

# Maximum Peak Conducted Output Power

UL Japan, Inc.  
YAMAKITA No.2 Shielded Room

COMPANY : TOPCON Corporation  
EQUIPMENT : Global Mapping System  
MODEL NUMBER : GMS-2Pro  
SERIAL NUMBER : 0014  
FCC ID : LCB-841221  
POWER : DC7.4V  
TEST MODE : Transmitting

REPORT NO : 28CE0024-YK-C  
REGULATION : Fcc Part15SubpartC 247(b)(1)  
DATE : 2007/10/24  
TEMP./HUMI : 24deg.C/49%  
  
ENGINEER : Tatsuya Arai

## DH5

| CH      | FREQ<br>[GHz] | P/M<br>Reading<br>[dBm] | Cable Loss<br>[dB] | Results<br>[dBm] | Limit<br>(125mW)<br>[dBm] | MARGIN<br>[dB] |
|---------|---------------|-------------------------|--------------------|------------------|---------------------------|----------------|
| Low     | 2402.00       | -1.60                   | 0.60               | -1.00            | 20.96                     | 21.96          |
| Mid     | 2441.00       | -1.85                   | 0.60               | -1.25            | 20.96                     | 22.21          |
| High    | 2480.00       | -1.72                   | 0.60               | -1.12            | 20.96                     | 22.08          |
| Inquiry | -             | -1.71                   | 0.60               | -1.11            | 20.96                     | 22.07          |

Limit: 125mW=20.96dBm

P/M: Power Meter

CABLE LOSS:0.60dB

## 2DH5

| CH   | FREQ<br>[GHz] | P/M<br>Reading<br>[dBm] | Cable Loss<br>[dB] | Results<br>[dBm] | Limit<br>(125mW)<br>[dBm] | MARGIN<br>[dB] |
|------|---------------|-------------------------|--------------------|------------------|---------------------------|----------------|
| Low  | 2402.00       | -0.49                   | 0.60               | 0.11             | 20.96                     | 20.85          |
| Mid  | 2441.00       | -0.87                   | 0.60               | -0.27            | 20.96                     | 21.23          |
| High | 2480.00       | -1.30                   | 0.60               | -0.70            | 20.96                     | 21.66          |

Limit: 125mW=20.96dBm

P/M: Power Meter

CABLE LOSS:0.60dB

## 3DH5

| CH   | FREQ<br>[GHz] | P/M<br>Reading<br>[dBm] | Cable Loss<br>[dB] | Results<br>[dBm] | Limit<br>(125mW)<br>[dBm] | MARGIN<br>[dB] |
|------|---------------|-------------------------|--------------------|------------------|---------------------------|----------------|
| Low  | 2402.00       | -0.35                   | 0.60               | 0.25             | 20.96                     | 20.71          |
| Mid  | 2441.00       | -0.77                   | 0.60               | -0.17            | 20.96                     | 21.13          |
| High | 2480.00       | -1.20                   | 0.60               | -0.60            | 20.96                     | 21.56          |

Limit: 125mW=20.96dBm

P/M: Power Meter

CABLE LOSS:0.60dB

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

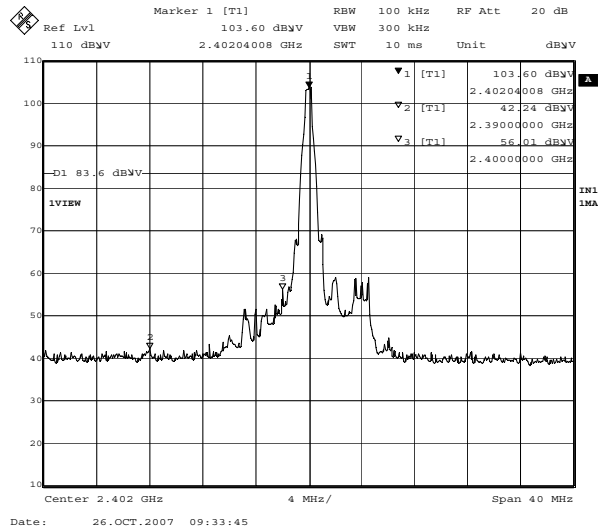
COMPANY : TOPCON Corporation  
EQUIPMENT : Global Mapping System  
MODEL NUMBER: GMS-2Pro  
SERIAL NUMBER: 0014  
FCC ID : LCB-841221  
POWER : DC7.4V

UL Japan, Inc. Yamakita No.4 Shielded Room  
REPORT NO : 28CE0024-YK-C  
REGULATION : Fcc Part15SubpartC 247(d)  
DATE : 2007/10/26  
TEMP./HUMI : 24deg.C./61%  
TEST MODE : Transmitting  
ENGINEER : Tatsuya Arai

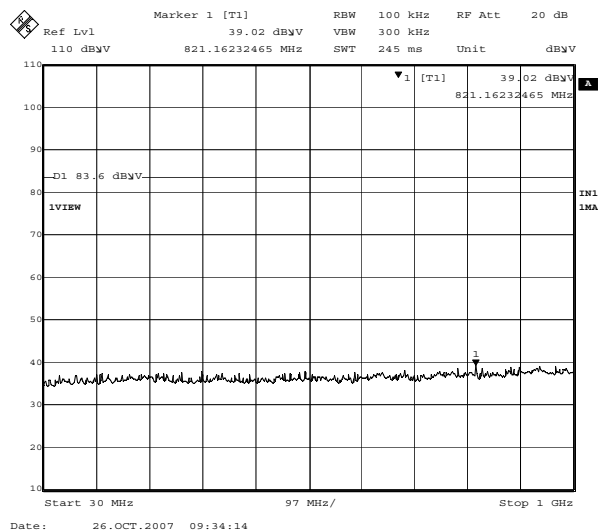
[Transmitting DH5]

Ch:2402MHz

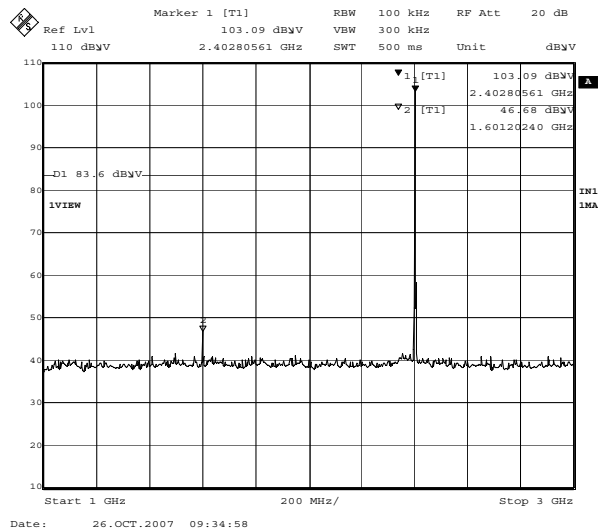
1.



2.



3.



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

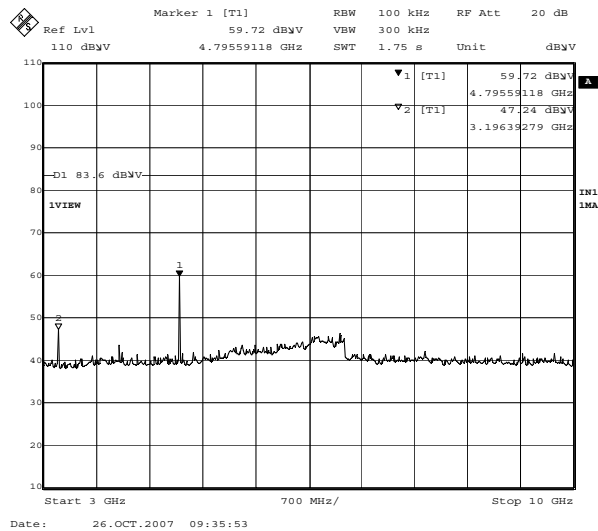
COMPANY : TOPCON Corporation  
EQUIPMENT : Global Mapping System  
MODEL NUMBER: GMS-2Pro  
SERIAL NUMBER: 0014  
FCC ID : LCB-841221  
POWER : DC7.4V

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DATE : 2007/10/26  
TEMP./HUMI : 24deg.C./61%  
TEST MODE : Transmitting  
ENGINEER : Tatsuya Arai

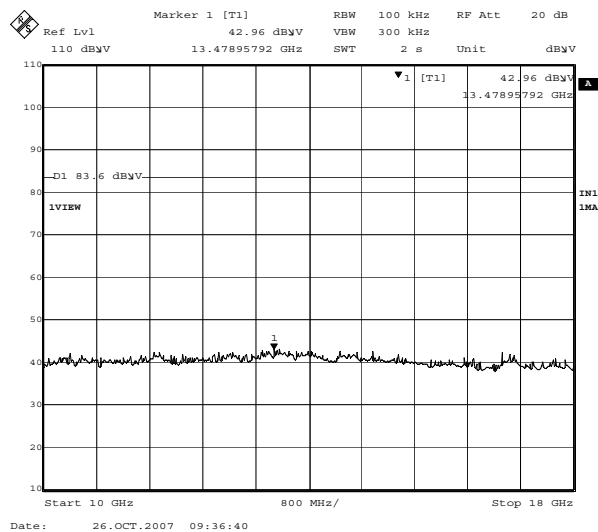
[Transmitting DH5]

Ch:2402MHz

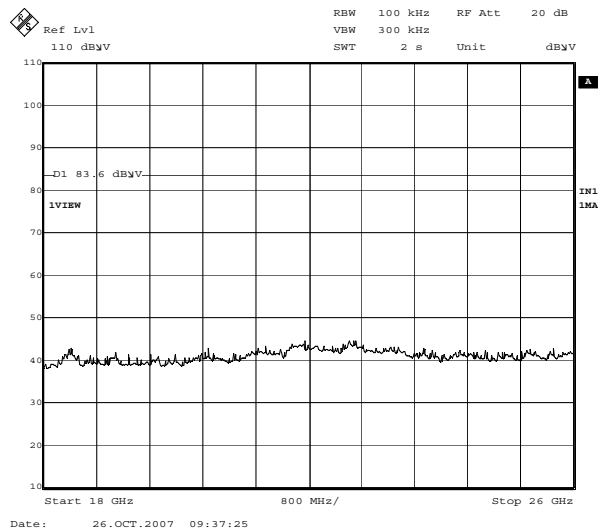
4.



5.



6.



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

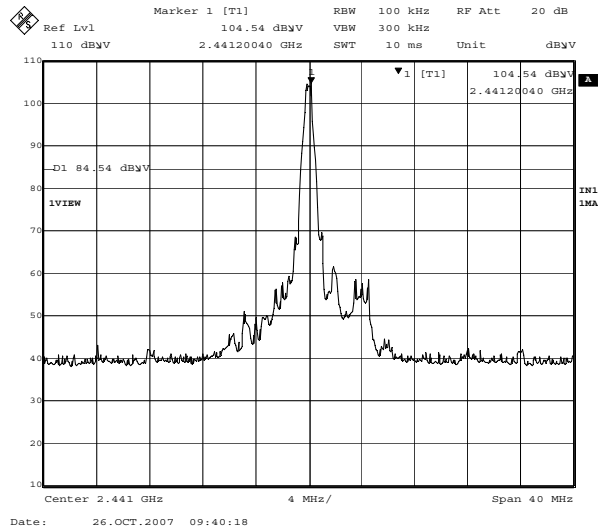
COMPANY : TOPCON Corporation  
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TEMP/HUMI : 24deg.C./61%  
TEST MODE : Transmitting  
ENGINEER : Tatsuya Arai

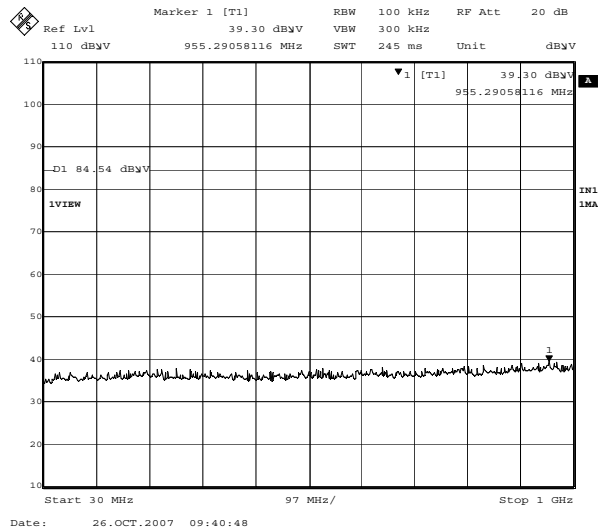
### [Transmitting DH5]

Ch:2441MHz

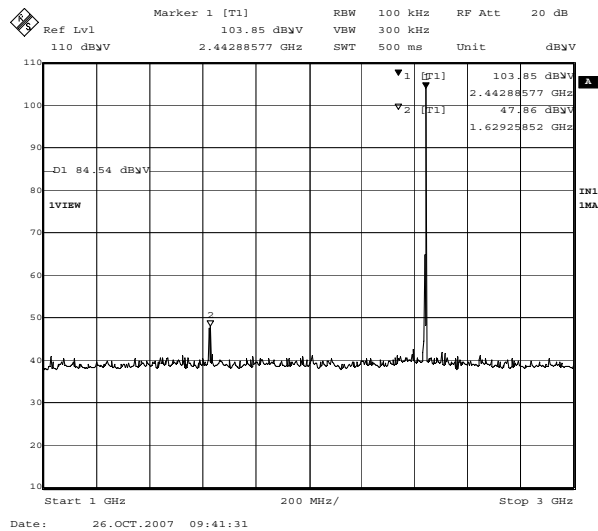
1.



2.



3.



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

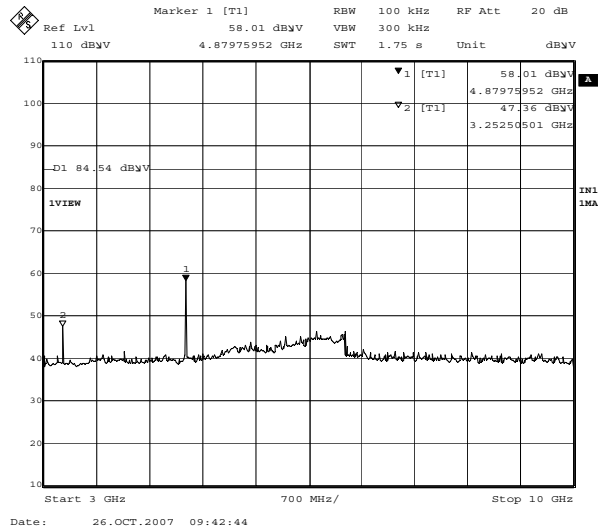
COMPANY : TOPCON Corporation  
EQUIPMENT : Global Mapping System  
MODEL NUMBER: GMS-2Pro  
SERIAL NUMBER: 0014  
FCC ID : LCB-841221  
POWER : DC7.4V

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REGULATION : Fcc Part15SubpartC 247(d)  
DATE : 2007/10/26  
TEMP./HUMI : 24deg.C./61%  
TEST MODE : Transmitting  
ENGINEER : Tatsuya Arai

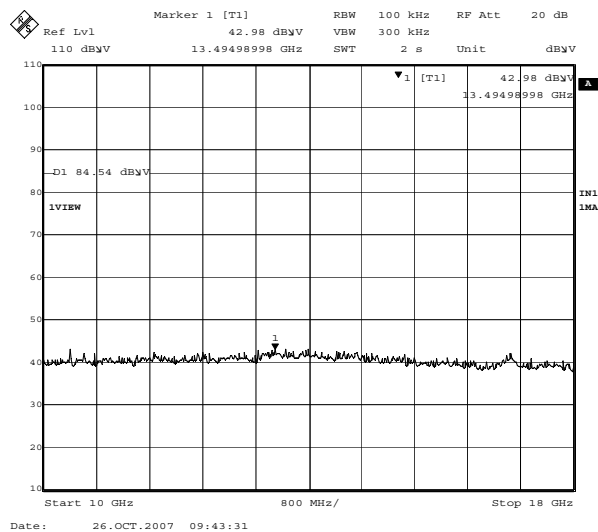
[Transmitting DH5]

Ch:2441MHz

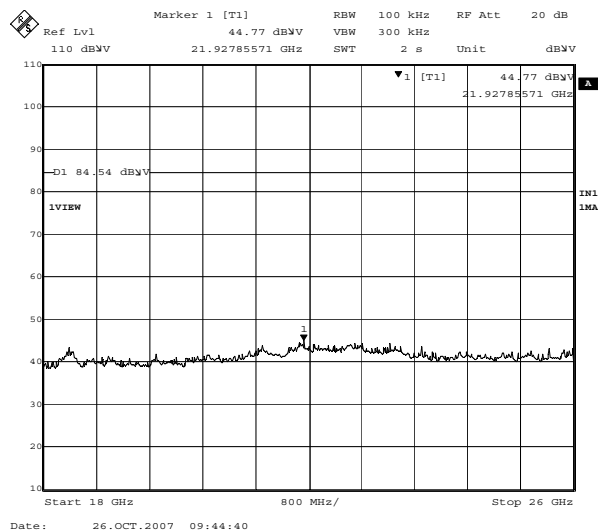
4.



