36.28	4.81	0.00	Peak
3	5368.160	71.34	-12.20	83.54	29.96	36.51	4.87	0.00	Peak
1	5147.520	57.10	-6.44	63.54	16.11	36.21	4.78	0.00	Average
2 @	5198.200	95.16			54.07	36.28	4.81	0.00	Average
3 @	5388.320	57.38	-6.16	63.54	15.96	36.54	4.88	0.00	Average

An item 2 is Fundamental Emissions.

Channel 48

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5146.960	69.70	-13.84	83.54	28.71	36.21	4.78	0.00	Peak
2 @	5238.160	107.17			66.02	36.33	4.82	0.00	Peak
3	5365.840	69.98	-13.56	83.54	28.60	36.51	4.87	0.00	Peak
1	5139.600	57.04	-6.50	63.54	16.05	36.21	4.78	0.00	Average
2 @	5238.160	96.89			55.74	36.33	4.82	0.00	Average
3 @	5407.120	57.45	-6.09	63.54	16.01	36.56	4.88	0.00	Average

An item 2 is Fundamental Emissions.

Final Test Date	Oct. 08, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11a CH 52, 56, 64

Channel 52

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5137.040	69.75	-13.79	83.54	28.78	36.19	4.78	0.00	Peak
2 @	5261.200	108.28			67.09	36.37	4.82	0.00	Peak
3	5400.720	70.04	-13.50	83.54	28.60	36.56	4.88	0.00	Peak
1	5124.240	57.07	-6.47	63.54	16.10	36.19	4.78	0.00	Average
2 @	5260.880	97.64			56.45	36.37	4.82	0.00	Average
3 @	5399.120	57.46	-6.08	63.54	16.02	36.56	4.88	0.00	Average

An item 2 is Fundamental Emissions.

Channel 56

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5133.200	69.39	-14.15	83.54	28.42	36.19	4.78	0.00	Peak
2 @	5281.360	110.77			69.53	36.40	4.84	0.00	Peak
3	5389.200	69.73	-13.81	83.54	28.31	36.54	4.88	0.00	Peak
1	5122.640	57.16	-6.38	63.54	16.19	36.19	4.78	0.00	Average
2 @	5278.800	100.27			59.03	36.40	4.84	0.00	Average
3 @	5402.960	57.52	-6.02	63.54	16.08	36.56	4.88	0.00	Average

An item 2 is Fundamental Emissions.

Channel 64

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @	5317.080	115.14			73.85	36.44	4.85	0.00	Peak
2	5350.740	73.68	-9.86	83.54	32.32	36.49	4.87	0.00	Peak
1 @	5318.280	104.25			62.96	36.44	4.85	0.00	Average
2 @	5350.200	59.49	-4.05	63.54	18.13	36.49	4.87	0.00	Average

An item 1 is Fundamental Emissions.

Final Test Date	Oct. 08, 2009	Test Site No.	03CH02-HY
Temperature	25.5℃	Humidity	52%
Test Engineer	Kobe	Configuration	802.11a CH 100, 116, 140

Channel 100

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5412.200	70.95	-12.59	83.54	29.49	36.58	4.88	0.00	Peak
2 @	5501.500	110.70			69.09	36.70	4.91	0.00	Peak
1 @	5447.500	57.66	-5.88	63.54	16.13	36.63	4.90	0.00	Average
2 @	5498.300	100.16			58.55	36.70	4.91	0.00	Average

An item 2 is Fundamental Emissions.

Channel 116

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5433.560	72.91	-10.63	83.54	31.40	36.61	4.90	0.00	Peak
2 @	5581.380	115.16			73.43	36.78	4.95	0.00	Peak
3 @	5725.000	72.05	-5.79	77.84	30.04	36.97	5.04	0.00	Peak
1 @	5458.260	59.71	-3.83	63.54	18.18	36.63	4.90	0.00	Average
2 @	5578.340	104.89			63.16	36.78	4.95	0.00	Average
3	5725.000	60.01	-17.83	77.84	18.00	36.97	5.04	0.00	Average

An item 2 is Fundamental Emissions.

