

# DATA OF CONDUCTION TEST

UL Japan, Inc.  
YAMAKITA No.1 ANECHOIC CHAMBER  
Report No. : 281E0218-YK-A

Applicant : RICOH COMPANY, LTD.  
 Kind of Equipment : Full-color MFP  
 Model No. : Aficio MP C3000  
 Serial No. : L3700000023  
 Power : AC120V/60Hz  
 Mode : Transmitting(2402MHz)  
 Remarks : Bluetooth, With RFID Transmitting  
 Date : 5/13/2008  
 Phase : Single Phase  
 Temperature : 21 °C  
 Humidity : 48 %  
 Regulation : FCC Part15C § 15. 207. (CISPR Pub. 22 )

Engineer : Makoto Hosaka

No.	FREQ. [MHz]	READING(N)		READING(L1)		LISN FACTOR [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
		QP [dB μ V]	AV	QP [dB μ V]	AV				QP [dB]	AV [dB μ V]	QP [dB μ V]	AV [dB μ V]	QP [dB]	AV [dB]
1.	0.1500	39.5	-	40.7	-	0.0	0.1	0.0	40.8	-	66.0	56.0	25.2	-
2.	0.1965	48.9	42.6	50.1	42.8	0.0	0.1	0.0	50.2	42.9	63.8	53.8	13.6	10.9
3.	0.2953	31.6	-	33.4	-	0.0	0.1	0.0	33.5	-	60.4	50.4	26.9	-
4.	3.5493	18.0	-	31.8	-	0.1	0.2	0.0	32.1	-	56.0	46.0	23.9	-
5.	7.4951	35.9	-	38.4	-	0.3	0.4	0.0	39.1	-	60.0	50.0	20.9	-
6.	7.6923	36.8	-	39.2	-	0.3	0.4	0.0	39.9	-	60.0	50.0	20.1	-

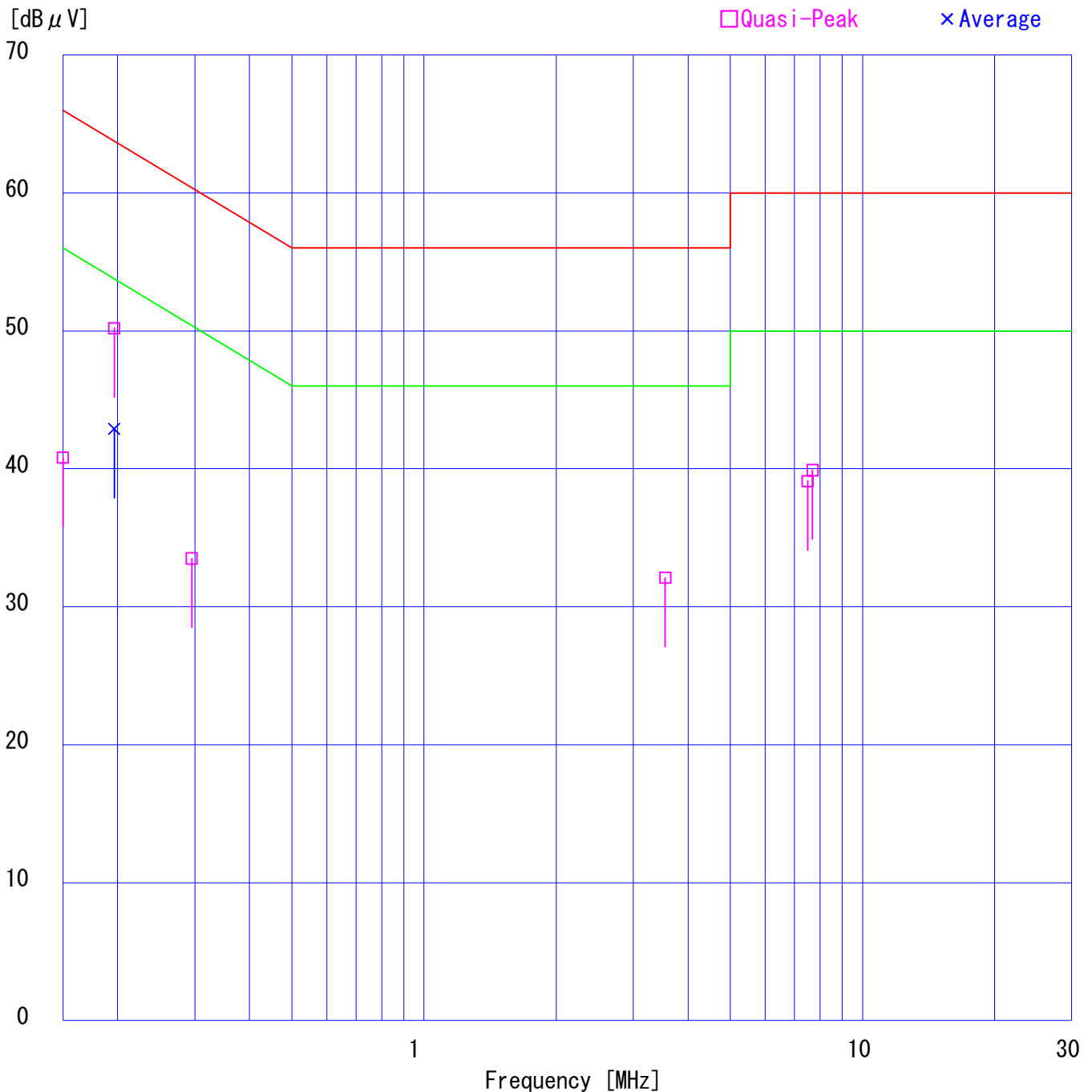
CALCULATION: READING + LISN FACTOR + CABLE LOSS + ATTEN.

■ LISN: KLS-03 (NNLK8129) ■ COAXIAL CABLE: KCC-33/34  
 ■ EMI RECEIVER: KTR-03 (ESHS10)

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Kind of Equipment : Full-color MFP  
Model No. : Aficio MP C3000  
Serial No. : L3700000023  
Power : AC120V/60Hz  
Mode : Transmitting (2402MHz)  
Remarks : Bluetooth, With RFID Transmitting  
Date : 5/13/2008  
Phase : Single Phase  
Temperature : 21 °C  
Humidity : 48 %  
Regulation : FCC Part15C § 15. 207. (CISPR Pub. 22 )  
Engineer : Makoto Hosaka

