FCC/IC Test Report

FOR:

Model Name: JD22E00004F1

FCC ID: XVZGITCPJ318
IC ID: 8711A-GITCPJ318

47 CFR Part 2, 22, 24

RSS-132 Issue 2

RSS-133 Issue 5

TEST REPORT #: EMC_CET10_048_09501_FCC_22_24_rev2
DATE: 2009-12-22

ilac-MRA

ACCREDITED
TESTING LABORATORY
CERTIFICATE # 2135.01

Bluetooth

Bluetooth Qualification Test Facility (BQTF)

CTIA Authorized Test Lab
LAB CODE 20020328-00

FCC listed: A2LA accredited

IC recognized # 3462B-1

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Board of Directors: Dr. Harald Ansorge, Dr. Klaus Matkey, Hans Peter May

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1 Assessment

The following is in compliance with the applicable criteria specified in FCC rules Parts 2, 22 and 24 of Title 47 of the Code of Federal Regulations and Industry Canada Standards RSS 132 and RSS 133.

Company	Model #
Kobelco Cranes	JD22E00004F1

Responsible for Testing Laboratory:

Date	Section	Name	Signature
2009-12-22	Compliance	Sajay Jose (Quality Manager)	

Responsible for the Report:

Date	Section	Name	Signature
2009-12-22	Compliance	Peter Mu (Project Manager)	

The test results of this test report relate exclusively to the test item specified in Section3.
CETECOM Inc. USA does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item. The test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written approval of the CETECOM Inc USA.

2 Administrative Data

2.1 Identification of the Testing Laboratory Issuing the EMC Test Report

Company Name:	CETECOM Inc.
Department:	Compliance
Address:	411 Dixon Landing Road Milpitas, CA 95035 U.S.A.
Telephone:	+1 (408) 586 6200
Fax:	+1 (408) 586 6299
Responsible Test Lab Manager:	Marc Douat
Responsible Project Leader:	Josie Sabado

2.2 Identification of the Client

Applicant's Name:	Kobelco Cranes Co., Ltd.
Street Address:	740 Yagi, Okubo,
City/Zip Code	Akashi, Hyogo 674-0063
Country	Japan
Contact Person:	Motohiko Mizutani
Phone No.	+81-(0)78-936-1331
Fax:	+81-(0)78-935-1029

2.3 Identification of the Manufacturer

Manufacturer's Name:	KYB Trondule Co., Ltd.
Manufacturers Address:	3909 Ura
City/Zip Code	Nagaoka, Niigata 949-5406
Country	Japan

3 Equipment under Test (EUT)

3.1 Specification of the Equipment under Test

Marketing Name:	JD22E00004F1
Model No:	JD22E00004F1
Product Type:	Vehicular
Hardware Revision :	V1.0; B2.11
Software Revision :	V1.0; Revision 01.030
FCC-ID:	XVZGITCPJ318
IC-ID :	8711A-GITCPJ318
Frequency:	GSM 850: 824.2-848.8MHz; PCS 1800: 1850.2-1909.8MHz FDD V: 826.4-846.6MHz; FDD II: 1852.4-1907.6MHz
Type(s) of Modulation:	GMSK; 8-PSK; QPSK; 16QAM
Number of channels:	GSM850: 125 and PCS 1900: 300 FDD II: 278/ FDD V: 103
Antenna Type:	0dBd gain, SMA connector
Power Supply:	24V DC

3.2 Identification of the Equipment Under Test (EUT)

EUT #	Serial Number	HW Status	SW Status
1	00000029	V1.0; B2.11	V1.0; Revision 01.030

3.3 Identification of Accessory equipment

AE #	Type	Manufacturer	Model	Serial Number
1	GSM Antenna	Smarteq	1140.26 SMA	N/A
2	GPS Antenna	N/A	N/A	N/A

4 Subject of Investigation

The objective of the measurements done by Cetecom Inc. was to measure the performance of the EUT as specified by requirements listed in the following test standards:

- 47 CFR Part 2: Title 47 of the Code of Federal Regulations: Chapter I-Federal Communications Commission Frequency allocations and radio treaty matters; general rules and regulations.
- 47 CFR Part 22: Title 47 of the Code of Federal Regulations: Chapter I-Federal Communications Commission subchapter B- common carrier services; Part 22- Public mobile services
- 47 CFR Part 24: Title 47 of the Code of Federal Regulations: Chapter I-Federal Communications Commission subchapter B- common carrier services; Part 24- Personal communication services
- RSS 132- Issue 2: Spectrum management and telecommunication policy- Radio Standards Specifications Cellular telephones employing new technologies operating in the bands 824-849MHz and 869-894MHz
- RSS 133- Issue 5: Spectrum management and telecommunication policy- Radio Standards Specifications- 2GHz personal communication services

This report replaces test report number **EMC_CET10_048_09501 _FCC22_24.**

5 Measurements

5.1 RF Power Output

5.1.1 References

FCC: CFR Part 2.1046, CFR Part 22.913, CFR Part 24.232
IC: RSS 132 Section 4.4 and 6.4; RSS 133 Section 4.3

5.1.2 FCC 2.1046 Measurements required: RF power output.

Power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on circuit elements as specified. The electrical characteristics of the radio frequency load attached to the output terminals when this test is made shall be stated.

5.1.3 Limits:

5.1.3.1 FCC 22.913 (a) Effective radiated power limits.

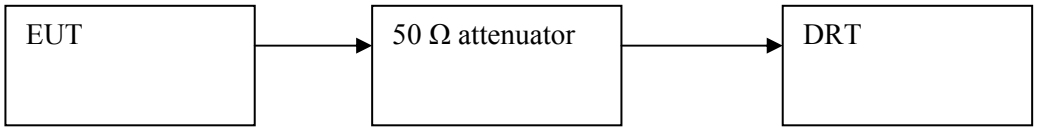
The effective radiated power (ERP) of mobile transmitters must not exceed 7 Watts.

5.1.3.2 FCC 24.232 (b)(c) Power limits.

(b) Mobile/portable stations are limited to 2 Watts effective isotropic radiated power (EIRP).
(c) Peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms equivalent voltage. The measurement results shall be properly adjusted for any limitations, such as detector response times, limited resolution bandwidth capability when compared to the emission bandwidth, sensitivity, etc., so as to obtain a true peak measurement over the full bandwidth of the channel.

