

DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.1 Shielded Room
Date : 2010/09/10

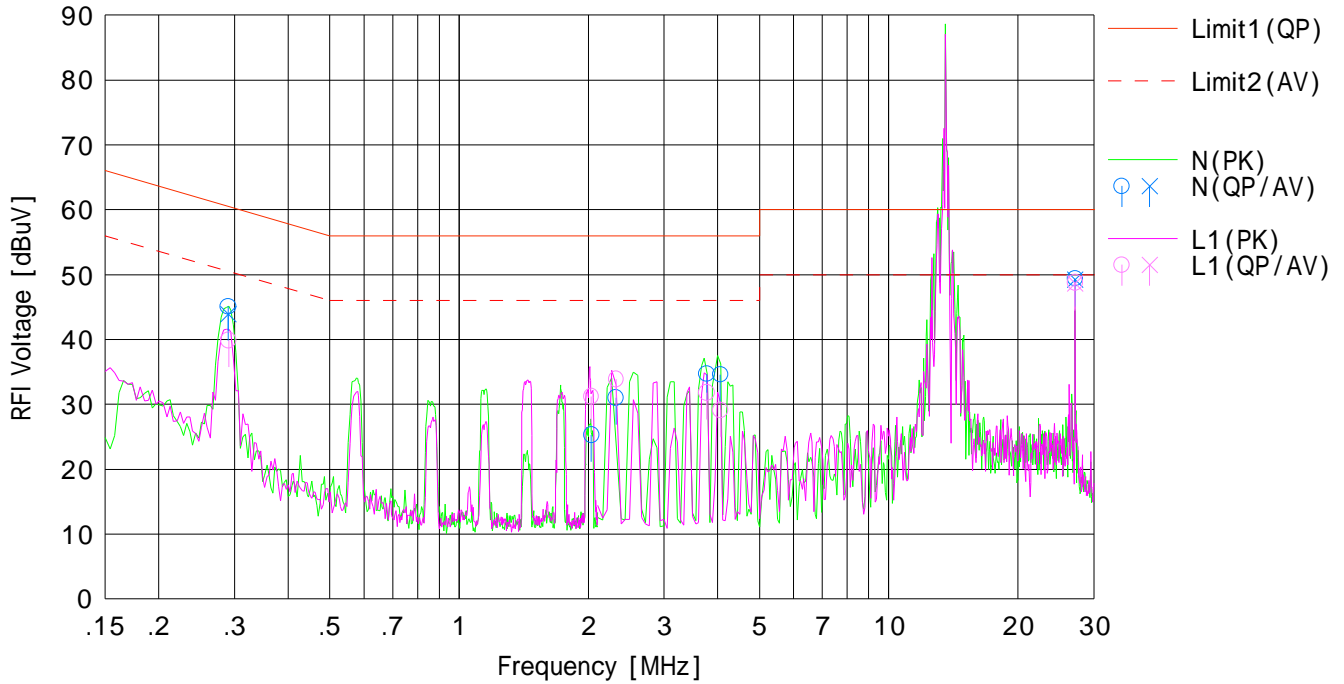
Company : MITSUBISHI ELECTRIC CORPORATION
Kind of EUT : Card Reader
Model No. : UCR-8212A
Serial No. : 0460795

Mode : Transmitting (Tx and Rx) with Card
Report No. : 30LE0268-SH-01-A
Power : DC24V
Temp./Humi. : 25deg.C./52%

Remarks : -

Limit1 : FCC 15C(15.207) QP
Limit2 : FCC 15C(15.207) AV

Engineer : Shinichi Takano



No.	Freq. [MHz]	Reading		C.Fac [dB]	Results		Limit		Margin		Phase	Comment
		<QP>	<AV>		<QP>	<AV>	<QP>	<AV>	<QP>	<AV>		
		[dBuV]	[dBuV]		[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
1	0.29026	32.5	31.3	12.6	45.1	43.9	60.5	50.5	15.4	6.6	N	
2	2.03392	12.6	---	12.7	25.3	---	56.0	46.0	30.7	---	N	
3	2.31751	18.3	---	12.7	31.0	---	56.0	46.0	25.0	---	N	
4	3.76904	22.0	---	12.7	34.7	---	56.0	46.0	21.3	---	N	
5	4.05551	21.9	---	12.7	34.6	---	56.0	46.0	21.4	---	N	
6	27.12000	35.8	35.6	13.6	49.4	49.2	60.0	50.0	10.6	0.8	N	
7	0.29113	27.3	---	12.6	39.9	---	60.5	50.5	20.5	---	L1	
8	2.03046	18.5	---	12.7	31.2	---	56.0	46.0	24.8	---	L1	
9	2.32027	21.2	---	12.7	33.9	---	56.0	46.0	22.1	---	L1	
10	3.77004	19.1	---	12.7	31.8	---	56.0	46.0	24.2	---	L1	
11	4.05701	16.4	---	12.7	29.1	---	56.0	46.0	26.9	---	L1	
12	27.12000	35.2	35.0	13.6	48.8	48.6	60.0	50.0	11.2	1.4	L1	

Calculation: Result [dBuV] = Reading [dBuV] + C.Fac (LISN+Cable+ATT+HighPassFilter) [dB]

DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.1 Shielded Room
Date : 2010/09/10