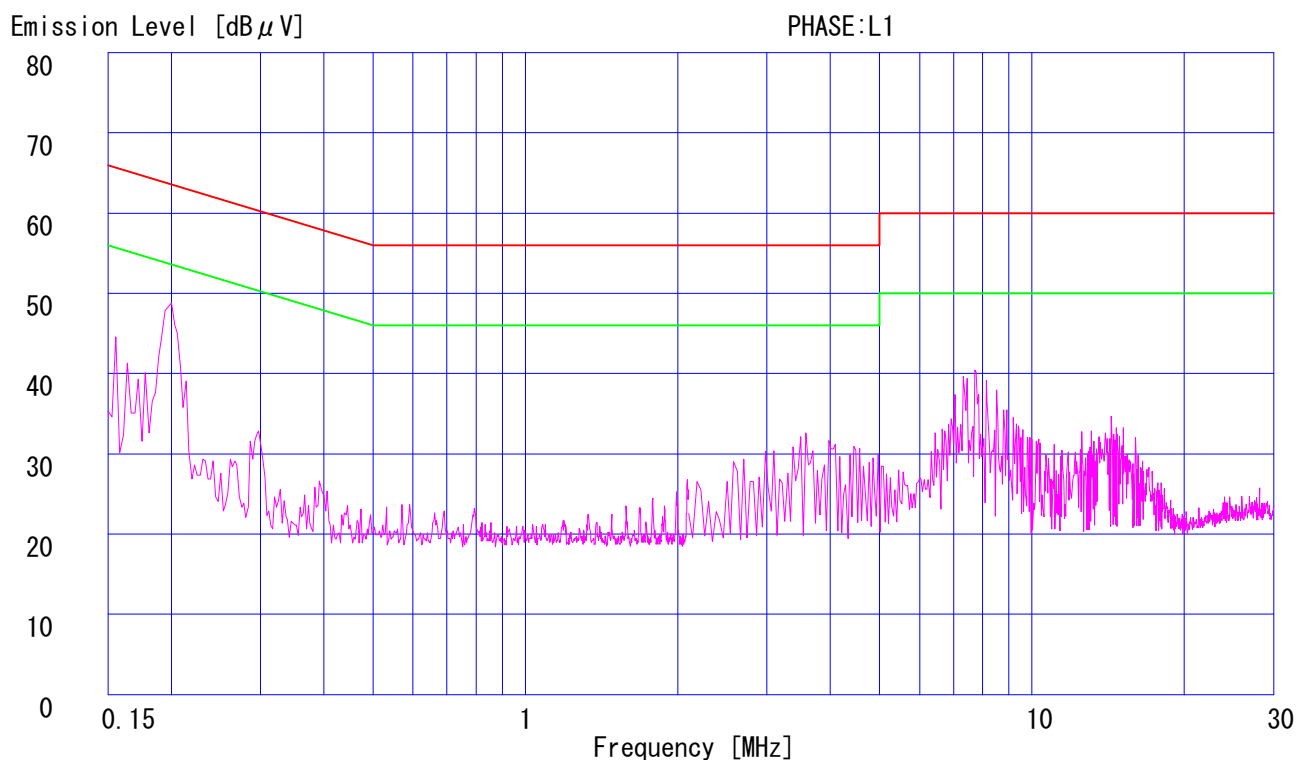
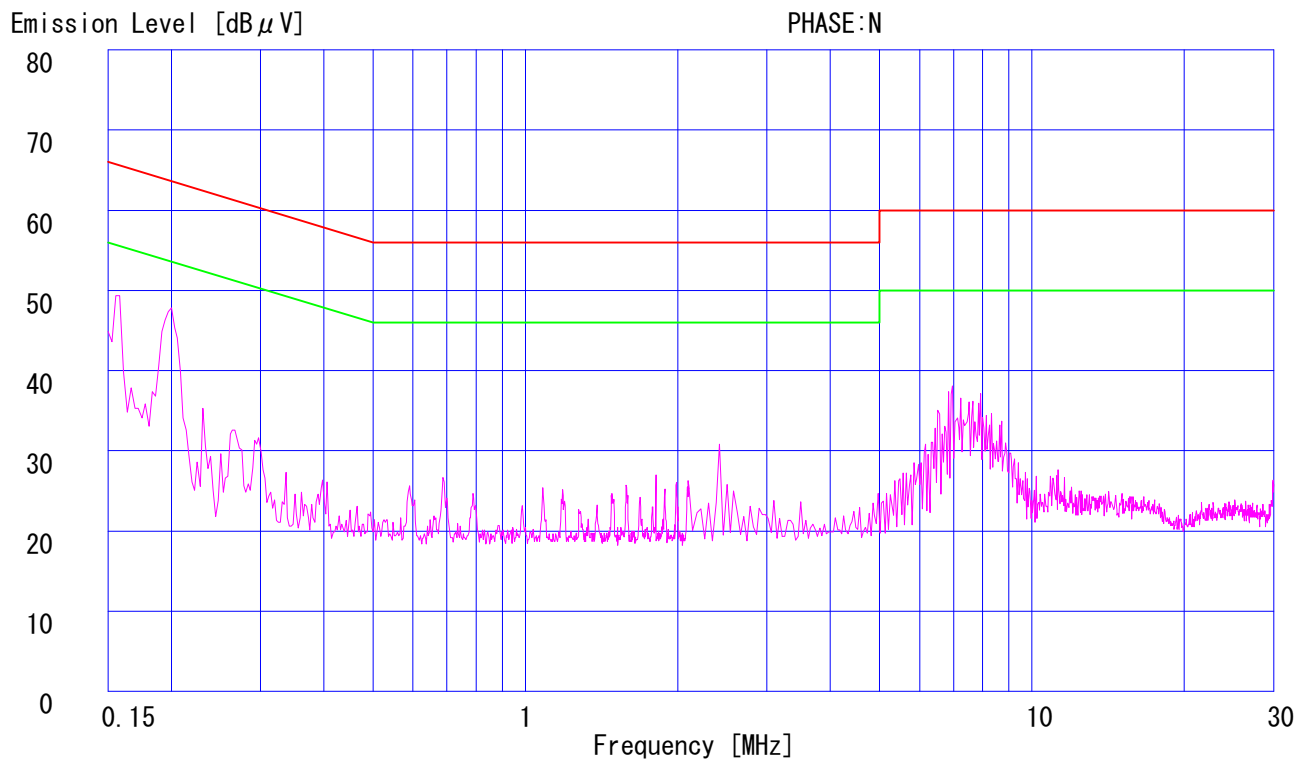


# DATA OF CONDUCTION TEST CHART

UL Japan, Inc.  
YAMAKITA No.1 ANECHOIC CHAMBER  
Report No. : 281E0218-YK-A

Applicant : RICOH COMPANY, LTD.  
Kind of Equipment : Full-color MFP  
Model No. : Aficio MP C3000  
Serial No. : L370000023  
Power : AC120V/60Hz  
Mode : Transmitting (2402MHz)  
Remarks : Bluetooth, With RFID Transmitting  
Date : 5/13/2008  
Phase : Single Phase  
Temperature : 21 °C  
Humidity : 48 %  
Regulation 1 : FCC Part15C § 15.207. (CISPR Pub.22 )  
Regulation 2 : None