5.



6.



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

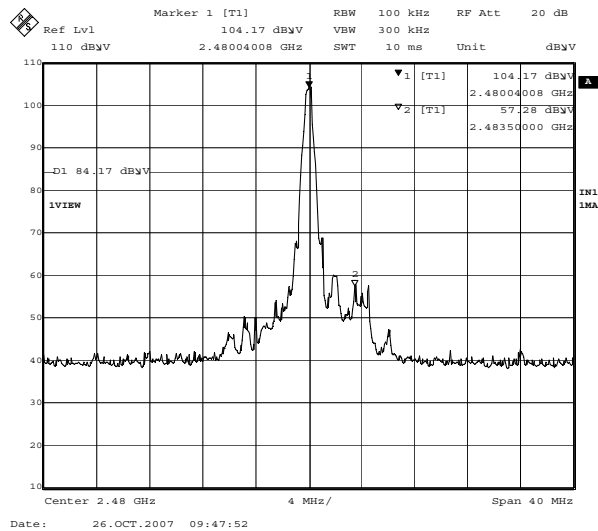
COMPANY : TOPCON Corporation  
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TEST MODE : Transmitting  
ENGINEER : Tatsuya Arai

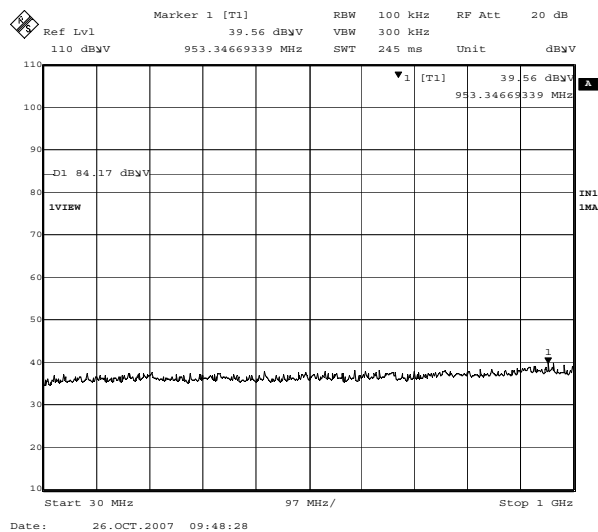
[Transmitting DH5]

Ch:2480MHz

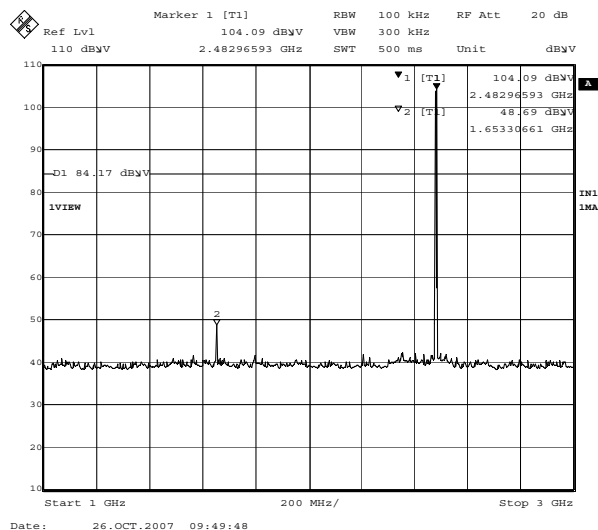
1.



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

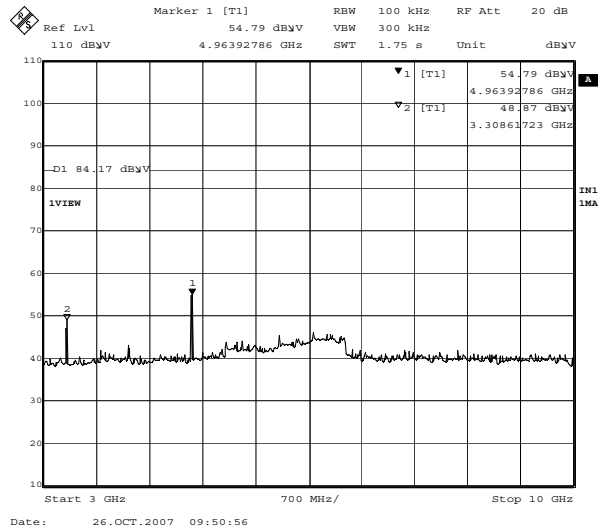
COMPANY : TOPCON Corporation  
EQUIPMENT : Global Mapping System  
MODEL NUMBER: GMS-2Pro  
SERIAL NUMBER: 0014  
FCC ID : LCB-841221  
POWER : DC7.4V

UL Japan, Inc. Yamakita No.4 Shielded Room  
REPORT NO : 28CE0024-YK-C  
REGULATION : Fcc Part15SubpartC 247(d)  
DATE : 2007/10/26  
TEMP./HUMI : 24deg.C./61%  
TEST MODE : Transmitting  
ENGINEER : Tatsuya Arai

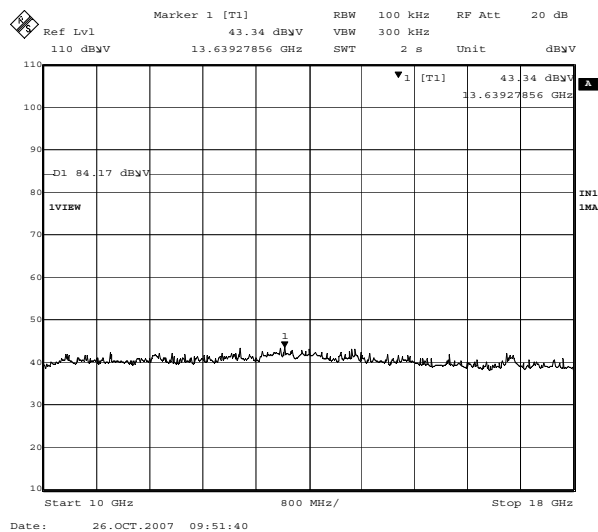
[Transmitting DH5]

Ch:2480MHz

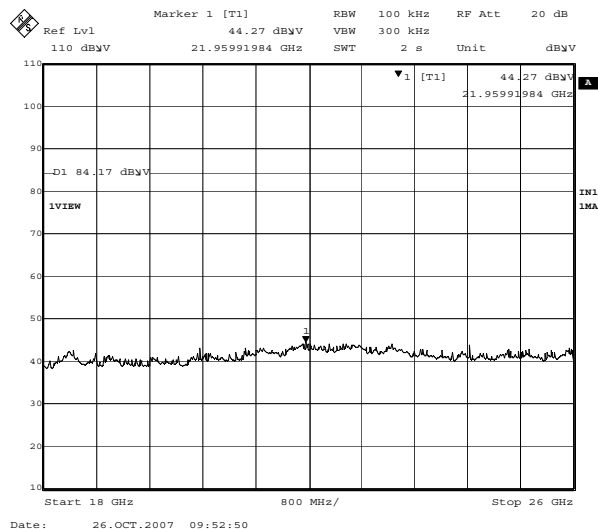
4.



5.



6.



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

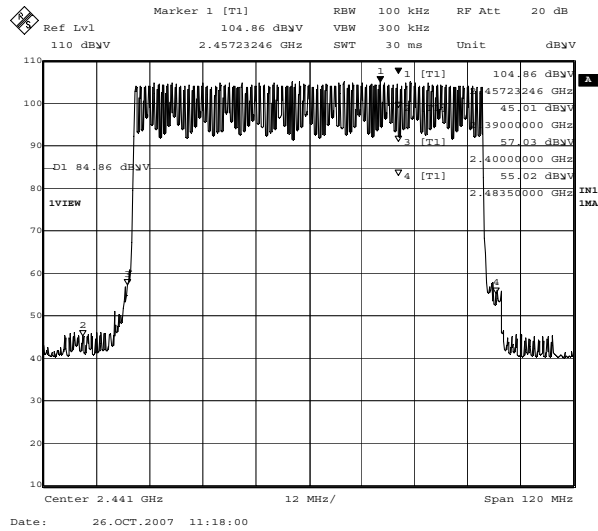
COMPANY : TOPCON Corporation  
EQUIPMENT : Global Mapping System  
MODEL NUMBER: GMS-2Pro  
SERIAL NUMBER: 0014  
FCC ID : LCB-841221  
POWER : DC7.4V

UL Japan, Inc. Yamakita No.4 Shielded Room  
REPORT NO : 28CE0024-YK-C  
REGULATION : Fcc Part15SubpartC 247(d)  
DATE : 2007/10/26  
TEMP./HUMI : 24deg.C./61%  
TEST MODE : Transmitting  
ENGINEER : Tatsuya Arai

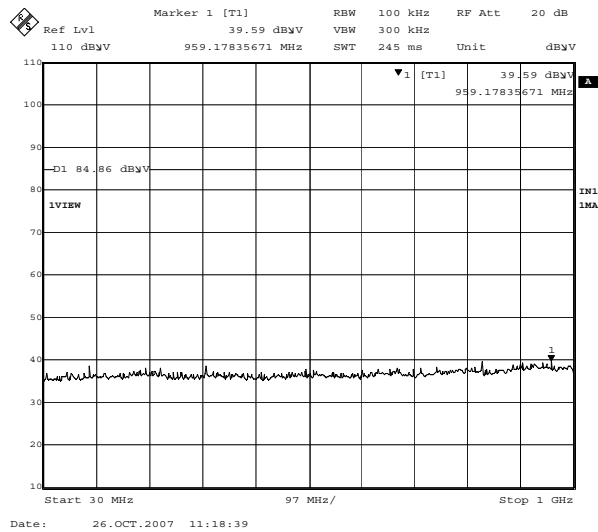
[Transmitting DH5]

Hopping

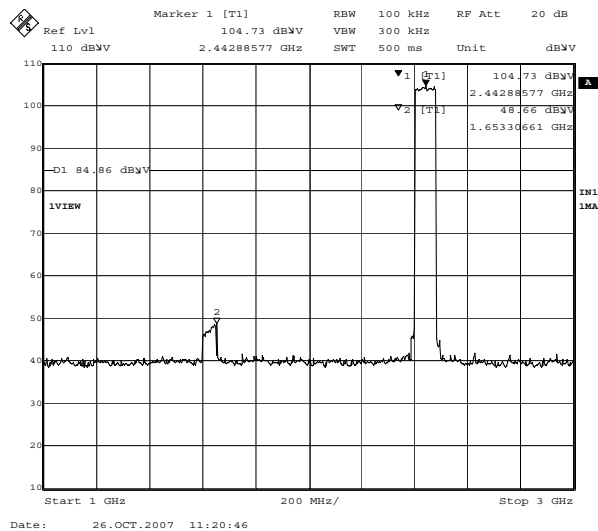
1.



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

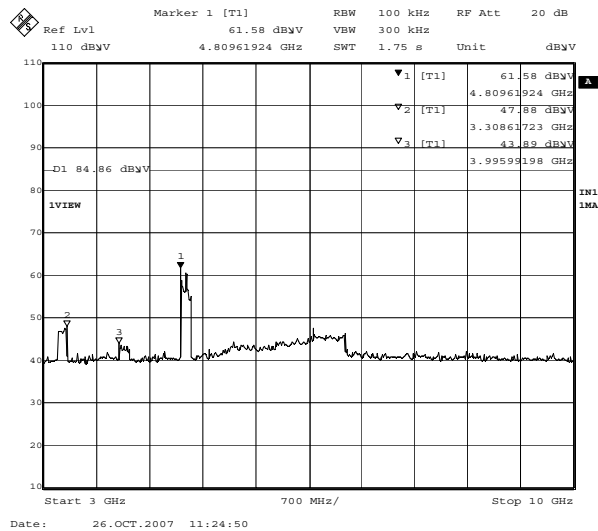
COMPANY : TOPCON Corporation  
EQUIPMENT : Global Mapping System  
MODEL NUMBER: GMS-2Pro  
SERIAL NUMBER: 0014  
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ENGINEER : Tatsuya Arai

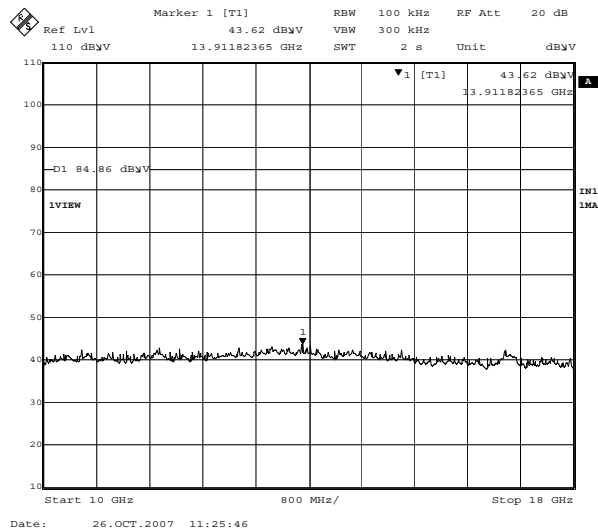
[Transmitting DH5]

Hopping

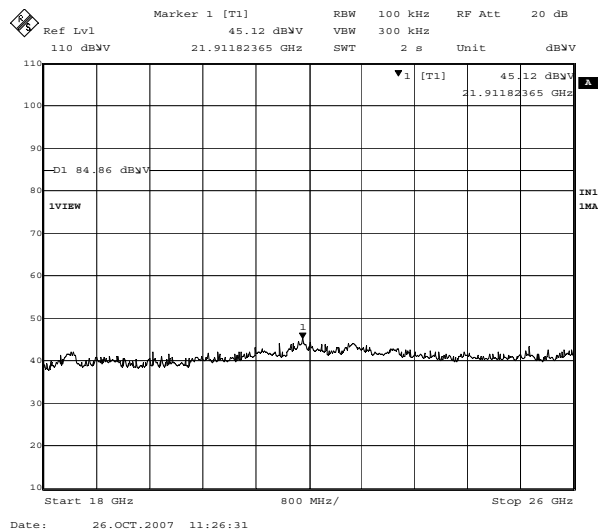
4.



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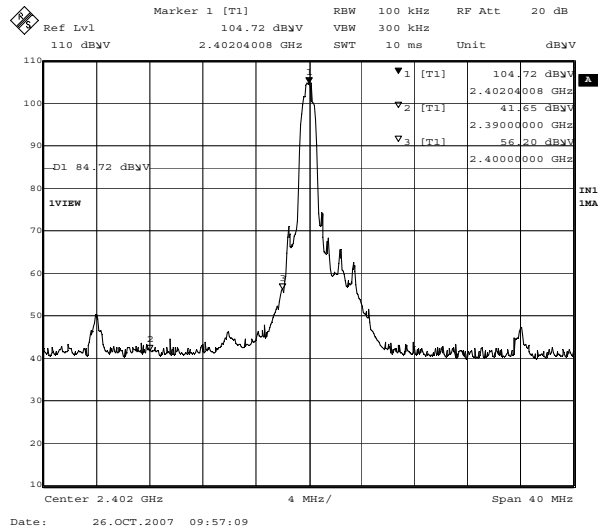
COMPANY : TOPCON Corporation  
EQUIPMENT : Global Mapping System  
MODEL NUMBER: GMS-2Pro  
SERIAL NUMBER: 0014  
FCC ID : LCB-841221  
POWER : DC7.4V

UL Japan, Inc. Yamakita No.4 Shielded Room  
REPORT NO : 28CE0024-YK-C  
REGULATION : Fcc Part15SubpartC 247(d)  
DATE : 2007/10/26  
TEMP./HUMI : 24deg.C./61%  
TEST MODE : Transmitting  
ENGINEER : Tatsuya Arai

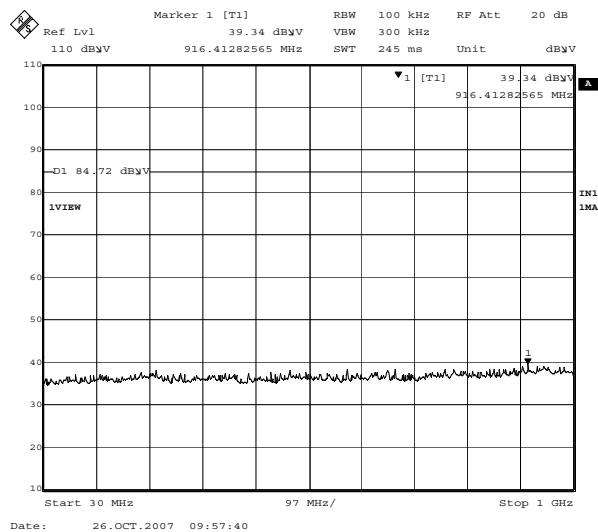
[Transmitting 3DH5]

Ch:2402MHz

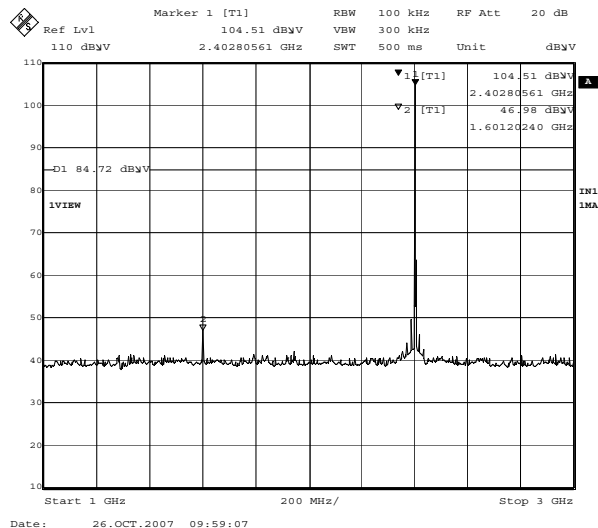
1.