5.1.4 Conducted Output Power Measurement procedure

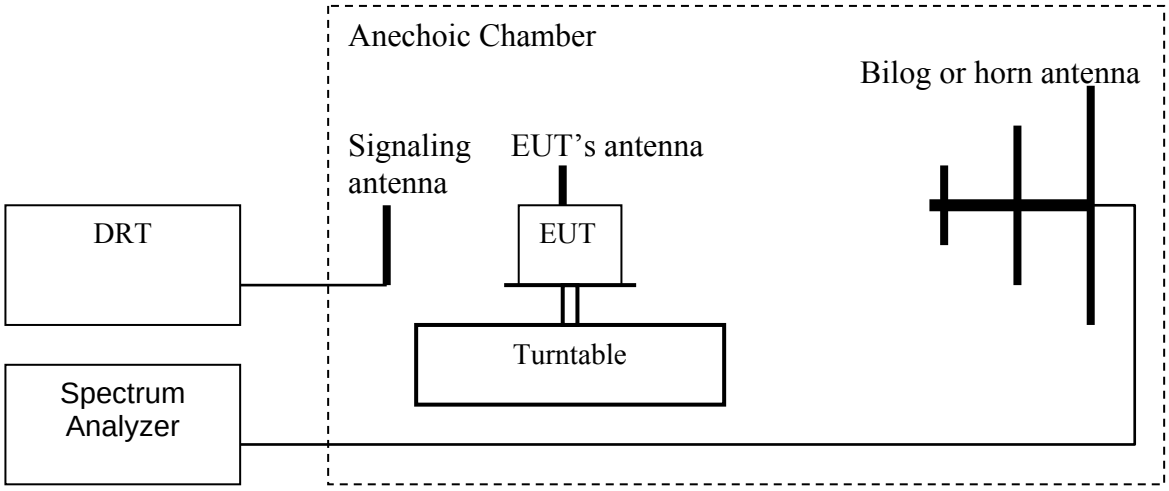
Ref: TIA-603C 2004 2.2.1 Conducted Carrier Output Power Rating



1. Connect the equipment as shown in the above diagram. A Digital RadioCommunication Tester (DRT) is used to enable the EUT to transmit and to measure the output power.
2. Adjust the settings of the DRT to set the EUT to its maximum power at the required channel.
3. Record the output power level measured by the DRT.
4. Correct the measured level for all losses in the RF path.
5. Measurements are to be performed with the EUT set to the low, middle and high channel of each frequency band.

5.1.5 Radiated Output Power Measurement procedure

Ref: TIA-603C 2004 -2.2.17.2 Effective Radiated Power (ERP) or Effective Isotropic Radiated Power (EIRP)



1. Connect the equipment as shown in the above diagram with the EUT's antenna in a vertical orientation.
2. Adjust the settings of the Digital RadioCommunication Tester (DRT) to set the EUT to its maximum power at the required channel.
3. Set the spectrum analyzer to the channel frequency. Set the analyzer to measure peak hold with the required settings.
4. Rotate the EUT 360°. Record the peak level in dBm (**LVL**).
5. Replace the EUT with a vertically polarized half wave dipole or known gain antenna. The center of the antenna should be at the same location as the center of the EUT's antenna.
6. Connect the antenna to a signal generator with known output power and record the path loss in dB (**LOSS)**. **LOSS** = Generator Output Power (dBm) – Analyzer reading (dBm).
7. Determine the ERP using the following equation:
   ERP (dBm) = **LVL** (dBm) + **LOSS** (dB)
8. Determine the EIRP using the following equation:
   EIRP (dBm) = **ERP** (dBm) + 2.14 (dB)
9. Measurements are to be performed with the EUT set to the low, middle and high channel of each frequency band.

Spectrum analyzer settings: RBW=VBW=3MHz

(**Note:** Steps 5 and 6 above are performed prior to testing and **LOSS** is recorded by test software. Steps 3, 4, 7 and 8 above are performed with test software.)

5.1.6 RF Power Output 850MHz band

Limit: Nominal Peak Output Power < 38.45 dBm (7W)
Measurement Uncertainty: ±0.5 dB

GSM 850: GMSK Mode	
Frequency (MHz)	**Radiated Power**
	ERP (dBm)
824.2	29.244
836.4	29.649
848.8	30.294

EGPRS 850: 8PSK Mode	
Frequency (MHz)	**Radiated Power**
	ERP (dBm)
824.2	26.123
836.4	25.324
848.8	26.035

FDD V: UMTS Mode	
Frequency (MHz)	**Radiated Power**
	ERP (dBm)
826.4	23.900
836.0	24.050
846.6	24.610

5.1.7 RF Power Output 1900MHz band

Limit: Nominal Peak Output Power < 33 dBm (2W)
PAR many not exceed 13dB
Measurement Uncertainty: ±0.5 dB

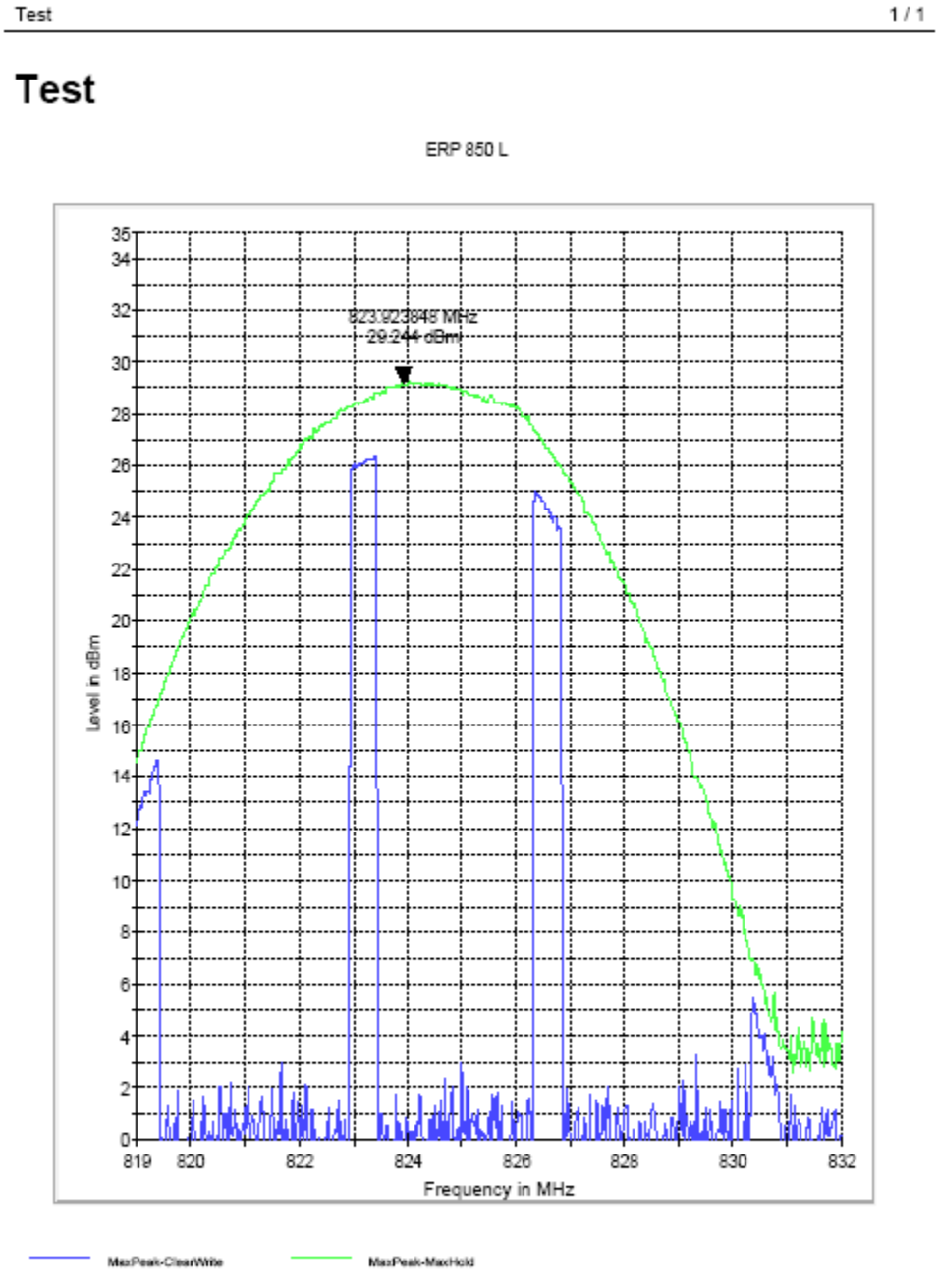
GSM 1900: GMSK Mode	
Frequency (MHz)	**Radiated Power**
	EIRP (dBm)
1850.2	28.750
1880.0	29.722
1909.8	29.333