Channel 140

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @	5701.400	109.39			67.40	36.95	5.04	0.00	Peak
2	5725.000	69.97	-7.87	77.84	27.96	36.97	5.04	0.00	Peak
1 @	5703.000	98.89			56.90	36.95	5.04	0.00	Average
2	5725.000	58.22	-19.62	77.84	16.21	36.97	5.04	0.00	Average

An item 1 is Fundamental Emissions.

Final Test Date	Oct. 08, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n CH 36, 40, 48 (20MHz)

Channel 36

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5139.960	70.35	-13.19	83.54	31.22	34.35	4.78	0.00	Peak
2 @	5177.880	116.78			77.60	34.38	4.80	0.00	Peak
1	5139.240	57.15	-6.39	63.54	18.04	34.33	4.78	0.00	Average
2 @	5178.600	106.18			67.00	34.38	4.80	0.00	Average

An item 2 is Fundamental Emissions.

Channel 40

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5143.440	70.08	-13.46	83.54	30.95	34.35	4.78	0.00	Peak
2 @	5197.200	116.73			77.52	34.40	4.81	0.00	Peak
3	5367.120	71.30	-12.24	83.54	31.86	34.57	4.87	0.00	Peak
1 @	5146.000	57.72	-5.82	63.54	18.59	34.35	4.78	0.00	Average
2 @	5198.160	105.39			66.18	34.40	4.81	0.00	Average
3 @	5401.680	57.33	-6.21	63.54	17.85	34.60	4.88	0.00	Average

An item 2 is Fundamental Emissions.

Channel 48

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5097.360	70.14	-13.40	83.54	31.07	34.30	4.77	0.00	Peak
2 @	5237.840	117.67			78.42	34.43	4.82	0.00	Peak
3	5367.440	70.68	-12.86	83.54	31.24	34.57	4.87	0.00	Peak
1 @	5114.000	57.39	-6.15	63.54	18.30	34.32	4.77	0.00	Average
2 @	5236.560	106.80			67.55	34.43	4.82	0.00	Average
3 @	5376.400	57.41	-6.13	63.54	17.97	34.57	4.87	0.00	Average

An item 2 is Fundamental Emissions.

Final Test Date	Oct. 08, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n CH 52, 56, 64 (20MHz)

Channel 52

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5143.440	70.80	-12.74	83.54	31.67	34.35	4.78	0.00	Peak
2 @	5265.040	115.67			76.38	34.47	4.82	0.00	Peak
3	5354.640	70.68	-12.86	83.54	31.26	34.55	4.87	0.00	Peak
1 @	5132.880	57.51	-6.03	63.54	18.40	34.33	4.78	0.00	Average
2 @	5266.320	105.15			65.86	34.47	4.82	0.00	Average
3 @	5372.560	57.38	-6.16	63.54	17.94	34.57	4.87	0.00	Average

An item 2 is Fundamental Emissions.

Channel 56

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5122.960	70.06	-13.48	83.54	30.95	34.33	4.78	0.00	Peak
2 @	5276.560	117.48			78.16	34.48	4.84	0.00	Peak
3	5368.400	70.43	-13.11	83.54	30.99	34.57	4.87	0.00	Peak
1 @	5104.720	57.81	-5.73	63.54	18.74	34.30	4.77	0.00	Average
2 @	5276.560	107.05			67.73	34.48	4.84	0.00	Average
3 @	5366.160	57.74	-5.80	63.54	18.30	34.57	4.87	0.00	Average

An item 2 is Fundamental Emissions.

Channel 64

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @	5323.300	117.60			78.23	34.52	4.85	0.00	Peak
2	5371.810	71.54	-12.00	83.54	32.10	34.57	4.87	0.00	Peak
1 @	5325.260	107.04			67.67	34.52	4.85	0.00	Average
2 @	5372.020	59.10	-4.44	63.54	19.66	34.57	4.87	0.00	Average

An item 1 is Fundamental Emissions.

Final Test Date	Oct. 08, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n CH 100, 116, 140 (20MHz)

Channel 100

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5447.900	72.19	-11.35	83.54	32.64	34.65	4.90	0.00	Peak
2 @	5497.000	118.53			78.92	34.70	4.91	0.00	Peak
1 @	5448.600	59.16	-4.38	63.54	19.61	34.65	4.90	0.00	Average
2 @	5494.600	107.78			68.19	34.68	4.91	0.00	Average

An item 2 is Fundamental Emissions.