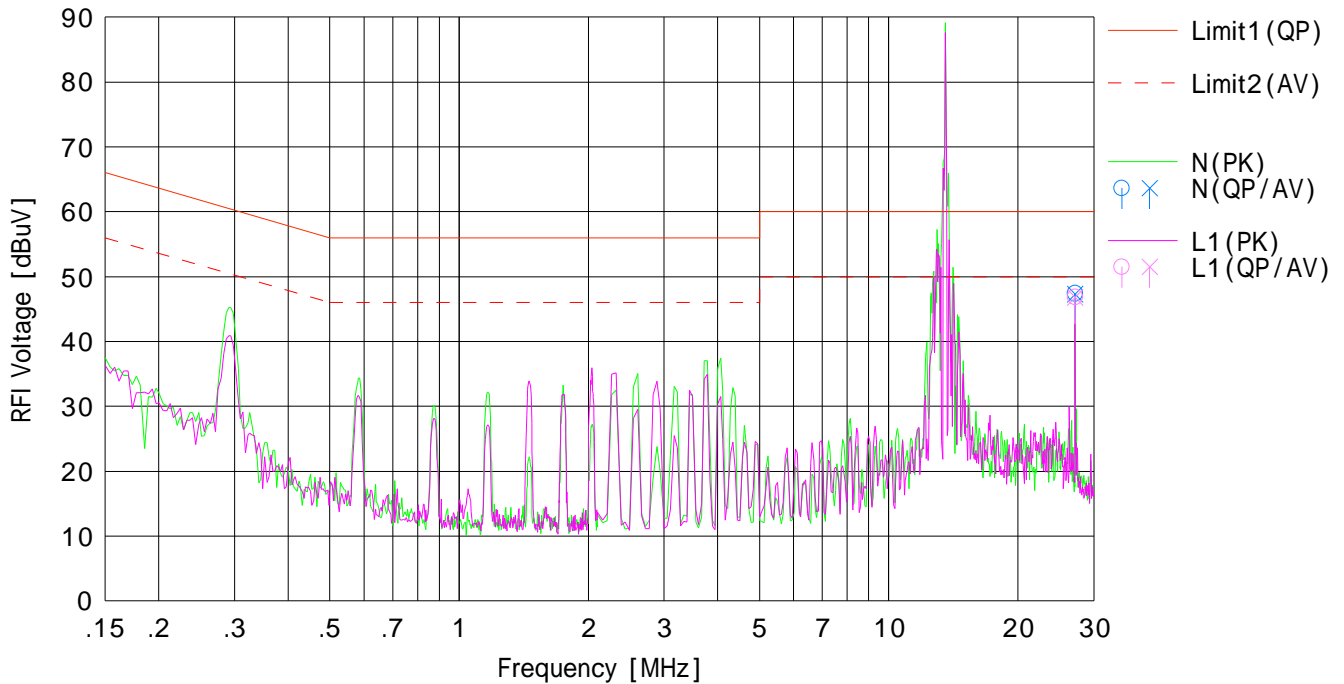
Company : MITSUBISHI ELECTRIC CORPORATION
Kind of EUT : Card Reader
Model No. : UCR-8212A
Serial No. : 0460795

Mode : Transmitting (Tx and Rx) without Card
Report No. : 30LE0268-SH-01-A
Power : DC24V
Temp./Humi. : 25deg.C./52%

Remarks : -

Limit1 : FCC 15C(15.207) QP
Limit2 : FCC 15C(15.207) AV

Engineer : Shinichi Takano



No.	Freq. [MHz]	Reading		C.Fac [dB]	Results		Limit		Margin		Phase	Comment
		<QP>	<AV>		<QP>	<AV>	<QP>	<AV>	<QP>	<AV>		
		[dBuV]	[dBuV]		[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
1	27.12000	33.8	33.7	13.6	47.4	47.3	60.0	50.0	12.6	2.7	N	
2	27.12000	33.3	33.2	13.6	46.9	46.8	60.0	50.0	13.1	3.2	L1	

Calculation: Result [dBuV] = Reading [dBuV] + C.Fac (LISN+Cable+ATT+HighPassFilter) [dB]

DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.1 Shielded Room
Date : 2010/09/10

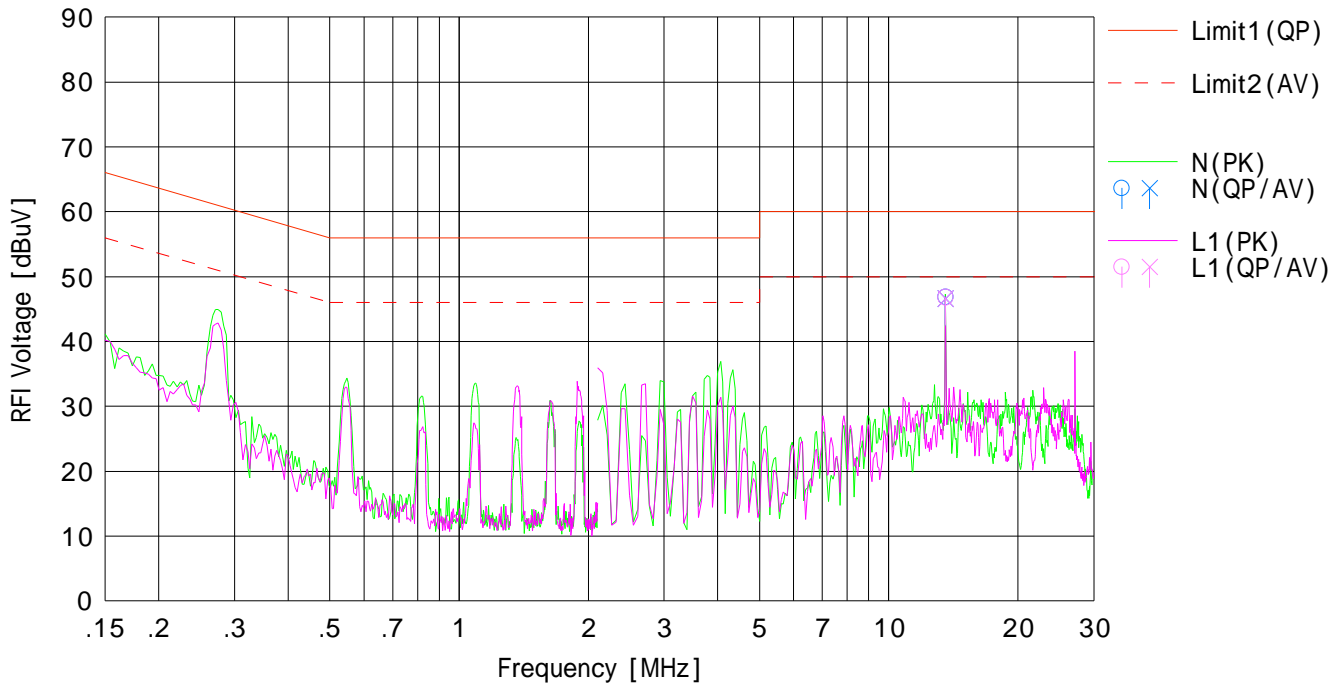
Company : MITSUBISHI ELECTRIC CORPORATION
Kind of EUT : Card Reader
Model No. : UCR-8212A
Serial No. : 0460795