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

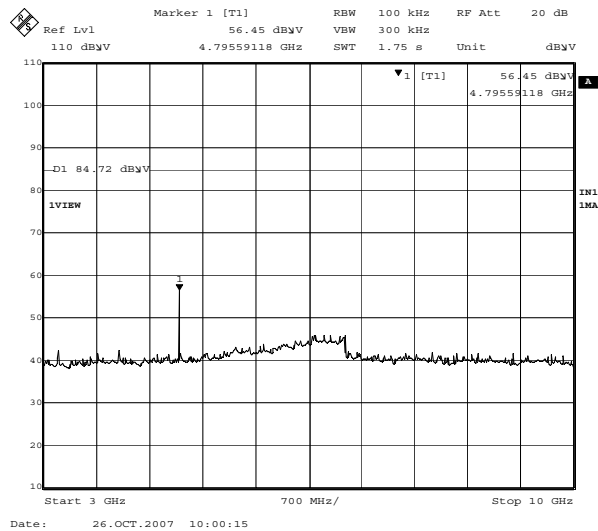
COMPANY : TOPCON Corporation  
EQUIPMENT : Global Mapping System  
MODEL NUMBER: GMS-2Pro  
SERIAL NUMBER: 0014  
FCC ID : LCB-841221  
POWER : DC7.4V

UL Japan, Inc. Yamakita No.4 Shielded Room  
REPORT NO : 28CE0024-YK-C  
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DATE : 2007/10/26  
TEMP./HUMI : 24deg.C./61%  
TEST MODE : Transmitting  
ENGINEER : Tatsuya Arai

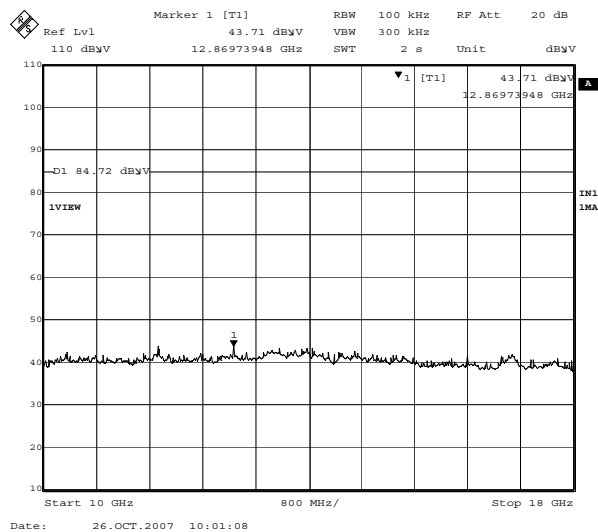
[Transmitting 3DH5]

Ch:2402MHz

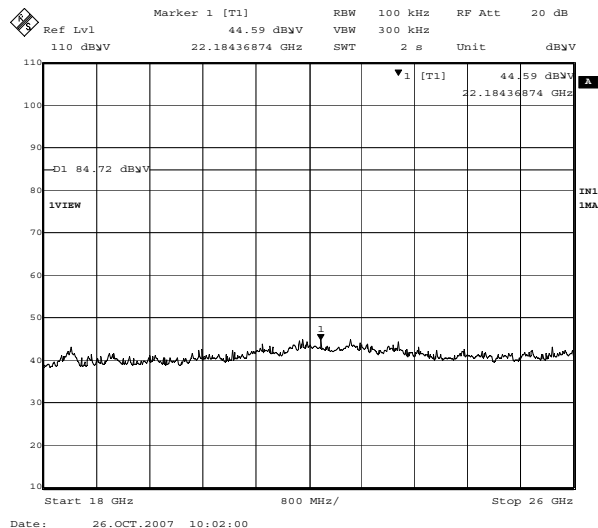
4.



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

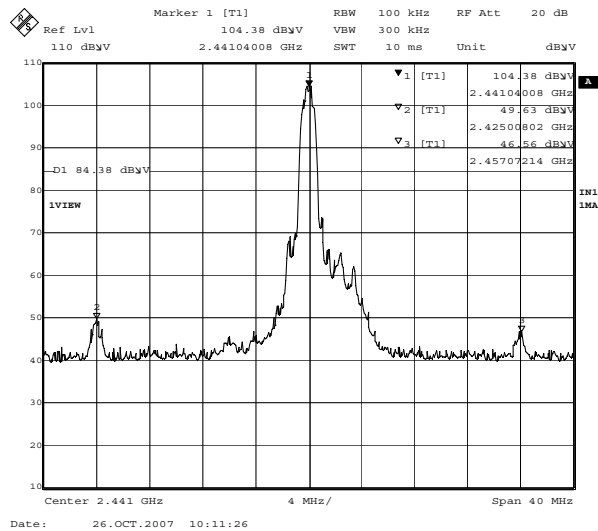
COMPANY : TOPCON Corporation  
EQUIPMENT : Global Mapping System  
MODEL NUMBER: GMS-2Pro  
SERIAL NUMBER: 0014  
FCC ID : LCB-841221  
POWER : DC7.4V

UL Japan, Inc. Yamakita No.4 Shielded Room  
REPORT NO : 28CE0024-YK-C  
REGULATION : Fcc Part15SubpartC 247(d)  
DATE : 2007/10/26  
TEMP./HUMI : 24deg.C./61%  
TEST MODE : Transmitting  
ENGINEER : Tatsuya Arai

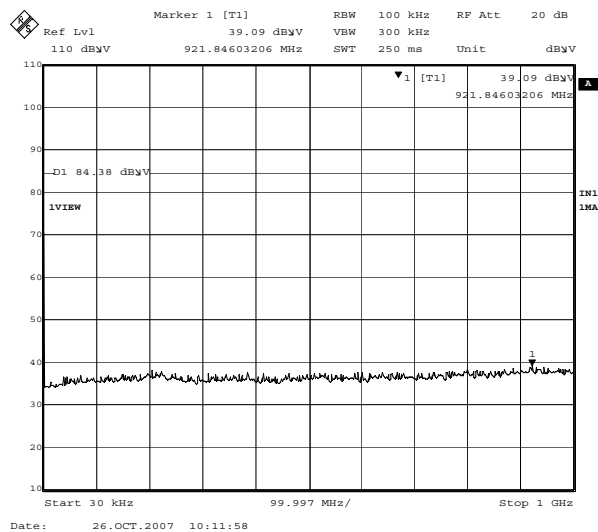
[Transmitting 3DH5]

Ch:2441MHz

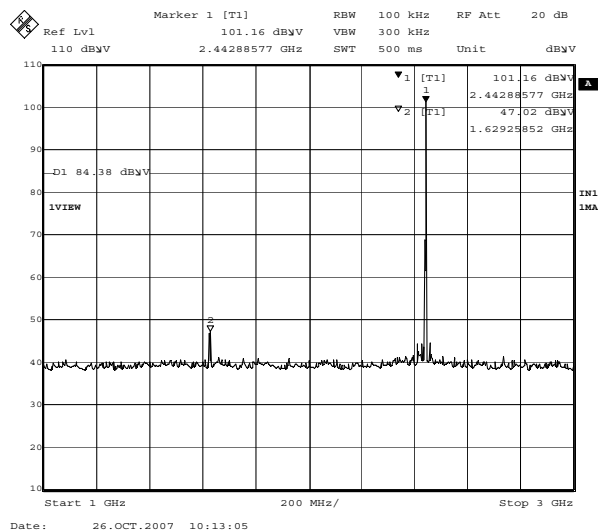
1.



2.



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

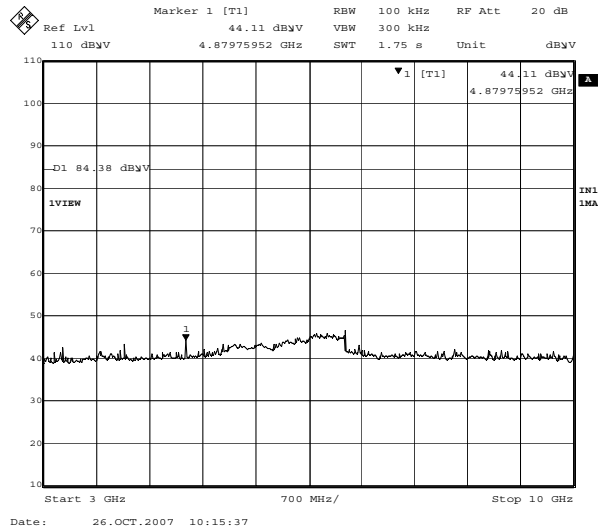
COMPANY : TOPCON Corporation  
EQUIPMENT : Global Mapping System  
MODEL NUMBER: GMS-2Pro  
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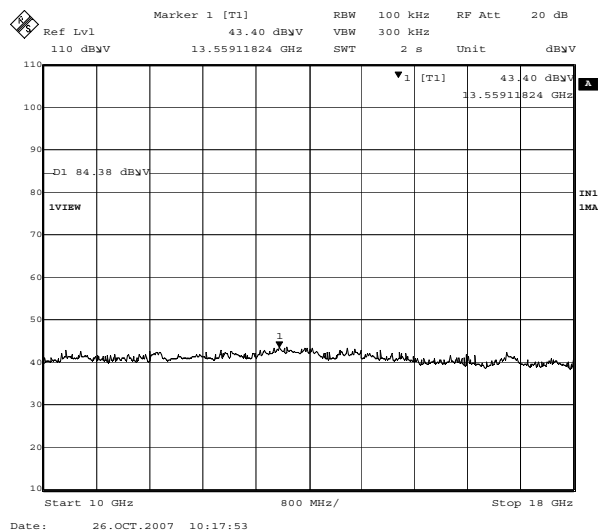
[Transmitting 3DH5]

Ch:2441MHz

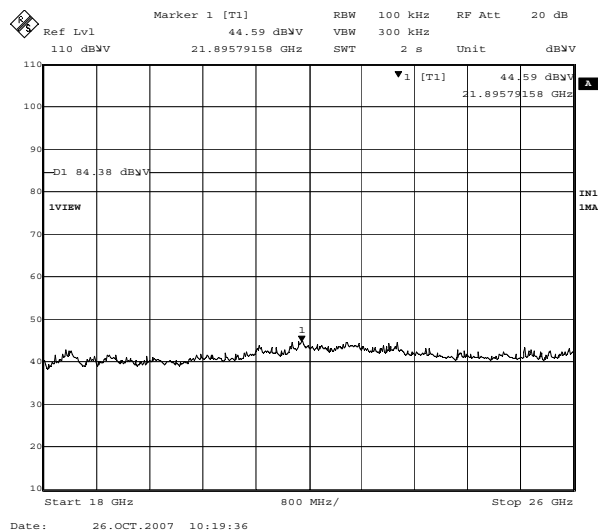
4.



5.



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

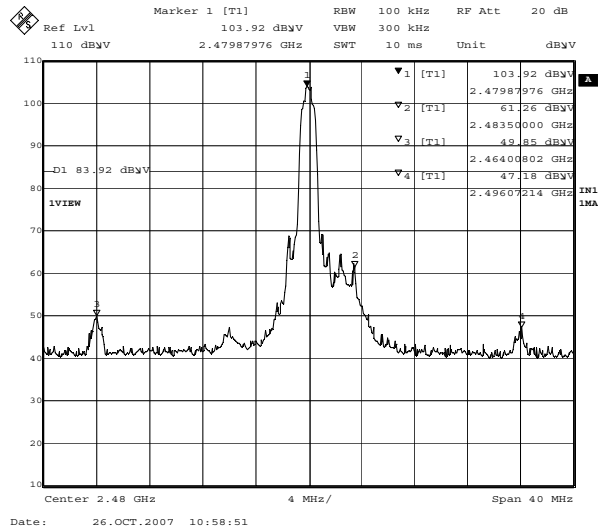
COMPANY : TOPCON Corporation  
EQUIPMENT : Global Mapping System  
MODEL NUMBER: GMS-2Pro  
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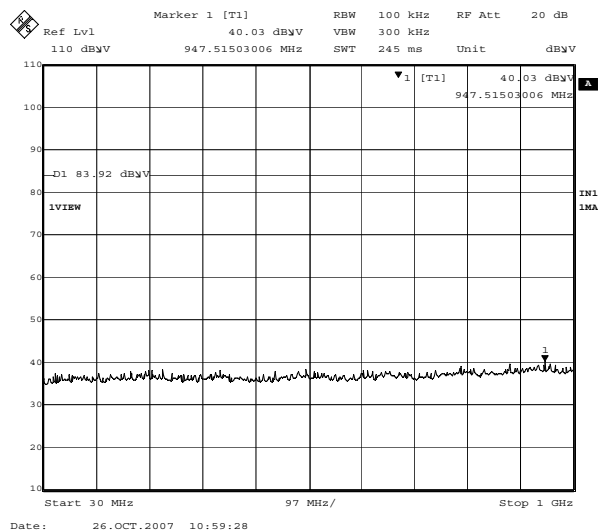
[Transmitting 3DH5]

Ch:2480MHz

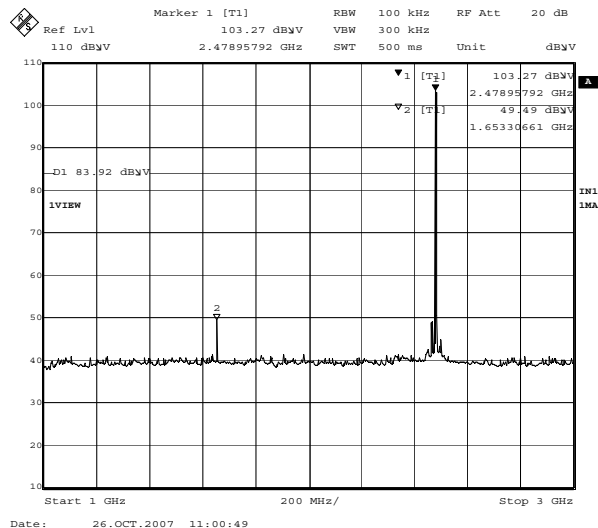
1.



2.



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

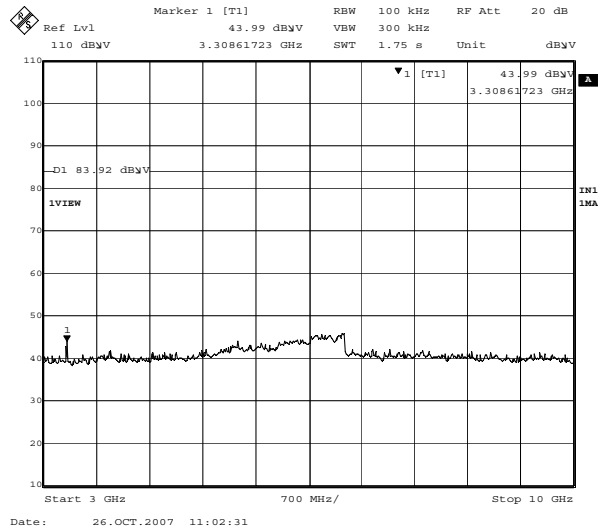
COMPANY : TOPCON Corporation  
EQUIPMENT : Global Mapping System  
MODEL NUMBER: GMS-2Pro  
SERIAL NUMBER: 0014  
FCC ID : LCB-841221  
POWER : DC7.4V

UL Japan, Inc. Yamakita No.4 Shielded Room  
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REGULATION : Fcc Part15SubpartC 247(d)  
DATE : 2007/10/26  
TEMP./HUMI : 24deg.C./61%  
TEST MODE : Transmitting  
ENGINEER : Tatsuya Arai

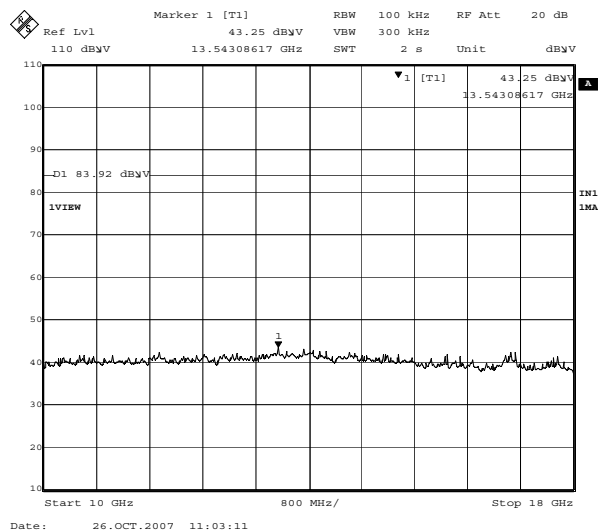
[Transmitting 3DH5]

Ch:2480MHz

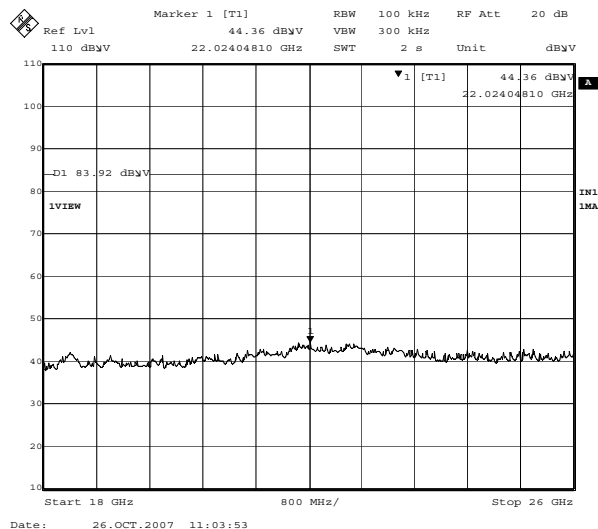
4.