Channel 116

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5451.800	70.58	-12.96	83.54	31.03	34.65	4.90	0.00	Peak
2 @	5576.440	112.81			73.15	34.71	4.95	0.00	Peak
3	5725.000	69.75	-8.09	77.84	29.97	34.74	5.04	0.00	Peak
1 @	5415.320	57.74	-5.80	63.54	18.24	34.62	4.88	0.00	Average
2 @	5581.000	102.12			62.46	34.71	4.95	0.00	Average
3	5725.000	57.83	-20.01	77.84	18.05	34.74	5.04	0.00	Average

An item 2 is Fundamental Emissions.

Channel 140

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @	5701.200	115.93			76.15	34.74	5.04	0.00	Peak
2	5725.000	70.01	-7.83	77.84	30.23	34.74	5.04	0.00	Peak
1 @	5701.680	105.39			65.61	34.74	5.04	0.00	Average
2	5725.000	58.23	-19.61	77.84	18.45	34.74	5.04	0.00	Average

An item 1 is Fundamental Emissions.

Final Test Date	Oct. 08, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n CH 38, 46, 54 (40MHz)

Channel 38

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5148.890	71.23	-12.31	83.54	32.10	34.35	4.78	0.00	Peak
2 @	5186.130	115.42			76.24	34.38	4.80	0.00	Peak
1 @	5149.940	58.38	-5.16	63.54	19.25	34.35	4.78	0.00	Average
2 @	5185.570	103.37			64.19	34.38	4.80	0.00	Average

An item 2 is Fundamental Emissions.

Channel 46

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5128.080	72.99	-10.55	83.54	33.88	34.33	4.78	0.00	Peak
2 @	5243.280	116.56			77.29	34.45	4.82	0.00	Peak
3	5381.200	72.20	-11.34	83.54	32.75	34.58	4.87	0.00	Peak
1 @	5126.480	58.79	-4.75	63.54	19.68	34.33	4.78	0.00	Average
2 @	5244.560	102.09			62.82	34.45	4.82	0.00	Average
3 @	5367.440	57.46	-6.08	63.54	18.02	34.57	4.87	0.00	Average

An item 2 is Fundamental Emissions.

Channel 54

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5118.600	70.15	-13.39	83.54	31.05	34.32	4.78	0.00	Peak
2 @	5274.600	113.19			73.88	34.47	4.84	0.00	Peak
3	5371.800	70.68	-12.86	83.54	31.24	34.57	4.87	0.00	Peak
1 @	5136.600	57.56	-5.98	63.54	18.45	34.33	4.78	0.00	Average
2 @	5260.200	102.88			63.59	34.47	4.82	0.00	Average
3 @	5373.300	58.20	-5.34	63.54	18.76	34.57	4.87	0.00	Average

An item 2 is Fundamental Emissions.

Final Test Date	Oct. 08, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n CH 62, 102, 110 (40MHz)

Channel 62

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @	5300.340	115.00			75.66	34.50	4.84	0.00	Peak
2	5351.380	72.91	-10.63	83.54	33.49	34.55	4.87	0.00	Peak
1 @	5300.010	106.52			65.26	36.42	4.84	0.00	Average
2 @	5353.580	60.38	-3.16	63.54	19.02	36.49	4.87	0.00	Average

An item 1 is Fundamental Emissions.

Channel 102

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5406.520	72.01	-11.53	83.54	32.53	34.60	4.88	0.00	Peak
2 @	5522.440	115.50			75.87	34.70	4.93	0.00	Peak
1 @	5406.700	60.11	-3.43	63.54	20.63	34.60	4.88	0.00	Average
2 @	5521.720	103.74			64.11	34.70	4.93	0.00	Average

An item 2 is Fundamental Emissions.

Channel 110

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @	5537.900	111.97			72.33	34.71	4.93	0.00	Peak
1 X	5556.300	99.85			60.19	34.71	4.95	0.00	Average

An item 1 is Fundamental Emissions.