Mode : Transmitting (Tx and Rx) without Card
Report No. : 30LE0268-SH-01-A
Power : DC24V
Temp./Humi. : 25deg.C./52%

Remarks : Antenna terminated with dummy load

Limit1 : FCC 15C(15.207) QP
Limit2 : FCC 15C(15.207) AV

Engineer : Shinichi Takano



No.	Freq. [MHz]	Reading		C.Fac [dB]	Results		Limit		Margin		Phase	Comment
		<QP>	<AV>		<QP>	<AV>	<QP>	<AV>	<QP>	<AV>		
		[dBuV]	[dBuV]		[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
1	13.56000	33.8	33.5	13.1	46.9	46.6	60.0	50.0	13.1	3.4	N	
2	13.56000	33.7	33.5	13.1	46.8	46.6	60.0	50.0	13.2	3.4	L1	

Calculation: Result [dBuV] = Reading [dBuV] + C.Fac (LISN+Cable+ATT+HighPassFilter) [dB]

Data of Field Strength and Outside Filed Strength: FCC15.225(a)(b)(c)

UL Japan, Inc.
Shonan No3 Semi-Anechoic Chamber

Company	: MITSUBISHI ELECTRIC CORPORATION	Report No.	: 30LE0268-SH-01-A
Equipment	: Card Reader	Regulation	: FCC Part15 SupartC 15.225
Model	: UCR-8212A	Test Distance	: 3m
Sample No.	: 0460795	Date	: 2010/9/10
Power	: DC24V	Temperature	: 22deg.C
Mode	: Transmitting (Tx and Rx) with Card	Humidity	: 56%
Remarks	: Vertical polarization (antenna angle) of the worst case: 45deg		

ENGINEER : Shinichi Takano

Field strength

No.	FREQ [MHz]	T/R Reading		ANT Factor	LOSS [dB]	AMP GAIN [dB]	RESULT		LIMIT (3m) [dBuV/m]	MARGIN	
		Hor [dBuV]	Ver [dBuV]				Hor [dBuV/m]	Ver [dBuV/m]		Hor [dB]	Ver [dB]
1	13.560	73.6	82.7	19.7	6.3	32.2	67.4	76.5	124.0	56.6	47.5

Field strength of 13.553MHz to 13.567MHz Limit(3m) = 84dBuV/m + 40log 30m/3m
= 124dBuV/m (FCC15.225(a))

Outside Field strength

No.	FREQ [MHz]	T/R Reading		ANT Factor	LOSS [dB]	AMP GAIN [dB]	RESULT Ver [dBuV/m]	LIMIT (3m) [dBuV/m]	MARGIN Ver [dB]
		Ver [dBuV]							
1	13.110	36.2		19.7	6.3	32.1	30.1	69.5	39.4
2	13.410	52.3		19.7	6.3	32.1	46.2	80.5	34.3
3	13.553	70.7		19.7	6.3	32.1	64.6	90.5	25.9
4	13.567	69.9		19.7	6.3	32.1	63.8	90.5	26.7
5	13.710	49.8		19.6	6.3	32.1	43.6	80.5	36.9
6	14.010	31.8		19.6	6.3	32.1	25.6	69.5	43.9

This test was made at the Loop antenna polarization that has the maximum noise.

Outside filed strength frequencies

- filed strength band $F_c \pm 7\text{kHz}$: 13.553MHz to 13.567MHz
 - Outside filed strength $F_c \pm 150\text{kHz}$: 13.410MHz to 13.710MHz
 - Outside filed strength $F_c \pm 450\text{kHz}$: 13.110MHz to 14.010MHz
- $F_c = 13.56\text{MHz}$

Limits (3m)

- 13.410MHz to 13.553MHz and 13.567MHz to 13.710MHz : $50.5\text{dBuV/m} + 40\log 30\text{m}/3\text{m} = 90.5\text{dBuV/m}$ (FCC15.225(b))
- 13.110MHz to 14.010MHz and 13.710MHz to 14.010MHz : $40.5\text{dBuV/m} + 40\log 30\text{m}/3\text{m} = 80.5\text{dBuV/m}$ (15.225(c))
- Below 13.110MHz and Above 14.010MHz : $29.5\text{dBuV/m} + 40\log 30\text{m}/3\text{m} = 69.5\text{dBuV/m}$ (FCC15.225(d) and FCC15.209)

Data of Field Strength and Outside Filed Strength: FCC15.225(a)(b)(c)

UL Japan, Inc.
Shonan No3 Semi-Anechoic Chamber

Company	: MITSUBISHI ELECTRIC CORPORATION	Report No.	: 30LE0268-SH-01-A
Equipment	: Card Reader	Regulation	: FCC Part15 SupartC 15.225
Model	: UCR-8212A	Test Distance	: 3m
Sample No.	: 0460795	Date	: 2010/9/10
Power	: DC24V	Temperature	: 22deg.C
Mode	: Transmitting (Tx and Rx) without Card	Humidity	: 56%
Remarks	: Vertical polarization (antenna angle) of the worst case: 45deg		

ENGINEER : Shinichi Takano

Field strength

No.	FREQ [MHz]	T/R Reading		ANT Factor	LOSS [dB]	AMP GAIN [dB]	RESULT		LIMIT (3m) [dBuV/m]	MARGIN	
		Hor [dBuV]	Ver [dBuV]				Hor [dBuV/m]	Ver [dBuV/m]		Hor [dB]	Ver [dB]
1	13.560	73.8	82.7	19.7	6.3	32.2	67.6	76.5	124.0	56.4	47.5