Engineer : Makoto Hosaka

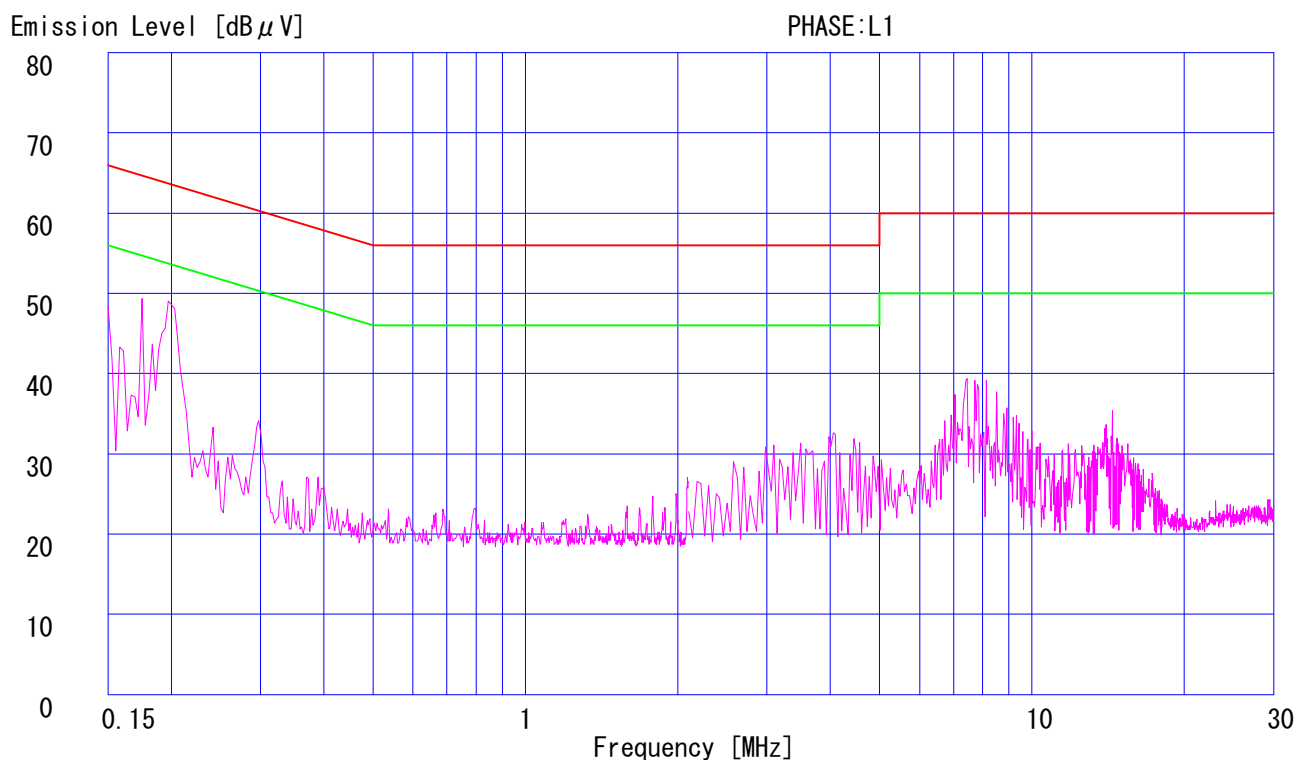
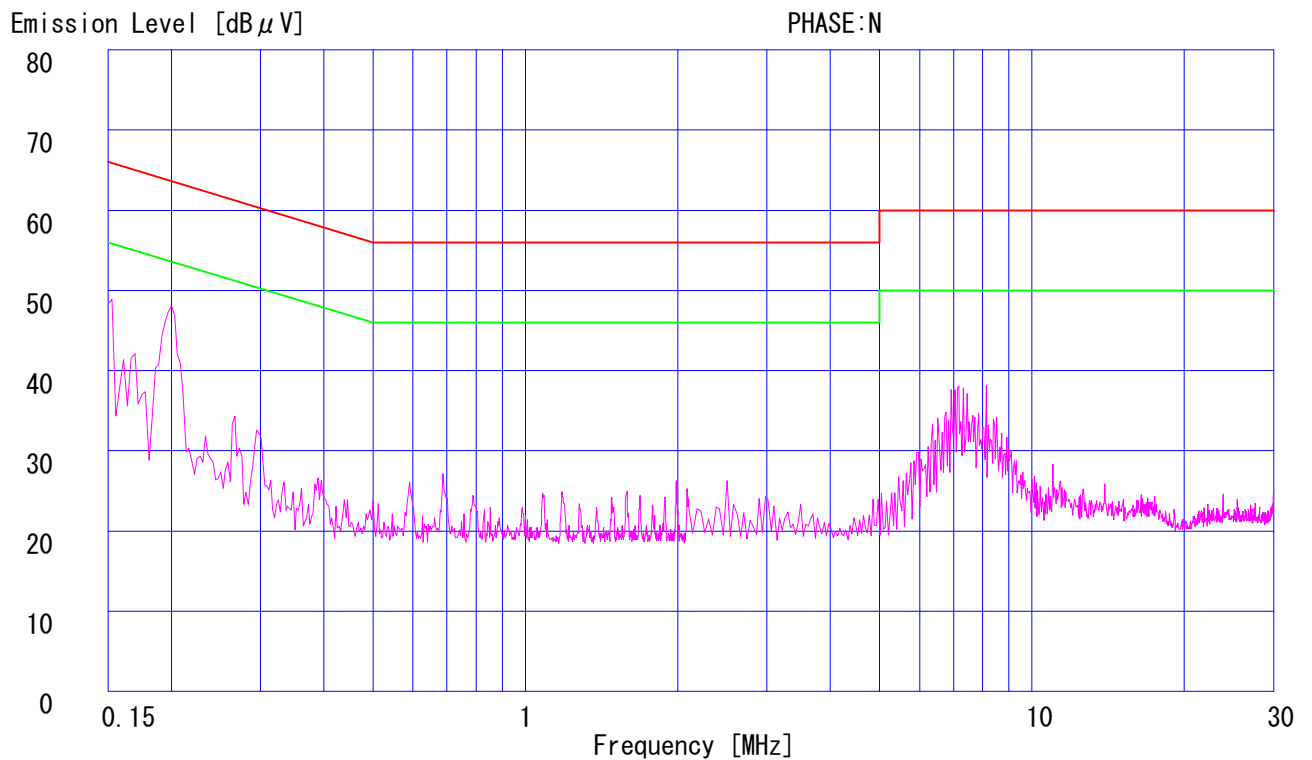


# DATA OF CONDUCTION TEST CHART

UL Japan, Inc.  
YAMAKITA No.1 ANECHOIC CHAMBER  
Report No. : 281E0218-YK-A

Applicant : RICOH COMPANY, LTD.  
Kind of Equipment : Full-color MFP  
Model No. : Aficio MP C3000  
Serial No. : L3700000023  
Power : AC120V/60Hz  
Mode : Transmitting(2441MHz)  
Remarks : Bluetooth, With RFID Transmitting  
Date : 5/13/2008  
Phase : Single Phase  
Temperature : 21 °C  
Humidity : 48 %  
Regulation 1 : FCC Part15C § 15.207. (CISPR Pub.22 )  
Regulation 2 : None

