## Channel Separation (Regulation: FCC 15.247(a)(1))

UL Japan, Inc. Yamakita EMC lab. No.4 shielded room

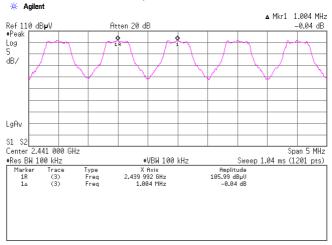
Date: 2009.12.10

Temp./Humid.: 21 deg. C. / 40

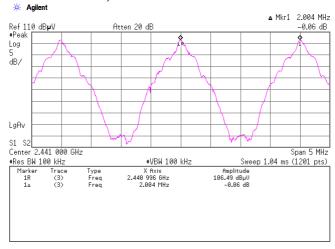
%

Engineer: Minoru Nakatake
Test mode: Transmitting

Limit: ≥ 20dB Bandwidth (Power: No greater than 1W)
1. Hopping, DH5: 1.004MHz (20dB Bandwidth: 940.0 kHz)



### 2. Inquiry: 2.004MHz (20dB Bandwidth: 782.5kHz)



### 20dB Bandwidth (Regulation: FCC 15.247(a)(1))

UL Japan, Inc. Yamakita EMC lab. No.4

ate: 2009.12.10

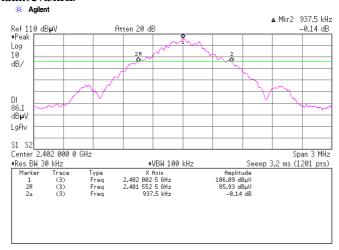
Temp/Humid.: 21 deg. C. / 40
Engineer: Minoru Nakatake
Test mode: Transmitting

shielded room

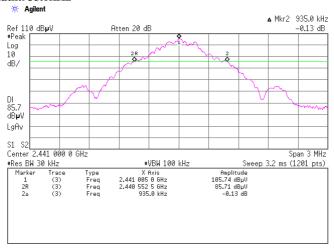
%

### [Hopping off, DH5]

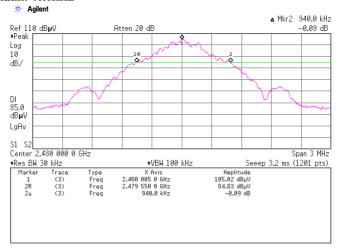
#### 1. ch: 2402MHz/20dB Bandwidth:937.5kHz



#### 2. ch: 2441MHz/20dB Bandwidth:935.0kHz

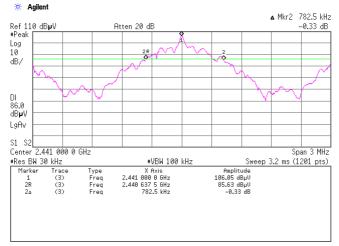


#### 3. ch: 2480MHz/20dB Bandwidth:940.0kHz



## [Inquiry]

# 4. Inquiry/20dB Bandwidth:782.5kHz \*\* Agilent



Company: Kind of Equipment: Serial No.:

PIONEER CORPORATION MEDIA CENTER RECEIVER TPJJ000035

Report No .: Model No.: Power:

30CE0242-YK-01-A MVH-P8200BT DC 12.0V

%

## Channel Utilization (Regulation: FCC 15.247(a)(1)(iii))

UL Japan, Inc. Yamakita EMC lab. shielded room No.4

2009.12.10

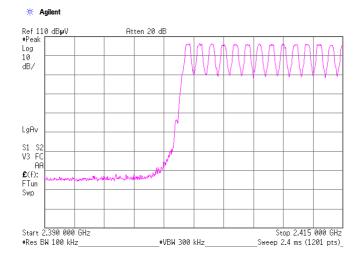
Temp./Humid.: 21 deg. C./ 40 Engineer: Minoru Nakatake Test mode: Transmitting

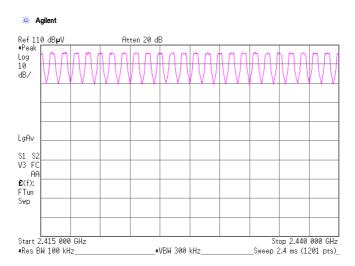
Hopping, DH5: 79ch

1.

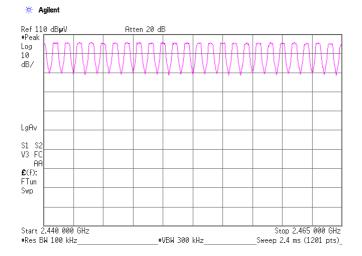


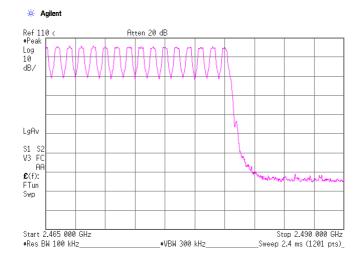
2.



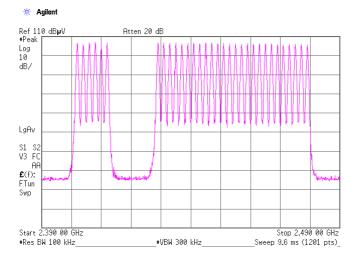


4.





## 1. Inquiry: 32ch



Company: Kind of Equipment: Serial No.: PIONEER CORPORATION MEDIA CENTER RECEIVER TPJJ000035 Report No.: Model No.: Power: 30CE0242-YK-01-A MVH-P8200BT DC 12.0V

Shielded room

%

## Dwell Time (Regulation: FCC 15.247(a)(1)(iii))

Test mode:

UL Japan, Inc. Yamakita EMC lab.

2009.12.10

No.4

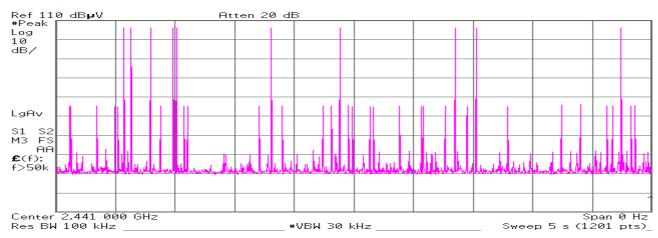
Temp./Humid.: Engineer: 21 deg. C. / Minoru Nakatake

Minoru Nakatake Transmitting

## Hopping (DH1):

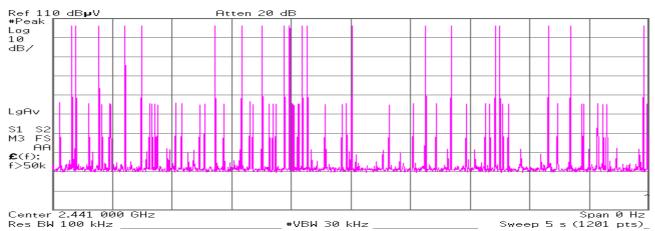
#### Count 1

#### 🗯 Agilent



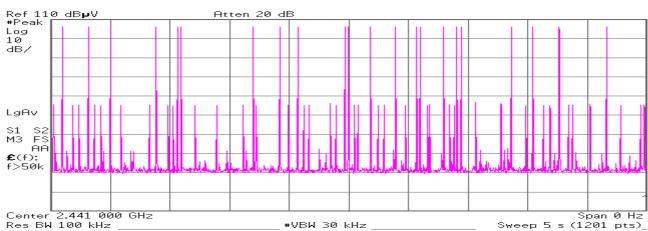
#### Count 2

#### 🔆 Agilent



## Count 3

#### 🔆 Agilent



Company: Kind of Equipment: Serial No.: PIONEER CORPORATION MEDIA CENTER RECEIVER TPJJ000035 