Field strength of 13.553MHz to 13.567MHz Limit(3m) = 84dBuV/m + 40log 30m/3m
= 124dBuV/m (FCC15.225(a))

Outside Field strength

No.	FREQ [MHz]	T/R Reading		ANT Factor	LOSS [dB]	AMP GAIN [dB]	RESULT Ver [dBuV/m]	LIMIT (3m) [dBuV/m]	MARGIN Ver [dB]
		Ver [dBuV]							
1	13.110	32.3		19.7	6.3	32.1	26.2	69.5	43.3
2	13.410	50.1		19.7	6.3	32.1	44.0	80.5	36.5
3	13.553	70.8		19.7	6.3	32.1	64.7	90.5	25.8
4	13.567	69.6		19.7	6.3	32.1	63.5	90.5	27.0
5	13.710	47.4		19.6	6.3	32.1	41.2	80.5	39.3
6	14.010	31.3		19.6	6.3	32.1	25.1	69.5	44.4

This test was made at the Loop antenna polarization that has the maximum noise.

Outside filed strength frequencies

- filed strength band $F_c \pm 7\text{kHz}$: 13.553MHz to 13.567MHz
 - Outside filde strength $F_c \pm 150\text{kHz}$: 13.410MHz to 13.710MHz
 - Outside filde strength $F_c \pm 450\text{kHz}$: 13.110MHz to 14.010MHz
- $F_c = 13.56\text{MHz}$

Limits (3m)

- 13.410MHz to 13.553MHz and 13.567MHz to 13.710MHz : $50.5\text{dBuV/m} + 40\log 30\text{m}/3\text{m} = 90.5\text{dBuV/m}$ (FCC15.225(b))
- 13.110MHz to 14.010MHz and 13.710MHz to 14.010MHz : $40.5\text{dBuV/m} + 40\log 30\text{m}/3\text{m} = 80.5\text{dBuV/m}$ (15.225(c))
- Below 13.110MHz and Above 14.010MHz : $29.5\text{dBuV/m} + 40\log 30\text{m}/3\text{m} = 69.5\text{dBuV/m}$ (FCC15.225(d)and FCC15.209)

DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2010/09/10

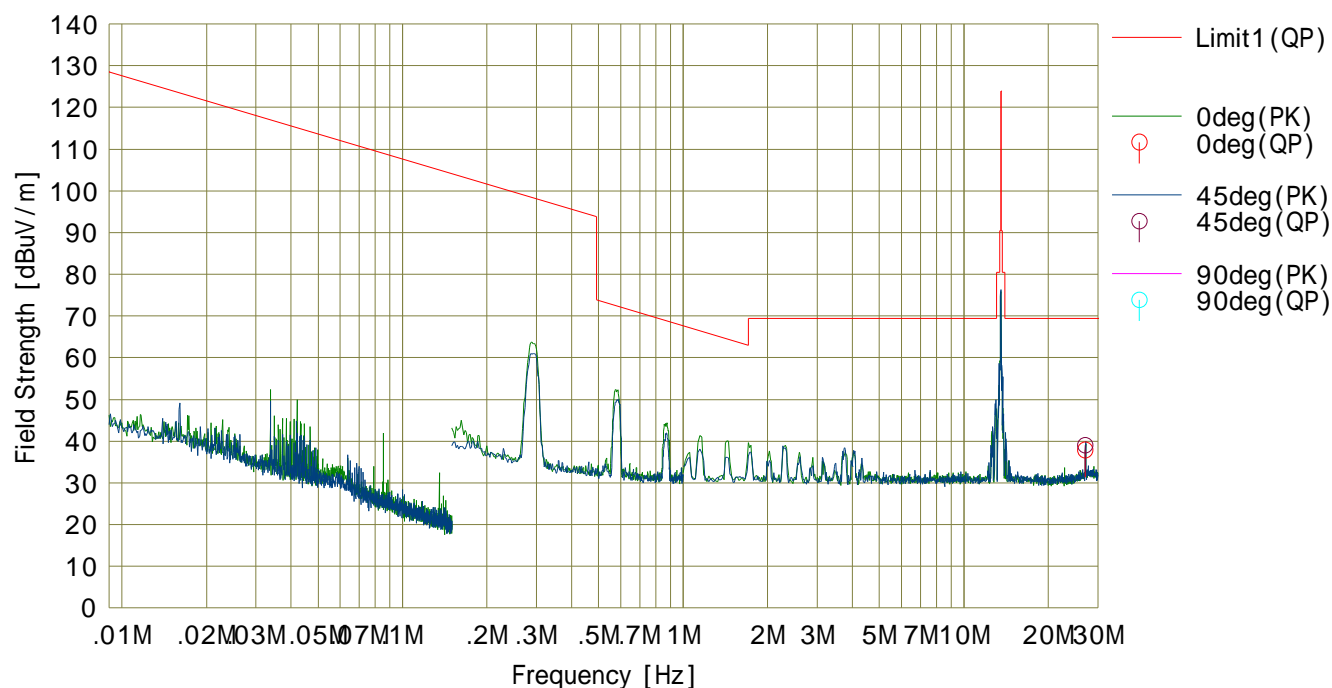
Company : MITSUBISHI ELECTRIC CORPORATION
Kind of EUT : Card Reader
Model No. : UCR-8212A
Serial No. : 0460795

Mode : Transmitting (Tx and Rx) with Card
Report No. : 30LE0268-SH-01-A
Power : DC24V
Temp./Humi. : 25deg.C./73%

Remarks : -

Limit1 : FCC15.225 3m, 9-90kHz:AV, 110-490kHz:AV, other:QP

Tested by : Shinichi Takano



No.	Freq. [MHz]	Reading <QP>	Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	Result <QP>	Limit <QP>	Margin <QP>	Antenna	Table	Comment
		[dBuV]				[dBuV/m]	[dBuV/m]	[dB]		[deg]	
1	27.12000	42.4	21.1	6.5	32.2	37.8	69.5	31.7	0deg	10	
2	27.12000	43.6	21.1	6.5	32.2	39.0	69.5	30.5	45deg	142	