EGPRS 1900: 8PSK Mode	
Frequency (MHz)	**Radiated Power**
	EIRP (dBm)
1850.2	27.891
1880.0	27.941
1909.8	26.901

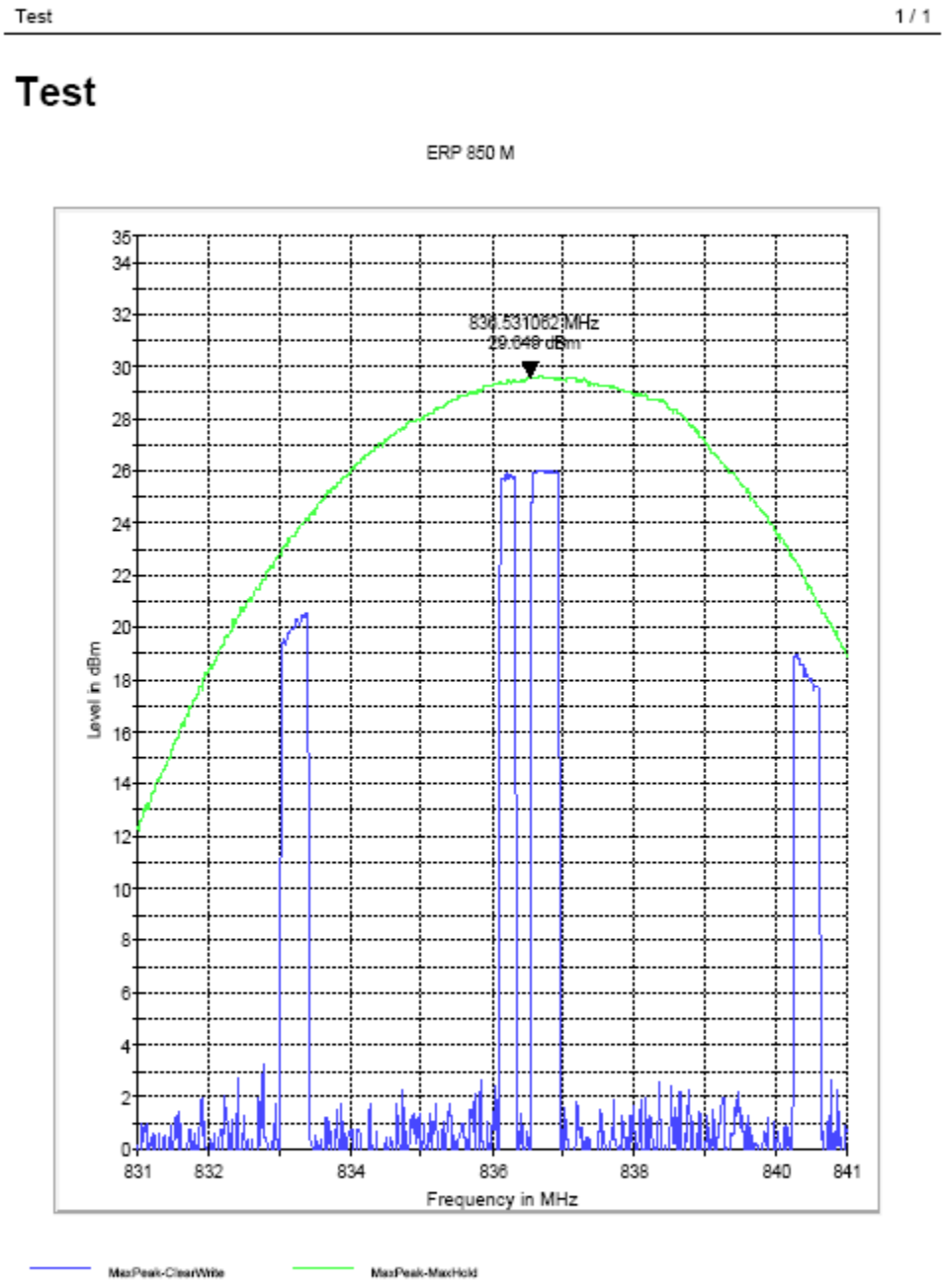
FDD II: UMTS Mode	
Frequency (MHz)	**Radiated Power**
	EIRP (dBm)
1852.4	25.239
1880.0	26.145
1907.6	24.872

5.1.8 Results

EIRP (GSM 850) CHANNEL 128 §22.913(a)