Engineer : Makoto Hosaka

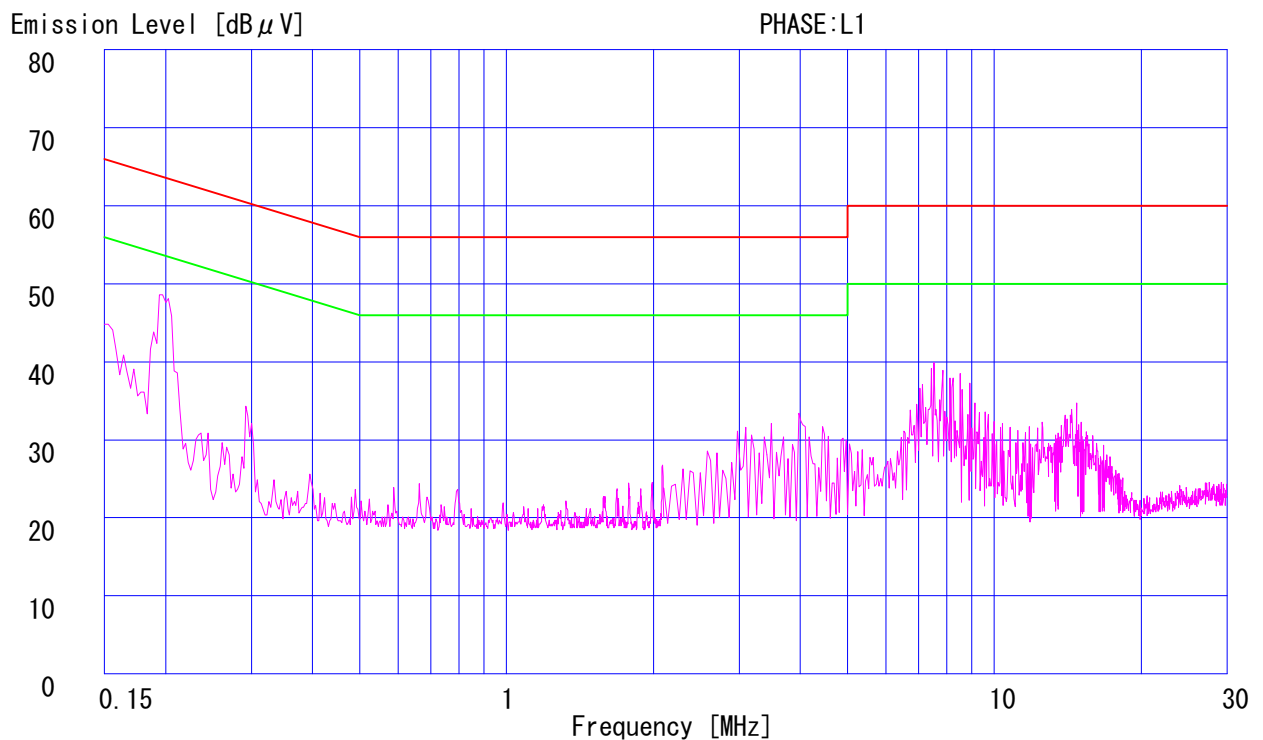
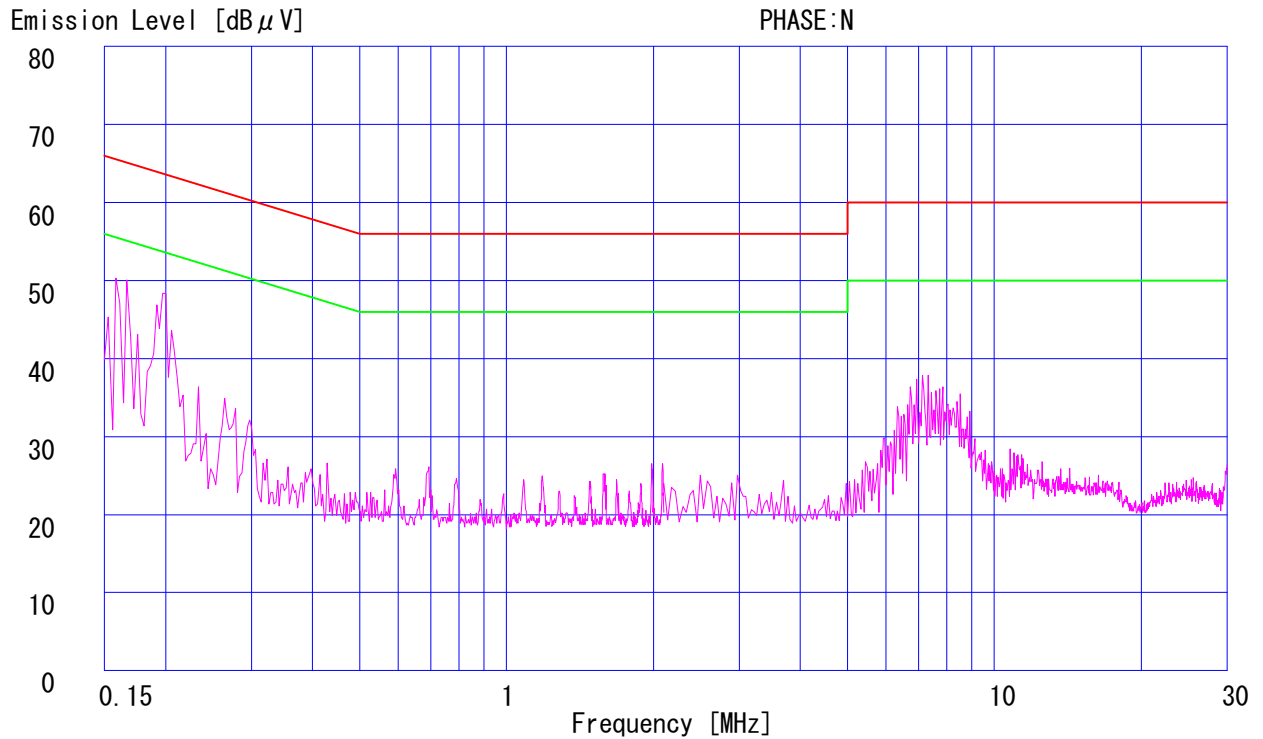


# DATA OF CONDUCTION TEST CHART

UL Japan, Inc.  
YAMAKITA No.1 ANECHOIC CHAMBER  
Report No. : 281E0218-YK-A

Applicant : RICOH COMPANY, LTD.  
Kind of Equipment : Full-color MFP  
Model No. : Aficio MP C3000  
Serial No. : L3700000023  
Power : AC120V/60Hz  
Mode : Transmitting (2480MHz)  
Remarks : Bluetooth, With RFID Transmitting  
Date : 5/13/2008  
Phase : Single Phase  
Temperature : 21 °C  
Humidity : 48 %  
Regulation 1 : FCC Part15C § 15.207. (CISPR Pub.22 )  
Regulation 2 : None

Engineer : Makoto Hosaka



# DATA OF RADIATION TEST

UL Japan, Inc.  
YAMAKITA No.1 ANECHOIC CHAMBER  
Report No. : 281E0218-YK-A

Applicant : RICOH COMPANY, LTD.  
 Kind of Equipment : Full-color MFP  
 Model No. : Aficio MP C3000  
 Serial No. : L3700000023  
 Power : AC120V/60Hz  
 Mode : Transmitting(2402MHz)  
 Remarks : Bluetooth, With RF ID Transmitting  
 Date : 5/12/2008  
 Test Distance : 3 m  
 Temperature : 22 °C  
 Humidity : 53 %  
 Regulation : FCC Part15C § 15. 209