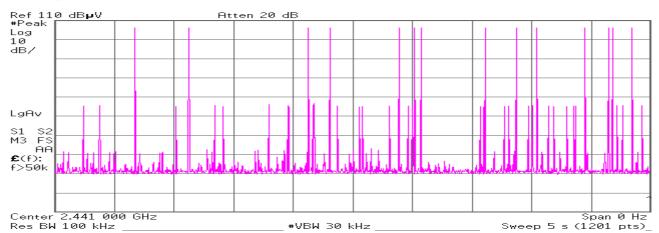
 Report No.:
 30CE0242-YK-01-A

 Model No.:
 MVH-P8200BT

 Power:
 DC 12.0V

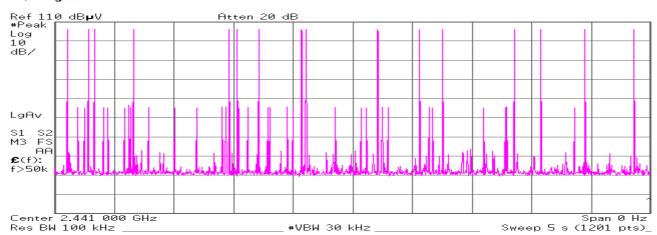
#### Count 4



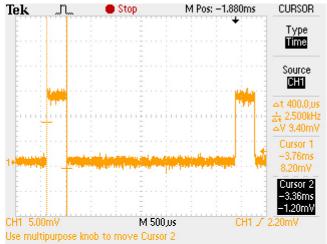


#### Count 5

#### 🗰 Agilent



## **Duty cycle(Hopping DH1)**



Average times of rising in 5 sec. of sweep = (10 + 20 + 22 + 14 + 16) / 5 = 16.4

Average times of rising in 1 sec. = 16.4 / 5s = 3.28

Average times of rising in 0.4x = 0.4 \* 79ch \* 3.28 = 103.65

Dwell time = 103.65 \* 0.400 = 41.46 [ms]

Limit: Dwell Time < 0.4[s]

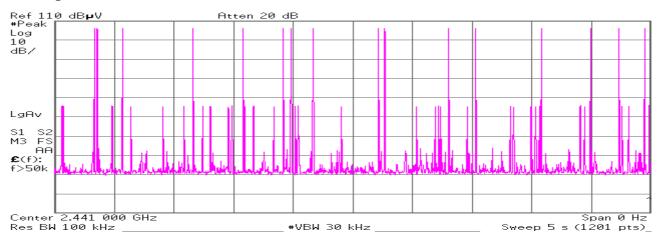
Company: PIONEER CORPORATION Report N
Kind of Equipment: MEDIA CENTER RECEIVER Model No
Serial No.: TPJJ000035 Power:

Report No.: 30CE0242-YK-01-A Model No.: MVH-P8200BT DC 12.0V

#### Hopping (DH3):

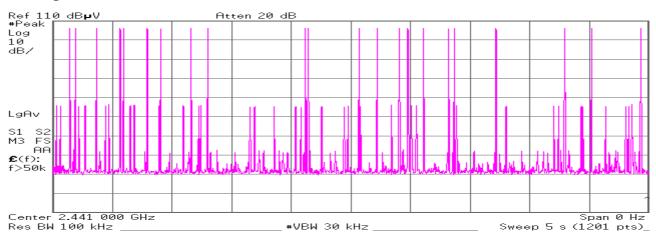
#### Count 1





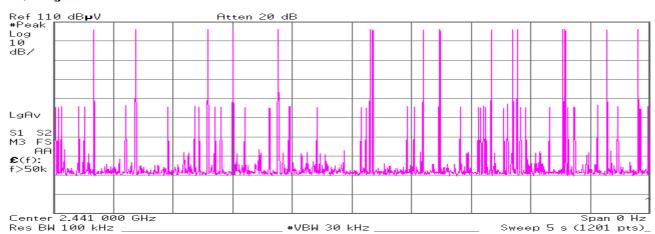
### Count 2

#### 🗰 Agilent



#### Count 3

## Agilent

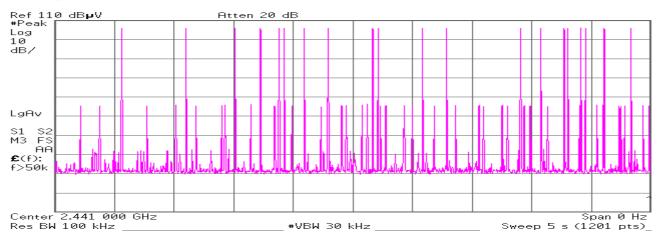


Page:

Company: Kind of Equipment: Serial No.: PIONEER CORPORATION MEDIA CENTER RECEIVER TPJJ000035 Report No.: Model No.: Power: 30CE0242-YK-01-A MVH-P8200BT DC 12.0V

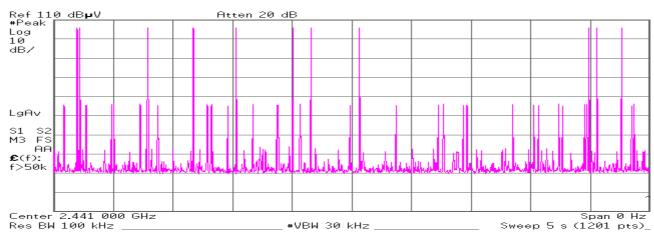
#### Count 4



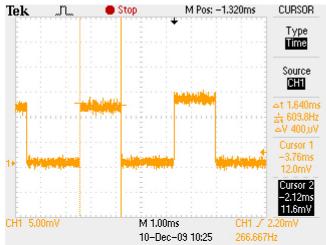


#### Count 5

#### 🗰 Agilent



## **Duty cycle(Hopping DH3)**



Average times of rising in 5 sec. of sweep = (16 + 22 + 16 + 20 + 11)/5 = 17.0

Average times of rising in 1 sec. = 17.0 / 5s = 3.4

Average times of rising in 0.4x = 0.4 \* 79ch \* 3.4 = 107.44

Dwell time = 107.44 \* 1.64 = 176.20 [ms]

Limit: Dwell Time < 0.4[s]

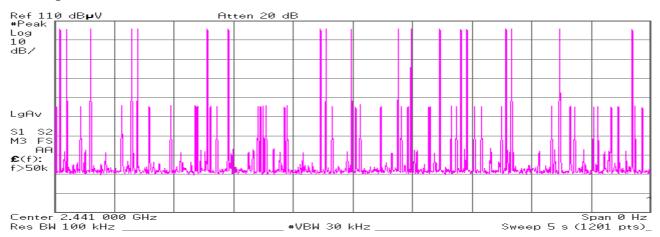
Company: PIONEER CORPORATION
Kind of Equipment: MEDIA CENTER RECEIVER
Serial No.: TPJJ000035