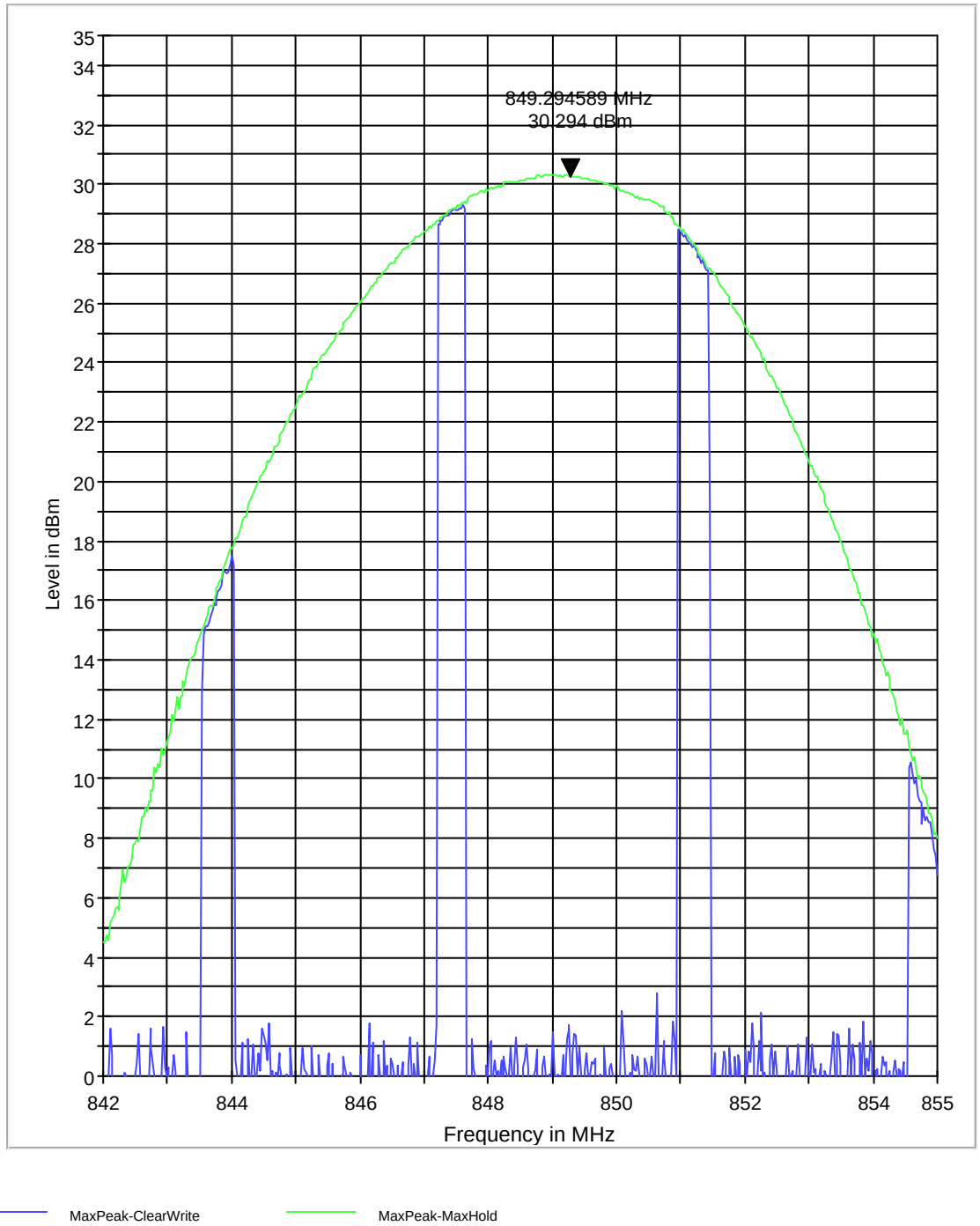


EIRP (GSM 850) CHANNEL 190 §22.913(a)



EIRP (GSM 850) CHANNEL 251 §22.913(a)

H



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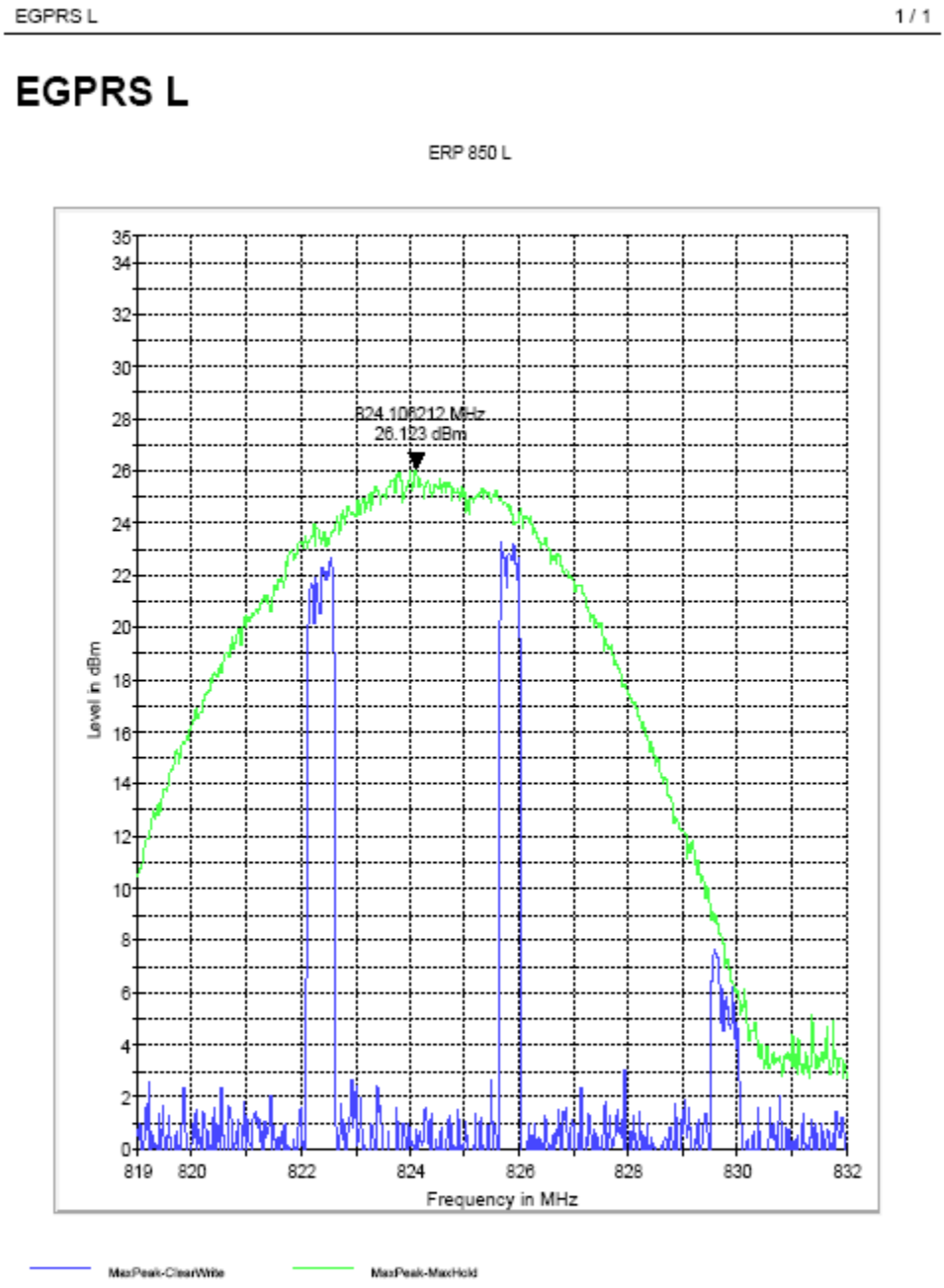
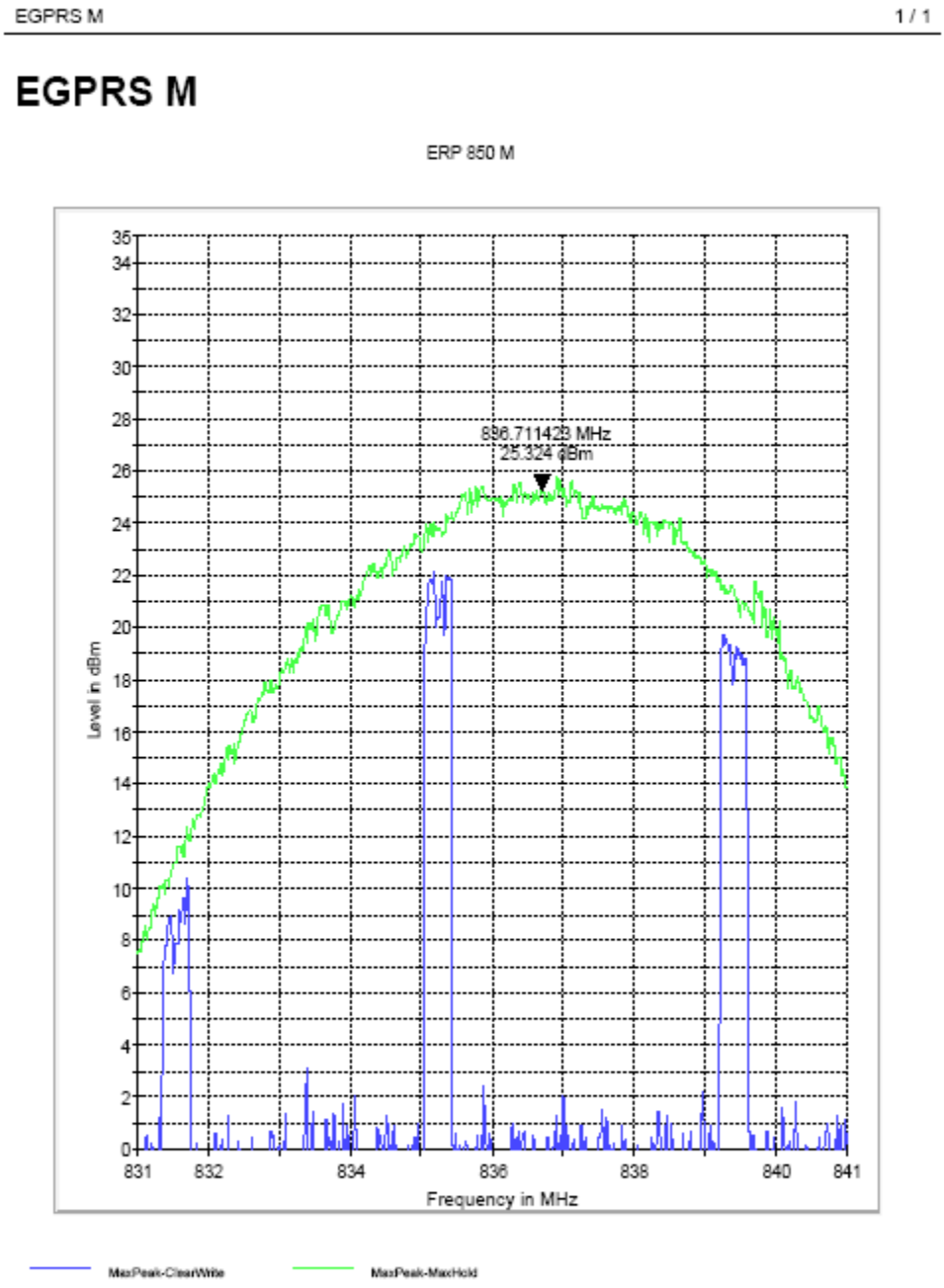