5.



6.



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

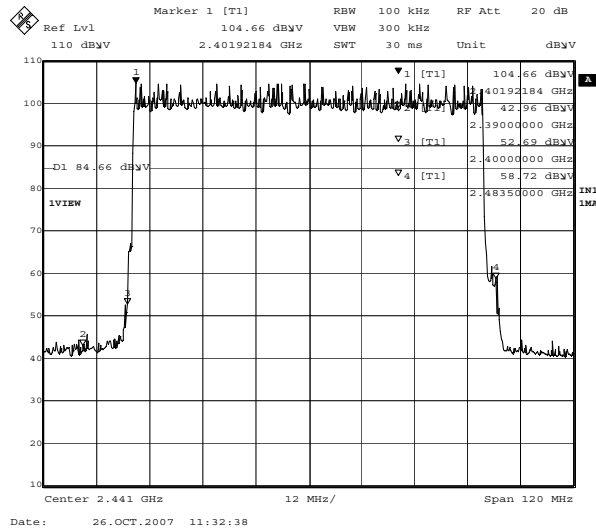
COMPANY : TOPCON Corporation  
EQUIPMENT : Global Mapping System  
MODEL NUMBER: GMS-2Pro  
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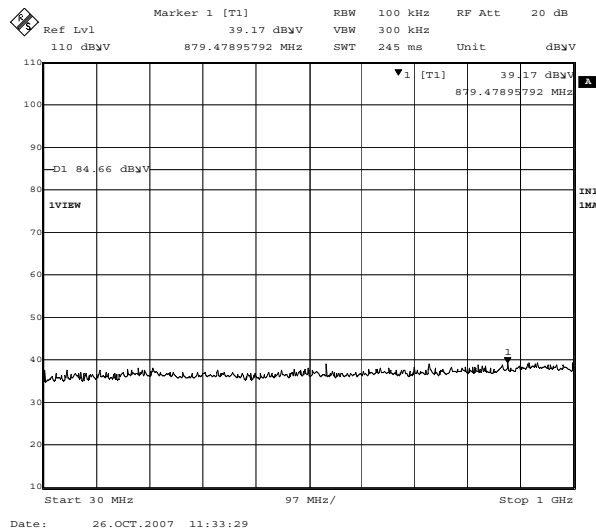
[Transmitting 3DH5]

Hopping

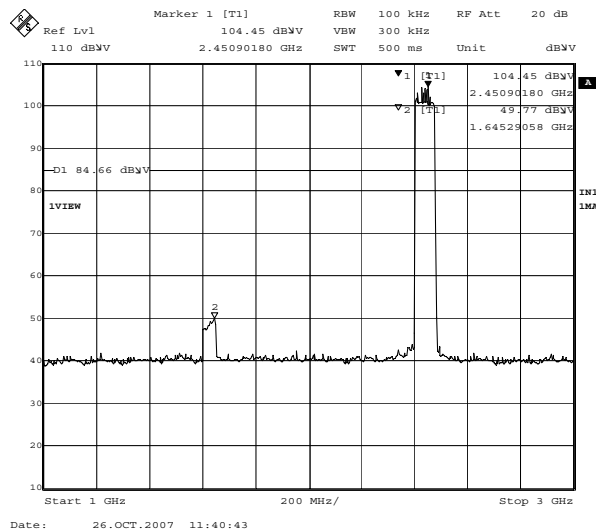
1.



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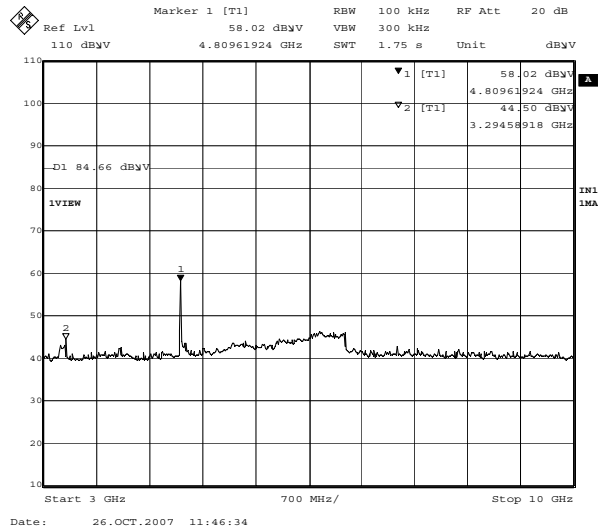
COMPANY : TOPCON Corporation  
EQUIPMENT : Global Mapping System  
MODEL NUMBER: GMS-2Pro  
SERIAL NUMBER: 0014  
FCC ID : LCB-841221  
POWER : DC7.4V

UL Japan, Inc. Yamakita No.4 Shielded Room  
REPORT NO : 28CE0024-YK-C  
REGULATION : Fcc Part15SubpartC 247(d)  
DATE : 2007/10/26  
TEMP./HUMI : 24deg.C./61%  
TEST MODE : Transmitting  
ENGINEER : Tatsuya Arai

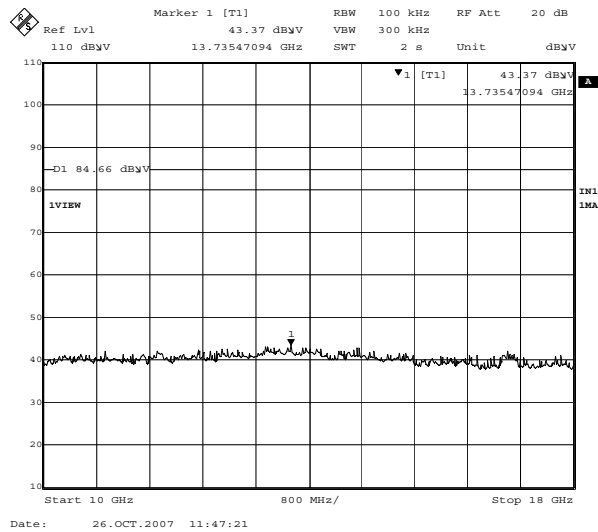
[Transmitting3 DH5]

Hopping

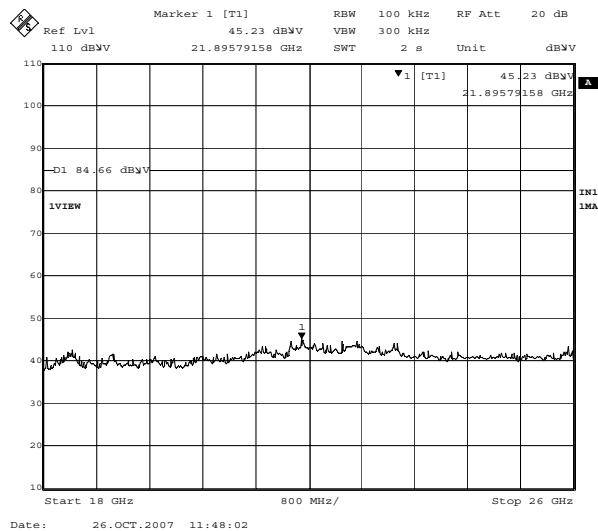
4.



5.



6.



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

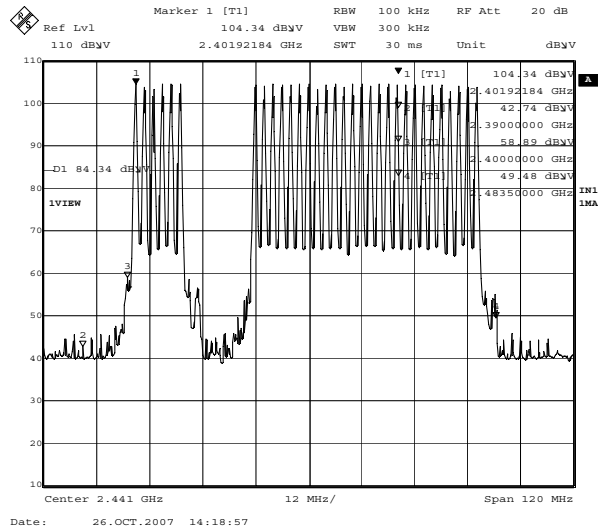
COMPANY : TOPCON Corporation  
EQUIPMENT : Global Mapping System  
MODEL NUMBER: GMS-2Pro  
SERIAL NUMBER: 0014  
FCC ID : LCB-841221  
POWER : DC7.4V

UL Japan, Inc. Yamakita No.4 Shielded Room  
REPORT NO : 28CE0024-YK-C  
REGULATION : Fcc Part15SubpartC 247(d)  
DATE : 2007/10/26  
TEMP./HUMI : 24deg.C./61%  
TEST MODE : Transmitting  
ENGINEER : Tatsuya Arai

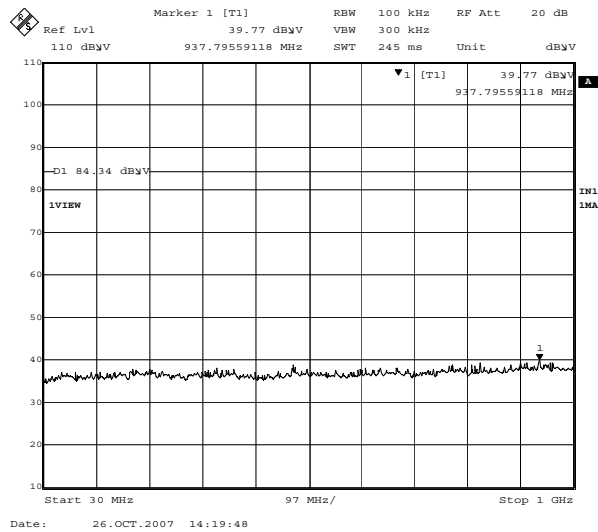
[Transmitting]

## Inquiry

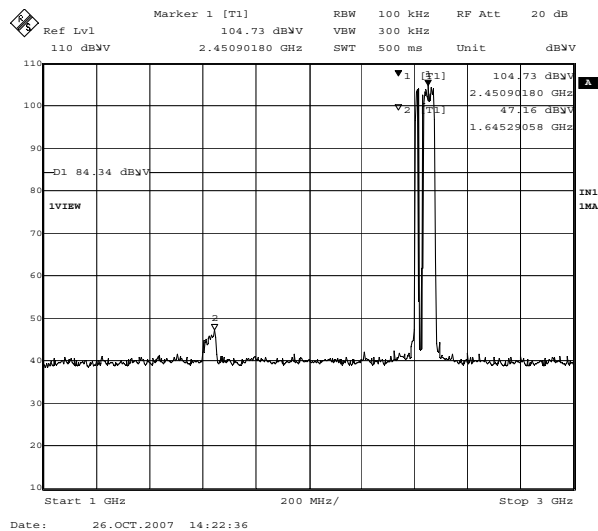
1.



2.



3.



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

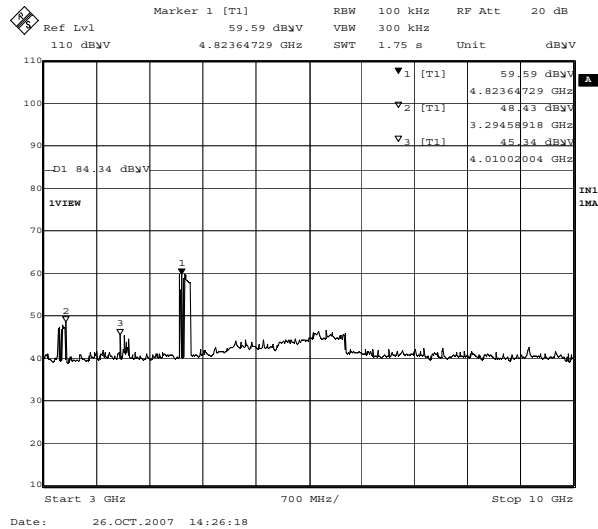
COMPANY : TOPCON Corporation  
EQUIPMENT : Global Mapping System  
MODEL NUMBER: GMS-2Pro  
SERIAL NUMBER: 0014  
FCC ID : LCB-841221  
POWER : DC7.4V

UL Japan, Inc. Yamakita No.4 Shielded Room  
REPORT NO : 28CE0024-YK-C  
REGULATION : Fcc Part15SubpartC 247(d)  
DATE : 2007/10/26  
TEMP./HUMI : 24deg.C./61%  
TEST MODE : Transmitting  
ENGINEER : Tatsuya Arai

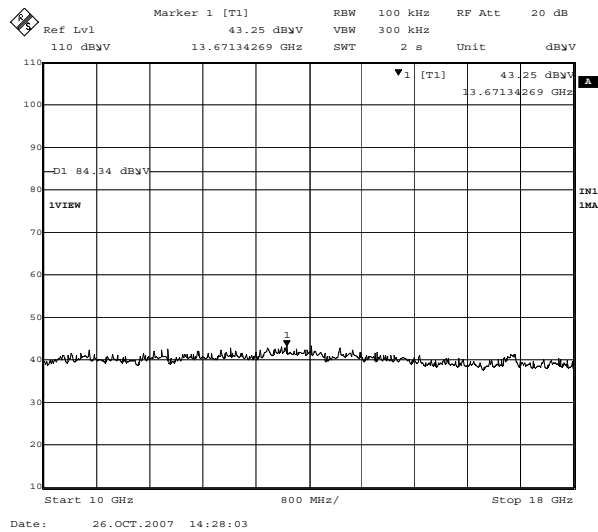
[Transmitting]

Inquiry

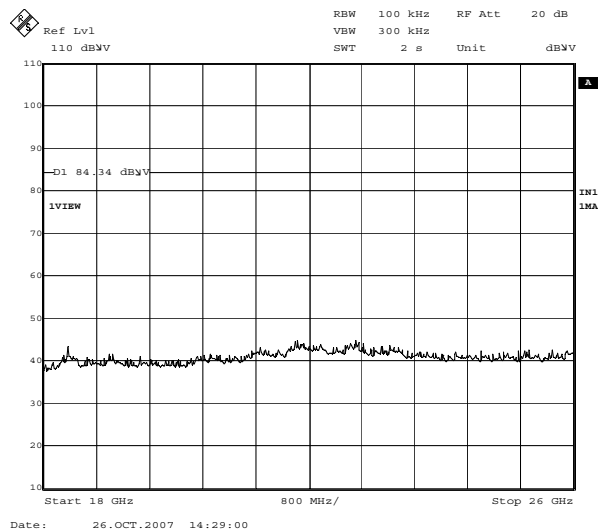
4.



5.



6.



# DATA OF RADIATION TEST

UL Japan, Inc.