Report No.: 30CE0242-YK-01-A Model No.: MVH-P8200BT DC 12.0V

#### Hopping (DH5):

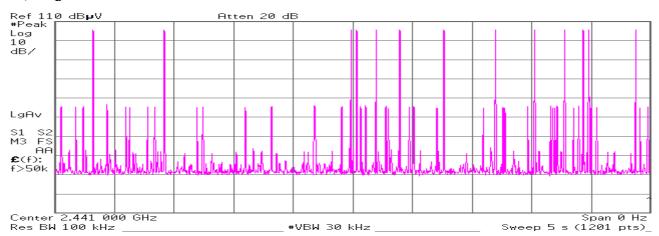
#### Count 1





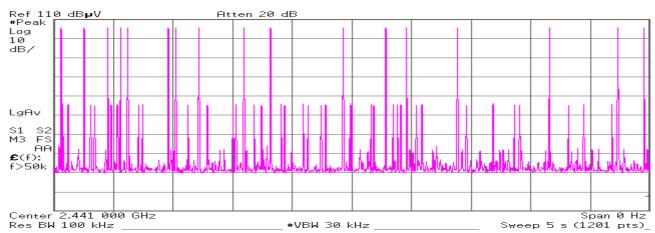
#### Count 2

### 🗰 Agilent



#### Count 3

#### 🗯 Agilent



Company: Kind of Equipment: Serial No.: PIONEER CORPORATION MEDIA CENTER RECEIVER TPJJ000035 

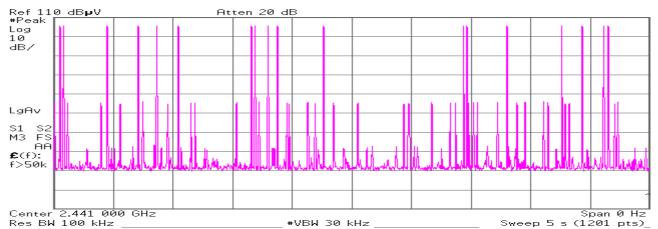
 Report No.:
 30CE0242-YK-01-A

 Model No.:
 MVH-P8200BT

 Power:
 DC 12.0V

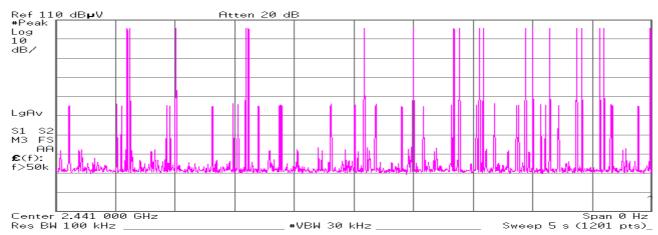
#### Count 4





#### Count 5

#### 🔆 Agilent



## **Duty cycle(Hopping DH5)**



Average times of rising in 5 sec. of sweep = (19 + 13 + 17 + 18 + 19)/5 = 17.2

Average times of rising in 1 sec. = 17.2 / 5s = 3.44

Average times of rising in 0.4x = 0.4 \* 79ch \* 3.44 = 108.70

Dwell time = 108.70 \* 2.88 = 313.07 [ms]

Limit: Dwell Time < 0.4[s]

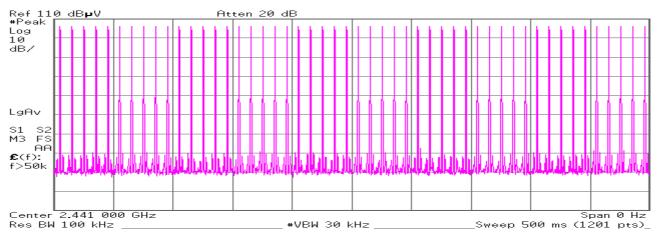
Company: PIONEER CORPORATION
Kind of Equipment: MEDIA CENTER RECEIVER
Serial No.: TPJJ000035

Report No.: 30CE0242-YK-01-A Model No.: MVH-P8200BT Power: DC 12.0V

## Inquiry:

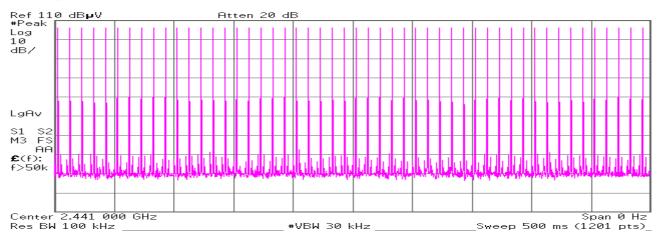
#### Count 1





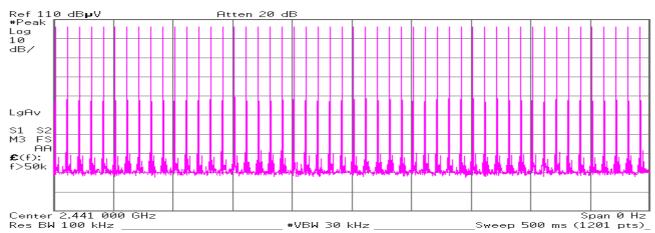
#### Count 2

### 🗰 Agilent



#### Count 3

#### 🗯 Agilent



Company: Kind of Equipment: Serial No.: PIONEER CORPORATION MEDIA CENTER RECEIVER

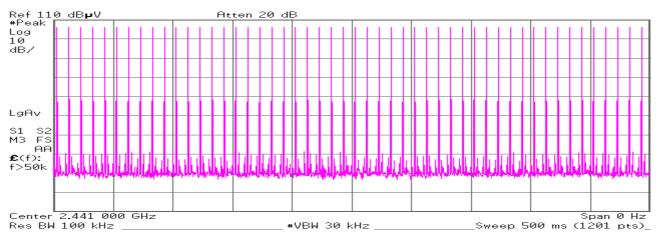
TPJJ000035

Report No.: 30C Model No.: MV Power: DC

30CE0242-YK-01-A MVH-P8200BT DC 12.0V

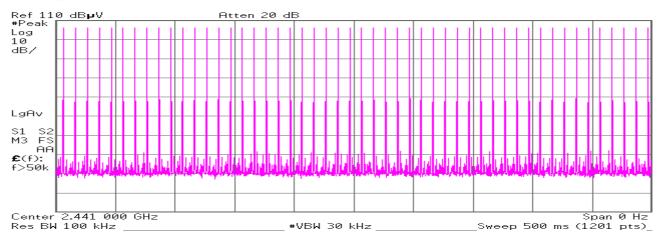
#### Count 4



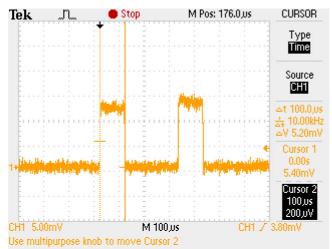


### Count 5

### 🐺 Agilent



#### **Duty cycle(Inquiry)**



Average times of rising in 0.5 sec. of sweep = (50 + 50 + 50 + 50 + 50) / 5 = 50.0

Average times of rising in 1 sec. = 50.0 / 0.5s = 100.0

Average times of rising in 0.4x = 0.4 \* 32ch \* 100.0 = 1280.0

Dwell time = 1280.0 \* 0.100 = 128.0 [ms]