EIRP (EGPRS 850) CHANNEL 190 §22.913(a)

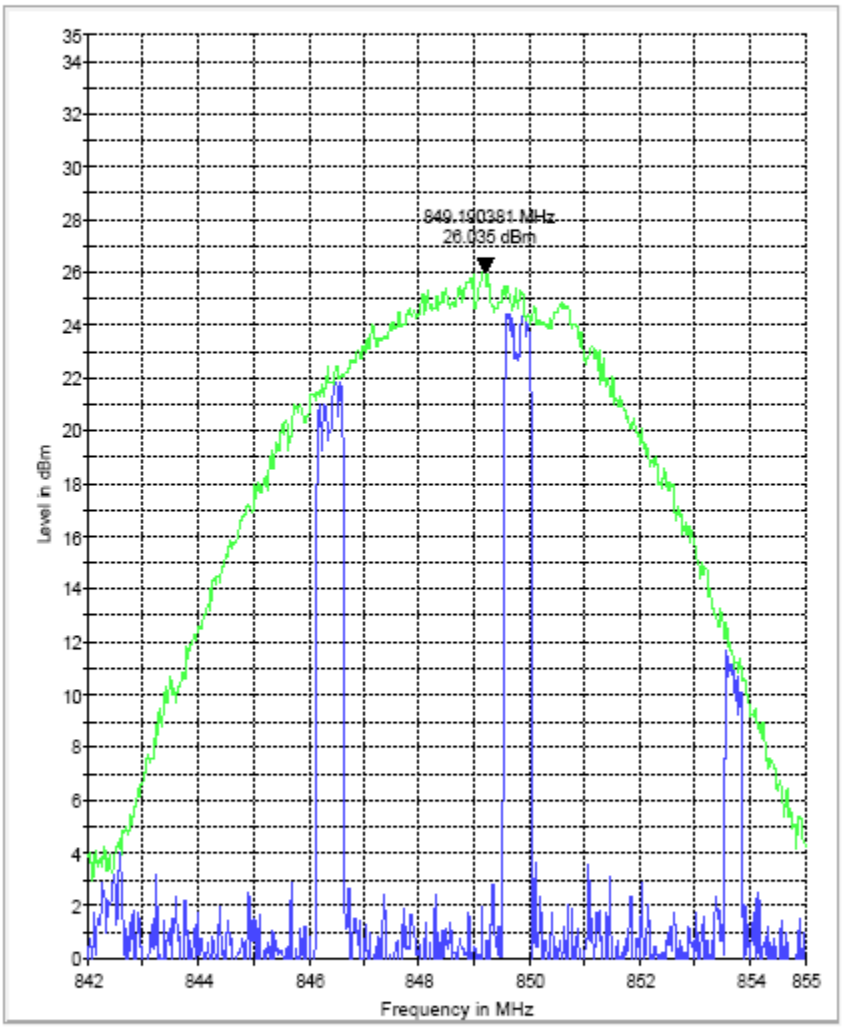


EIRP (EGPRS 850) CHANNEL 251 §22.913(a)

