

## APPENDIX 2: DATA OF EMI

### Radiated Emission

Test place: UL Japan, Inc. Shonan EMC Lab. No.2 Semi-Anechoic Chamber  
 Date: November 29, 2010  
 Temperature / Humidity: 23deg.C., 43%  
 Engineer: Kenichi Adachi  
 Mode: Tx, 2405 MHz  
 Worst EUT module-axis: above1GHz H: Y-axis, V: Z-axis below1GHz H: Y-axis, V: Z-axis  
 Worst EUT antenna-axis: H: X-axis, V: Y-axis

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty factor[dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori	648.001	QP	50.0	19.7	8.4	31.6	-	46.5	46.0	-	119	206	reference data (20dBc is final result)
Hori	743.999	QP	50.1	20.7	8.8	31.4	-	48.2	46.0	-	125	90	reference data (20dBc is final result)
Hori	840.003	QP	47.8	21.4	9.3	31.1	-	47.4	46.0	-	100	144	reference data (20dBc is final result)
Hori	960.003	QP	43.8	22.6	9.8	30.4	-	45.8	53.9	8.1	100	0	
Vert	648.001	QP	45.2	19.7	8.4	31.6	-	41.7	46.0	-	123	111	reference data (20dBc is final result)
Vert	743.999	QP	43.6	20.7	8.8	31.4	-	41.7	46.0	-	252	132	reference data (20dBc is final result)
Vert	840.003	QP	42.4	21.4	9.3	31.1	-	42.0	46.0	-	126	225	reference data (20dBc is final result)
Vert	960.003	QP	34.0	22.6	9.8	30.4	-	36.0	53.9	17.9	100	172	
Hori	1685.178	PK	56.7	26.0	13.0	37.7	-	58.0	73.9	15.9	117	243	
Hori	2380.410	PK	61.6	27.4	13.6	37.1	-	65.5	73.9	8.4	120	313	
Hori	2390.000	PK	58.2	27.4	13.6	37.0	-	62.2	73.9	11.7	120	313	
Hori	2400.000	PK	70.8	27.4	13.7	37.0	-	74.9	73.9	-	120	313	reference data (20dBc is final result)
Hori	4810.000	PK	58.7	30.6	5.6	35.9	-	59.0	73.9	14.9	128	226	
Hori	7215.000	PK	59.0	36.2	6.6	37.3	-	64.5	73.9	9.4	105	89	
Hori	9620.000	PK	52.4	38.4	8.2	35.6	-	63.4	73.9	10.5	103	110	
Hori	12025.000	PK	45.5	39.4	8.6	36.9	-	56.6	73.9	17.3	100	0	noise floor level
Vert	1685.178	PK	57.9	26.0	13.0	37.7	-	59.2	73.9	14.7	112	241	
Vert	2380.410	PK	56.1	27.4	13.6	37.1	-	60.0	73.9	13.9	117	75	
Vert	2390.000	PK	52.6	27.4	13.6	37.0	-	56.6	73.9	17.3	117	75	
Vert	2400.000	PK	66.3	27.4	13.7	37.0	-	70.4	73.9	-	117	75	reference data (20dBc is final result)
Vert	4810.000	PK	64.3	30.6	5.6	35.9	-	64.6	73.9	9.3	102	264	
Vert	7215.000	PK	55.3	36.2	6.6	37.3	-	60.8	73.9	13.1	103	233	
Vert	9620.000	PK	52.0	38.4	8.2	35.6	-	63.0	73.9	10.9	102	228	
Vert	12025.000	PK	45.4	39.4	8.6	36.9	-	56.5	73.9	17.4	100	0	noise floor level
Hori	1685.178	AV	56.7	26.0	13.0	37.7	30.5	27.5	53.9	26.4	117	243	
Hori	2380.410	AV	61.6	27.4	13.6	37.1	30.5	35.0	53.9	18.9	120	313	
Hori	2390.000	AV	58.2	27.4	13.6	37.0	30.5	31.7	53.9	22.2	120	313	
Hori	2400.000	AV	70.8	27.4	13.7	37.0	30.5	44.4	53.9	-	120	313	reference data (20dBc is final result)
Hori	4810.000	AV	58.7	30.6	5.6	35.9	30.5	28.5	53.9	25.4	128	226	
Hori	7215.000	AV	59.0	36.2	6.6	37.3	30.5	34.0	53.9	19.9	105	89	
Hori	9620.000	AV	52.4	38.4	8.2	35.6	30.5	32.9	53.9	21.0	103	110	
Hori	12025.000	AV	45.5	39.4	8.6	36.9	30.5	26.1	53.9	27.8	100	0	noise floor level
Vert	1685.178	AV	57.9	26.0	13.0	37.7	30.5	28.7	53.9	25.2	112	241	
Vert	2380.410	AV	56.1	27.4	13.6	37.1	30.5	29.5	53.9	24.4	117	75	
Vert	2390.000	AV	52.6	27.4	13.6	37.0	30.5	26.1	53.9	27.8	117	75	
Vert	2400.000	AV	66.3	27.4	13.7	37.0	30.5	39.9	53.9	-	117	75	reference data (20dBc is final result)
Vert	4810.000	AV	64.3	30.6	5.6	35.9	30.5	34.1	53.9	19.8	102	264	
Vert	7215.000	AV	55.3	36.2	6.6	37.3	30.5	30.3	53.9	23.6	103	233	
Vert	9620.000	AV	52.0	38.4	8.2	35.6	30.5	32.5	53.9	21.4	102	228	
Vert	12025.000	AV	45.4	39.4	8.6	36.9	30.5	26.0	53.9	27.9	100	0	noise floor level