Calculation: Result [dBuA/m] = Reading [dBuV] + Ant.Fac [(dB/m) (A/V)] + Loss (Cable+ATT) [dB] + Gain (AMP) [dB]
Ant.Type=LOOP: Loop Antenna

DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2010/09/10

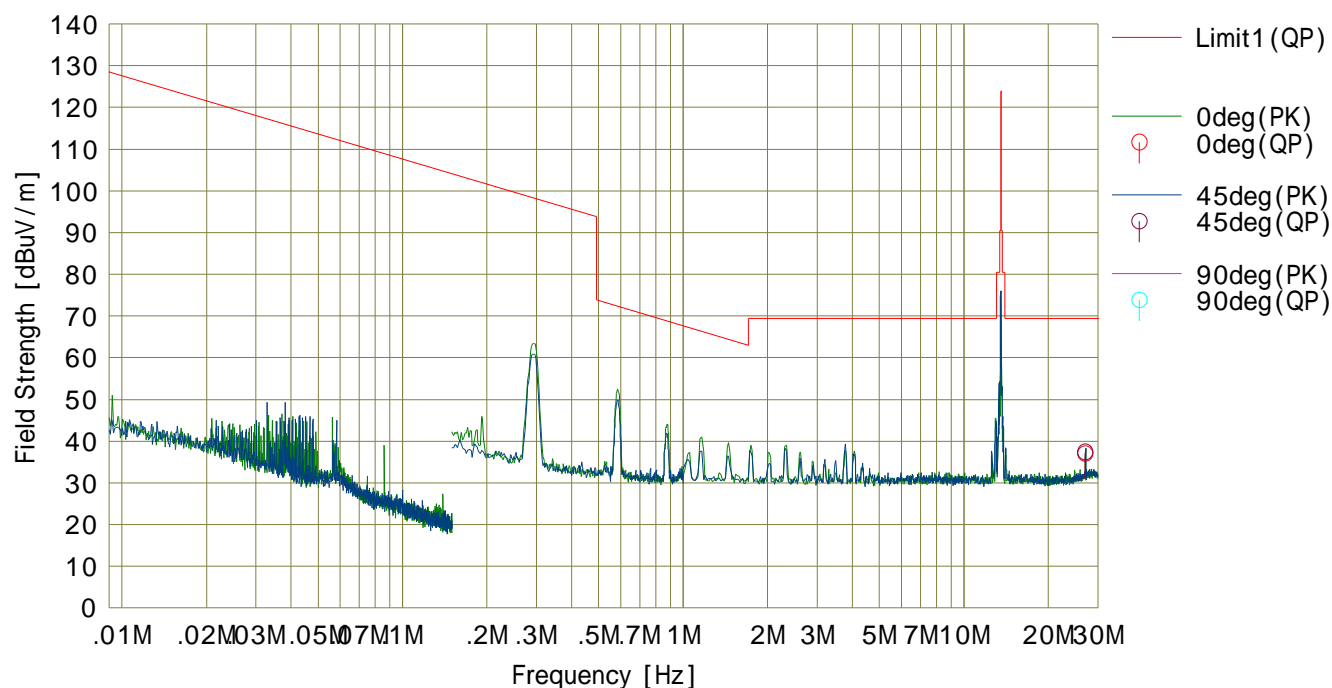
Company : MITSUBISHI ELECTRIC CORPORATION
Kind of EUT : Card Reader
Model No. : UCR-8212A
Serial No. : 0460795

Mode : Transmitting (Tx and Rx) without Card
Report No. : 30LE0268-SH-01-A
Power : DC24V
Temp./Humi. : 25deg.C./73%

Remarks : -

Limit1 : FCC15.225 3m, 9-90kHz:AV, 110-490kHz:AV, other:QP

Tested by : Shinichi Takano



No.	Freq. [MHz]	Reading <QP>	Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	Result <QP>	Limit <QP>	Margin <QP>	Antenna	Table	Comment
		[dBuV]				[dBuV/m]	[dBuV/m]	[dB]		[deg]	
1	27.12000	41.6	21.1	6.5	32.2	37.0	69.5	32.5	0deg	356	
2	27.12000	42.0	21.1	6.5	32.2	37.4	69.5	32.1	45deg	113	

Calculation: Result [dBuA/m] = Reading [dBuV] + Ant.Fac [(dB/m) (A/V)] + Loss (Cable+ATT) [dB] + Gain (AMP) [dB]
Ant.Type=LOOP: Loop Antenna

DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2010/09/17

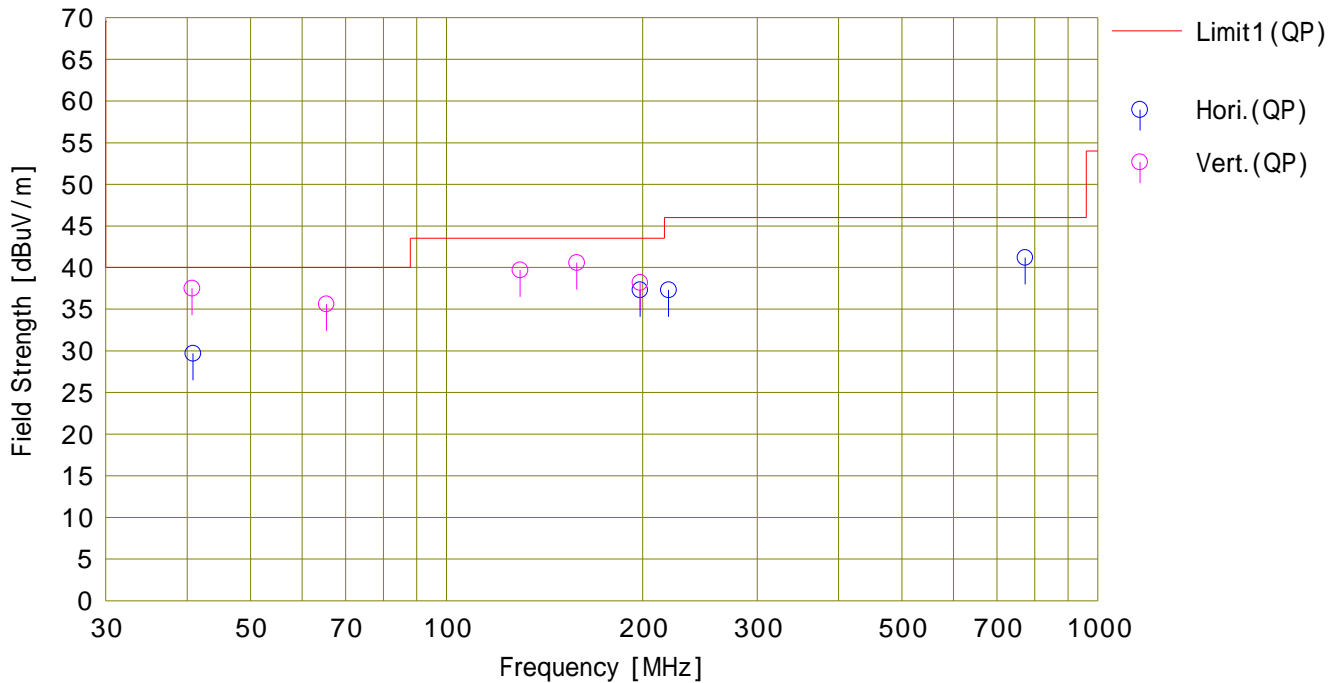
Company : MITSUBISHI ELECTRIC CORPORATION
Kind of EUT : Card Reader
Model No. : UCR-8212A
Serial No. : 0460795

Mode : Transmitting (Tx and Rx) with Card
Report No. : 30LE0268-SH-01-A
Power : DC24V
Temp./Humi. : 23deg.C./58%

Remarks : with card

Limit1 : FCC15C_209 3m

Engineer : Makoto Hosaka



No.	Freq. [MHz]	Reading <QP>	Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	Result <QP>	Limit <QP>	Margin <QP>	Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		[dBuV]				[dBuV/m]	[dBuV/m]	[dB]					
1	40.800	40.7	14.4	6.7	32.1	29.7	40.0	10.3	Hori.	300	358	BC	
2	198.210	44.7	16.7	7.9	32.0	37.3	43.5	6.2	Hori.	210	320	BC	
3	219.270	44.3	17.0	8.0	32.0	37.3	46.0	8.7	Hori.	287	24	BC	
4	773.200	42.0	20.6	10.3	31.7	41.2	46.0	4.8	Hori.	100	124	LP	
5	40.682	48.5	14.4	6.7	32.1	37.5	40.0	2.5	Vert.	100	96	BC	
6	65.385	53.7	7.1	6.9	32.1	35.6	40.0	4.4	Vert.	100	58	BC	
7	129.660	50.4	14.0	7.4	32.1	39.7	43.5	3.8	Vert.	100	47	BC	
8	158.460	49.7	15.3	7.6	32.0	40.6	43.5	2.9	Vert.	100	0	BC	
9	198.210	45.6	16.7	7.9	32.0	38.2	43.5	5.3	Vert.	100	242	BC	

DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2010/09/17

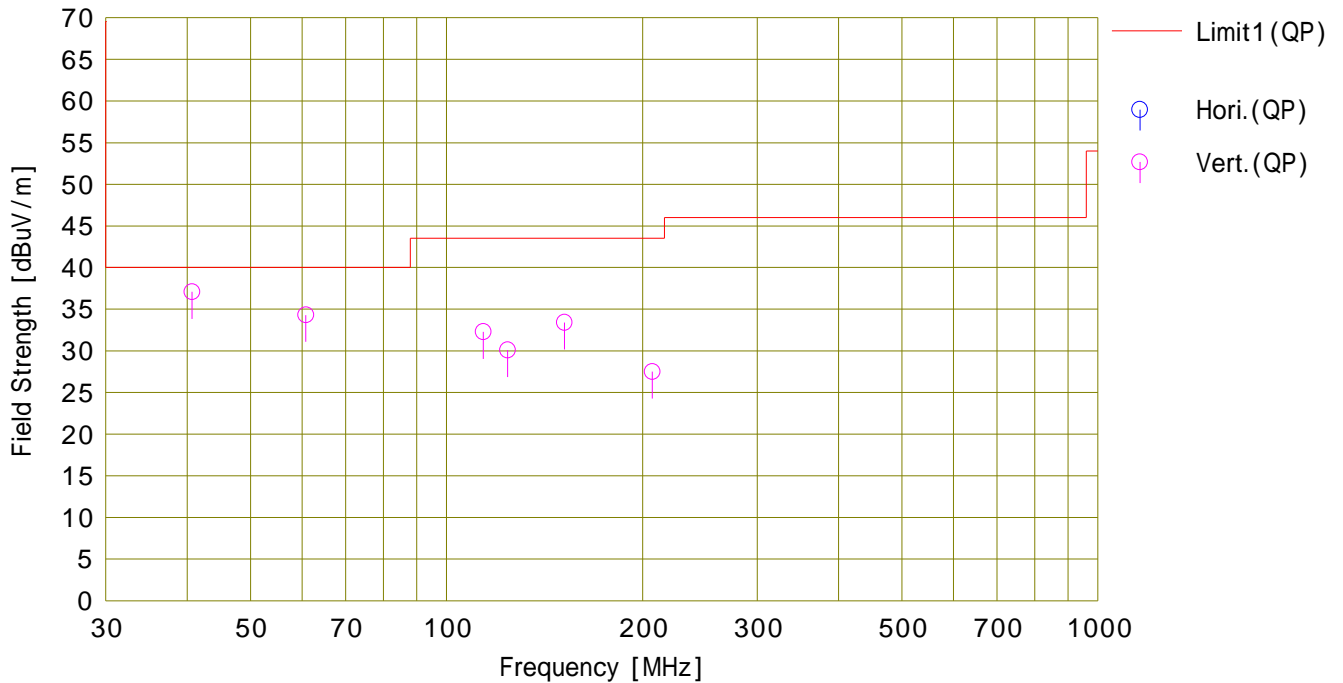
Company : MITSUBISHI ELECTRIC CORPORATION
Kind of EUT : Card Reader
Model No. : UCR-8212A
Serial No. : 0460795