Engineer : Toyokazu Imamura

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μ V/m]	MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER		HOR [dB]	VER
1.	33.24	BB	29.9	36.4	17.4	28.5	0.9	6.0	25.7	32.2	40.0	14.3	7.8
2.	176.30	BB	33.7	27.8	16.1	28.0	2.4	6.0	30.2	24.3	43.5	13.3	19.2
3.	412.87	BB	32.3	38.5	17.3	28.4	4.1	6.0	31.3	37.5	46.0	14.7	8.5
4.	500.01	BB	35.7	34.6	18.6	28.9	4.6	6.0	36.0	34.9	46.0	10.0	11.1
5.	619.34	BB	32.1	36.7	20.1	29.3	5.3	6.0	34.2	38.8	46.0	11.8	7.2
6.	625.01	BB	35.9	29.9	20.1	29.3	5.3	6.0	38.0	32.0	46.0	8.0	14.0
7.	700.00	BB	32.7	29.2	20.4	29.1	5.6	6.1	35.7	32.2	46.0	10.3	13.8

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA : KBA-03 (BBA9106) 30-299.99MHz / KLA-03 (USLP9143) 300-1000MHz  
 ■ CABLE : KCC-A2/A3 ■ PREAMP : KAF-05 (8447D) ■ EMI RECEIVER : KTR-04 (ESVS10)

# DATA OF RADIATION TEST

UL Japan, Inc.  
YAMAKITA No.1 ANECHOIC CHAMBER  
Report No. : 281E0218-YK-A

Applicant : RICOH COMPANY, LTD.  
 Kind of Equipment : Full-color MFP  
 Model No. : Aficio MP C3000  
 Serial No. : L3700000023  
 Power : AC120V/60Hz  
 Mode : Transmitting(2441MHz)  
 Remarks : Bluetooth, With RF ID Transmitting  
 Date : 5/12/2008  
 Test Distance : 3 m  
 Temperature : 22 °C  
 Humidity : 53 %  
 Regulation : FCC Part15C § 15. 209

Engineer : Toyokazu Imamura

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER	HOR [dB]	VER		
1.	33.23	BB	28.2	34.2	17.4	28.5	0.9	6.0	24.0	30.0	40.0	16.0	10.0	
2.	176.30	BB	32.3	27.7	16.1	28.0	2.4	6.0	28.8	24.2	43.5	14.7	19.3	
3.	412.88	BB	33.0	36.0	17.3	28.4	4.1	6.0	32.0	35.0	46.0	14.0	11.0	
4.	500.01	BB	37.5	33.0	18.6	28.9	4.6	6.0	37.8	33.3	46.0	8.2	12.7	
5.	619.32	BB	31.5	35.5	20.1	29.3	5.3	6.0	33.6	37.6	46.0	12.4	8.4	
6.	625.01	BB	35.4	31.9	20.1	29.3	5.3	6.0	37.5	34.0	46.0	8.5	12.0	
7.	700.00	BB	32.0	28.3	20.4	29.1	5.6	6.1	35.0	31.3	46.0	11.0	14.7	

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA : KBA-03 (BBA9106) 30-299.99MHz / KLA-03 (USLP9143) 300-1000MHz  
 ■ CABLE : KCC-A2/A3 ■ PREAMP : KAF-05 (8447D) ■ EMI RECEIVER : KTR-04 (ESVS10)

# DATA OF RADIATION TEST

UL Japan, Inc.  
YAMAKITA No.1 ANECHOIC CHAMBER  
Report No. : 281E0218-YK-A

Applicant : RICOH COMPANY, LTD.  
 Kind of Equipment : Full-color MFP  
 Model No. : Aficio MP C3000  
 Serial No. : L3700000023  
 Power : AC120V/60Hz  
 Mode : Transmitting(2480MHz)  
 Remarks : Bluetooth, With RF ID Transmitting  
 Date : 5/12/2008  
 Test Distance : 3 m  
 Temperature : 22 °C  
 Humidity : 53 %  
 Regulation : FCC Part15C § 15. 209

Engineer : Toyokazu Imamura

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER	HOR [dB]	VER		
1.	33.25	BB	30.2	37.1	17.4	28.5	0.9	6.0	26.0	32.9	40.0	14.0	7.1	
2.	176.30	BB	33.7	28.7	16.1	28.0	2.4	6.0	30.2	25.2	43.5	13.3	18.3	
3.	412.89	BB	33.4	36.7	17.3	28.4	4.1	6.0	32.4	35.7	46.0	13.6	10.3	
4.	500.01	BB	35.3	31.8	18.6	28.9	4.6	6.0	35.6	32.1	46.0	10.4	13.9	
5.	550.05	BB	37.4	32.0	19.3	29.1	4.9	6.0	38.5	33.1	46.0	7.5	12.9	
6.	619.32	BB	31.7	35.5	20.1	29.3	5.3	6.0	33.8	37.6	46.0	12.2	8.4	
7.	625.01	BB	36.8	30.8	20.1	29.3	5.3	6.0	38.9	32.9	46.0	7.1	13.1	
8.	700.00	BB	32.1	26.4	20.4	29.1	5.6	6.1	35.1	29.4	46.0	10.9	16.6	

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA : KBA-03 (BBA9106) 30-299. 99MHz/KLA-03 (USLP9143) 300-1000MHz  
 ■ CABLE : KCC-A2/A3 ■ PREAMP : KAF-05 (8447D) ■ EMI RECEIVER : KTR-04 (ESVS10)



# DATA OF RADIATION TEST

UL Japan, Inc.  
YAMAKITA No.1 ANECHOIC CHAMBER  
Report No. : 281E0218-YK-A

Applicant : RICOH COMPANY, LTD.  
 Kind of Equipment : Full-color MFP  
 Model No. : Aficio MP C3000  
 Serial No. : L3700000023  
 Power : AC120V/60Hz  
 Mode : Transmitting(2402MHz)  
 Remarks : PK RBW:1MHz, VBW:1MHz  
 Date : 5/13/2008  
 Test Distance : 3 m  
 Temperature : 21 °C  
 Humidity : 48 %  
 Regulation : FCC Part15C § 15. 209(PK Detection)1-26GHz:3m/26-40GHz:1m  
 Engineer : Makoto Hosaka

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER	HOR [dB]	VER		
1.	2390.00	BB	55.3	49.6	28.5	35.4	4.3	0.0	52.7	47.0	74.0	21.3	27.0	
2.	2400.00	BB	73.3	67.0	28.5	35.3	4.3	0.0	70.8	64.5	74.0	3.2	9.5	
3.	2658.01	BB	52.7	47.3	28.8	35.2	4.5	0.0	50.8	45.4	74.0	23.2	28.6	
4.	4804.00	BB	51.7	47.3	32.9	34.1	5.6	0.0	56.1	51.7	74.0	17.9	22.3	
5.	7206.00	BB	47.9	52.3	36.5	34.7	6.5	0.0	56.2	60.6	74.0	17.8	13.4	
6.	9608.00	BB	42.7	42.1	37.7	35.3	7.3	0.0	52.4	51.8	74.0	21.6	22.2	
7.	12010.00	BB	40.7	42.1	40.0	35.0	7.8	0.0	53.5	54.9	74.0	20.5	19.1	