EGPRS H 1 / 1

EGPRS H

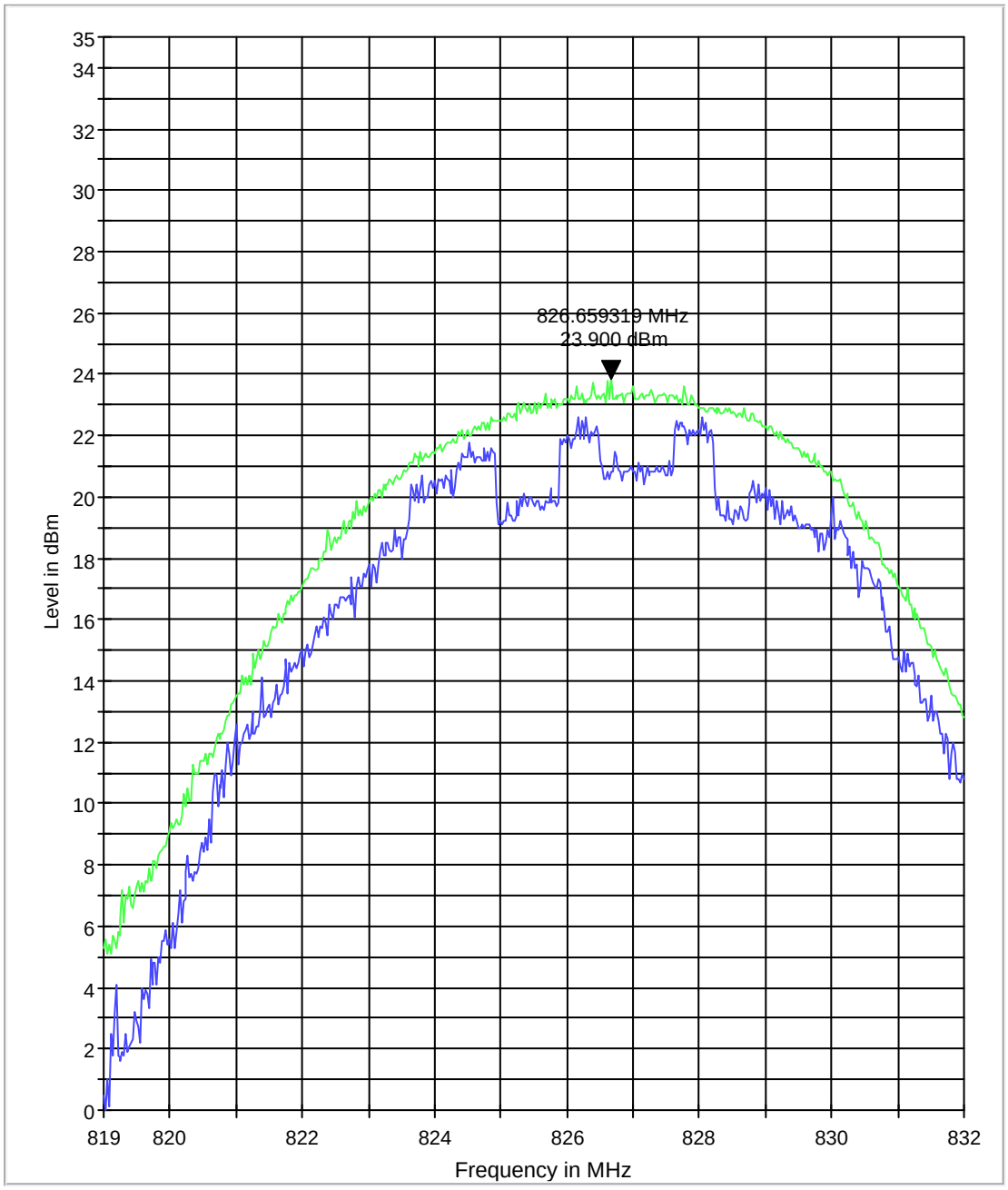
ERP 850 H



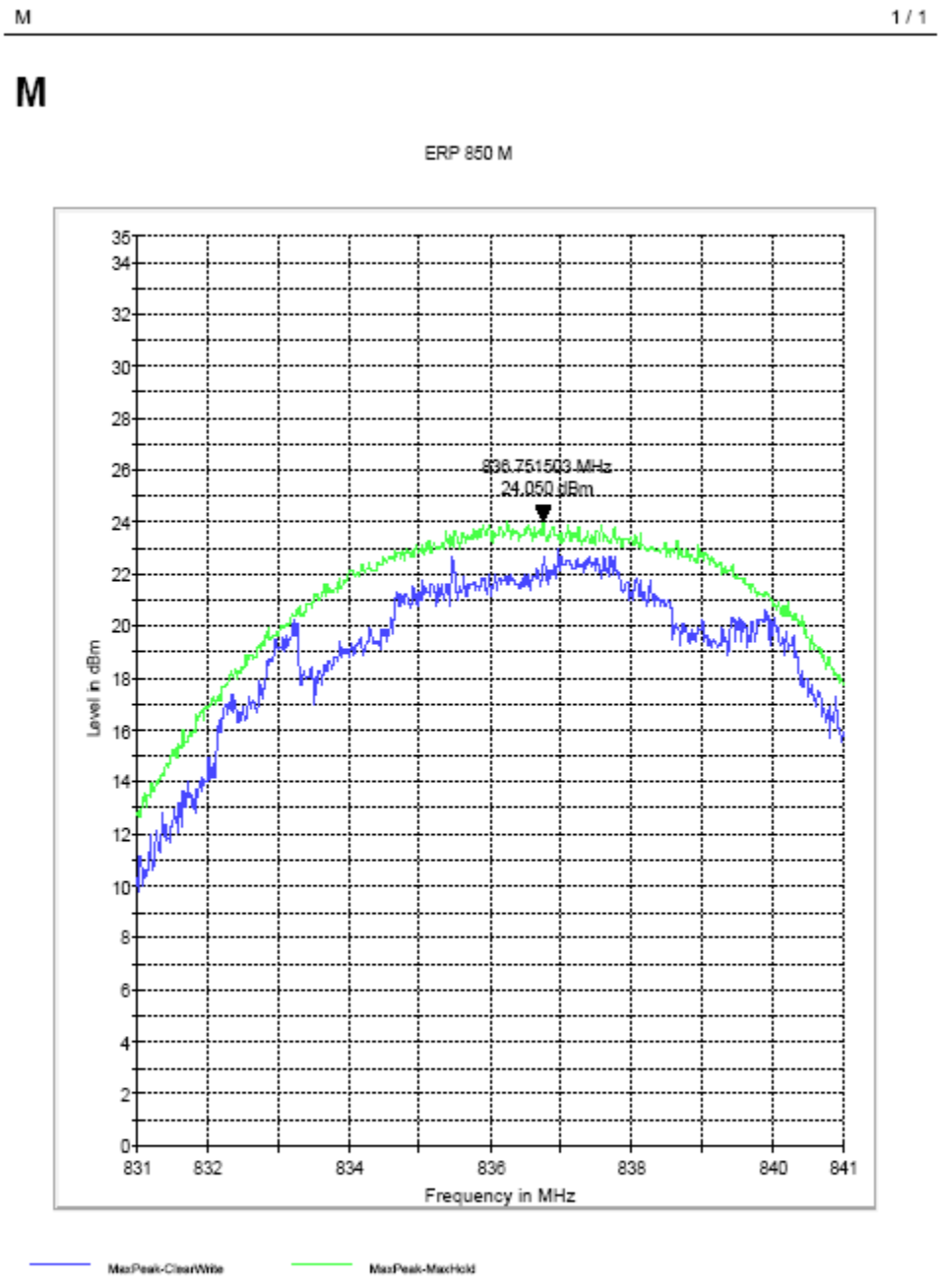
11/21/2009 jsabado EMC32 V8.10.10 3:53:10

EIRP (UMTS FDD5) CHANNEL 4132 §22.913(a)