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 13GHz)) - Duty factor(AV only) - Gain(Amplifier)

\*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

\*The 6th, 7th, 8th, 9th, 10th harmonic was not seen so the result was its base noise level.

(\*PK/AV: RBW1MHz,VBW3MHz)

\*Duty factor = 20 x log ( (worst on times = 4.096 [ms]) / (worst 1 slot times = 136.5333[ms]) )^( -1 ) = 30.46 dB

Distance factor: 13GHz-40GHz 20log(3.0m/1.0m)= 9.5dB

#### 20dBc Data Sheet (RBW 100kHz, VBW 300kHz)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	648.001	PK	51.3	19.7	8.4	31.6	47.8	93.7	45.9	
Hori	743.999	PK	51.2	20.7	8.8	31.4	49.3	93.7	44.4	
Hori	840.003	PK	48.9	21.4	9.3	31.1	48.5	93.7	45.2	
Hori	2400.000	PK	58.4	27.4	13.7	37.0	62.5	93.7	31.2	
Hori	2405.000	PK	109.6	27.4	13.7	37.0	113.7	-	-	Carrier
Vert	648.001	PK	46.4	19.7	8.4	31.6	42.9	83.6	40.7	
Vert	743.999	PK	44.7	20.7	8.8	31.4	42.8	83.6	40.8	
Vert	840.003	PK	43.5	21.4	9.3	31.1	43.1	83.6	40.5	
Vert	2400.000	PK	57.9	27.4	13.7	37.0	62.0	83.6	21.6	
Vert	2405.000	PK	99.5	27.4	13.7	37.0	103.6	-	-	Carrier

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 13GHz)) - Gain(Amplifier)

UL Japan, Inc.

Shonan EMC Lab.

1-22-3 Megumioka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

### Radiated Emission

Test place: UL Japan, Inc. Shonan EMC Lab. No.2 Semi-Anechoic Chamber  
 Date: November 29, 2010  
 Temperature / Humidity: 23deg.C., 43%  
 Engineer: Kenichi Adachi  
 Mode: Tx, 2440 MHz  
 Worst EUT module-axis: above1GHz H: Y-axis, V: Z-axis below1GHz H: Y-axis, V: Z-axis  
 Worst EUT antenna-axis: H: X-axis, V: Y-axis