Mode : Transmitting (Tx and Rx) without Card
Report No. : 30LE0268-SH-01-A
Power : DC24V
Temp./Humi. : 23deg.C./58%

Remarks : without card

Limit1 : FCC15C_209 3m

Engineer : Makoto Hosaka

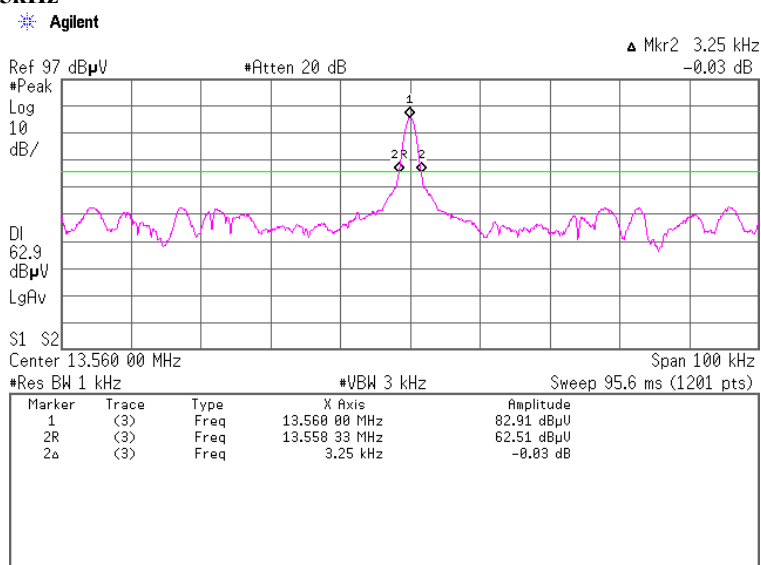


No.	Freq. [MHz]	Reading <QP>	Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	Result <QP>	Limit <QP>	Margin <QP>	Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		[dBuV]				[dBuV/m]	[dBuV/m]	[dB]					
1	40.680	48.1	14.4	6.7	32.1	37.1	40.0	2.9	Vert.	100	91	BC	
2	60.842	51.8	7.7	6.9	32.1	34.3	40.0	5.7	Vert.	100	24	BC	
3	113.868	44.7	12.4	7.3	32.1	32.3	43.5	11.2	Vert.	100	158	BC	
4	124.148	41.2	13.6	7.4	32.1	30.1	43.5	13.4	Vert.	100	4	BC	
5	151.754	42.7	15.1	7.6	32.0	33.4	43.5	10.1	Vert.	100	137	BC	
6	206.934	34.7	16.9	7.9	32.0	27.5	43.5	16.0	Vert.	100	244	BC	

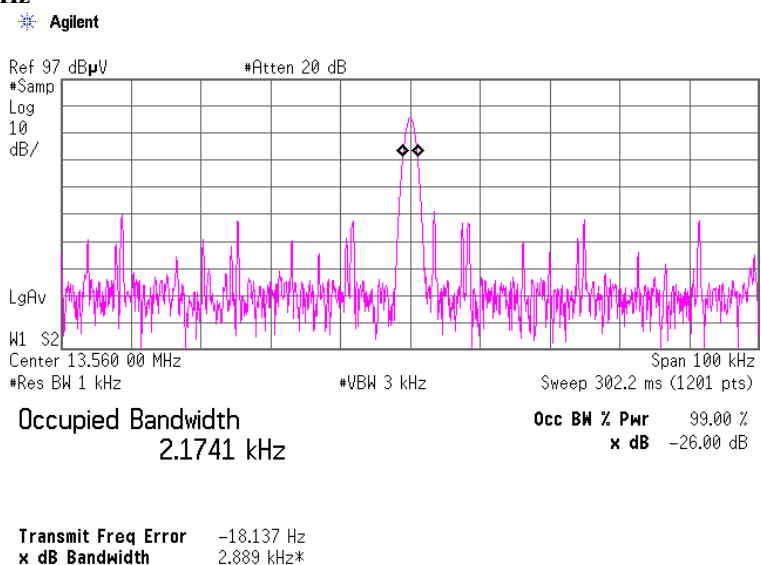
20dB bandwidth & Occupied bandwidth (99%): FCC 15.215(c)

COMPANY	: MITSUBISHI ELECTRIC CORPORATION	UL Japan, Inc. Shonan No5 Shield room	REPORT No.	: 30LE0268-SH-01-A
Equipment	: Card Reader		REGULATION	: FCC Part15SubpartC 215(c)
MODEL NUMBER	: UCR-8212A		DATE	: 2010/09/10
SERIAL NUMBER	: 0460795		TEMP./HUMI	: 25°C/28%
POWER	: DC24V		TEST MODE	: Transmitting (Tx and Rx) with Card
			ENGINEER	: Shinichi Takano

20dB Bandwidth: 3.25kHz



OBW(99%): 2.1741kHz



Data of Frequency Tolerance: FCC 15.225(e)

UL Japan, Inc.
Shonan EMC Lab. No5 Shield room

Company : MITSUBISHI ELECTRIC CORPORATION
 Equipment : Card Reader
 Model : UCR-8212A
 Sample No : 0460795
 Power : DC24V
 Mode : Transmitting (Tx and Rx) with Card

Report No. : 30LE0268-SH-01-A
 Regulation : FCC Part15 SupartC 15.225 (e)