Final Test Date	Oct. 08, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n CH 134 (40MHz)

Channel 134

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @	5660.280	112.89			73.16	34.73	5.00	0.00	Peak
1 @	5661.600	102.53			62.78	34.73	5.02	0.00	Average

An item 1 is Fundamental Emissions.

For Two Chain:

Final Test Date	Oct. 08, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n Ant. 1 + Ant. 2 CH 36, 40, 48 (20MHz)

Channel 36

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5147.400	72.65	-10.89	83.54	31.66	36.21	4.78	0.00	Peak
2 @	5176.740	114.63			73.57	36.26	4.80	0.00	Peak
1 @	5149.980	58.73	-4.81	63.54	17.74	36.21	4.78	0.00	Average
2 @	5176.920	102.88			61.82	36.26	4.80	0.00	Average

An item 2 is Fundamental Emissions.

Channel 40

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5149.520	70.21	-13.33	83.54	29.22	36.21	4.78	0.00	Peak
2 @	5196.880	108.93			67.84	36.28	4.81	0.00	Peak
3	5402.000	70.27	-13.27	83.54	28.83	36.56	4.88	0.00	Peak
1	5148.240	57.26	-6.28	63.54	16.27	36.21	4.78	0.00	Average
2 @	5196.880	97.25			56.16	36.28	4.81	0.00	Average
3 @	5399.440	57.46	-6.08	63.54	16.02	36.56	4.88	0.00	Average

An item 2 is Fundamental Emissions.

Channel 48

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5144.400	71.19	-12.35	83.54	30.20	36.21	4.78	0.00	Peak
2 @	5242.000	111.48			70.31	36.35	4.82	0.00	Peak
3	5364.560	71.58	-11.96	83.54	30.20	36.51	4.87	0.00	Peak
1	5146.000	57.20	-6.34	63.54	16.21	36.21	4.78	0.00	Average
2 @	5244.240	99.66			58.49	36.35	4.82	0.00	Average
3 @	5397.840	57.53	-6.01	63.54	16.09	36.56	4.88	0.00	Average

An item 2 is Fundamental Emissions.

Final Test Date	Oct. 08, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n Ant. 1 + Ant. 2 CH 52, 56, 64 (20MHz)

Channel 52

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5128.080	69.54	-14.00	83.54	28.57	36.19	4.78	0.00	Peak
2 @	5256.080	110.85			69.68	36.35	4.82	0.00	Peak
3	5397.840	69.81	-13.73	83.54	28.37	36.56	4.88	0.00	Peak
1	5143.120	57.15	-6.39	63.54	16.16	36.21	4.78	0.00	Average
2 @	5262.480	99.58			58.39	36.37	4.82	0.00	Average
3 @	5390.160	57.55	-5.99	63.54	16.13	36.54	4.88	0.00	Average

An item 2 is Fundamental Emissions.

Channel 56

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5112.400	69.76	-13.78	83.54	28.83	36.16	4.77	0.00	Peak
2 @	5282.640	113.10			71.86	36.40	4.84	0.00	Peak
3	5390.160	69.83	-13.71	83.54	28.41	36.54	4.88	0.00	Peak
1	5144.400	57.22	-6.32	63.54	16.23	36.21	4.78	0.00	Average
2 @	5278.800	101.38			60.14	36.40	4.84	0.00	Average
3 @	5395.600	57.62	-5.92	63.54	16.18	36.56	4.88	0.00	Average

An item 2 is Fundamental Emissions.

Channel 64

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @	5316.930	115.89			74.60	36.44	4.85	0.00	Peak
2 @	5352.140	81.72	-1.82	83.54	40.36	36.49	4.87	0.00	Peak
1 @	5316.650	103.60			62.31	36.44	4.85	0.00	Average
2 @	5372.300	59.77	-3.77	63.54	18.39	36.51	4.87	0.00	Average

An item 1 is Fundamental Emissions.