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty factor[dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori	648.002	QP	50.2	19.7	8.4	31.6	-	46.7	46.0	-	122	211	reference data (20dBc is final result)
Hori	743.998	QP	49.9	20.7	8.8	31.4	-	48.0	46.0	-	127	91	reference data (20dBc is final result)
Hori	840.000	QP	47.9	21.4	9.3	31.1	-	47.5	46.0	-	100	148	reference data (20dBc is final result)
Hori	960.001	QP	43.6	22.6	9.8	30.4	-	45.6	53.9	8.3	103	0	
Vert	648.002	QP	45.4	19.7	8.4	31.6	-	41.9	46.0	-	125	99	reference data (20dBc is final result)
Vert	743.998	QP	43.7	20.7	8.8	31.4	-	41.8	46.0	-	248	134	reference data (20dBc is final result)
Vert	840.000	QP	42.6	21.4	9.3	31.1	-	42.2	46.0	-	124	230	reference data (20dBc is final result)
Vert	960.001	QP	33.8	22.6	9.8	30.4	-	35.8	53.9	18.1	100	178	
Hori	1695.720	PK	59.4	26.0	13.0	37.7	-	60.7	73.9	13.2	119	245	
Hori	2367.800	PK	56.8	27.4	13.5	37.1	-	60.6	73.9	13.3	116	309	
Hori	4880.000	PK	58.5	30.8	5.6	35.9	-	59.0	73.9	14.9	125	228	
Hori	7320.000	PK	55.8	36.4	6.6	37.3	-	61.5	73.9	12.4	107	92	
Hori	9760.000	PK	49.7	38.5	8.2	35.8	-	60.6	73.9	13.3	106	123	
Hori	12200.000	PK	45.0	39.4	8.6	36.9	-	56.1	73.9	17.8	100	0	noise floor level
Vert	1695.720	PK	56.1	26.0	13.0	37.7	-	57.4	73.9	16.5	120	225	
Vert	2367.800	PK	55.9	27.4	13.5	37.1	-	59.7	73.9	14.2	121	221	
Vert	4880.000	PK	59.9	30.8	5.6	35.9	-	60.4	73.9	13.5	119	261	
Vert	7320.000	PK	56.3	36.4	6.6	37.3	-	62.0	73.9	11.9	117	231	
Vert	9760.000	PK	50.4	38.5	8.2	35.8	-	61.3	73.9	12.6	105	225	
Vert	12200.000	PK	44.9	39.4	8.6	36.9	-	56.0	73.9	17.9	100	0	noise floor level
Hori	1695.720	AV	59.4	26.0	13.0	37.7	30.5	30.2	53.9	23.7	119	245	
Hori	2367.800	AV	56.8	27.4	13.5	37.1	30.5	30.1	53.9	23.8	116	309	
Hori	4880.000	AV	58.5	30.8	5.6	35.9	30.5	28.5	53.9	25.4	125	228	
Hori	7320.000	AV	55.8	36.4	6.6	37.3	30.5	31.0	53.9	22.9	107	92	
Hori	9760.000	AV	49.7	38.5	8.2	35.8	30.5	30.1	53.9	23.8	106	123	
Hori	12200.000	AV	45.0	39.4	8.6	36.9	30.5	25.6	53.9	28.3	100	0	noise floor level
Vert	1695.720	AV	56.1	26.0	13.0	37.7	30.5	26.9	53.9	27.0	120	225	
Vert	2367.800	AV	55.9	27.4	13.5	37.1	30.5	29.2	53.9	24.7	121	221	
Vert	4880.000	AV	59.9	30.8	5.6	35.9	30.5	29.9	53.9	24.0	119	261	
Vert	7320.000	AV	56.3	36.4	6.6	37.3	30.5	31.5	53.9	22.4	117	231	
Vert	9760.000	AV	50.4	38.5	8.2	35.8	30.5	30.8	53.9	23.1	105	225	
Vert	12200.000	AV	44.9	39.4	8.6	36.9	30.5	25.5	53.9	28.4	100	0	noise floor level

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 13GHz)) - Duty factor(AV only) - Gain(Amplifier)

\*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

\*The 6th, 7th, 8th, 9th, 10th harmonic was not seen so the result was its base noise level.

(\*PK/AV: RBW1MHz,VBW3MHz)

\*Duty factor = 20 x log ( (worst on times = 4.096 [ms]) / (worst 1 slot times = 136.5333[ms]) )^( -1 ) = 30.46 dB

Distance factor: 13GHz-40GHz 20log(3.0m/1.0m)= 9.5dB

**20dBc Data Sheet (RBW 100kHz, VBW 300kHz)**

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	648.002	PK	51.5	20.7	8.8	31.4	49.6	88.2	38.6	
Hori	743.998	PK	51.0	21.4	9.3	31.1	50.6	88.2	37.6	
Hori	840.000	PK	48.7	27.4	13.5	37.1	52.5	88.2	35.7	
Hori	2440.000	PK	104.1	27.4	13.7	37.0	108.2	-	-	Carrier
Vert	743.998	PK	46.2	20.7	8.8	31.4	44.3	84.2	39.9	
Vert	840.000	PK	44.9	21.4	9.3	31.1	44.5	84.2	39.7	
Vert	960.001	PK	43.7	27.4	13.5	37.1	47.5	84.2	36.7	
Vert	2440.000	PK	100.1	27.4	13.7	37.0	104.2	-	-	Carrier