YAMAKITA No.1 ANECHOIC CHAMBER

Report No. : 28CE0024-YK-C

Applicant : TOPCON Corporation  
Kind of Equipment : Global Mapping System  
Model No. : GMS-2Pro  
Serial No. : 0014  
Power : DC 7.4V  
Mode : Transmitting 2402MHz (DH5)  
Remarks : -  
Date : 10/22/2007  
Test Distance : 3 m  
Temperature : 21 °C  
Humidity : 56 %  
Regulation : FCC Part15C § 15.209

Engineer : Tatsuya Arai

| No. | FREQ.<br>[MHz] | ANT<br>TYPE | READING         |                 | ANT<br>FACTOR<br>[dB/m] | AMP<br>GAIN<br>[dB] | CABLE<br>LOSS<br>[dB] | ATTEN.<br>[dB] | RESULT            |                   | LIMITS<br>[dB μ V/m] | MARGIN      |             |
|-----|----------------|-------------|-----------------|-----------------|-------------------------|---------------------|-----------------------|----------------|-------------------|-------------------|----------------------|-------------|-------------|
|     |                |             | HOR<br>[dB μ V] | VER<br>[dB μ V] |                         |                     |                       |                | HOR<br>[dB μ V/m] | VER<br>[dB μ V/m] |                      | HOR<br>[dB] | VER<br>[dB] |
| 1.  | 208.87         | BB          | 33.2            | 31.8            | 17.0                    | 27.9                | 3.0                   | 5.8            | 31.1              | 29.7              | 43.5                 | 12.4        | 13.8        |
| 2.  | 282.59         | BB          | 29.2            | 27.5            | 19.3                    | 27.4                | 3.6                   | 5.9            | 30.6              | 28.9              | 46.0                 | 15.4        | 17.1        |
| 3.  | 307.16         | BB          | 40.9            | 37.7            | 14.4                    | 27.5                | 3.8                   | 5.9            | 37.5              | 34.3              | 46.0                 | 8.5         | 11.7        |
| 4.  | 331.74         | BB          | 28.8            | 29.5            | 15.1                    | 27.7                | 4.1                   | 5.9            | 26.2              | 26.9              | 46.0                 | 19.8        | 19.1        |
| 5.  | 430.02         | BB          | 28.8            | 27.0            | 17.4                    | 28.6                | 4.9                   | 5.9            | 28.4              | 26.6              | 46.0                 | 17.6        | 19.4        |
| 6.  | 577.46         | BB          | 31.5            | 33.3            | 19.4                    | 29.1                | 5.4                   | 5.9            | 33.1              | 34.9              | 46.0                 | 12.9        | 11.1        |

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

■ ANTENNA: KBA-03 (BBA9106) 30-299.99MHz/KLA-03 (USLP9143) 300-1000MHz  
■ CABLE: KCC-30/31/32/34 ■ PREAMP: KAF-05 (8447D) ■ EMI RECEIVER: KTR-05 (ESC1)

# DATA OF RADIATION TEST

UL Japan, Inc.

YAMAKITA No.1 ANECHOIC CHAMBER

Report No. : 28CE0024-YK-C

Applicant : TOPCON Corporation  
Kind of Equipment : Global Mapping System  
Model No. : GMS-2Pro  
Serial No. : 0014  
Power : DC 7.4V  
Mode : Transmitting 2402MHz (DH5)  
Remarks : PK Detector (RBW:1MHz/VBW:1MHz)  
Date : 10/25/2007  
Test Distance : 3 m  
Temperature : 23 °C Engineer : Toyokazu Imamura  
Humidity : 49 %  
Regulation : FCC Part15C § 15.209 (PK Detection)

| No. | FREQ.<br>[MHz] | ANT<br>TYPE | READING         |                 | ANT<br>FACTOR<br>[dB/m] | AMP<br>GAIN<br>[dB] | CABLE<br>LOSS<br>[dB] | ATTEN.<br>[dB] | RESULT            |                   | LIMITS<br>[dB μ V/m] | MARGIN      |             |
|-----|----------------|-------------|-----------------|-----------------|-------------------------|---------------------|-----------------------|----------------|-------------------|-------------------|----------------------|-------------|-------------|
|     |                |             | HOR<br>[dB μ V] | VER<br>[dB μ V] |                         |                     |                       |                | HOR<br>[dB μ V/m] | VER<br>[dB μ V/m] |                      | HOR<br>[dB] | VER<br>[dB] |
| 1.  | 1602.00        | BB          | 54.2            | 56.6            | 26.0                    | 37.4                | 3.0                   | 0.0            | 45.8              | 48.2              | 74.0                 | 28.2        | 25.8        |
| 2.  | 2390.00        | BB          | 44.0            | 45.2            | 28.5                    | 37.5                | 3.4                   | 0.0            | 38.4              | 39.6              | 74.0                 | 35.6        | 34.4        |
| 3.  | 4804.00        | BB          | 51.4            | 52.1            | 32.9                    | 37.8                | 5.3                   | 0.0            | 51.8              | 52.5              | 74.0                 | 22.2        | 21.5        |
| 4.  | 7206.00        | BB          | 45.1            | 45.6            | 36.5                    | 37.2                | 6.1                   | 0.0            | 50.5              | 51.0              | 74.0                 | 23.5        | 23.0        |
| 5.  | 9608.00        | BB          | 45.2            | 44.9            | 37.7                    | 37.4                | 8.0                   | 0.0            | 53.5              | 53.2              | 74.0                 | 20.5        | 20.8        |
| 6.  | 12010.00       | BB          | 44.6            | 44.4            | 40.0                    | 36.5                | 8.5                   | 0.0            | 56.6              | 56.4              | 74.0                 | 17.4        | 17.6        |

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-D16/D17 ■ PREAMP: KAF-02 (8449B) ■ SPECTRUMANALYZER: ES140 (KTR-01)

# DATA OF RADIATION TEST

UL Japan, Inc.  
YAMAKITA No.1 ANECHOIC CHAMBER  
Report No. : 28CE0024-YK-C

Applicant : TOPCON Corporation  
Kind of Equipment : Global Mapping System  
Model No. : GMS-2Pro  
Serial No. : 0014  
Power : DC 7.4V  
Mode : Transmitting 2402MHz (DH5)  
Remarks : AV Detector (RBW:1MHz/VBW:200Hz\*)  
Date : 10/25/2007  
Test Distance : 3 m  
Temperature : 23 °C Engineer : Toyokazu Imamura  
Humidity : 49 %  
Regulation : FCC Part15C § 15.209 (AV Detection)

| No. | FREQ.<br>[MHz] | ANT<br>TYPE | READING         |                 | ANT<br>FACTOR<br>[dB/m] | AMP<br>GAIN<br>[dB] | CABLE<br>LOSS<br>[dB] | ATTEN.<br>[dB] | RESULT            |                   | LIMITS<br>[dB μ V/m] | MARGIN      |             |
|-----|----------------|-------------|-----------------|-----------------|-------------------------|---------------------|-----------------------|----------------|-------------------|-------------------|----------------------|-------------|-------------|
|     |                |             | HOR<br>[dB μ V] | VER<br>[dB μ V] |                         |                     |                       |                | HOR<br>[dB μ V/m] | VER<br>[dB μ V/m] |                      | HOR<br>[dB] | VER<br>[dB] |
| 1.  | 1602.00        | BB          | 50.9            | 53.5            | 26.0                    | 37.4                | 3.0                   | 0.0            | 42.5              | 45.1              | 54.0                 | 11.5        | 8.9         |
| 2.  | 2390.00        | BB          | 33.4            | 33.8            | 28.5                    | 37.5                | 3.4                   | 0.0            | 27.8              | 28.2              | 54.0                 | 26.2        | 25.8        |
| 3.  | 4804.00        | BB          | 46.8            | 47.4            | 32.9                    | 37.8                | 5.3                   | 0.0            | 47.2              | 47.8              | 54.0                 | 6.8         | 6.2         |
| 4.  | 7206.00        | BB          | 32.9            | 33.3            | 36.5                    | 37.2                | 6.1                   | 0.0            | 38.3              | 38.7              | 54.0                 | 15.7        | 15.3        |
| 5.  | 9608.00        | BB          | 33.8            | 33.6            | 37.7                    | 37.4                | 8.0                   | 0.0            | 42.1              | 41.9              | 54.0                 | 11.9        | 12.1        |
| 6.  | 12010.00       | BB          | 32.1            | 33.0            | 40.0                    | 36.5                | 8.5                   | 0.0            | 44.1              | 45.0              | 54.0                 | 9.9         | 9.0         |

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-D16/D17 ■ PREAMP: KAF-02 (8449B) ■ SPECTRUMANALYZER: ESI40 (KTR-01)  
 \* VBW: 10Hz for No.1

# DATA OF RADIATION TEST

UL Japan, Inc.

YAMAKITA No.1 ANECHOIC CHAMBER

Report No. : 28CE0024-YK-C

Applicant : TOPCON Corporation  
Kind of Equipment : Global Mapping System  
Model No. : GMS-2Pro  
Serial No. : 0014  
Power : DC 7.4V  
Mode : Transmitting 2441MHz (DH5)  
Remarks : -  
Date : 10/22/2007  
Test Distance : 3 m  
Temperature : 21 °C  
Humidity : 56 %  
Regulation : FCC Part15C § 15.209

Engineer : Tatsuya Arai

| No. | FREQ.<br>[MHz] | ANT<br>TYPE | READING         |                 | ANT<br>FACTOR<br>[dB/m] | AMP<br>GAIN<br>[dB] | CABLE<br>LOSS<br>[dB] | ATTEN.<br>[dB] | RESULT            |                   | LIMITS<br>[dB μ V/m] | MARGIN      |             |
|-----|----------------|-------------|-----------------|-----------------|-------------------------|---------------------|-----------------------|----------------|-------------------|-------------------|----------------------|-------------|-------------|
|     |                |             | HOR<br>[dB μ V] | VER<br>[dB μ V] |                         |                     |                       |                | HOR<br>[dB μ V/m] | VER<br>[dB μ V/m] |                      | HOR<br>[dB] | VER<br>[dB] |
| 1.  | 208.87         | BB          | 31.5            | 29.4            | 17.0                    | 27.9                | 3.0                   | 5.8            | 29.4              | 27.3              | 43.5                 | 14.1        | 16.2        |
| 2.  | 282.59         | BB          | 27.6            | 31.1            | 19.3                    | 27.4                | 3.6                   | 5.9            | 29.0              | 32.5              | 46.0                 | 17.0        | 13.5        |
| 3.  | 307.16         | BB          | 40.1            | 36.5            | 14.4                    | 27.5                | 3.8                   | 5.9            | 36.7              | 33.1              | 46.0                 | 9.3         | 12.9        |
| 4.  | 331.73         | BB          | 30.3            | 31.0            | 15.1                    | 27.7                | 4.1                   | 5.9            | 27.7              | 28.4              | 46.0                 | 18.3        | 17.6        |
| 5.  | 430.02         | BB          | 26.1            | 25.3            | 17.4                    | 28.6                | 4.9                   | 5.9            | 25.7              | 24.9              | 46.0                 | 20.3        | 21.1        |
| 6.  | 577.46         | BB          | 31.6            | 31.4            | 19.4                    | 29.1                | 5.4                   | 5.9            | 33.2              | 33.0              | 46.0                 | 12.8        | 13.0        |

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

■ ANTENNA: KBA-03 (BBA9106) 30-299.99MHz/KLA-03 (USLP9143) 300-1000MHz  
■ CABLE: KCC-30/31/32/34 ■ PREAMP: KAF-05 (8447D) ■ EMI RECEIVER: KTR-05 (ESC1)

# DATA OF RADIATION TEST

UL Japan, Inc.

YAMAKITA No.1 ANECHOIC CHAMBER

Report No. : 28CE0024-YK-C

Applicant : TOPCON Corporation  
 Kind of Equipment : Global Mapping System  
 Model No. : GMS-2Pro  
 Serial No. : 0014  
 Power : DC 7.4V  
 Mode : Transmitting 2441MHz (DH5)  
 Remarks : PK Detector (RBW:1MHz/VBW:1MHz)  
 Date : 10/25/2007  
 Test Distance : 3 m  
 Temperature : 23 °C  
 Humidity : 49 %  
 Regulation : FCC Part15C § 15.209 (PK Detection)

Engineer : Toyokazu Imamura

| No. | FREQ.<br>[MHz] | ANT<br>TYPE | READING         |                 | ANT<br>FACTOR<br>[dB/m] | AMP<br>GAIN<br>[dB] | CABLE<br>LOSS<br>[dB] | ATTEN.<br>[dB] | RESULT            |                   | LIMITS<br>[dB μ V/m] | MARGIN      |             |
|-----|----------------|-------------|-----------------|-----------------|-------------------------|---------------------|-----------------------|----------------|-------------------|-------------------|----------------------|-------------|-------------|
|     |                |             | HOR<br>[dB μ V] | VER<br>[dB μ V] |                         |                     |                       |                | HOR<br>[dB μ V/m] | VER<br>[dB μ V/m] |                      | HOR<br>[dB] | VER<br>[dB] |
| 1.  | 1628.01        | BB          | 54.9            | 57.6            | 26.2                    | 37.4                | 3.0                   | 0.0            | 46.7              | 49.4              | 74.0                 | 27.3        | 24.6        |
| 2.  | 4882.00        | BB          | 53.0            | 52.7            | 33.1                    | 37.7                | 5.4                   | 0.0            | 53.8              | 53.5              | 74.0                 | 20.2        | 20.5        |
| 3.  | 7323.00        | BB          | 45.4            | 43.6            | 36.7                    | 37.6                | 6.1                   | 0.0            | 50.6              | 48.8              | 74.0                 | 23.4        | 25.2        |
| 4.  | 9764.00        | BB          | 44.6            | 44.8            | 37.7                    | 37.1                | 7.7                   | 0.0            | 52.9              | 53.1              | 74.0                 | 21.1        | 20.9        |
| 5.  | 12205.00       | BB          | 44.1            | 44.8            | 40.2                    | 36.4                | 8.8                   | 0.0            | 56.7              | 57.4              | 74.0                 | 17.3        | 16.6        |

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-D16/D17 ■ PREAMP: KAF-02 (8449B) ■ SPECTRUMANALYZER: ESI40 (KTR-01)

# DATA OF RADIATION TEST

UL Japan, Inc.

YAMAKITA No.1 ANECHOIC CHAMBER

Report No. : 28CE0024-YK-C

Applicant : TOPCON Corporation  
Kind of Equipment : Global Mapping System  
Model No. : GMS-2Pro  
Serial No. : 0014  
Power : DC 7.4V  
Mode : Transmitting 2441MHz (DH5)  
Remarks : AV Detector (RBW:1MHz/VBW:200Hz\*)  
Date : 10/25/2007  
Test Distance : 3 m  
Temperature : 23 °C Engineer : Toyokazu Imamura  
Humidity : 49 %  
Regulation : FCC Part15C § 15.209 (AV Detection)

| No. | FREQ.<br>[MHz] | ANT<br>TYPE | READING        |                | ANT<br>FACTOR<br>[dB/m] | AMP<br>GAIN<br>[dB] | CABLE<br>LOSS<br>[dB] | ATTEN.<br>[dB] | RESULT           |                  | LIMITS<br>[dB μV/m] | MARGIN      |             |
|-----|----------------|-------------|----------------|----------------|-------------------------|---------------------|-----------------------|----------------|------------------|------------------|---------------------|-------------|-------------|
|     |                |             | HOR<br>[dB μV] | VER<br>[dB μV] |                         |                     |                       |                | HOR<br>[dB μV/m] | VER<br>[dB μV/m] |                     | HOR<br>[dB] | VER<br>[dB] |
| 1.  | 1628.01        | BB          | 52.0           | 55.3           | 26.2                    | 37.4                | 3.0                   | 0.0            | 43.8             | 47.1             | 54.0                | 10.2        | 6.9         |
| 2.  | 4882.00        | BB          | 48.7           | 47.9           | 33.1                    | 37.7                | 5.4                   | 0.0            | 49.5             | 48.7             | 54.0                | 4.5         | 5.3         |
| 3.  | 7323.00        | BB          | 33.3           | 33.2           | 36.7                    | 37.6                | 6.1                   | 0.0            | 38.5             | 38.4             | 54.0                | 15.5        | 15.6        |
| 4.  | 9764.00        | BB          | 33.2           | 33.1           | 37.7                    | 37.1                | 7.7                   | 0.0            | 41.5             | 41.4             | 54.0                | 12.5        | 12.6        |
| 5.  | 12205.00       | BB          | 32.7           | 33.2           | 40.2                    | 36.4                | 8.8                   | 0.0            | 45.3             | 45.8             | 54.0                | 8.7         | 8.2         |

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-D16/D17 ■ PREAMP: KAF-02 (8449B) ■ SPECTRUMANALYZER: ESI40 (KTR-01)

\* VBW: 10Hz for No. 1

# DATA OF RADIATION TEST

UL Japan, Inc.