Limit: Dwell Time < 0.4[s]

## Maximum Peak Conducted Output Power (Regulation: FCC 15.247(b)(1))

UL Japan, Inc Yamakita EMC lab. No.4 Shielded Room

DATE: 2009.12.10 TEMP./HUMID.: 21deg.C/40% TEST MODE: Transmitting

ENGINEER: Minoru Nakatake

## DH5

СН	FREQ	P/M	Cable Loss	Results	Limit	MARGIN
		Reading			(1W)	
	[GHz]	[dBm]	[dB]	[dBm]	[dBm]	[dB]
Low	2402.00	-0.76	1.18	0.42	30.00	29.58
Mid	2441.00	-1.24	1.21	-0.03	30.00	30.03
High	2480.00	-1.67	1.27	-0.40	30.00	30.40
Inquiry	-	-0.69	1.21	0.52	30.00	29.48

P/M: Power Meter

CABLE LOSS:Customer's cable + KCC-D20

Out of Band Emission (Antenna Terminal Conducted) (Regulation: FCC 15.247(d))

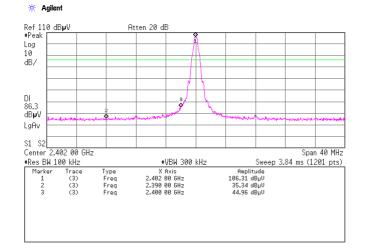
UL Japan, Inc. Yamakita EMC lab. No.4 shielded room

Date: 2009.12.10

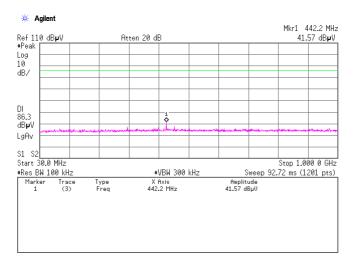
Temp./Humid.: 21 deg. C. / 40 % Engineer: Minoru Nakatake Test mode: Transmitting

[Transmitting DH5] Ch:2402MHz

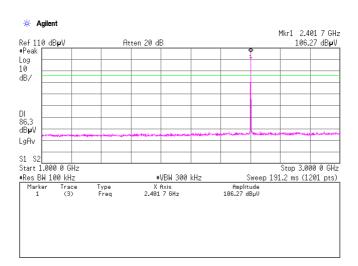
1.



2.

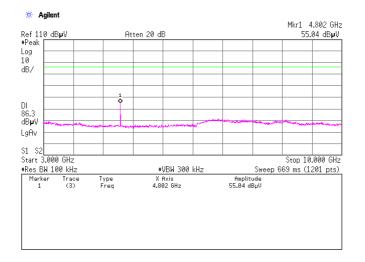


3.

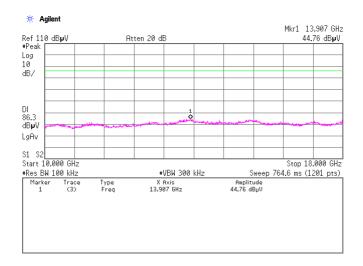


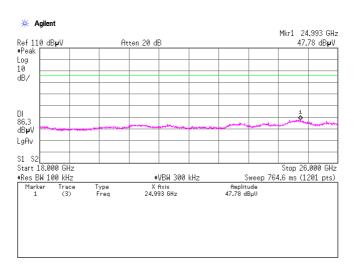
## [Transmitting DH5] Ch:2402MHz

4.



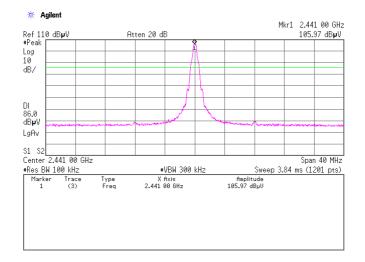
5.



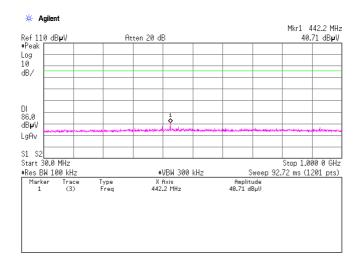


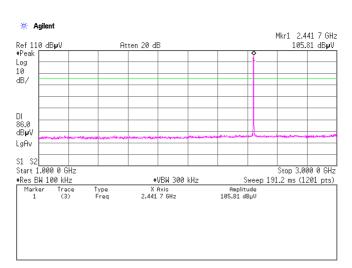
## [Transmitting DH5] Ch:2441MHz

1.



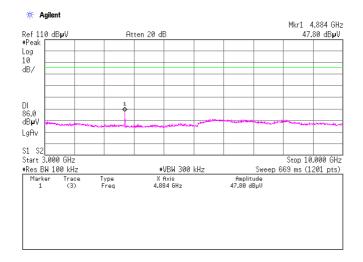
2.



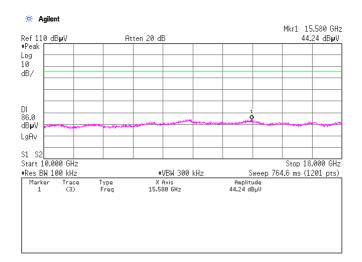


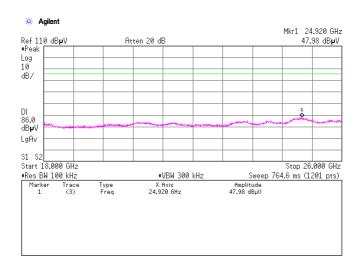
## [Transmitting DH5] Ch:2441MHz

4



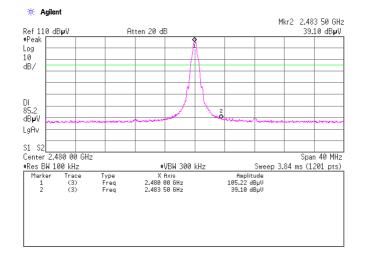
5.



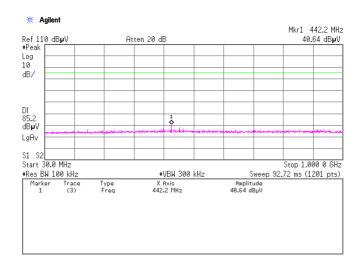


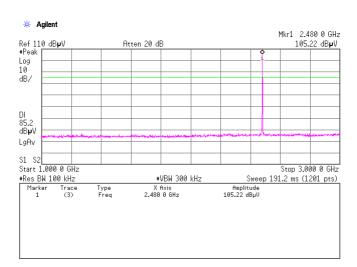
# [Transmitting DH5] Ch:2480MHz

1.



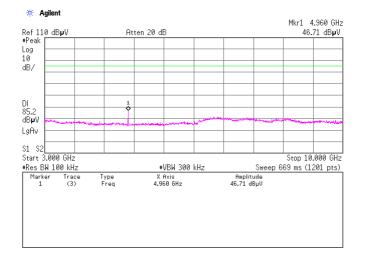
2.