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 13GHz)) - Gain(Amplifier)

**UL Japan, Inc.**

**Shonan EMC Lab.**

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

### Radiated Emission

Test place: UL Japan, Inc. Shonan EMC Lab. No.2 Semi-Anechoic Chamber  
 Date: November 29, 2010  
 Temperature / Humidity: 23deg.C., 43%  
 Engineer: Kenichi Adachi  
 Mode: Tx, 2475 MHz  
 Worst EUT module-axis: above1GHz H: Y-axis, V: Z-axis below1GHz H: Y-axis, V: Z-axis  
 Worst EUT antenna-axis: H: X-axis, V: Y-axis H: X-axis, V: Y-axis

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty factor[dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori	648.000	QP	48.2	19.7	8.4	31.6	-	44.7	46.0	-	124	223	reference data (20dBc is final result)
Hori	744.001	QP	50.0	20.7	8.8	31.4	-	48.1	46.0	-	121	89	reference data (20dBc is final result)
Hori	840.002	QP	48.0	21.4	9.3	31.1	-	47.6	46.0	-	100	156	reference data (20dBc is final result)
Hori	960.002	QP	44.9	22.6	9.8	30.4	-	46.9	53.9	7.0	100	353	
Vert	648.000	QP	45.5	19.7	8.4	31.6	-	42.0	46.0	-	125	99	reference data (20dBc is final result)
Vert	744.001	QP	43.4	20.7	8.8	31.4	-	41.5	46.0	-	248	134	reference data (20dBc is final result)
Vert	840.002	QP	42.2	21.4	9.3	31.1	-	41.8	46.0	-	124	230	reference data (20dBc is final result)
Vert	960.002	QP	34.2	22.6	9.8	30.4	-	36.2	53.9	17.7	100	176	
Hori	1778.500	PK	60.9	26.3	13.0	37.6	-	62.6	73.9	11.3	131	102	
Hori	2355.330	PK	56.4	27.3	13.5	37.1	-	60.1	73.9	13.8	114	311	
Hori	2483.500	PK	55.9	27.4	13.7	36.9	-	60.1	73.9	13.8	114	311	
Hori	2484.848	PK	60.8	27.4	13.7	36.9	-	65.0	73.9	8.9	114	311	
Hori	4950.000	PK	58.6	30.9	5.6	35.9	-	59.2	73.9	14.7	124	219	
Hori	7425.000	PK	53.4	36.6	6.7	37.3	-	59.4	73.9	14.5	109	95	
Hori	9900.000	PK	49.3	38.7	8.2	35.9	-	60.3	73.9	13.6	104	114	
Hori	12375.000	PK	45.5	39.4	8.7	36.8	-	56.8	73.9	17.1	100	0	noise floor level
Vert	1682.480	PK	57.6	26.0	13.0	37.7	-	58.9	73.9	15.0	115	197	
Vert	2355.330	PK	56.0	27.3	13.5	37.1	-	59.7	73.9	14.2	120	223	
Vert	2483.500	PK	52.7	27.4	13.7	36.9	-	56.9	73.9	17.0	120	223	
Vert	2484.848	PK	57.7	27.4	13.7	36.9	-	61.9	73.9	12.0	120	223	
Vert	4950.000	PK	59.3	30.9	5.6	35.9	-	59.9	73.9	14.0	115	251	
Vert	7425.000	PK	52.9	36.6	6.7	37.3	-	58.9	73.9	15.0	117	218	
Vert	9900.000	PK	50.7	38.7	8.2	35.9	-	61.7	73.9	12.2	112	214	
Vert	12375.000	PK	45.4	39.4	8.7	36.8	-	56.7	73.9	17.2	100	0	noise floor level
Hori	1778.500	AV	60.9	26.3	13.0	37.6	30.5	32.1	53.9	21.8	131	102	
Hori	2355.330	AV	56.4	27.3	13.5	37.1	30.5	29.6	53.9	24.3	114	311	
Hori	2483.500	AV	55.9	27.4	13.7	36.9	30.5	29.6	53.9	24.3	114	311	
Hori	2484.848	AV	60.8	27.4	13.7	36.9	30.5	34.5	53.9	19.4	114	311	
Hori	4950.000	AV	58.6	30.9	5.6	35.9	30.5	28.7	53.9	25.2	124	219	
Hori	7425.000	AV	53.4	36.6	6.7	37.3	30.5	28.9	53.9	25.0	109	95	
Hori	9900.000	AV	49.3	38.7	8.2	35.9	30.5	29.8	53.9	24.1	104	114	
Hori	12375.000	AV	45.5	39.4	8.7	36.8	30.5	26.3	53.9	27.6	100	0	noise floor level
Vert	1682.480	AV	57.6	26.0	13.0	37.7	30.5	28.4	53.9	25.5	115	197	
Vert	2355.330	AV	56.0	27.3	13.5	37.1	30.5	29.2	53.9	24.7	120	223	
Vert	2483.500	AV	52.7	27.4	13.7	36.9	30.5	26.4	53.9	27.5	120	223	
Vert	2484.848	AV	57.7	27.4	13.7	36.9	30.5	31.4	53.9	22.5	120	223	
Vert	4950.000	AV	59.3	30.9	5.6	35.9	30.5	29.4	53.9	24.5	115	251	
Vert	7425.000	AV	52.9	36.6	6.7	37.3	30.5	28.4	53.9	25.5	117	218	
Vert	9900.000	AV	50.7	38.7	8.2	35.9	30.5	31.2	53.9	22.7	112	214	
Vert	12375.000	AV	45.4	39.4	8.7	36.8	30.5	26.2	53.9	27.7	100	0	noise floor level