YAMAKITA No.1 ANECHOIC CHAMBER

Report No. : 28CE0024-YK-C

Applicant : TOPCON Corporation  
Kind of Equipment : Global Mapping System  
Model No. : GMS-2Pro  
Serial No. : 0014  
Power : DC 7.4V  
Mode : Transmitting 2480MHz (DH5)  
Remarks : -  
Date : 10/22/2007  
Test Distance : 3 m  
Temperature : 21 °C  
Humidity : 56 %  
Regulation : FCC Part15C § 15.209

Engineer : Tatsuya Arai

| No. | FREQ.<br>[MHz] | ANT<br>TYPE | READING         |                 | ANT<br>FACTOR<br>[dB/m] | AMP<br>GAIN<br>[dB] | CABLE<br>LOSS<br>[dB] | ATTEN.<br>[dB] | RESULT            |                   | LIMITS<br>[dB μ V/m] | MARGIN      |             |
|-----|----------------|-------------|-----------------|-----------------|-------------------------|---------------------|-----------------------|----------------|-------------------|-------------------|----------------------|-------------|-------------|
|     |                |             | HOR<br>[dB μ V] | VER<br>[dB μ V] |                         |                     |                       |                | HOR<br>[dB μ V/m] | VER<br>[dB μ V/m] |                      | HOR<br>[dB] | VER<br>[dB] |
| 1.  | 208.87         | BB          | 33.4            | 30.4            | 17.0                    | 27.9                | 3.0                   | 5.8            | 31.3              | 28.3              | 43.5                 | 12.2        | 15.2        |
| 2.  | 282.59         | BB          | 29.5            | 30.0            | 19.3                    | 27.4                | 3.6                   | 5.9            | 30.9              | 31.4              | 46.0                 | 15.1        | 14.6        |
| 3.  | 307.16         | BB          | 39.8            | 36.7            | 14.4                    | 27.5                | 3.8                   | 5.9            | 36.4              | 33.3              | 46.0                 | 9.6         | 12.7        |
| 4.  | 331.73         | BB          | 30.5            | 28.2            | 15.1                    | 27.7                | 4.1                   | 5.9            | 27.9              | 25.6              | 46.0                 | 18.1        | 20.4        |
| 5.  | 430.03         | BB          | 25.4            | 25.0            | 17.4                    | 28.6                | 4.9                   | 5.9            | 25.0              | 24.6              | 46.0                 | 21.0        | 21.4        |
| 6.  | 577.47         | BB          | 31.6            | 31.5            | 19.4                    | 29.1                | 5.4                   | 5.9            | 33.2              | 33.1              | 46.0                 | 12.8        | 12.9        |

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

■ ANTENNA: KBA-03 (BBA9106) 30-299.99MHz/KLA-03 (USLP9143) 300-1000MHz  
■ CABLE: KCC-30/31/32/34 ■ PREAMP: KAF-05 (8447D) ■ EMI RECEIVER: KTR-05 (ESC1)

# DATA OF RADIATION TEST

UL Japan, Inc.

YAMAKITA No.1 ANECHOIC CHAMBER

Report No. : 28CE0024-YK-C

Applicant : TOPCON Corporation  
 Kind of Equipment : Global Mapping System  
 Model No. : GMS-2Pro  
 Serial No. : 0014  
 Power : DC 7.4V  
 Mode : Transmitting 2480MHz (DH5)  
 Remarks : PK Detector (RBW:1MHz/VBW:1MHz)  
 Date : 10/25/2007  
 Test Distance : 3 m  
 Temperature : 23 °C  
 Humidity : 49 %  
 Regulation : FCC Part15C § 15.209 (PK Detection)

Engineer : Toyokazu Imamura

| No. | FREQ.<br>[MHz] | ANT<br>TYPE | READING         |                 | ANT<br>FACTOR<br>[dB/m] | AMP<br>GAIN<br>[dB] | CABLE<br>LOSS<br>[dB] | ATTEN.<br>[dB] | RESULT            |                   | LIMITS<br>[dB μ V/m] | MARGIN      |             |
|-----|----------------|-------------|-----------------|-----------------|-------------------------|---------------------|-----------------------|----------------|-------------------|-------------------|----------------------|-------------|-------------|
|     |                |             | HOR<br>[dB μ V] | VER<br>[dB μ V] |                         |                     |                       |                | HOR<br>[dB μ V/m] | VER<br>[dB μ V/m] |                      | HOR<br>[dB] | VER<br>[dB] |
| 1.  | 1654.00        | BB          | 54.6            | 56.6            | 26.5                    | 37.4                | 3.0                   | 0.0            | 46.7              | 48.7              | 74.0                 | 27.3        | 25.3        |
| 2.  | 2483.50        | BB          | 54.3            | 52.4            | 28.3                    | 37.6                | 3.4                   | 0.0            | 48.4              | 46.5              | 74.0                 | 25.6        | 27.5        |
| 3.  | 4960.00        | BB          | 53.4            | 52.5            | 33.4                    | 37.6                | 5.4                   | 0.0            | 54.6              | 53.7              | 74.0                 | 19.4        | 20.3        |
| 4.  | 7440.00        | BB          | 44.6            | 45.3            | 36.8                    | 38.0                | 6.1                   | 0.0            | 49.5              | 50.2              | 74.0                 | 24.5        | 23.8        |
| 5.  | 9920.00        | BB          | 45.0            | 44.1            | 37.7                    | 36.7                | 7.5                   | 0.0            | 53.5              | 52.6              | 74.0                 | 20.5        | 21.4        |
| 6.  | 12400.00       | BB          | 45.7            | 46.4            | 40.3                    | 36.3                | 9.1                   | 0.0            | 58.8              | 59.5              | 74.0                 | 15.2        | 14.5        |

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-D16/D17 ■ PREAMP: KAF-02 (8449B) ■ SPECTRUMANALYZER: ES140 (KTR-01)

# DATA OF RADIATION TEST

UL Japan, Inc.

YAMAKITA No.1 ANECHOIC CHAMBER

Report No. : 28CE0024-YK-C

Applicant : TOPCON Corporation  
 Kind of Equipment : Global Mapping System  
 Model No. : GMS-2Pro  
 Serial No. : 0014  
 Power : DC 7.4V  
 Mode : Transmitting 2480MHz (DH5)  
 Remarks : AV Detector (RBW:1MHz/VBW:200Hz\*)  
 Date : 10/25/2007  
 Test Distance : 3 m  
 Temperature : 23 °C  
 Humidity : 49 %  
 Regulation : FCC Part15C § 15.209 (AV Detection)

Engineer : Toyokazu Imamura

| No. | FREQ.<br>[MHz] | ANT<br>TYPE | READING         |                 | ANT<br>FACTOR<br>[dB/m] | AMP<br>GAIN<br>[dB] | CABLE<br>LOSS<br>[dB] | ATTEN.<br>[dB] | RESULT            |                   | LIMITS<br>[dB μ V/m] | MARGIN      |             |
|-----|----------------|-------------|-----------------|-----------------|-------------------------|---------------------|-----------------------|----------------|-------------------|-------------------|----------------------|-------------|-------------|
|     |                |             | HOR<br>[dB μ V] | VER<br>[dB μ V] |                         |                     |                       |                | HOR<br>[dB μ V/m] | VER<br>[dB μ V/m] |                      | HOR<br>[dB] | VER<br>[dB] |
| 1.  | 1654.00        | BB          | 50.6            | 54.5            | 26.5                    | 37.4                | 3.0                   | 0.0            | 42.7              | 46.6              | 54.0                 | 11.3        | 7.4         |
| 2.  | 2483.50        | BB          | 39.0            | 38.7            | 28.3                    | 37.6                | 3.4                   | 0.0            | 33.1              | 32.8              | 54.0                 | 20.9        | 21.2        |
| 3.  | 4960.00        | BB          | 40.7            | 40.4            | 33.4                    | 37.6                | 5.4                   | 0.0            | 41.9              | 41.6              | 54.0                 | 12.1        | 12.4        |
| 4.  | 7440.00        | BB          | 32.9            | 33.3            | 36.8                    | 38.0                | 6.1                   | 0.0            | 37.8              | 38.2              | 54.0                 | 16.2        | 15.8        |
| 5.  | 9920.00        | BB          | 33.3            | 32.8            | 37.7                    | 36.7                | 7.5                   | 0.0            | 41.8              | 41.3              | 54.0                 | 12.2        | 12.7        |
| 6.  | 12400.00       | BB          | 32.9            | 33.2            | 40.3                    | 36.3                | 9.1                   | 0.0            | 46.0              | 46.3              | 54.0                 | 8.0         | 7.7         |

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-D16/D17 ■ PREAMP: KAF-02 (8449B) ■ SPECTRUMANALYZER: ESI40 (KTR-01)

\* VBW: 10Hz for No. 1

# DATA OF RADIATION TEST

UL Japan, Inc.

YAMAKITA No.1 ANECHOIC CHAMBER

Report No. : 28CE0024-YK-C

Applicant : TOPCON Corporation  
 Kind of Equipment : Global Mapping System  
 Model No. : GMS-2Pro  
 Serial No. : 0014  
 Power : DC 7.4V  
 Mode : Transmitting 2402MHz (3DH5)  
 Remarks : -  
 Date : 10/22/2007  
 Test Distance : 3 m  
 Temperature : 21 °C  
 Humidity : 56 %  
 Regulation : FCC Part15C § 15.209

Engineer : Tatsuya Arai

| No. | FREQ.<br>[MHz] | ANT<br>TYPE | READING         |                 | ANT<br>FACTOR<br>[dB/m] | AMP<br>GAIN<br>[dB] | CABLE<br>LOSS<br>[dB] | ATTEN.<br>[dB] | RESULT            |                   | LIMITS<br>[dB μ V/m] | MARGIN      |             |
|-----|----------------|-------------|-----------------|-----------------|-------------------------|---------------------|-----------------------|----------------|-------------------|-------------------|----------------------|-------------|-------------|
|     |                |             | HOR<br>[dB μ V] | VER<br>[dB μ V] |                         |                     |                       |                | HOR<br>[dB μ V/m] | VER<br>[dB μ V/m] |                      | HOR<br>[dB] | VER<br>[dB] |
| 1.  | 208.87         | BB          | 32.2            | 27.5            | 17.0                    | 27.9                | 3.0                   | 5.8            | 30.1              | 25.4              | 43.5                 | 13.4        | 18.1        |
| 2.  | 282.59         | BB          | 30.9            | 30.2            | 19.3                    | 27.4                | 3.6                   | 5.9            | 32.3              | 31.6              | 46.0                 | 13.7        | 14.4        |
| 3.  | 307.16         | BB          | 40.0            | 36.3            | 14.4                    | 27.5                | 3.8                   | 5.9            | 36.6              | 32.9              | 46.0                 | 9.4         | 13.1        |
| 4.  | 331.75         | BB          | 30.8            | 29.8            | 15.1                    | 27.7                | 4.1                   | 5.9            | 28.2              | 27.2              | 46.0                 | 17.8        | 18.8        |
| 5.  | 430.02         | BB          | 25.0            | 24.8            | 17.4                    | 28.6                | 4.9                   | 5.9            | 24.6              | 24.4              | 46.0                 | 21.4        | 21.6        |
| 6.  | 577.46         | BB          | 31.7            | 32.2            | 19.4                    | 29.1                | 5.4                   | 5.9            | 33.3              | 33.8              | 46.0                 | 12.7        | 12.2        |

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

# DATA OF RADIATION TEST

UL Japan, Inc.

YAMAKITA No.1 ANECHOIC CHAMBER

Report No. : 28CE0024-YK-C

Applicant : TOPCON Corporation  
Kind of Equipment : Global Mapping System  
Model No. : GMS-2Pro  
Serial No. : 0014  
Power : DC 7.4V  
Mode : Transmitting 2402MHz (3DH5)  
Remarks : PK Detector (RBW:1MHz/VBW:1MHz)  
Date : 10/25/2007  
Test Distance : 3 m  
Temperature : 23 °C Engineer : Toyokazu Imamura  
Humidity : 49 %  
Regulation : FCC Part15C § 15.209 (PK Detection)

| No. | FREQ.<br>[MHz] | ANT<br>TYPE | READING         |                 | ANT<br>FACTOR<br>[dB/m] | AMP<br>GAIN<br>[dB] | CABLE<br>LOSS<br>[dB] | ATTEN.<br>[dB] | RESULT            |                   | LIMITS<br>[dB μ V/m] | MARGIN      |             |
|-----|----------------|-------------|-----------------|-----------------|-------------------------|---------------------|-----------------------|----------------|-------------------|-------------------|----------------------|-------------|-------------|
|     |                |             | HOR<br>[dB μ V] | VER<br>[dB μ V] |                         |                     |                       |                | HOR<br>[dB μ V/m] | VER<br>[dB μ V/m] |                      | HOR<br>[dB] | VER<br>[dB] |
| 1.  | 1602.00        | BB          | 56.0            | 55.6            | 26.0                    | 37.4                | 3.0                   | 0.0            | 47.6              | 47.2              | 74.0                 | 26.4        | 26.8        |
| 2.  | 2390.00        | BB          | 45.9            | 44.9            | 28.5                    | 37.5                | 3.4                   | 0.0            | 40.3              | 39.3              | 74.0                 | 33.7        | 34.7        |
| 3.  | 4804.00        | BB          | 46.6            | 48.9            | 32.9                    | 37.8                | 5.3                   | 0.0            | 47.0              | 49.3              | 74.0                 | 27.0        | 24.7        |
| 4.  | 7206.00        | BB          | 45.2            | 45.0            | 36.5                    | 37.2                | 6.1                   | 0.0            | 50.6              | 50.4              | 74.0                 | 23.4        | 23.6        |
| 5.  | 9608.00        | BB          | 45.3            | 44.7            | 37.7                    | 37.4                | 8.0                   | 0.0            | 53.6              | 53.0              | 74.0                 | 20.4        | 21.0        |
| 6.  | 12010.00       | BB          | 43.2            | 45.2            | 40.0                    | 36.5                | 8.5                   | 0.0            | 55.2              | 57.2              | 74.0                 | 18.8        | 16.8        |

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-D16/D17 ■ PREAMP: KAF-02 (8449B) ■ SPECTRUMANALYZER: ESI40 (KTR-01)

# DATA OF RADIATION TEST

UL Japan, Inc.

YAMAKITA No.1 ANECHOIC CHAMBER

Report No. : 28CE0024-YK-C

Applicant : TOPCON Corporation  
 Kind of Equipment : Global Mapping System  
 Model No. : GMS-2Pro  
 Serial No. : 0014  
 Power : DC 7.4V  
 Mode : Transmitting 2402MHz (3DH5)  
 Remarks : AV Detector (RBW:1MHz/VBW:200Hz\*)  
 Date : 10/25/2007  
 Test Distance : 3 m  
 Temperature : 23 °C  
 Humidity : 49 %  
 Regulation : FCC Part15C § 15.209 (AV Detection)

Engineer : Toyokazu Imamura

| No. | FREQ.<br>[MHz] | ANT<br>TYPE | READING         |                 | ANT<br>FACTOR<br>[dB/m] | AMP<br>GAIN<br>[dB] | CABLE<br>LOSS<br>[dB] | ATTEN.<br>[dB] | RESULT            |                   | LIMITS<br>[dB μ V/m] | MARGIN      |             |
|-----|----------------|-------------|-----------------|-----------------|-------------------------|---------------------|-----------------------|----------------|-------------------|-------------------|----------------------|-------------|-------------|
|     |                |             | HOR<br>[dB μ V] | VER<br>[dB μ V] |                         |                     |                       |                | HOR<br>[dB μ V/m] | VER<br>[dB μ V/m] |                      | HOR<br>[dB] | VER<br>[dB] |
| 1.  | 1602.00        | BB          | 53.6            | 53.0            | 26.0                    | 37.4                | 3.0                   | 0.0            | 45.2              | 44.6              | 54.0                 | 8.8         | 9.4         |
| 2.  | 2390.00        | BB          | 33.8            | 33.8            | 28.5                    | 37.5                | 3.4                   | 0.0            | 28.2              | 28.2              | 54.0                 | 25.8        | 25.8        |
| 3.  | 4804.00        | BB          | 33.5            | 36.0            | 32.9                    | 37.8                | 5.3                   | 0.0            | 33.9              | 36.4              | 54.0                 | 20.1        | 17.6        |
| 4.  | 7206.00        | BB          | 33.2            | 33.2            | 36.5                    | 37.2                | 6.1                   | 0.0            | 38.6              | 38.6              | 54.0                 | 15.4        | 15.4        |
| 5.  | 9608.00        | BB          | 33.6            | 32.9            | 37.7                    | 37.4                | 8.0                   | 0.0            | 41.9              | 41.2              | 54.0                 | 12.1        | 12.8        |
| 6.  | 12010.00       | BB          | 32.0            | 32.8            | 40.0                    | 36.5                | 8.5                   | 0.0            | 44.0              | 44.8              | 54.0                 | 10.0        | 9.2         |

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-D16/D17 ■ PREAMP: KAF-02 (8449B) ■ SPECTRUMANALYZER: ESI40 (KTR-01)

\* VBW: 10Hz for No. 1

# DATA OF RADIATION TEST

UL Japan, Inc.  
YAMAKITA No.1 ANECHOIC CHAMBER  
Report No. : 28CE0024-YK-C

Applicant : TOPCON Corporation  
Kind of Equipment : Global Mapping System  
Model No. : GMS-2Pro  
Serial No. : 0014  
Power : DC 7.4V  
Mode : Transmitting 2441MHz (3DH5)  
Remarks : -  
Date : 10/22/2007  
Test Distance : 3 m  
Temperature : 21 °C  
Humidity : 56 %  
Regulation : FCC Part15C § 15.209

Engineer : Tatsuya Arai

| No. | FREQ.<br>[MHz] | ANT<br>TYPE | READING         |                 | ANT<br>FACTOR<br>[dB/m] | AMP<br>GAIN<br>[dB] | CABLE<br>LOSS<br>[dB] | ATTEN.<br>[dB] | RESULT            |                   | LIMITS<br>[dB μ V/m] | MARGIN      |             |
|-----|----------------|-------------|-----------------|-----------------|-------------------------|---------------------|-----------------------|----------------|-------------------|-------------------|----------------------|-------------|-------------|
|     |                |             | HOR<br>[dB μ V] | VER<br>[dB μ V] |                         |                     |                       |                | HOR<br>[dB μ V/m] | VER<br>[dB μ V/m] |                      | HOR<br>[dB] | VER<br>[dB] |
| 1.  | 208.87         | BB          | 26.9            | 30.6            | 17.0                    | 27.9                | 3.0                   | 5.8            | 24.8              | 28.5              | 43.5                 | 18.7        | 15.0        |
| 2.  | 282.59         | BB          | 32.2            | 31.3            | 19.3                    | 27.4                | 3.6                   | 5.9            | 33.6              | 32.7              | 46.0                 | 12.4        | 13.3        |
| 3.  | 307.16         | BB          | 40.8            | 37.7            | 14.4                    | 27.5                | 3.8                   | 5.9            | 37.4              | 34.3              | 46.0                 | 8.6         | 11.7        |
| 4.  | 331.74         | BB          | 29.8            | 29.4            | 15.1                    | 27.7                | 4.1                   | 5.9            | 27.2              | 26.8              | 46.0                 | 18.8        | 19.2        |
| 5.  | 430.03         | BB          | 26.7            | 28.1            | 17.4                    | 28.6                | 4.9                   | 5.9            | 26.3              | 27.7              | 46.0                 | 19.7        | 18.3        |
| 6.  | 577.46         | BB          | 32.8            | 31.2            | 19.4                    | 29.1                | 5.4                   | 5.9            | 34.4              | 32.8              | 46.0                 | 11.6        | 13.2        |

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

■ ANTENNA: KBA-03 (BBA9106) 30-299.99MHz/KLA-03 (USLP9143) 300-1000MHz  
■ CABLE: KCC-30/31/32/34 ■ PREAMP: KAF-05 (8447D) ■ EMI RECEIVER: KTR-05 (ESC1)

# DATA OF RADIATION TEST

UL Japan, Inc.