Final Test Date	Oct. 08, 2009	Test Site No.	03CH02-HY
Temperature	25.5℃	Humidity	52%
Test Engineer	Kobe	Configuration	802.11n Ant. 1 + Ant. 2 CH 100, 116, 140 (20MHz)

Channel 100

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5419.900	71.37	-12.17	83.54	29.91	36.58	4.88	0.00	Peak
2 @	5502.600	112.29			70.68	36.70	4.91	0.00	Peak
1 @	5448.200	58.21	-5.33	63.54	16.68	36.63	4.90	0.00	Average
2 @	5501.900	100.59			58.98	36.70	4.91	0.00	Average

An item 2 is Fundamental Emissions.

Channel 116

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5432.040	72.54	-11.00	83.54	31.03	36.61	4.90	0.00	Peak
2 @	5582.520	116.33			74.55	36.80	4.98	0.00	Peak
3	5725.000	72.06	-5.78	77.84	30.05	36.97	5.04	0.00	Peak
1	5423.300	59.77	-3.77	63.54	18.31	36.58	4.88	0.00	Average
2 @	5576.820	104.34			62.61	36.78	4.95	0.00	Average
3	5725.000	59.99	-17.85	77.84	17.98	36.97	5.04	0.00	Average

An item 2 is Fundamental Emissions.

Channel 140

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @	5701.800	111.51			69.52	36.95	5.04	0.00	Peak
2	5725.000	68.92	-8.92	77.84	26.91	36.97	5.04	0.00	Peak
1 @	5702.760	99.88			57.89	36.95	5.04	0.00	Average
2	5725.000	58.23	-19.61	77.84	16.22	36.97	5.04	0.00	Average

An item 1 is Fundamental Emissions.

Final Test Date	Oct. 08, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n Ant. 1 + Ant. 2 CH 38, 46, 54 (40MHz)

Channel 38

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5144.220	71.17	-12.37	83.54	32.04	34.35	4.78	0.00	Peak
2 @	5193.500	111.50			72.29	34.40	4.81	0.00	Peak
1 @	5149.940	59.84	-3.70	63.54	20.71	34.35	4.78	0.00	Average
2 @	5196.140	102.23			63.02	34.40	4.81	0.00	Average

An item 2 is Fundamental Emissions.

Channel 46

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5139.600	72.69	-10.85	83.54	33.56	34.35	4.78	0.00	Peak
2 @	5245.840	115.57			76.30	34.45	4.82	0.00	Peak
3	5369.680	72.78	-10.76	83.54	33.34	34.57	4.87	0.00	Peak
1 @	5126.800	59.82	-3.72	63.54	20.71	34.33	4.78	0.00	Average
2 @	5236.560	103.40			64.15	34.43	4.82	0.00	Average
3 @	5367.120	59.46	-4.08	63.54	20.02	34.57	4.87	0.00	Average

An item 2 is Fundamental Emissions.

Channel 54

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5136.720	70.23	-13.31	83.54	31.12	34.33	4.78	0.00	Peak
2 @	5266.000	114.14			74.85	34.47	4.82	0.00	Peak
3	5373.520	71.15	-12.39	83.54	31.71	34.57	4.87	0.00	Peak
1 @	5133.200	57.39	-6.15	63.54	18.28	34.33	4.78	0.00	Average
2 @	5263.760	101.09			61.80	34.47	4.82	0.00	Average
3 @	5373.840	57.85	-5.69	63.54	18.41	34.57	4.87	0.00	Average

An item 2 is Fundamental Emissions.

Final Test Date	Oct. 08, 2009	Test Site No.	03CH02-HY
Temperature	25.5℃	Humidity	52%
Test Engineer	Kobe	Configuration	802.11n Ant. 1 + Ant. 2 CH 62, 102, 110 (40MHz)

Channel 62

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @	5305.200	114.98			75.64	34.50	4.84	0.00	Peak
2	5350.480	72.81	-10.73	83.54	33.39	34.55	4.87	0.00	Peak
1 @	5312.720	103.85			64.48	34.52	4.85	0.00	Average
2 @	5351.120	59.05	-4.49	63.54	19.63	34.55	4.87	0.00	Average

An item 1 is Fundamental Emissions.

Channel 102

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5407.960	71.78	-11.76	83.54	32.30	34.60	4.88	0.00	Peak
2 @	5505.340	114.49			74.86	34.70	4.93	0.00	Peak
1 @	5406.700	59.40	-4.14	63.54	19.92	34.60	4.88	0.00	Average
2 @	5507.320	103.74			64.11	34.70	4.93	0.00	Average

An item 2 is Fundamental Emissions.