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 13GHz)) - Duty factor(AV only) - Gain(Amplifier)

\*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

\*The 6th, 7th, 8th, 9th, 10th harmonic was not seen so the result was its base noise level.

(\*PK/AV: RBW1MHz,VBW3MHz)

\*Duty factor = 20 x log ((worst on times = 4.096 [ms]) / (worst 1 slot times = 136.5333[ms]))^(-1) = 30.46 dB

Distance factor: 13GHz-40GHz 20log(3.0m/1.0m)= 9.5dB

**20dBc Data Sheet (RBW 100kHz, VBW 300kHz)**

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	648.000	PK	51.5	20.7	8.8	31.4	49.6	87.3	37.7	
Hori	744.001	PK	51.0	21.4	9.3	31.1	50.6	87.3	36.7	
Hori	840.002	PK	49.1	21.4	9.3	31.1	48.7	87.3	38.6	
Hori	2475.000	PK	103.1	27.4	13.7	36.9	107.3	-	-	Carrier
Vert	648.000	PK	46.5	20.7	8.8	31.4	44.6	82.7	38.1	
Vert	744.001	PK	45.0	21.4	9.3	31.1	44.6	82.7	38.1	
Vert	840.002	PK	43.9	21.4	9.3	31.1	43.5	82.7	39.2	
Vert	2475.000	PK	98.5	27.4	13.7	36.9	102.7	-	-	Carrier

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 13GHz)) - Gain(Amplifier)

**UL Japan, Inc.**

**Shonan EMC Lab.**

1-22-3 Megumioka, Hiratsuka-shi, Kanagawa 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401