ERP 850 L

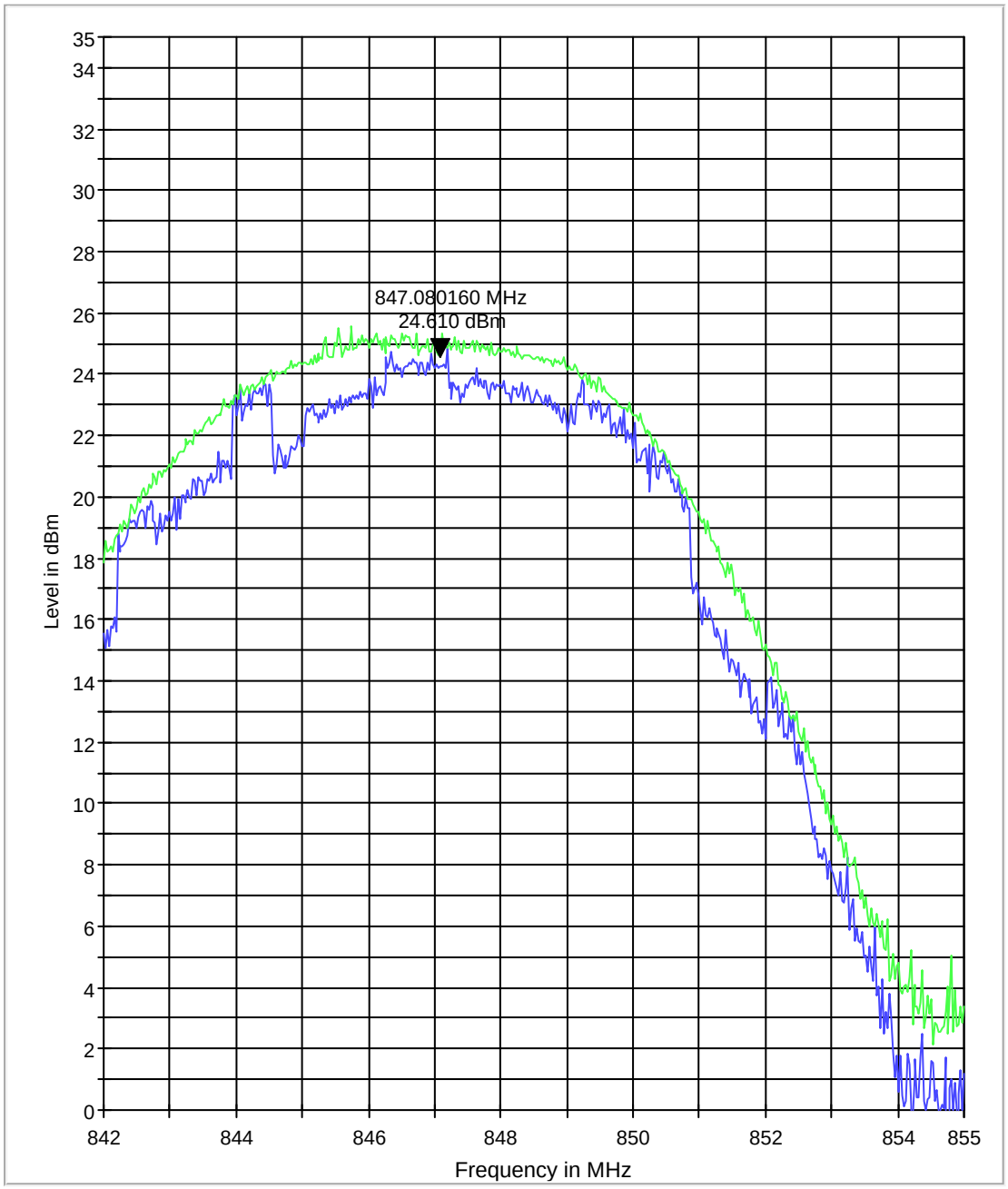


EIRP (UMTS FDD5) CHANNEL 4183 §22.913(a)

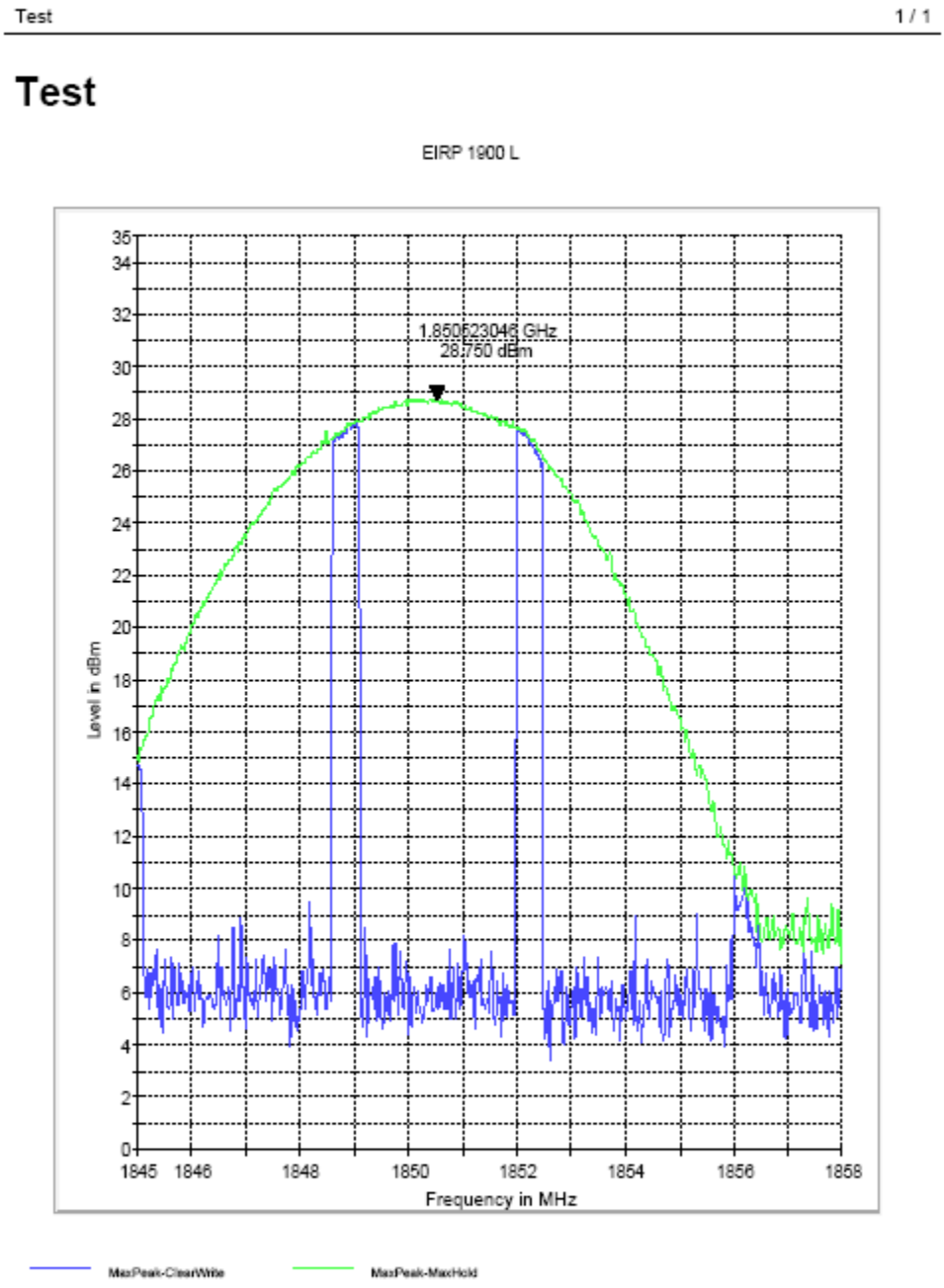


EIRP (UMTS FDD5) CHANNEL 4233 §22.913(a)