CALCULATION: READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

■ ANTENNA:KHA-01(SAS-200 571)1-18GHz/KHA-03(3160-09)18-26GHz  
 ■ CABLE:KCC-D3/D16 ■ PREAMP:KAF-07(8449B) ■ SPECTRUM ANALYZER:KTR-01(ES140)

# DATA OF RADIATION TEST (Above 1GHz)

UL Japan, Inc.  
YAMAKITA NO.1 ANECHOIC CHAMBER  
Report No. : 28IE0218-YK-A

Company : RICOH COMPANY, LTD.  
Equipment : Full-color MFP  
Model : Aficio MP C3000  
Sample No. : L3700000023  
Power : AC120V/60Hz  
Mode : Transmitting 2402MHz  
Remarks : Bluetooth, With RFID Transmitting

Regulation : FCC Part15C Section 15.209  
Test Distance : 3m  
Date : 2008/05/13  
Temperature : 21deg.C  
Humidity : 48%

ENGINEER : Makoto Hosaka

## AV calculation value SPECTRUMANALYZER RBW:1MHz

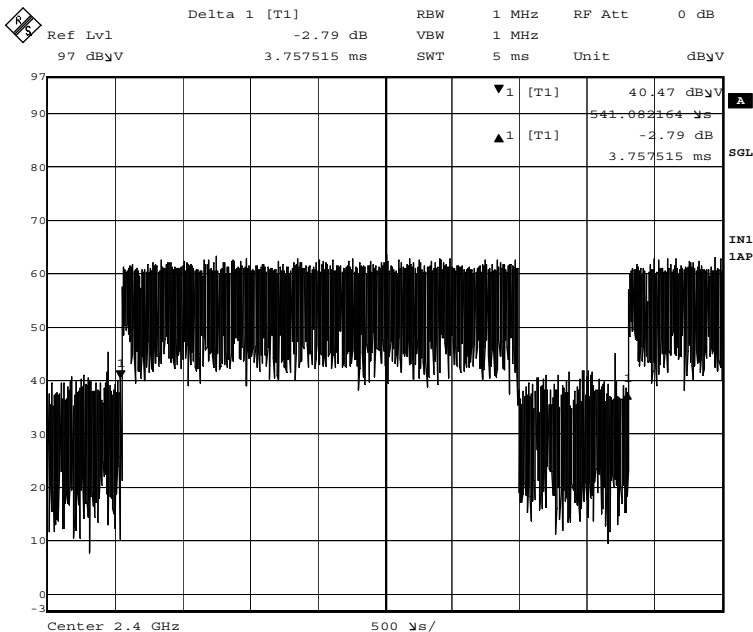
No.	FREQ [MHz]	READING		ANT Factor [dB]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN [dB]	Duty Factor	RESULT		LIMIT [dBuV/m]	MARGIN		VBW [Hz]
		HOR [dBuV]	VER						HOR [dBuV/m]	VER		HOR [dB]	VER	
1	2390.00	55.3	49.6	28.5	35.4	4.3	0.0	-30.3	22.4	16.7	54.0	31.6	37.3	1M
2	2400.00	73.3	67.0	28.5	35.3	4.3	0.0	-30.3	40.5	34.2	54.0	13.5	19.8	1M
3*	2658.01	43.7	41.7	28.8	35.2	4.5	0.0	0.0	41.8	39.8	54.0	12.2	14.2	300
4	4804.00	51.7	47.3	32.9	34.1	5.6	0.0	-30.3	25.8	21.4	54.0	28.2	32.6	1M
5	7206.00	47.9	52.3	36.5	34.7	6.5	0.0	-30.3	25.9	30.3	54.0	28.1	23.7	1M
6	9608.00	42.7	42.1	37.7	35.3	7.3	0.0	-30.3	22.1	21.5	54.0	31.9	32.5	1M
7	12010.00	40.7	42.1	40.0	35.0	7.8	0.0	-30.3	23.2	24.6	54.0	30.8	29.4	1M

Sample Calculation :

RESULT=Reading + ANT Factor - Amp Gain + Cabel Loss + ATT + Duty Factor

Duty Factor calculation:  $20 \cdot \log(3.05[\text{ms}]/100[\text{ms}]) = -30.31[\text{dB}]$  See Duty factor data

\*  $f(\text{Hz})=1/T(s)=1/0.00376(s)=265.96 \approx 300(\text{Hz})$



Date: 13.MAY.2008 17:24:56

# DATA OF RADIATION TEST

UL Japan, Inc.

YAMAKITA No.1 ANECHOIC CHAMBER

Report No. : 281E0218-YK-A

Applicant : RICOH COMPANY, LTD.  
Kind of Equipment : Full-color MFP  
Model No. : Aficio MP C3000  
Serial No. : L3700000023  
Power : AC120V/60Hz  
Mode : Transmitting(2441MHz)  
Remarks : PK RBW:1MHz, VBW:1MHz  
Date : 5/13/2008  
Test Distance : 3 m  
Temperature : 21 °C Engineer : Makoto Hosaka  
Humidity : 48 %  
Regulation : FCC Part15C § 15. 209(PK Detection) 1-26GHz:3m/26-40GHz:1m

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER	HOR [dB]	VER		
1.	2697.05	BB	48.1	47.0	28.9	35.2	4.5	0.0	46.3	45.2	74.0	27.7	28.8	
2.	4882.00	BB	52.3	47.0	33.1	34.1	5.6	0.0	56.9	51.6	74.0	17.1	22.4	
3.	7323.00	BB	48.6	55.9	36.7	34.8	6.6	0.0	57.1	64.4	74.0	16.9	9.6	
4.	9764.00	BB	43.1	42.1	37.7	35.4	7.4	0.0	52.8	51.8	74.0	21.2	22.2	
5.	12205.00	BB	42.2	41.9	40.2	34.8	8.0	0.0	55.6	55.3	74.0	18.4	18.7	

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz

■ CABLE: KCC-D3/D16 ■ PREAMP: KAF-07 (8449B) ■ SPECTRUM ANALYZER: KTR-01 (ES140)

# DATA OF RADIATION TEST (Above 1GHz)

UL Japan, Inc.  
YAMAKITA NO.1 ANECHOIC CHAMBER  
Report No. : 28IE0218-YK-A

Company : RICOH COMPANY, LTD.  
Equipment : Full-color MFP  
Model : Aficio MP C3000  
Sample No. : L3700000023  
Power : AC120V/60Hz  
Mode : Transmitting 2441MHz  
Remarks : Bluetooth, With RFID Transmitting

Regulation : FCC Part15C Section 15.209  
Test Distance : 3m  
Date : 2008/05/13  
Temperature : 21deg.C  
Humidity : 48%