Channel 110

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @	5540.600	112.23			72.59	34.71	4.93	0.00	Peak
1 X	5538.200	99.25			59.61	34.71	4.93	0.00	Average

An item 1 is Fundamental Emissions.

Final Test Date	Oct. 08, 2009	**Test Site No.**	03CH02-HY
Temperature	25.5℃	**Humidity**	52%
Test Engineer	Kobe	**Configuration**	802.11n Ant. 1 + Ant. 2 CH 134 (40MHz)

Channel 134

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @	5680.440	112.04			72.29	34.73	5.02	0.00	Peak
1 @	5665.920	101.51			61.76	34.73	5.02	0.00	Average

An item 1 is Fundamental Emissions.

Note:

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

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

The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade form 3m to 1m.

Distance extrapolation factor = 20 log (specific distance [3m] / test distance [1m]) (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor [9.54 dB].

3.8 Frequency Stability Measurement

3.8.1 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 ±20ppm (IEEE 802.11a specification).

3.8.2 Measuring Instruments and Setting

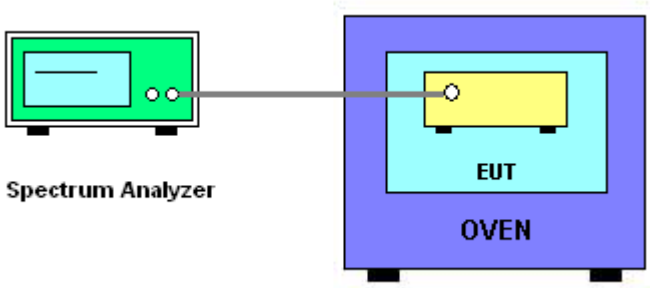
Please refer to section 4 of equipments list in this report. The following table is the setting of the spectrum analyzer.

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

3.8.3 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 × 10^6 ppm and the limit is less than ±20ppm (IEEE 802.11a 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°C~50°C.
8. When measuring maximum conducted output power within multiple antenna systems, add every result of the values by mathematic formula.

3.8.4 Test Setup Layout



3.8.5 Test Deviation

There is no deviation with the original standard.

3.8.6 EUT Operation during Test

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

3.8.7 Test Result of Frequency Stability

Voltage vs. Frequency Stability

For Single Chain

Voltage	Measurement Frequency (MHz)
(V)	IEEE 802.11a/n 5320 MHz(20MHz)
126.5	5319.993750
110	5319.996635
93.5	5319.994712
Max. Deviation (MHz)	0.006250
Max. Deviation (ppm)	1.17

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)
(℃)	IEEE 802.11a/n 5320 MHz(20MHz)
-30	5320.025962
-20	5320.031250
-10	5320.032212
0	5320.025962
10	5320.014423
20	5319.996635
30	5319.985577
40	5319.975000
50	5319.971154
Max. Deviation (MHz)	0.032212
Max. Deviation (ppm)	6.05

For Two Chain

Voltage	Measurement Frequency (MHz)
(V)	IEEE 802.11n 5510 MHz (40MHz)
126.5	5509.992308
110	5509.993269
93.5	5509.992788
Max. Deviation (MHz)	**0.007692**
Max. Deviation (ppm)	**1.40**

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)
(℃)	IEEE 802.11n 5510 (40MHz)
-30	5510.027885
-20	5510.033654
-10	5510.033654
0	5510.025481
10	5510.013942
20	5509.996635
30	5509.984135
40	5509.974038
50	5509.970673
Max. Deviation (MHz)	**0.033654**
Max. Deviation (ppm)	**6.11**

3.9 Antenna Requirements

3.9.1 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.

3.9.2 Antenna Connector Construction

Please refer to section 2.2 in this test report; antenna connector complied with the requirements.