Test Report No :31DE0149-SH-01-A

### APPENDIX 3 Test Instruments

#### EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
SAF-05	Pre Amplifier	TOYO Corporation	TPA0118-36	1440490	RE	2010/03/09 * 12
SCC-G02	Coaxial Cable	Suhner	SUCOFLEX 104A	46498/4A	RE	2010/04/09 * 12
SCC-G22	Coaxial Cable	Suhner	SUCOFLEX 104	296199/4	RE	2010/05/25 * 12
SAT10-05	Attenuator(above1GHz)	Agilent	8493C-010	74864	RE	2010/03/05 * 12
KFL-01	Highpass Filter	Hewlett Packard	84300 80038	004	RE	2010/04/22 * 12
SHA-02	Horn Antenna	Schwarzbeck	BBHA9120D	9120D-726	RE	2010/08/08 * 12
SOS-03	Humidity Indicator	A&D	AD-5681	4063325	RE	2010/02/09 * 12
SSA-01	Spectrum Analyzer	Agilent	N9010A-526	MY48031482	RE	2010/04/05 * 12
SJM-02	Measure	KOMELON	KMC-36	-	RE	-
COTS-SEMI-1	EMI Software	TSJ	TEPTO-DV	-	RE	-
SAF-02	Pre Amplifier	SONOMA	310N	290212	RE	2010/02/06 * 12
SAT6-02	Attenuator	JFW	50HF-006N	-	RE	2010/02/06 * 12
SAT3-02	Attenuator	JFW	50HF-003N	-	RE	2010/02/06 * 12
SBA-02	Biconical Antenna	Schwarzbeck	BBA9106	91032665	RE	2010/10/11 * 12
SCC-B1/B3/B5/B7/B8/B13/SRSE-02	Coaxial Cable&RF Selector	Fujikura/Fujikura/Suhner/Suhner/Suhner/TOYO	8D2W/12DSFA/141PE/141PE/141PE/141PE/NS4906	-/0901-270(RF Selector)	RE	2010/04/02 * 12
SCC-B2/B4/B6/B7/B8/B13/SRSE-02	Coaxial Cable&RF Selector	Fujikura/Fujikura/Suhner/Suhner/Suhner/TOYO	8D2W/12DSFA/141PE/141PE/141PE/141PE/NS4906	-/0901-270(RF Selector)	RE	2010/04/02 * 12
SLA-02	Logperiodic Antenna	Schwarzbeck	UHALP9108A	UHALP 9108-A 0893	RE	2010/10/11 * 12
STR-02	Test Receiver	Rohde & Schwarz	ESCI	100575	RE	2010/08/18 * 12
SAEC-02(NSA)	Semi-Anechoic Chamber	TDK	SAEC-02(NSA)	2	RE	2010/09/04 * 12

The expiration date of the calibration is the end of the expired month .  
As for some calibrations performed after the tested dates , those test equipment have been controlled by means of an unbroken chains of calibrations .

All equipment is calibrated with traceable calibrations . Each calibration is traceable to the national or international standards .

Test Item :

RE: Radiated emission ,

# APPENDIX 4

## Duty cycle specification

**Maximum transmitter duty cycle in Nivis ISA system: 3%**

**Maximum "ON" time – 4.096ms**

**Minimum timeslot duration –136.5333ms**

Yokogawa Electric Corporation  
 Tomoyuki.Kamoshita  
 2010.5.27

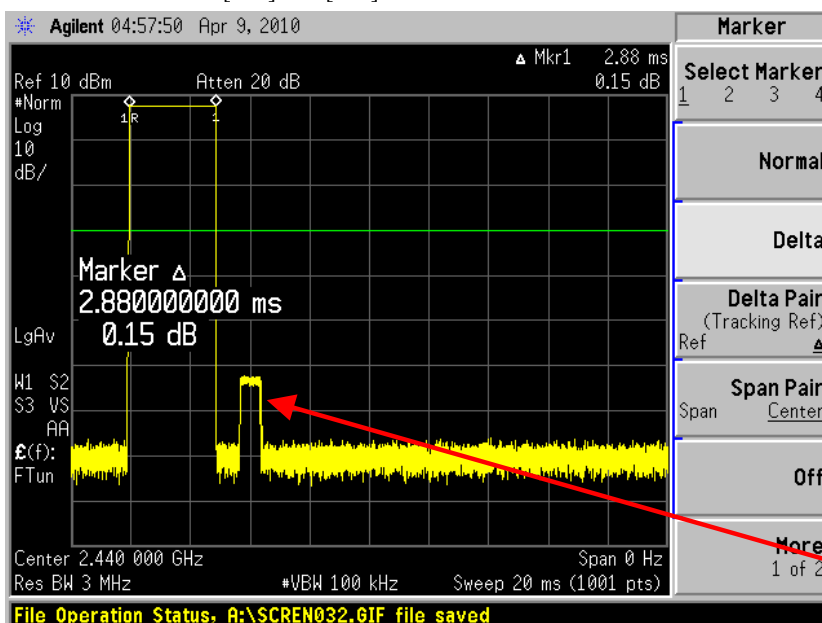
(Reference data)

Yokogawa Electric Corporation

Measurement date April 12, 2010

by Tomoyuki Kamoshita

$$0.00288[\text{sec.}] / 1.0[\text{sec.}] = 0.288 \%$$



from other party  
of communication  
equipment