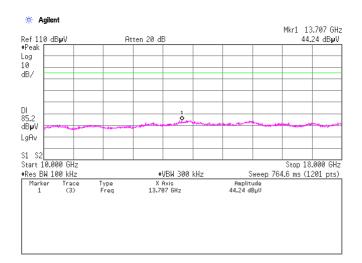


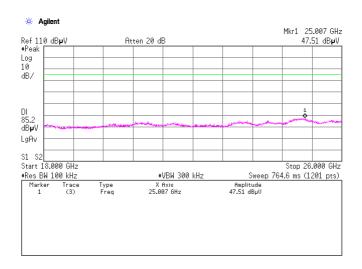
## [Transmitting DH5] Ch:2480MHz

4.



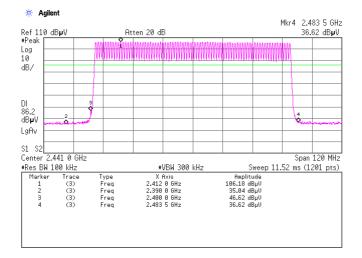
5.



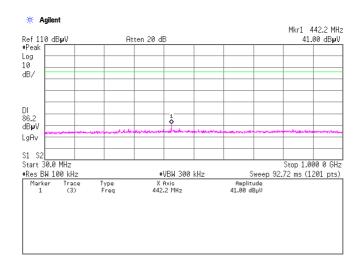


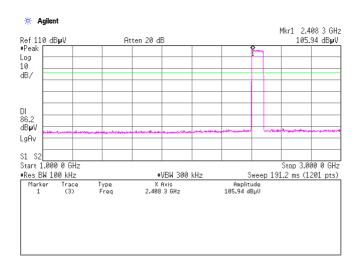
## [Transmitting DH5] Hopping

1.



2.





Company: PIONEER CORPORATION Report Kind of Equipment: MEDIA CENTER RECEIVER Model Serial No.: TPJJ000035 Power

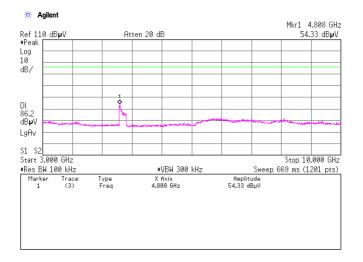
 Report No.:
 30CE0242-YK-01-A

 Model No.:
 MVH-P8200BT

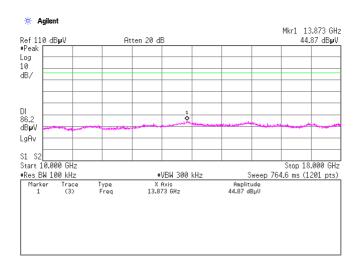
 Power:
 DC 12.0V

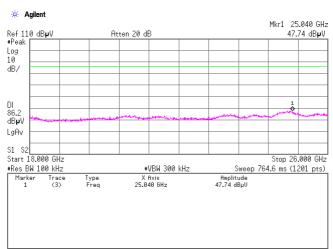
### [Transmitting DH5] Hopping

4.



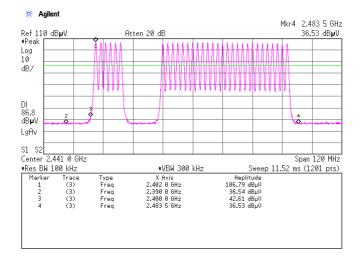
5.



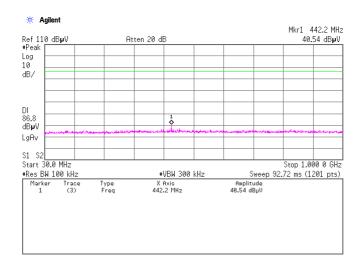


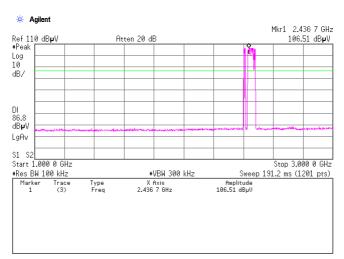
### [Transmitting] <u>Inquiry</u>

1.



2.



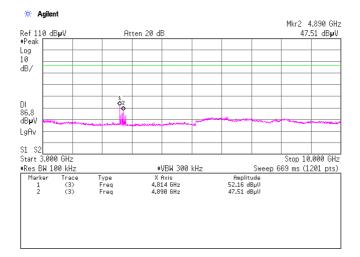


Company: PIONEER CORPORATION
Kind of Equipment: MEDIA CENTER RECEIVER
Serial No.: TPJJ000035

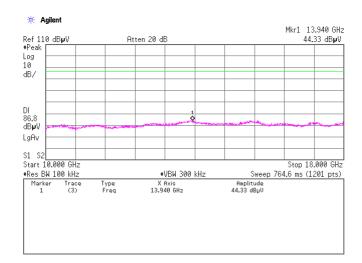
Report No.: Model No.: Power: 30CE0242-YK-01-A MVH-P8200BT DC 12.0V

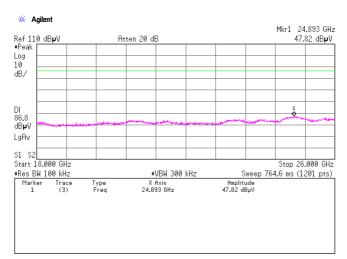
## [Transmitting] Inquiry

4.



5.





UL Japan, Inc.

YAMAKITA No.1 Semi-anechoic chamber Report No.: 30CE0242-YK-01-A

**Applicant** : PIONEER CORPORATION Type of Equipment MEDIA CENTER RECEIVER

MVH-P8200BT Model No. Serial No. : TPJJ000031 Power DC12V

Mode : Transmitting (2402MHz)

Remarks

: 12/8/2009 : 3 m : 20 °C : 40 % Date Test Distance

Engineer : Yasumasa Owaki Temperature

Humidity

: FCC Part15C § 15.209 Limit

No.	FREQ.	ANT TYPE	REAI HOR		ANT FACTOR	AMP GAIN	CABLE LOSS	ATTEN.	RESU HOR	JLT VER	LIMITS	MAI HOR	RGIN VER
	[MHz]		[dB	μV]	[dB/m]	[dB]	[dB]	[dB]	[dB μ \	V/m] [d	$B \mu V/m$	[	dB]
1. 2. 3. 4.	213. 62 283. 50 300. 38 364. 50	BB BB BB	36. 6 38. 7 45. 6 40. 5	37. 1 30. 8 34. 6 35. 3	17. 0 19. 0 14. 4 16. 1	27. 9 27. 6 27. 6 28. 1	3. 9	6. 0 6. 0 3. 0 3. 0	35. 0 40. 0 39. 5 36. 2	35. 5 32. 1 28. 5 31. 0	43. 5 46. 0 46. 0 46. 0	8. 5 6. 0 6. 5 9. 8	8. 0 13. 9 17. 5 15. 0

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN. Except for the above table : adequate margin data below the limits.

■ ANT: KBA-03 (<300MHz) /KLA-03 ■ AMP: KAF-05 ■ RECEIVER: KTR-04 \*\* : enough margin compared to another polarized wave data.

UL Japan, Inc.