4 LIST OF MEASURING EQUIPMENTS

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMC Receiver	R&S	ESCS 30	100174	9kHz – 2.75GHz	Apr. 15, 2009	Conduction (CO04-HY)
LISN	MessTec	NNB-2/16Z	99079	9kHz – 30MHz	Mar. 23, 2009	Conduction (CO04-HY)
LISN (Support Unit)	EMCO	3810/2NM	9703-1839	9kHz – 30MHz	Mar. 22, 2009	Conduction (CO04-HY)
RF Cable-CON	UTIFLEX	3102-26886-4	CB049	9kHz – 30MHz	Apr. 20, 2009	Conduction (CO04-HY)

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

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Spectrum Analyzer	R&S	FSU26.5	100015	20Hz ~ 26.5GHz	Oct. 01, 2009	Conducted (TH01-HY)
Power Meter	R&S	NRVS	100444	DC ~ 40GHz	Jul. 31, 2009	Conducted (TH01-HY)
Power Sensor	R&S	NRV-Z51	100666	DC ~ 30GHz	Aug. 05, 2009	Conducted (TH01-HY)
Power Sensor	R&S	NRV-Z32	100057	30MHz ~ 6GHz	Jul. 31, 2009	Conducted (TH01-HY)
DC Power Source	G.W.	GPC-6030D	C671845	DC 1V ~ 60V	Mar. 13, 2009	Conducted (TH01-HY)
Temp. and Humidity Chamber	Giant Force	GTH-225-20-S	MAB0103-001	N/A	Aug. 06, 2009	Conducted (TH01-HY)
RF CABLE-1m	Jye Bao	RG142	CB034-1m	20MHz ~ 7GHz	Dec. 01, 2008	Conducted (TH01-HY)
RF CABLE-2m	Jye Bao	RG142	CB035-2m	20MHz ~ 1GHz	Dec. 01, 2008	Conducted (TH01-HY)

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

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
AC Power Source	HPC	HPA-500W	HPA-9100024	AC 0 ~ 300V	Jul. 12, 2009*	Conducted (TH01-HY)

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

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Horn Antenna	EMCO	3115	6741	1GHz ~ 18GHz	Apr. 28, 2009	Radiation (03CH02-HY)
Bilog Antenna	SCHAFFNER	CBL61128	2723	30 MHz - 2 GHz	Nov. 30, 2008	Radiation (03CH02-HY)
RF Cable-R03m	Jye Bao	RG142	CB020	30 MHz - 1 GHz	Dec. 17, 2008	Radiation (03CH02-HY)
RF Cable-HIGH	SUHNER	SUCOFLEX106	03CH02-HY	1GHz~40GHz	Dec. 17, 2008	Radiation (03CH02-HY)
Spectrum Analyzer	R&S	FSP40	100305/040	9 kHz - 40GHz	Feb. 04, 2009	Radiation (03CH02-HY)
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30 MHz - 1 GHz 3m	May 11, 2009	Radiation (03CH02-HY)
Amplifier	Agilent	8447D	2944A11146	100 kHz – 1.3 GHz	Jul. 07, 2009	Radiation (03CH02-HY)
Amplifier	Agilent	8449B	3008A02373	1GHz – 26.5 GHz	Jul. 16, 2009	Radiation (03CH02-HY)
Turn Table	HD	DS 420	420/649/00	0 - 360 degree	N/A	Radiation (03CH02-HY)
Antenna Mast	HD	MA 240	240/559/00	1 m - 4 m	N/A	Radiation (03CH02-HY)

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

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Loop Antenna	R&S	HFH2-Z2	860004/001	9 kHz - 30 MHz	Jul 28, 2008*	Radiation (03CH02-HY)

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

5 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 2nd Rd., Taipei 114, Taiwan, R.O.C.
	TEL	:	886-2-2794-8886
	FAX	:	886-2-2794-9777
JHUBEI	ADD	:	No.8, Lane 728, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.
	TEL	:	886-3-656-9065
	FAX	:	886-3-656-9085

6 TAF CERTIFICATE OF ACCREDITATION

Certificate No. : L1190-090318

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

Certificate of Accreditation

This is to certify that

Sporton International Inc.
EMC & Wireless Communications Laboratory
No.52, Hwa Ya 1st Rd., 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, 2007 to January 09, 2010
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 Arrangment with Foreign Authorities

Jay-San Chen
President, Taiwan Accreditation Foundation
Date : March 18, 2009

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