ENGINEER : Makoto Hosaka

**AV calculation value SPECTRUMANALYZER RBW:1MHz**

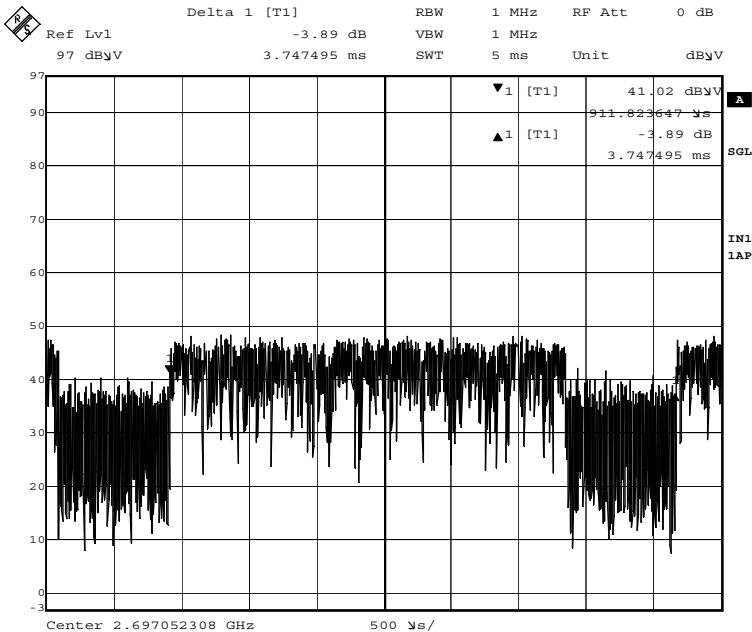
No.	FREQ [MHz]	READING		ANT Factor [dB]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN [dB]	Duty Factor	RESULT		LIMIT [dBuV/m]	MARGIN		VBW [Hz]
		HOR [dBuV]	VER						HOR [dB]	VER				
1*	2697.05	41.4	41.8	28.9	35.2	4.5	0.0	0.0	39.6	40.0	54.0	14.4	14.1	300
2	4882.00	52.3	47.0	33.1	34.1	5.6	0.0	-30.3	26.6	21.3	54.0	27.4	32.7	1M
3	7323.00	48.6	55.9	36.7	34.8	6.6	0.0	-30.3	26.8	34.1	54.0	27.2	19.9	1M
4	9764.00	43.1	42.1	37.7	35.4	7.4	0.0	-30.3	22.5	21.5	54.0	31.5	32.5	1M
5	12205.00	42.2	41.9	40.2	34.8	8.0	0.0	-30.3	25.3	25.0	54.0	28.7	29.0	1M

Sample Calculation :

RESULT=Reading + ANT Factor - Amp Gain + Cabel Loss + ATT + Duty Factor

Duty Factor calculation:  $20 \cdot \log(3.05[\text{ms}]/100[\text{ms}]) = -30.31[\text{dB}]$  See Duty factor data

\*  $f(\text{Hz})=1/T(\text{s})=1/0.00375(\text{s})=266.67 \approx 300(\text{Hz})$



Date: 13.MAY.2008 17:35:03

# DATA OF RADIATION TEST

UL Japan, Inc.  
YAMAKITA No.1 ANECHOIC CHAMBER  
Report No. : 281E0218-YK-A

Applicant : RICOH COMPANY, LTD.  
 Kind of Equipment : Full-color MFP  
 Model No. : Aficio MP C3000  
 Serial No. : L3700000023  
 Power : AC120V/60Hz  
 Mode : Transmitting(2480MHz)  
 Remarks : PK RBW:1MHz, VBW:1MHz  
 Date : 5/13/2008  
 Test Distance : 3 m  
 Temperature : 21 °C  
 Humidity : 48 %  
 Regulation : FCC Part15C § 15. 209(PK Detection) 1-26GHz:3m/26-40GHz:1m  
 Engineer : Makoto Hosaka

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER	HOR [dB]	VER		
1.	2483.50	BB	63.8	56.4	28.3	35.3	4.4	0.0	61.2	53.8	74.0	12.8	20.2	
2.	2736.02	BB	48.6	47.0	29.1	35.2	4.5	0.0	47.0	45.4	74.0	27.0	28.6	
3.	4960.00	BB	54.8	46.1	33.4	34.1	5.7	0.0	59.8	51.1	74.0	14.2	22.9	
4.	7440.00	BB	48.9	54.5	36.8	34.8	6.6	0.0	57.5	63.1	74.0	16.5	10.9	
5.	9920.00	BB	42.4	42.7	37.7	35.4	7.5	0.0	52.2	52.5	74.0	21.8	21.5	
6.	12400.00	BB	41.6	42.1	40.3	34.6	8.2	0.0	55.5	56.0	74.0	18.5	18.0	

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz  
 ■ CABLE: KCC-D3/D16 ■ PREAMP: KAF-07 (8449B) ■ SPECTRUM ANALYZER: KTR-01 (ES140)

# DATA OF RADIATION TEST (Above 1GHz)

UL Japan, Inc.  
YAMAKITA NO.1 ANECHOIC CHAMBER  
Report No. : 28IE0218-YK-A

Company : RICOH COMPANY, LTD.  
Equipment : Full-color MFP  
Model : Aficio MP C3000  
Sample No. : L3700000023  
Power : AC120V/60Hz  
Mode : Transmitting 2480MHz  
Remarks : Bluetooth, With RFID Transmitting

Regulation : FCC Part15C Section 15.209  
Test Distance : 3m  
Date : 2008/05/13  
Temperature : 21deg.C  
Humidity : 48%

ENGINEER : Makoto Hosaka

**AV calculation value SPECTRUMANALYZER RBW:1MHz**

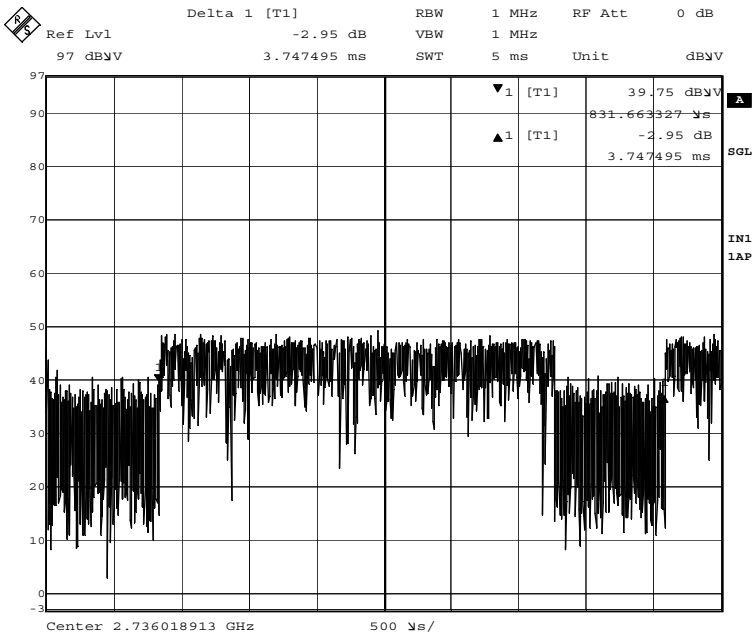
No.	FREQ [MHz]	READING		ANT Factor [dB]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN [dB]	Duty Factor	RESULT		LIMIT [dBuV/m]	MARGIN		VBW [Hz]
		HOR [dBuV]	VER						HOR [dBuV/m]	VER		HOR [dB]	VER	
1	2483.50	63.8	56.4	28.3	35.3	4.4	0.0	-30.3	30.9	23.5	54.0	23.1	30.5	1M
2*	2736.02	41.5	40.7	29.1	35.2	4.5	0.0	0.0	39.9	39.1	54.0	14.2	14.9	300
3	4960.00	54.8	46.1	33.4	34.1	5.7	0.0	-30.3	29.5	20.8	54.0	24.5	33.2	1M
4	7440.00	48.9	54.5	36.8	34.8	6.6	0.0	-30.3	27.2	32.8	54.0	26.8	21.2	1M
5	9920.00	42.4	42.7	37.7	35.4	7.5	0.0	-30.3	21.9	22.2	54.0	32.1	31.8	1M
6	12400.00	41.6	42.1	40.3	34.6	8.2	0.0	-30.3	25.2	25.7	54.0	28.8	28.3	1M