YAMAKITA No.1 Semi-anechoic chamber Report No.: 30CE0242-YK-01-A

Applicant : PIONEER CORPORATION Type of Equipment MEDIA CENTER RECEIVER

Model No. MVH-P8200BT Serial No. : TPJJ000031 Power : DC12V

Mode : Transmitting (2441MHz)

Remarks

: 12/8/2009 : 3 m : 20 °C : 40 % Date Test Distance

Engineer : Yasumasa Owaki Temperature

Humidity

: FCC Part15C § 15.209 Limit

No.	FREQ. ANT TYPE [MHz]	READING HOR VER $[\mathrm{dB}\mu\mathrm{V}]$	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESU HOR [dB μ V	JLT VER //m] [d]	LIMITS BμV/m]	HOR	RGIN VER HB]
1. 2. 3. 4.	216. 96 BB 283. 50 BB 300. 38 BB 364. 50 BB	36. 0 34. 5 38. 7 30. 4 45. 6 34. 7 40. 7 35. 3	19. 0 14. 4	27. 9 27. 6 27. 6 28. 1	3. 9	6. 0 6. 0 3. 0 3. 0	34. 4 40. 0 39. 5 36. 4	32. 9 31. 7 28. 6 31. 0	46. 0 46. 0 46. 0 46. 0	11. 6 6. 0 6. 5 9. 6	13. 1 14. 3 17. 4 15. 0

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN. Except for the above table : adequate margin data below the limits.

■ ANT: KBA-03 (<300MHz) /KLA-03 ■ AMP: KAF-05 ■ RECEIVER: KTR-04 \*\* : enough margin compared to another polarized wave data.

UL Japan, Inc.

YAMAKITA No.1 Semi-anechoic chamber Report No.: 30CE0242-YK-01-A

**Applicant** : PIONEER CORPORATION Type of Equipment MEDIA CENTER RECEIVER

MVH-P8200BT Model No. Serial No. TPJJ000031 Power DC12V

Mode : Transmitting (2480MHz)

Remarks

: 12/8/2009 : 3 m : 20 °C : 40 % Date Test Distance

Engineer : Yasumasa Owaki Temperature

Humidity

: FCC Part15C § 15.209 Limit

No.	FREQ.	ANT TYPE	REAI HOR	VER	ANT FACTOR	AMP GAIN	CABLE LOSS	ATTEN.	RESI HOR	VER	LIMITS	HOR	RGIN VER
	[MHz] 		LdB	μV] 	[dB/m] 	[dB] 	[dB] 	[dB] 	dΒμ'	V/m] [d]	BμV/m] 		dB] 
1.	217.89	DD	35. 1	33.8	17.0	27.9	0.0	6.0	33.5	32.2	46.0	12.5	13.8
2.	283. 50		38. 6	29. 9	19.0	27.6	٥. ٥	6.0	39.9	31.2	46.0	6. 1	14.8
3.	300.38		45. 9	35. 1	14. 4	27.6		3.0	39.8	29.0	46.0	6. 2	17.0
4.	364. 50	BB	40.7	35. 4	16. 1	28. 1	4. 7	3. 0	36. 4	31. 1	46. 0	9.6	14. 9

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN. Except for the above table : adequate margin data below the limits.

■ ANT: KBA-03 (<300MHz) /KLA-03 ■ AMP: KAF-05 ■ RECEIVER: KTR-04 \*\* : enough margin compared to another polarized wave data.

UL Japan, Inc.

YAMAKITA No.1 Semi-anechoic chamber Report No.: 30CE0242-YK-01-A

Applicant : PIONEER CORPORATION Kind of Equipment MEDIA CENTER RECEIVER

MVH-P8200BT Model No. Serial No. : TPJJ000031 Power : DC12V

Transmitting (2402MHz)PK:RBW=1MHz, VBW=1MHz Mode Remarks

Date

: 12/8/2009 : 3 m : 20 °C : 40 % Test Distance Temperature Humidity Engineer : Yasumasa Owaki

: FCC Part15C § 15.209 (PK Detection) Regulation

No.	FREQ.	ANT TYPE	READ HOR [dB]	VER	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	REST HOR [dB $\mu$	VER	LIMITS BμV/m]	HOR	RGIN VER dB]
1. 2. 3. 4. 5. 6.	1944. 00 2390. 00 4804. 00 7206. 00 9608. 00 12010. 00	BB BB BB BB BB	46. 0 42. 6 44. 7 43. 9 44. 6 44. 2	47. 8 42. 2 44. 0 44. 2 44. 5 44. 1	32. 2 36. 6	36. 6 36. 5 36. 2 36. 2 36. 3 35. 6	7. 2 8. 4 9. 0 10. 0	0. 0 0. 0 0. 0 0. 0 0. 0 0. 0	43. 5 41. 3 49. 1 53. 3 57. 1 58. 0	45. 3 40. 9 48. 4 53. 6 57. 0 57. 9	74. 0 74. 0 74. 0 74. 0 74. 0 74. 0	30. 5 32. 7 24. 9 20. 7 16. 9 16. 0	28. 7 33. 1 25. 6 20. 4 17. 0 16. 1

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN. Except for the above table : adequate margin data below the limits.

■ ANT: KHA-02 (<18GHz) /KHA-04 ■ CABLE: KCC-D13/D16 ■ AMP: KAF-02 ■ RECEIVER: KSA-R11

UL Japan, Inc.

YAMAKITA No.1 Semi-anechoic chamber Report No.: 30CE0242-YK-01-A

**Applicant** : PIONEER CORPORATION Kind of Equipment MEDIA CENTER RECEIVER

Model No. MVH-P8200BT Serial No. TPJJ000031 Power DC12V

Mode

: Transmitting(2402MHz)
: AV:RBW=1MHz, VBW=300Hz(No. 1:10Hz) \*1) Remarks

: 12/8/2009 : 3 m Date

: 3 m : 20 °C : 40 % Test Distance

Engineer : Yasumasa Owaki Temperature

Humidity

: FCC Part15C § 15.209 (AV Detection) Regulation

No.	•	ANT TYPE	READ HOR [dB]	VER	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESTHOR [dB $\mu$ ]	VER	LIMITS BμV/m]	HOR	RGIN VER HB]
2. 2 3. 4 4. 7 5. 9	1944. 00 2390. 00 1804. 00 7206. 00 9608. 00 2010. 00	BB BB BB BB BB BB	35. 6 34. 7 36. 0 33. 6 32. 5 32. 7	38. 7 34. 7 34. 7 33. 6 32. 6 32. 6	38.8	36. 6 36. 5 36. 2 36. 2 36. 3 35. 6	7. 2 8. 4 9. 0 10. 0	0. 0 0. 0 0. 0 0. 0 0. 0 0. 0	33. 1 33. 4 40. 4 43. 0 45. 0 46. 5	36. 2 33. 4 39. 1 43. 0 45. 1 46. 4	54. 0 54. 0 54. 0 54. 0 54. 0 54. 0	20. 9 20. 6 13. 6 11. 0 9. 0 7. 5	17. 8 20. 6 14. 9 11. 0 8. 9 7. 6

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN. Except for the above table : adequate margin data below the limits.

■ ANT: KHA-02 (<18GHz) /KHA-04 ■ CABLE: KCC-D13/D16 ■ AMP: KAF-02 ■ RECEIVER: KSA-R11

<sup>\*</sup> This noise is not pulse emission, therefore measurement was performed with 10Hz VBW according to DA00-705.

UL Japan, Inc.