YAMAKITA No.1 ANECHOIC CHAMBER

Report No. : 28CE0024-YK-C

Applicant : TOPCON Corporation  
Kind of Equipment : Global Mapping System  
Model No. : GMS-2Pro  
Serial No. : 0014  
Power : DC 7.4V  
Mode : Transmitting 2441MHz (3DH5)  
Remarks : PK Detector (RBW:1MHz/VBW:1MHz)  
Date : 10/25/2007  
Test Distance : 3 m  
Temperature : 23 °C Engineer : Toyokazu Imamura  
Humidity : 49 %  
Regulation : FCC Part15C § 15.209 (PK Detection)

| No. | FREQ.<br>[MHz] | ANT<br>TYPE | READING         |                 | ANT<br>FACTOR<br>[dB/m] | AMP<br>GAIN<br>[dB] | CABLE<br>LOSS<br>[dB] | ATTEN.<br>[dB] | RESULT            |                   | LIMITS<br>[dB μ V/m] | MARGIN      |             |
|-----|----------------|-------------|-----------------|-----------------|-------------------------|---------------------|-----------------------|----------------|-------------------|-------------------|----------------------|-------------|-------------|
|     |                |             | HOR<br>[dB μ V] | VER<br>[dB μ V] |                         |                     |                       |                | HOR<br>[dB μ V/m] | VER<br>[dB μ V/m] |                      | HOR<br>[dB] | VER<br>[dB] |
| 1.  | 1628.01        | BB          | 54.4            | 55.7            | 26.2                    | 37.4                | 3.0                   | 0.0            | 46.2              | 47.5              | 74.0                 | 27.8        | 26.5        |
| 2.  | 4882.00        | BB          | 48.8            | 51.9            | 33.1                    | 37.7                | 5.4                   | 0.0            | 49.6              | 52.7              | 74.0                 | 24.4        | 21.3        |
| 3.  | 7323.00        | BB          | 44.7            | 44.6            | 36.7                    | 37.6                | 6.1                   | 0.0            | 49.9              | 49.8              | 74.0                 | 24.1        | 24.2        |
| 4.  | 9764.00        | BB          | 45.9            | 46.3            | 37.7                    | 37.1                | 7.7                   | 0.0            | 54.2              | 54.6              | 74.0                 | 19.8        | 19.4        |
| 5.  | 12205.00       | BB          | 43.8            | 44.3            | 40.2                    | 36.4                | 8.8                   | 0.0            | 56.4              | 56.9              | 74.0                 | 17.6        | 17.1        |

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-D16/D17 ■ PREAMP: KAF-02 (8449B) ■ SPECTRUMANALYZER: ESI40 (KTR-01)

# DATA OF RADIATION TEST

UL Japan, Inc.  
YAMAKITA No.1 ANECHOIC CHAMBER  
Report No. : 28CE0024-YK-C

Applicant : TOPCON Corporation  
Kind of Equipment : Global Mapping System  
Model No. : GMS-2Pro  
Serial No. : 0014  
Power : DC 7.4V  
Mode : Transmitting 2441MHz (3DH5)  
Remarks : AV Detector (RBW:1MHz/VBW:200Hz\*)  
Date : 10/25/2007  
Test Distance : 3 m  
Temperature : 23 °C Engineer : Toyokazu Imamura  
Humidity : 49 %  
Regulation : FCC Part15C § 15.209 (AV Detection)

| No. | FREQ.<br>[MHz] | ANT<br>TYPE | READING         |                 | ANT<br>FACTOR<br>[dB/m] | AMP<br>GAIN<br>[dB] | CABLE<br>LOSS<br>[dB] | ATTEN.<br>[dB] | RESULT            |                   | LIMITS<br>[dB μ V/m] | MARGIN      |             |
|-----|----------------|-------------|-----------------|-----------------|-------------------------|---------------------|-----------------------|----------------|-------------------|-------------------|----------------------|-------------|-------------|
|     |                |             | HOR<br>[dB μ V] | VER<br>[dB μ V] |                         |                     |                       |                | HOR<br>[dB μ V/m] | VER<br>[dB μ V/m] |                      | HOR<br>[dB] | VER<br>[dB] |
| 1.  | 1628.01        | BB          | 50.3            | 53.2            | 26.2                    | 37.4                | 3.0                   | 0.0            | 42.1              | 45.0              | 54.0                 | 11.9        | 9.0         |
| 2.  | 4882.00        | BB          | 35.0            | 38.5            | 33.1                    | 37.7                | 5.4                   | 0.0            | 35.8              | 39.3              | 54.0                 | 18.2        | 14.7        |
| 3.  | 7323.00        | BB          | 33.1            | 33.0            | 36.7                    | 37.6                | 6.1                   | 0.0            | 38.3              | 38.2              | 54.0                 | 15.7        | 15.8        |
| 4.  | 9764.00        | BB          | 33.2            | 33.4            | 37.7                    | 37.1                | 7.7                   | 0.0            | 41.5              | 41.7              | 54.0                 | 12.5        | 12.3        |
| 5.  | 12205.00       | BB          | 32.6            | 32.9            | 40.2                    | 36.4                | 8.8                   | 0.0            | 45.2              | 45.5              | 54.0                 | 8.8         | 8.5         |

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-D16/D17 ■ PREAMP: KAF-02 (8449B) ■ SPECTRUMANALYZER: ESI40 (KTR-01)  
 \* VBW: 10Hz for No. 1

# DATA OF RADIATION TEST

UL Japan, Inc.

YAMAKITA No.1 ANECHOIC CHAMBER

Report No. : 28CE0024-YK-C

Applicant : TOPCON Corporation  
Kind of Equipment : Global Mapping System  
Model No. : GMS-2Pro  
Serial No. : 0014  
Power : DC 7.4V  
Mode : Transmitting 2480MHz (3DH5)  
Remarks : -  
Date : 10/22/2007  
Test Distance : 3 m  
Temperature : 21 °C  
Humidity : 56 %  
Regulation : FCC Part15C § 15.209

Engineer : Tatsuya Arai

| No. | FREQ.<br>[MHz] | ANT<br>TYPE | READING         |                 | ANT<br>FACTOR<br>[dB/m] | AMP<br>GAIN<br>[dB] | CABLE<br>LOSS<br>[dB] | ATTEN.<br>[dB] | RESULT            |                   | LIMITS<br>[dB μ V/m] | MARGIN      |             |
|-----|----------------|-------------|-----------------|-----------------|-------------------------|---------------------|-----------------------|----------------|-------------------|-------------------|----------------------|-------------|-------------|
|     |                |             | HOR<br>[dB μ V] | VER<br>[dB μ V] |                         |                     |                       |                | HOR<br>[dB μ V/m] | VER<br>[dB μ V/m] |                      | HOR<br>[dB] | VER<br>[dB] |
| 1.  | 208.87         | BB          | 31.0            | 30.5            | 17.0                    | 27.9                | 3.0                   | 5.8            | 28.9              | 28.4              | 43.5                 | 14.6        | 15.1        |
| 2.  | 282.59         | BB          | 28.2            | 29.1            | 19.3                    | 27.4                | 3.6                   | 5.9            | 29.6              | 30.5              | 46.0                 | 16.4        | 15.5        |
| 3.  | 307.16         | BB          | 39.1            | 37.7            | 14.4                    | 27.5                | 3.8                   | 5.9            | 35.7              | 34.3              | 46.0                 | 10.3        | 11.7        |
| 4.  | 331.73         | BB          | 30.6            | 31.0            | 15.1                    | 27.7                | 4.1                   | 5.9            | 28.0              | 28.4              | 46.0                 | 18.0        | 17.6        |
| 5.  | 430.02         | BB          | 25.4            | 25.5            | 17.4                    | 28.6                | 4.9                   | 5.9            | 25.0              | 25.1              | 46.0                 | 21.0        | 20.9        |
| 6.  | 577.46         | BB          | 33.4            | 31.3            | 19.4                    | 29.1                | 5.4                   | 5.9            | 35.0              | 32.9              | 46.0                 | 11.0        | 13.1        |

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

■ ANTENNA: KBA-03 (BBA9106) 30-299.99MHz/KLA-03 (USLP9143) 300-1000MHz  
■ CABLE: KCC-30/31/32/34 ■ PREAMP: KAF-05 (8447D) ■ EMI RECEIVER: KTR-05 (ESC1)

# DATA OF RADIATION TEST

UL Japan, Inc.

YAMAKITA No.1 ANECHOIC CHAMBER

Report No. : 28CE0024-YK-C

Applicant : TOPCON Corporation  
Kind of Equipment : Global Mapping System  
Model No. : GMS-2Pro  
Serial No. : 0014  
Power : DC 7.4V  
Mode : Transmitting 2480MHz (3DH5)  
Remarks : PK Detector (RBW:1MHz/VBW:1MHz)  
Date : 10/25/2007  
Test Distance : 3 m  
Temperature : 23 °C Engineer : Toyokazu Imamura  
Humidity : 49 %  
Regulation : FCC Part15C § 15.209 (PK Detection)

| No. | FREQ.<br>[MHz] | ANT<br>TYPE | READING             |                     | ANT<br>FACTOR<br>[dB/m] | AMP<br>GAIN<br>[dB] | CABLE<br>LOSS<br>[dB] | ATTEN.<br>[dB] | RESULT                |                       | LIMITS<br>[dB $\mu$ V/m] | MARGIN      |             |
|-----|----------------|-------------|---------------------|---------------------|-------------------------|---------------------|-----------------------|----------------|-----------------------|-----------------------|--------------------------|-------------|-------------|
|     |                |             | HOR<br>[dB $\mu$ V] | VER<br>[dB $\mu$ V] |                         |                     |                       |                | HOR<br>[dB $\mu$ V/m] | VER<br>[dB $\mu$ V/m] |                          | HOR<br>[dB] | VER<br>[dB] |
| 1.  | 1654.00        | BB          | 55.9                | 57.1                | 26.5                    | 37.4                | 3.0                   | 0.0            | 48.0                  | 49.2                  | 74.0                     | 26.0        | 24.8        |
| 2.  | 2483.50        | BB          | 55.9                | 59.3                | 28.3                    | 37.6                | 3.4                   | 0.0            | 50.0                  | 53.4                  | 74.0                     | 24.0        | 20.6        |
| 3.  | 4960.00        | BB          | 48.9                | 48.7                | 33.4                    | 37.6                | 5.4                   | 0.0            | 50.1                  | 49.9                  | 74.0                     | 23.9        | 24.1        |
| 4.  | 7440.00        | BB          | 45.2                | 45.2                | 36.8                    | 38.0                | 6.1                   | 0.0            | 50.1                  | 50.1                  | 74.0                     | 23.9        | 23.9        |
| 5.  | 9920.00        | BB          | 45.1                | 44.6                | 37.7                    | 36.7                | 7.5                   | 0.0            | 53.6                  | 53.1                  | 74.0                     | 20.4        | 20.9        |
| 6.  | 12400.00       | BB          | 44.3                | 45.3                | 40.3                    | 36.3                | 9.1                   | 0.0            | 57.4                  | 58.4                  | 74.0                     | 16.6        | 15.6        |

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-D16/D17 ■ PREAMP: KAF-02 (8449B) ■ SPECTRUMANALYZER: ES140 (KTR-01)

# DATA OF RADIATION TEST

UL Japan, Inc.

YAMAKITA No.1 ANECHOIC CHAMBER

Report No. : 28CE0024-YK-C

Applicant : TOPCON Corporation  
Kind of Equipment : Global Mapping System  
Model No. : GMS-2Pro  
Serial No. : 0014  
Power : DC 7.4V  
Mode : Transmitting 2480MHz (3DH5)  
Remarks : AV Detector (RBW:1MHz/VBW:200Hz\*)  
Date : 10/25/2007  
Test Distance : 3 m  
Temperature : 23 °C Engineer : Toyokazu Imamura  
Humidity : 49 %  
Regulation : FCC Part15C § 15.209 (AV Detection)

| No. | FREQ.<br>[MHz] | ANT<br>TYPE | READING         |                 | ANT<br>FACTOR<br>[dB/m] | AMP<br>GAIN<br>[dB] | CABLE<br>LOSS<br>[dB] | ATTEN.<br>[dB] | RESULT            |                   | LIMITS<br>[dB μ V/m] | MARGIN      |             |
|-----|----------------|-------------|-----------------|-----------------|-------------------------|---------------------|-----------------------|----------------|-------------------|-------------------|----------------------|-------------|-------------|
|     |                |             | HOR<br>[dB μ V] | VER<br>[dB μ V] |                         |                     |                       |                | HOR<br>[dB μ V/m] | VER<br>[dB μ V/m] |                      | HOR<br>[dB] | VER<br>[dB] |
| 1.  | 1654.00        | BB          | 53.1            | 54.6            | 26.5                    | 37.4                | 3.0                   | 0.0            | 45.2              | 46.7              | 54.0                 | 8.8         | 7.3         |
| 2.  | 2483.50        | BB          | 45.1            | 48.0            | 28.3                    | 37.6                | 3.4                   | 0.0            | 39.2              | 42.1              | 54.0                 | 14.8        | 11.9        |
| 3.  | 4960.00        | BB          | 36.4            | 36.3            | 33.4                    | 37.6                | 5.4                   | 0.0            | 37.6              | 37.5              | 54.0                 | 16.4        | 16.5        |
| 4.  | 7440.00        | BB          | 32.9            | 32.7            | 36.8                    | 38.0                | 6.1                   | 0.0            | 37.8              | 37.6              | 54.0                 | 16.2        | 16.4        |
| 5.  | 9920.00        | BB          | 32.1            | 33.1            | 37.7                    | 36.7                | 7.5                   | 0.0            | 40.6              | 41.6              | 54.0                 | 13.4        | 12.4        |
| 6.  | 12400.00       | BB          | 32.9            | 32.8            | 40.3                    | 36.3                | 9.1                   | 0.0            | 46.0              | 45.9              | 54.0                 | 8.0         | 8.1         |

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-D16/D17 ■ PREAMP: KAF-02 (8449B) ■ SPECTRUMANALYZER: ESI40 (KTR-01)

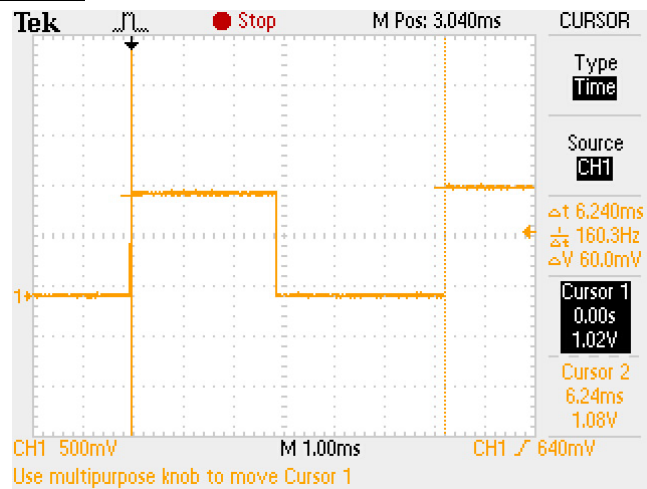
\* VBW: 10Hz for No. 1

## Duty Cycle

COMPANY : TOPCON Corporation  
EQUIPMENT : Global Mapping System  
MODEL NUMBER: GMS-2Pro  
SERIAL NUMBER: 0014  
POWER : DC7.4V

REPORT NO : 28CE0024-YK-C  
DATE : 2007/10/25  
TEMP./HUMI : 23deg.C./49%  
TEST MODE : Tx2402MHz  
ENGINEER : Toyokazu Imamura

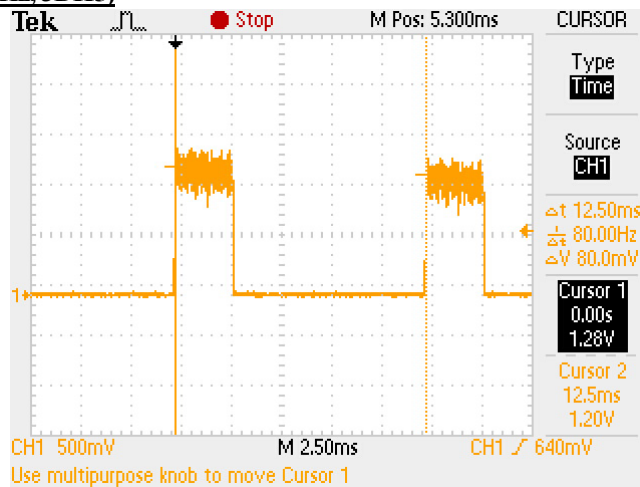
### Transmitting (2402MHz, DH5)



Duty Cycle: 6.27ms

AV Detector VBW:  $1 / 6.24\text{ms} = 160.26\text{Hz} \rightarrow 200\text{Hz}$

### Transmitting (2402MHz, 3DH5)



Duty Cycle: 12.5ms

AV Detector VBW:  $1 / 12.5\text{ms} = 80\text{Hz} \rightarrow 200\text{Hz}$

\* Duty cycle was within 100msec.