Sample Calculation :

RESULT=Reading + ANT Factor - Amp Gain + Cabel Loss + ATT + Duty Factor

Duty Factor calculation:  $20 \cdot \log(3.05[\text{ms}]/100[\text{ms}]) = -30.31[\text{dB}]$  See Duty factor data

\*  $f(\text{Hz}) = 1/T(\text{s}) = 1/0.00375(\text{s}) = 266.67 \approx 300(\text{Hz})$

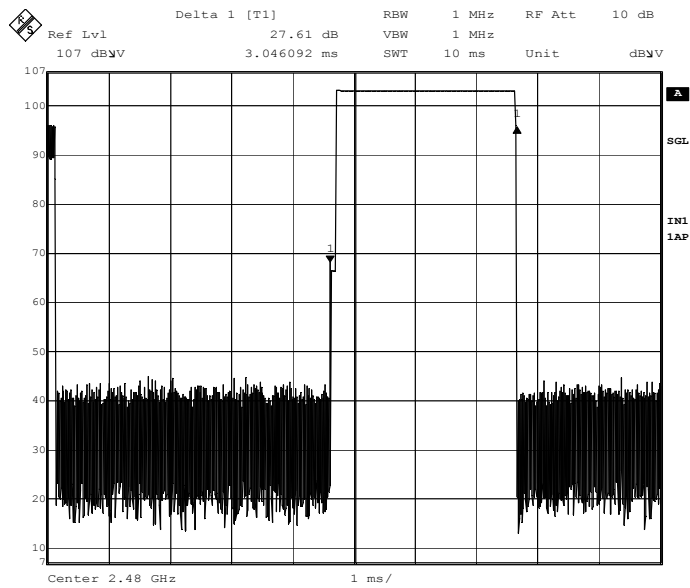
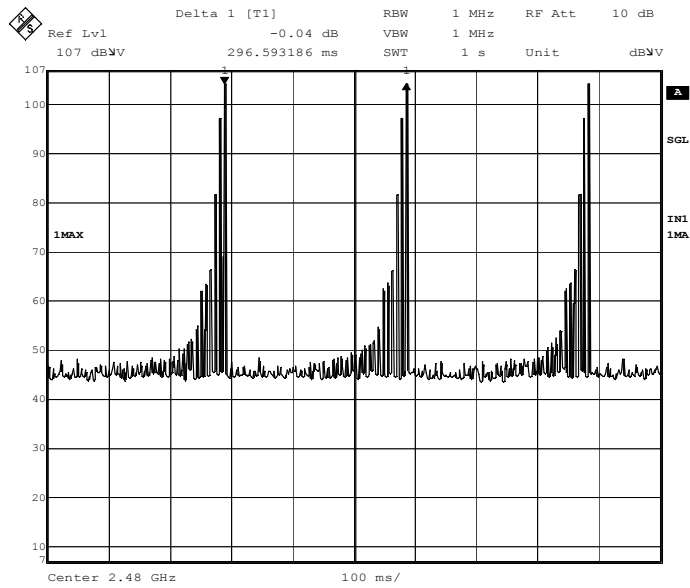


Date: 13.MAY.2008 18:01:35

# Duty Factor

**COMPANY** : RICOH COMPANY, LTD.  
**EQUIPMENT** : Full-color MFP  
**MODEL NUMBER**: Aficio MP C3000  
**SERIAL NUMBER**: L370000023  
**POWER** : AC120V/60Hz

**REPORT NO** : 28IE0218-YK-A  
**DATE** : 2008/05/13  
**TEMP./HUMI** : 21deg.C./48%  
**TEST MODE** : Transmitting  
**ENGINEER** : Makoto Hosaka



Duty factor:  $20\log(3.05\text{ms}/100\text{ms}) = -30.31\text{dB}$

**APPENDIX 3**  
**Test Instruments**

**EMI test equipment**

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
YA-CE	Conducted emission(software)	UL Japan	CE(Ver.1.6)	CE	-
YA-RE	Radiated emission(software)	UL Japan	RE(Ver.1.5)	RE	-
KAEC-01(NSA)	Anechoic Chamber	JSE	Semi 3m	CE/RE	2007/08/26 * 12
KAF-05	Pre Amplifier	Agilent	8447D	RE	2008/04/08 * 12
KAT6-01	Attenuator	INMET	18N-6dB	RE	2008/03/17 * 12
KBA-03	RF Relay Matrix	TSJ	RFM-E421	RE	Pre Check
KCC-33/34/KR M-03	Coaxial Cable/RF Relay Matrix	Fujikura/Suhner/TSJ	5D-2W/S04272B/RFM-E421	CE	2007/11/01 * 12
KLA-03	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2007/12/27 * 12
KLS-03	LISN(AMN)	Schwarzbeck	NNLK8129	CE	2007/05/15 * 12
KSA-04	Spectrum Analyzer	Advantest	R3271A	CE/RE	2007/09/25 * 12
KTR-01	Test Receiver	Rohde & Schwarz	ESI40	RE	2008/04/18 * 12
KTR-03	Test Receiver	Rohde & Schwarz	ESHS10	CE	2008/02/18 * 12
KTR-04	Test Receiver	Rohde & Schwarz	ESVS10	RE	2007/10/30 * 12
KOS-02	Humidity Indicator	Custom	CTH-190	CE/RE	2006/07/10 * 24
KJM-07	Measure	KOMELON	KMC-36	CE/RE	-
KCC-A2/A3	Coaxial Cable	Fujikura	5D-2W	RE	2007/05/15 * 12
KCC-D3/D16	Coaxial Cable	Rosenberger/INSULATE D WIRE INC	2201/KPS-1501-200-K PS	RE	2008/04/16 * 12
KAF-07	Pre Amplifier	Hewlett Packard	8449B	RE	2007/12/10 * 12
KHA-01	Horn Antenna	A.H.Systems	SAS-200/571	RE	2007/08/14 * 12
KHA-03	Horn Antenna	EMCO	3160-09	RE	2008/04/30 * 12

The expiration date of the calibration is the end of the expired month .

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

Test Item :

CE: Conducted emission,  
RE: Radiated emission