Date : 2010/09/12
 Temperature : 25deg.C
 Humidity : 43%
 ENGINEER : Akio Hayashi

Test Condition		Test Timing	Original Frequency (MHz)	Measured Frequency (MHz)	Frequency Error (MHz)	Frequency tolerance (%)	Limit (%)
-10deg.C.	24V	startup	13.56	13.560179	0.000179150	0.00132	±0.01
		after 2minutes	13.56	13.560172	0.000171622	0.00127	±0.01
		after 5minutes	13.56	13.560167	0.000167275	0.00123	±0.01
		after 10minutes	13.56	13.560166	0.000165544	0.00122	±0.01
0deg.C.	24V	startup	13.56	13.560162	0.000161667	0.00119	±0.01
		after 2minutes	13.56	13.560149	0.000149303	0.00110	±0.01
		after 5minutes	13.56	13.560142	0.000141639	0.00104	±0.01
		after 10minutes	13.56	13.560136	0.000135685	0.00100	±0.01
10deg.C.	24V	startup	13.56	13.560130	0.000130283	0.00096	±0.01
		after 2minutes	13.56	13.560107	0.000106652	0.00079	±0.01
		after 5minutes	13.56	13.560096	0.000095769	0.00071	±0.01
		after 10minutes	13.56	13.560094	0.000093676	0.00069	±0.01
20deg.C.	20.4V (Vmin)	startup	13.56	13.560096	0.000095930	0.00071	±0.01
		after 2minutes	13.56	13.560047	0.000046502	0.00034	±0.01
		after 5minutes	13.56	13.560047	0.000047313	0.00035	±0.01
		after 10minutes	13.56	13.560040	0.000039571	0.00029	±0.01
	24V	startup	13.56	13.560073	0.000073055	0.00054	±0.01
		after 2minutes	13.56	13.560055	0.000055311	0.00041	±0.01
		after 5minutes	13.56	13.560041	0.000040890	0.00030	±0.01
		after 10minutes	13.56	13.560040	0.000039935	0.00029	±0.01
	27.6V (Vmax)	startup	13.56	13.560062	0.000062455	0.00046	±0.01
		after 2minutes	13.56	13.560040	0.000040411	0.00030	±0.01
		after 5minutes	13.56	13.560044	0.000044037	0.00032	±0.01
		after 10minutes	13.56	13.560040	0.000039935	0.00029	±0.01
30deg.C.	24V	startup	13.56	13.560035	0.000034705	0.00026	±0.01
		after 2minutes	13.56	13.559999	-0.000000963	-0.00001	±0.01
		after 5minutes	13.56	13.559986	-0.000014337	-0.00011	±0.01
		after 10minutes	13.56	13.559996	-0.000004109	-0.00003	±0.01
40deg.C.	24V	startup	13.56	13.559959	-0.000040608	-0.00030	±0.01
		after 2minutes	13.56	13.559947	-0.000052748	-0.00039	±0.01
		after 5minutes	13.56	13.559386	-0.000613640	-0.00453	±0.01
		after 10minutes	13.56	13.559935	-0.000065294	-0.00048	±0.01

*The test on 50deg.C. and -20deg.C. were not apply, since the specification of operating temperature of EUT was -10deg.C to 40deg.C.

APPENDIX 3

Test Instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
SAF-03	Pre Amplifier	SONOMA	310N	290213	RE	2010/02/06 * 12
SAT6-03	Attenuator	JFW	50HF-006N	-	RE	2010/02/06 * 12
SBA-03	Biconical Antenna	Schwarzbeck	BBA9106	91032666	RE	2010/03/22 * 12
SCC-C1/C2/C3/C4/C5/C10/SRSE-03	Coaxial Cable&RF Selector	Fujikura/Fujikura/Suhner/Suhner/Suhner/Suhner/TOYO	8D2W/12DSFA/141PE/141PE/141PE/141PE/NS4906	-/0901-271(RF Selector)	RE	2010/04/02 * 12
SLA-03	Logperiodic Antenna	Schwarzbeck	UHALP9108A	UHALP 9108-A 0901	RE	2010/03/22 * 12
SOS-05	Humidity Indicator	A&D	AD-5681	4062518	RE	2010/02/09 * 12
STR-03	Test Receiver	Rohde & Schwarz	ES140	100054/040	RE,CE	2010/07/21 * 12
SJM-10	Measure	PROMART	SEN1935	-	RE,CE	-
SAEC-03(NSA)	Semi-Anechoic Chamber	TDK	SAEC-03(NSA)	3	RE	2009/09/18 * 12
COTS-SEMI-1	EMI Software	TSJ	TEPTO-DV	-	RE	-
SCC-C9/C10/SRSE-03	Coaxial Cable&RF Selector	Suhner/Suhner/TOYO	RG223U/141PE/NS4906	-/0901-271(RF Selector)	CE	2010/04/02 * 12
SLS-05	LISN	Rohde & Schwarz	ENV216	100516	CE	2010/02/19 * 12
SAT3-06	Attenuator	JFW	50HF-003N	-	CE	2010/02/06 * 12
SOS-06	Humidity Indicator	A&D	AD-5681	4062118	CE	2010/02/17 * 12
SLP-02	Loop Antenna	Rohde & Schwarz	HFH2-Z2	100218	RE	2009/10/06 * 12
SSA-02	Spectrum Analyzer	Agilent	E4448A	MY48250106	BW	2010/06/22 * 12
SOS-09	Humidity Indicator	A&D	AD-5681	4061484	FT	2010/02/17 * 12
SSA-03	Spectrum Analyzer	Agilent	E4448A	MY48250152	FT	2009/06/09 * 24
SSCA-01	Search coil	LANGER	RF-R 400-1	02-0634	FT	Pre Check
STS-05	Digital Hitester	Hioki	3805-50	080997828	FT	2010/03/26 * 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 :

CE: Conducted emission,
RE: Radiated emission,
BW: Bandwidth
FT: Frequency Tolerance