YAMAKITA No.1 Semi-anechoic chamber Report No.: 30CE0242-YK-01-A

**Applicant** : PIONEER CORPORATION Kind of Equipment MEDIA CENTER RECEIVER

MVH-P8200BT Model No. Serial No. TPJJ000031 Power DC12V

Transmitting (2441MHz)PK:RBW=1MHz, VBW=1MHz Mode Remarks

Date

: 12/8/2009 : 3 m : 20 °C : 40 % Test Distance Temperature Humidity : Yasumasa Owaki Engineer

: FCC Part15C § 15.209 (PK Detection) Regulation

No.	FREQ.	ANT TYPE	REAI HOR [dB]		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RES HOR [dB $\mu$	ULT VER V/m] [d	LIMITS BμV/m]	HOR	RGIN VER HB]
1. 2. 3. 4. 5.	1944. 03 4882. 00 7323. 00 9764. 00 12205. 00	BB BB BB BB BB	46. 3 43. 3 44. 0 45. 0 43. 6	48. 1 43. 2 43. 3 44. 4 43. 5	36. 9 38. 9	36. 6 36. 1 36. 3 36. 2 35. 2	6. 6 8. 4 9. 0 10. 1 10. 7	0. 0 0. 0 0. 0 0. 0 0. 0	43. 8 47. 8 53. 6 57. 8 58. 1	45. 6 47. 7 52. 9 57. 2 58. 0	74. 0 74. 0 74. 0 74. 0 74. 0	30. 2 26. 2 20. 4 16. 2 15. 9	28. 4 26. 3 21. 1 16. 8 16. 0

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN. Except for the above table : adequate margin data below the limits.

■ ANT: KHA-02 (<18GHz) /KHA-04 ■ CABLE: KCC-D13/D16 ■ AMP: KAF-02 ■ RECEIVER: KSA-R11

UL Japan, Inc.

YAMAKITA No.1 Semi-anechoic chamber Report No.: 30CE0242-YK-01-A

Applicant : PIONEER CORPORATION Kind of Equipment MEDIA CENTER RECEIVER

Model No. MVH-P8200BT Serial No. : TPJJ000031 Power : DC12V

Mode

: Transmitting(2441MHz)
: AV:RBW=1MHz, VBW=300Hz(No. 1:10Hz) \*1) Remarks

: 12/8/2009 : 3 m : 20 °C : 40 % Date

Test Distance

Engineer : Yasumasa Owaki Temperature

Humidity

: FCC Part15C § 15.209 (AV Detection) Regulation

No.	FREQ.	ANT TYPE	READ HOR [dB]	VER	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RES HOR [dB $\mu$	VER	LIMITS BμV/m]	HOR	RGIN VER HB]
1. 2. 3. 4. 5.	1944. 03 4882. 00 7323. 00 9764. 00 12205. 00	BB BB BB BB BB	35. 9 32. 7 33. 1 33. 1 32. 5	38. 6 33. 7 33. 5 33. 2 32. 5	32. 2 36. 9	36. 6 36. 1 36. 3 36. 2 35. 2	6. 6 8. 4 9. 0 10. 1 10. 7	0. 0 0. 0 0. 0 0. 0 0. 0	33. 4 37. 2 42. 7 45. 9 47. 0	36. 1 38. 2 43. 1 46. 0 47. 0	54. 0 54. 0 54. 0 54. 0 54. 0	20. 6 16. 8 11. 3 8. 1 7. 0	17. 9 15. 8 10. 9 8. 0 7. 0

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN. Except for the above table: adequate margin data below the limits.

■ ANT: KHA-02 (<18GHz) /KHA-04 ■ CABLE: KCC-D13/D16 ■ AMP: KAF-02 ■ RECEIVER: KSA-R11

<sup>\*</sup> This noise is not pulse emission, therefore measurement was performed with 10Hz VBW according to DA00-705.

UL Japan, Inc.

YAMAKITA No.1 Semi-anechoic chamber Report No.: 30CE0242-YK-01-A

Applicant : PIONEER CORPORATION Kind of Equipment MEDIA CENTER RECEIVER

Model No. MVH-P8200BT Serial No. : TPJJ000031 Power : DC12V

Transmitting (2480MHz)PK:RBW=1MHz, VBW=1MHz Mode Remarks

Date

: 12/8/2009 : 3 m : 20 °C : 40 % Test Distance Temperature Humidity Engineer : Yasumasa Owaki

: FCC Part15C § 15.209 (PK Detection) Regulation

No.	FREQ. ANT TYPE [MHz]	READ HOR [db/	VER	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RES HOR $[dB\mu]$	VER	LIMITS BμV/m]	HOR	RGIN VER dB]
2. 244 3. 490 4. 74 5. 992	44. 02 BB 83. 50 BB 60. 00 BB 40. 00 BB 20. 00 BB 00. 00 BB	46. 1 44. 8 43. 6 43. 3 44. 7 44. 7	47. 3 45. 1 44. 1 43. 9 44. 9 43. 5	27. 5 28. 0 32. 3 37. 2 39. 1 39. 3	36. 6 36. 5 36. 1 36. 3 36. 2 34. 9	7. 3 8. 5 9. 0 10. 1	0. 0 0. 0 0. 0 0. 0 0. 0 0. 0	43. 6 43. 6 48. 3 53. 2 57. 7 59. 8	44. 8 43. 9 48. 8 53. 8 57. 9 58. 6	74. 0 74. 0 74. 0 74. 0 74. 0 74. 0	30. 4 30. 4 25. 7 20. 8 16. 3 14. 2	29. 2 30. 1 25. 2 20. 2 16. 1 15. 4

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN. Except for the above table : adequate margin data below the limits.

■ ANT: KHA-02 (<18GHz) /KHA-04 ■ CABLE: KCC-D13/D16 ■ AMP: KAF-02 ■ RECEIVER: KSA-R11

UL Japan, Inc.

YAMAKITA No.1 Semi-anechoic chamber Report No.: 30CE0242-YK-01-A

**Applicant** : PIONEER CORPORATION Kind of Equipment MEDIA CENTER RECEIVER

Model No. MVH-P8200BT Serial No. : TPJJ000031 Power : DC12V

Mode

: Transmitting(2480MHz)
: AV:RBW=1MHz, VBW=300Hz(No. 1:10Hz) \*1) Remarks

: 12/8/2009 : 3 m Date

: 3 m : 20 °C : 40 % Test Distance

Engineer : Yasumasa Owaki Temperature

Humidity

: FCC Part15C § 15.209 (AV Detection) Regulation

No.	FREQ.	ANT TYPE	REAL HOR [dB]	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RES HOR [dB $\mu$	VER	LIMITS BμV/m]	HOR	RGIN VER HB]
1. 2. 3. 4. 5. 6.	1944. 02 2483. 50 4960. 00 7440. 00 9920. 00 12400. 00	BB BB BB BB BB	35. 7 40. 7 33. 3 33. 0 32. 4 31. 8	38. 5 43. 2 33. 1 33. 2 32. 3 31. 9	28. 0 32. 3	36. 6 36. 5 36. 1 36. 3 36. 2 34. 9	7. 3 8. 5 9. 0 10. 1	0. 0 0. 0 0. 0 0. 0 0. 0 0. 0	33. 2 39. 5 38. 0 42. 9 45. 4 46. 9	36. 0 42. 0 37. 8 43. 1 45. 3 47. 0	54. 0 54. 0 54. 0 54. 0 54. 0 54. 0	20. 8 14. 5 16. 0 11. 1 8. 6 7. 1	18. 0 12. 0 16. 2 10. 9 8. 7 7. 0

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN. Except for the above table : adequate margin data below the limits.