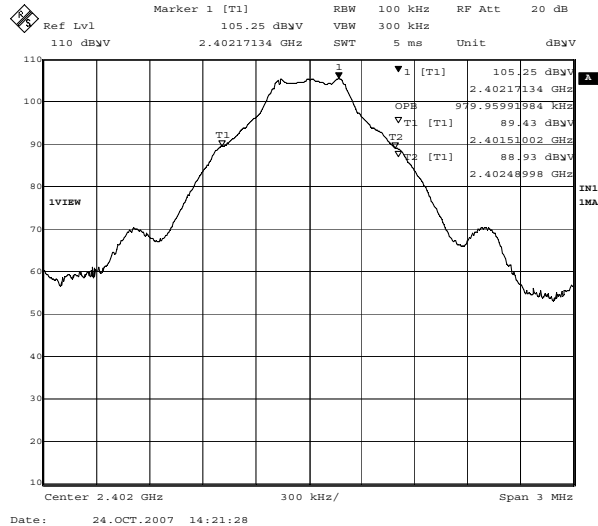
## Occupied Bandwidth(99%)

COMPANY : TOPCON Corporation  
EQUIPMENT : Global Mapping System  
MODEL NUMBER: GMS-2Pro  
SERIAL NUMBER: 0014  
FCC ID : LCB-841221  
POWER : DC7.4V

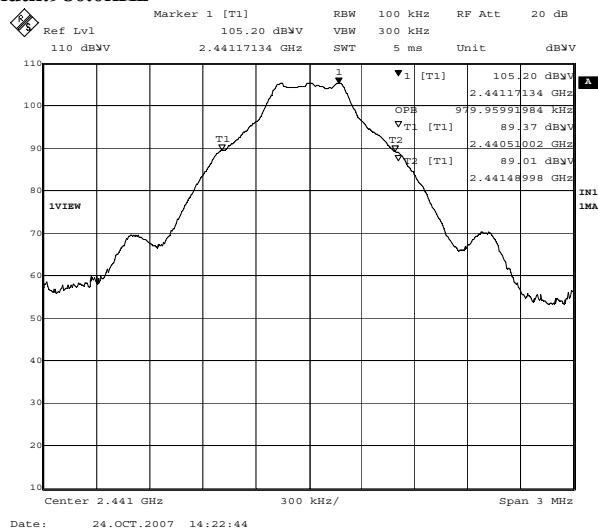
UL Japan, Inc. Yamakita No.2 Shielded Room  
REPORT NO : 28CE0024-YK-C  
REGULATION : RSS-210  
DATE : 2007/10/24  
TEMP/HUMI : 24deg.C./49%  
TEST MODE : Transmitting  
ENGINEER : Tatsuya Arai

[Hopping off, DH5]

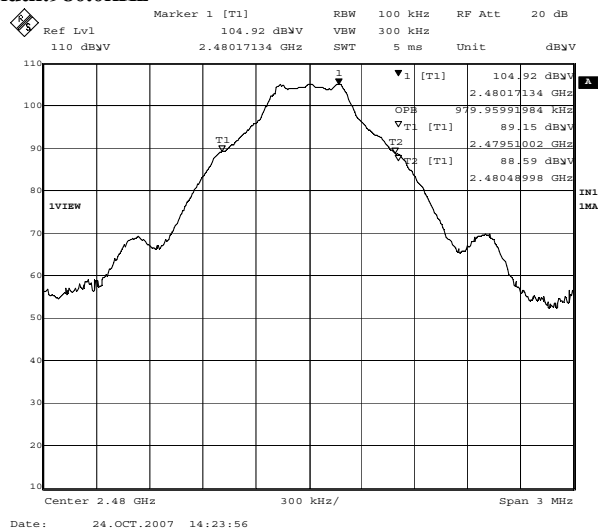
1. ch : 2402MHz/Occupied Bandwidth:980.0kHz



2. ch : 2441MHz/Occupied Bandwidth:980.0kHz



3. ch : 2480MHz/Occupied Bandwidth:980.0kHz



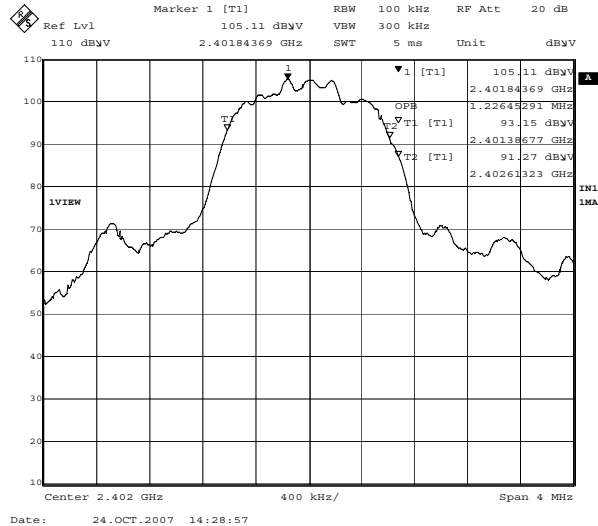
## Occupied Bandwidth(99%)

COMPANY : TOPCON Corporation  
EQUIPMENT : Global Mapping System  
MODEL NUMBER: GMS-2Pro  
SERIAL NUMBER: 0014  
FCC ID : LCB-841221  
POWER : DC7.4V

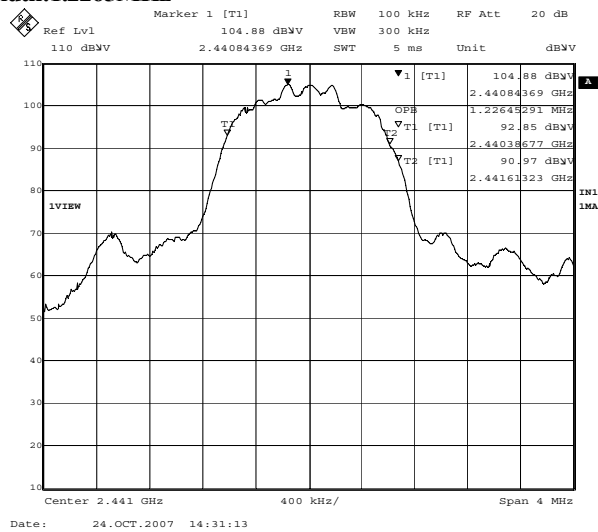
UL Japan, Inc. Yamakita No.2 Shielded Room  
REPORT NO : 28CE0024-YK-C  
REGULATION : RSS-210  
DATE : 2007/10/24  
TEMP/HUMI : 24deg.C./49%  
TEST MODE : Transmitting  
ENGINEER : Tatsuya Arai

[Hopping off, 3DH5]

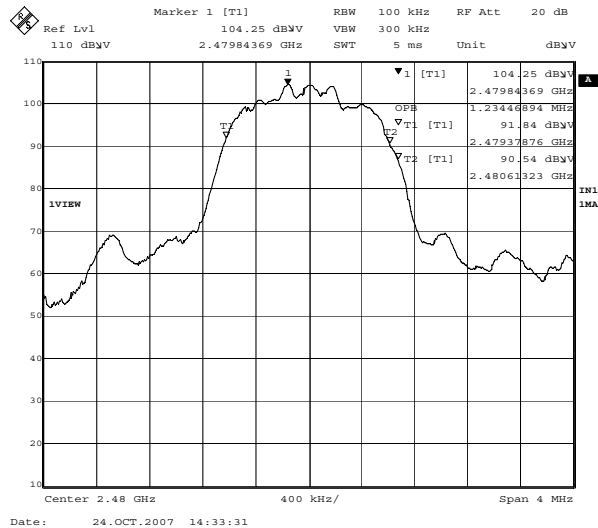
### 4. ch : 2402MHz/Occupied Bandwidth:1.2264MHz



### 5. ch : 2441MHz/Occupied Bandwidth:1.2265MHz



### 6. ch : 2480MHz/Occupied Bandwidth:1.2345MHz

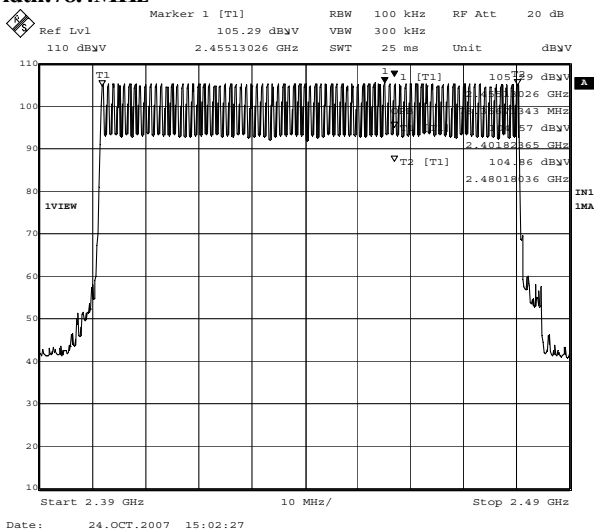


Occupied Bandwidth(99%)

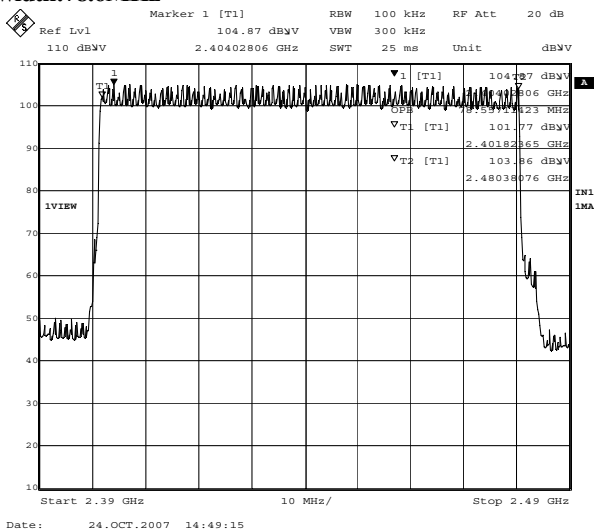
COMPANY : TOPCON Corporation  
EQUIPMENT : Global Mapping System  
MODEL NUMBER: GMS-2Pro  
SERIAL NUMBER: 0014  
FCC ID : LCB-841221  
POWER : DC7.4V

UL Japan, Inc. Yamakita No.2 Shielded Room  
REPORT NO : 28CE0024-YK-C  
REGULATION : RSS-210  
DATE : 2007/10/24  
TEMP/HUMI : 24deg.C./49%  
TEST MODE : Transmitting  
ENGINEER : Tatsuya Arai

7. Hopping, DH5/Occupied Bandwidth:78.4MHz



8. Hopping, 3DH5/Occupied Bandwidth:78.6MHz



### APPENDIX 3 Test Instruments

#### EMI test equipment

| Control No.                           | Instrument                                  | Manufacturer            | Model No                           | Test Item      | Calibration Date *<br>Interval(month) |
|---------------------------------------|---------------------------------------------|-------------------------|------------------------------------|----------------|---------------------------------------|
| YA-RE                                 | Radiated emission(software)                 | UL Japan                | RE(Ver.1.5)                        | RE             | -                                     |
| KAEC-01                               | Anechoic Chamber                            | JSE                     | Semi 3m                            | RE             | 2007/08/26 * 12                       |
| KAF-05                                | Pre Amplifier                               | Agilent                 | 8447D                              | RE             | 2007/04/13 * 12                       |
| KAT6-01                               | Attenuator                                  | INMET                   | 18N-6dB                            | RE             | 2007/03/28 * 12                       |
| KBA-03                                | Biconical Antenna                           | Schwarzbeck             | BBA9106                            | RE             | 2007/01/06 * 12                       |
| KCC-30/31/32<br>/34/KRM-03            | Coaxial Cable/RF Relay Matrix               | Fujikura/Suhner/TSJ     | 5D-2W/S04272B/RFM-E421             | RE             | 2006/11/27 * 12                       |
| KLA-03                                | Logperiodic Antenna                         | Schwarzbeck             | USLP9143                           | RE             | 2007/01/06 * 12                       |
| KOS-02                                | Humidity Indicator                          | Custom                  | CTH-190                            | RE             | 2006/07/10 * 24                       |
| KSA-04                                | Spectrum Analyzer                           | Advantest               | R3271A                             | RE             | 2007/09/25 * 12                       |
| KTR-05                                | Test Receiver                               | Rohde & Schwarz         | ESCI                               | RE             | 2007/06/26 * 12                       |
| KJM-01                                | Measure                                     | TAJIMA                  | GL19-55                            | RE             | -                                     |
| APPRA05                               | Pre Amplifier                               | Hewlett Packard         | 8449B                              | RE             | 2006/12/21 * 12                       |
| KHA-01                                | Horn Antenna                                | A.H.Systems             | SAS-200/571                        | RE             | 2007/08/14 * 12                       |
| KAT10-S2                              | Attenuator                                  | Agilent                 | 8490D 010                          | RE             | 2006/12/13 * 12                       |
| KFL-01                                | Highpass Filter                             | Hewlett Packard         | 84300 80038                        | RE             | 2007/04/11 * 12                       |
| KTR-01                                | Test Receiver                               | Rohde & Schwarz         | ESI40                              | RE/AT1,2,3,4,6 | 2007/04/12 * 12                       |
| KCC-D7                                | Coaxial Cable                               | Advantest               | A01002                             | AT all         | 2007/04/11 * 12                       |
| KPM-05                                | Power meter                                 | Agilent                 | E4417A                             | AT 5           | 2007/04/03 * 12                       |
| KPSS-01                               | Power sensor                                | Agilent                 | E9327A                             | AT 5           | 2007/03/13 * 12                       |
| KOSC-01                               | Oscilloscope                                | Tektronix               | TDS-2022B                          | AT 5           | 2007/05/15 * 12                       |
| KDT-01                                | Coaxial Crystal Detector                    | Agilent                 | 8473C                              | AT 5           | Pre Check                             |
| YA-CE                                 | Conducted emission(software)                | UL Japan                | CE(Ver.1.6)                        | CE             | -                                     |
| KCC-14/15/16<br>/18/KPL-01/K<br>RM-01 | Coaxial Cable/Pulse Limiter/RF Relay Matrix | Fujikura/Suhner/PMM/TSJ | 5D-2W/8D-2W/S04272B/S04272B/PL01/- | CE             | 2007/05/15 * 12                       |
| KLS-01                                | LISN(AMN)                                   | Schwarzbeck             | NSLK8126                           | CE             | 2007/04/05 * 12                       |
| KOS-04                                | Humidity Indicator                          | SATO                    | PC-5000TRH                         | CE             | 2006/07/14 * 24                       |
| KSA-05                                | Spectrum Analyzer                           | Advantest               | R3365                              | CE             | 2007/06/23 * 12                       |
| KTR-02                                | Test Receiver                               | Rohde & Schwarz         | ESCS30                             | CE             | 2007/09/05 * 12                       |
| KJM-03                                | Measure                                     | TAJIMA                  | GL19-55                            | CE             | -                                     |
|                                       |                                             |                         |                                    |                |                                       |
|                                       |                                             |                         |                                    |                |                                       |

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: 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)