■ ANT: KHA-02 (<18GHz) /KHA-04 ■ CABLE: KCC-D13/D16 ■ AMP: KAF-02 ■ RECEIVER: KSA-R11

<sup>\*</sup> This noise is not pulse emission, therefore measurement was performed with 10Hz VBW according to DA00-705.

Company: Kind of Equipment: Serial No.: PIONEER CORPORATION MEDIA CENTER RECEIVER TPJJ000035 

 Report No.:
 30CE0242-YK-01-A

 Model No.:
 MVH-P8200BT

 Power:
 DC 12.0V

%

### **Duty Cycle**

UL Japan, Inc. Yamakita EMC lab. No.4 shielded room

Date: 2009/12/10

Temp./Humid.: 21 deg. C. / 40 Engineer: Minoru Nakatake

Test mode: Minoru Naka
Test mode: Transmitting

#### [DH5]



**Duty Cycle: 3.76ms** 

AV Detector VBW: 1000 / 3.76ms =  $265.96z \rightarrow 300$ Hz

This purpose of the Duty Cycle calculation measures the pulse timing that we ensure Spectrum Analyzer can detect the pulse emission correctly. Therefore, if the pulse train can happen by 50msec(20Hz) or less, the average value measurement by setting the repetition frequency is done more correctly than VBW=10Hz that DA 00-705 accepts for AV detect. For instance, if pulse cycle is every 10msec, we set VBW = 100Hz(=1000/10) in order not to overlook a pulse unexpectedly.

<sup>\*</sup> All the measured noise was pulse emission.

<sup>\*</sup> Duty cycle was within 100msec.

Company: Kind of Equipment: Serial No .:

PIONEER CORPORATION MEDIA CENTER RECEIVER TPJJ000035

Report No.: Model No .: Power:

30CE0242-YK-01-A MVH-P8200BT

shielded room

40

%

DC 12.0V

## Occupied Bandwidth (99%) (Regulation: RSS-Gen 4.6.1)

UL Japan, Inc. Yamakita EMC lab. No.4

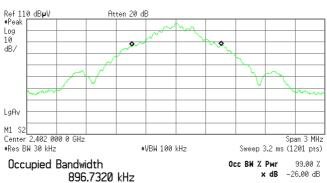
2009.12.10

deg. C. / Temp./Humid.: 21 Minoru Nakatake Engineer: Test mode: **Transmitting** 

## [Hopping off, DH5]

## 1. ch: 2402MHz/Occupied Bandwidth:896.7320kHz

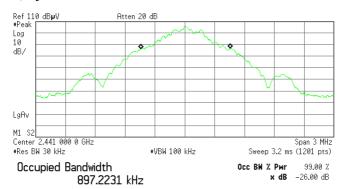




Transmit Freq Error x dB Bandwidth 7.349 kHz 1.134 MHz

## 2. ch: 2441MHz/Occupied Bandwidth:897.2231kHz

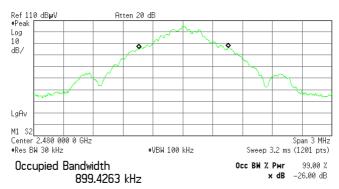




Transmit Freq Error x dB Bandwidth 1.133 MHz

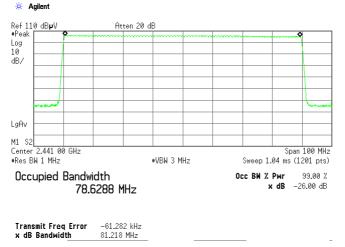
## 3. ch: 2480MHz/Occupied Bandwidth:899.4263kHz

#### 🔅 Agilent



Transmit Freg Error 7.507 kHz x dB Bandwidth

## 4. Hopping, DH5/Occupied Bandwidth:78.6288MHz



Test Report No :30CE0242-YK-01-A

# APPENDIX 3 Test Instruments

#### EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
CUST-YA-RE	Radiated emission(software)	UL Japan	RE(Ver.2.0)	-	RE	_
KAEC-01(NSA)	Anechoic Chamber	JSE	Semi 3m	1	RE	2009/08/20 * 12
KAF-05	Pre Amplifier	Agilent	8447D	2944A10150	RE	2009/03/27 * 12
KAT3-08	Attenuator	JFW IND. INC.	50HF-003N	_	RE	2009/08/18 * 12
KAT6-01	Attenuator	INMET	18N-6dB	-	RE	2009/03/10 * 12
KBA-03	Biconical Antenna	Schwarzbeck	BBA9106	1926	RE	2009/12/28 * 12
KLA-03	Logperiodic Antenna	Schwarzbeck	USLP9143	170	RE	2009/12/28 * 12
KCC-30/31/32 /34/37/KRM-0 3	Coaxial Cable/RF Relay Matrix	Fujikura/Suhner/TSJ	5D-2W/S04272B/ RFM-E421	-/01055	RE	2009/10/27 * 12
KAF-02	Pre Amplifier	Hewlett Packard	8449B	3008A01268	RE	2009/04/24 * 12
KHA-02	Horn Antenna	Schwarzbeck	BBHA9120D	230	RE	2009/04/24 * 12
KHA-04	Horn Antenna	EMCO	3160-09	1278	RE	2009/04/24 * 12
KCC-D13/D16	Coaxial cable	Suhuner/INSULATED WIRE INC	SUCOFLEX104/KP S-1501-200-KPS	200723/4 /04202005	RE	2009/04/27 * 12
KSA-R11	Spectrum Analyzer	Advantest	R3273	130300486	RE	2009/11/27 * 12
KTR-04	Test Receiver	Rohde & Schwarz	ESVS10	825475/006	RE	2009/03/03 * 12
KJM-07	Measure	KOMELON	KMC-36	_	RE	_
KOS-02	Humidity Indicator	Custom	CTH-190	K-02	RE	2009/07/23 * 12
KCC-D20	Coaxial Cable	SUHNER	SUCOFLEX102	31110/2	AT 1,2,3,4,6,7	2009/07/30 * 12
KPM-08	Power meter	Anritsu	ML2495A	6K00003356	AT 5	2009/10/30 * 12
KPSS-04	Power sensor	Anritsu	MA2411B	012088	AT 5	2009/10/30 * 12
KSA-08	Spectrum Analyzer	Agilent	E4446A	MY46180525	RE/AT 1,2,3,4,6	2009/01/22 * 12
KDT-01	Coaxial Crystal Detector	Agilent	8473C	1822A05320	AT 7	Pre Check
KOSC-01	Oscilloscope	Tektronix	TDS-2022B	C050588	AT 7	2009/05/20 * 12
KOS-07	Humidity Indicator	Custom	CTH-190	K-07	AT all	2009/07/29 * 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: Out of Band Emission (Radiated)

AT: Antenna terminal conducted test

- 1: Carrier Frequency Separation
- 2: 20dB Bandwidth
- 3: Number of Hopping Frequency
- 4: Dwell time
- 5: Maximum Peak Output Power
- 6: Out of Band Emission (Conducted)
- 7: Duty cycle

UL Japan, Inc. Page :