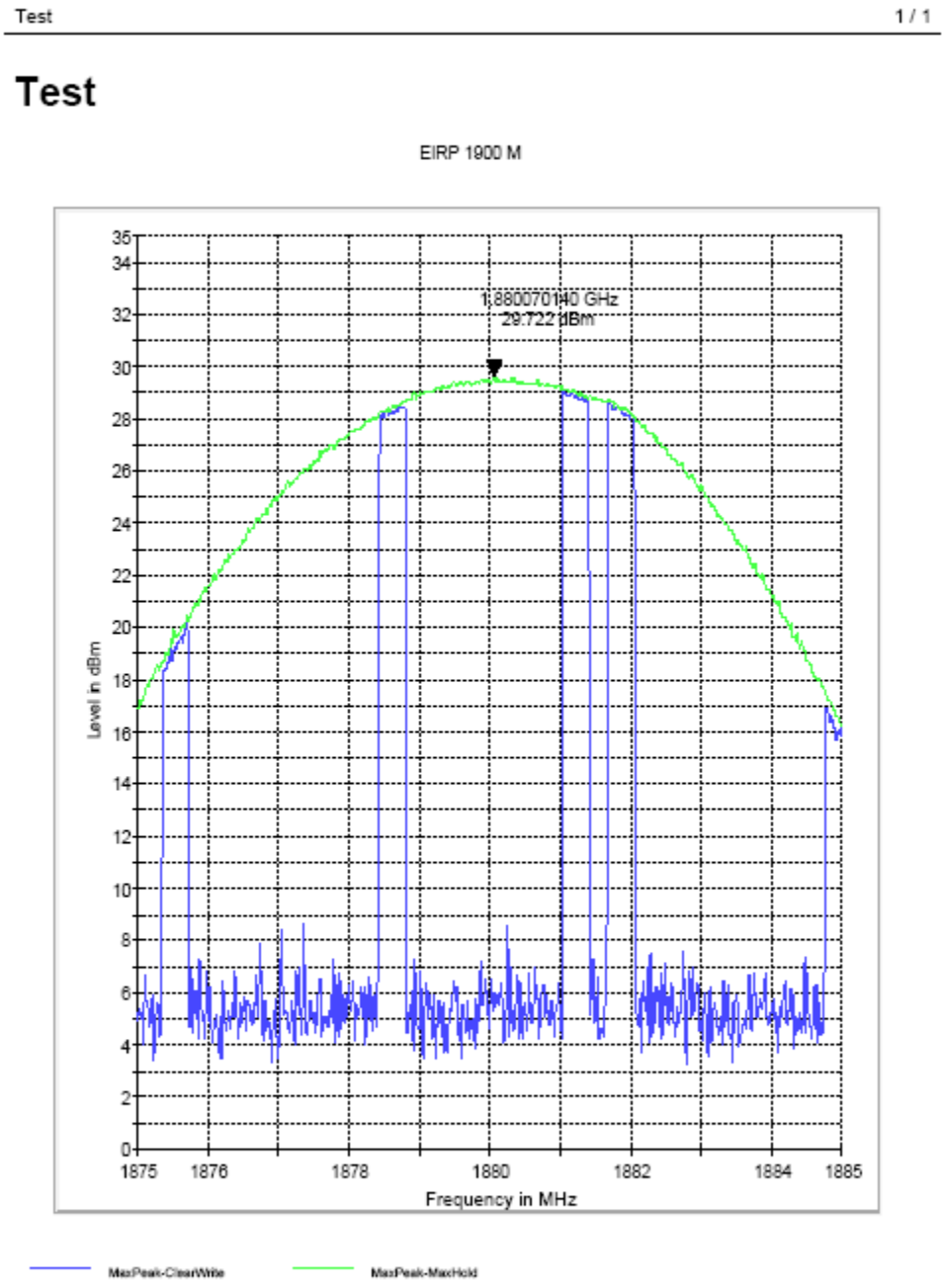
ERP 850 H



EIRP (PCS-1900) CHANNEL 512 §24.232(b)



EIRP (PCS-1900) CHANNEL 661 §24.232(b)

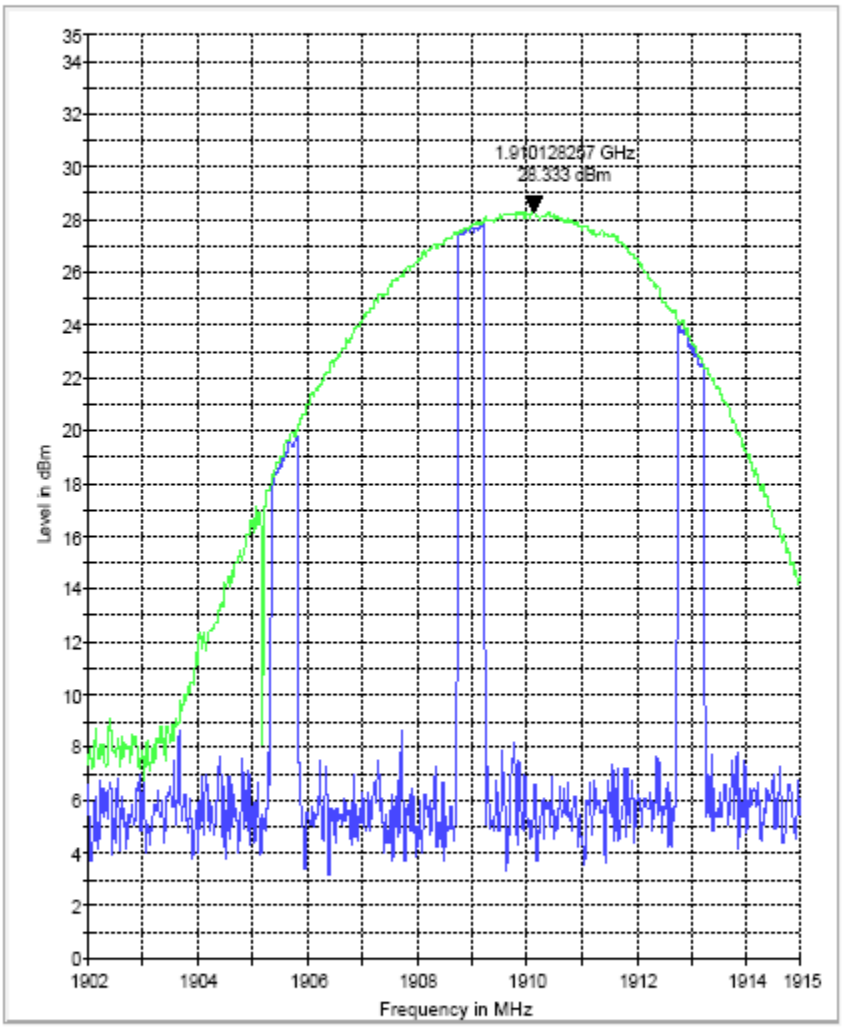


EIRP (PCS-1900) CHANNEL 810 §24.232(b)

Test 1 / 1

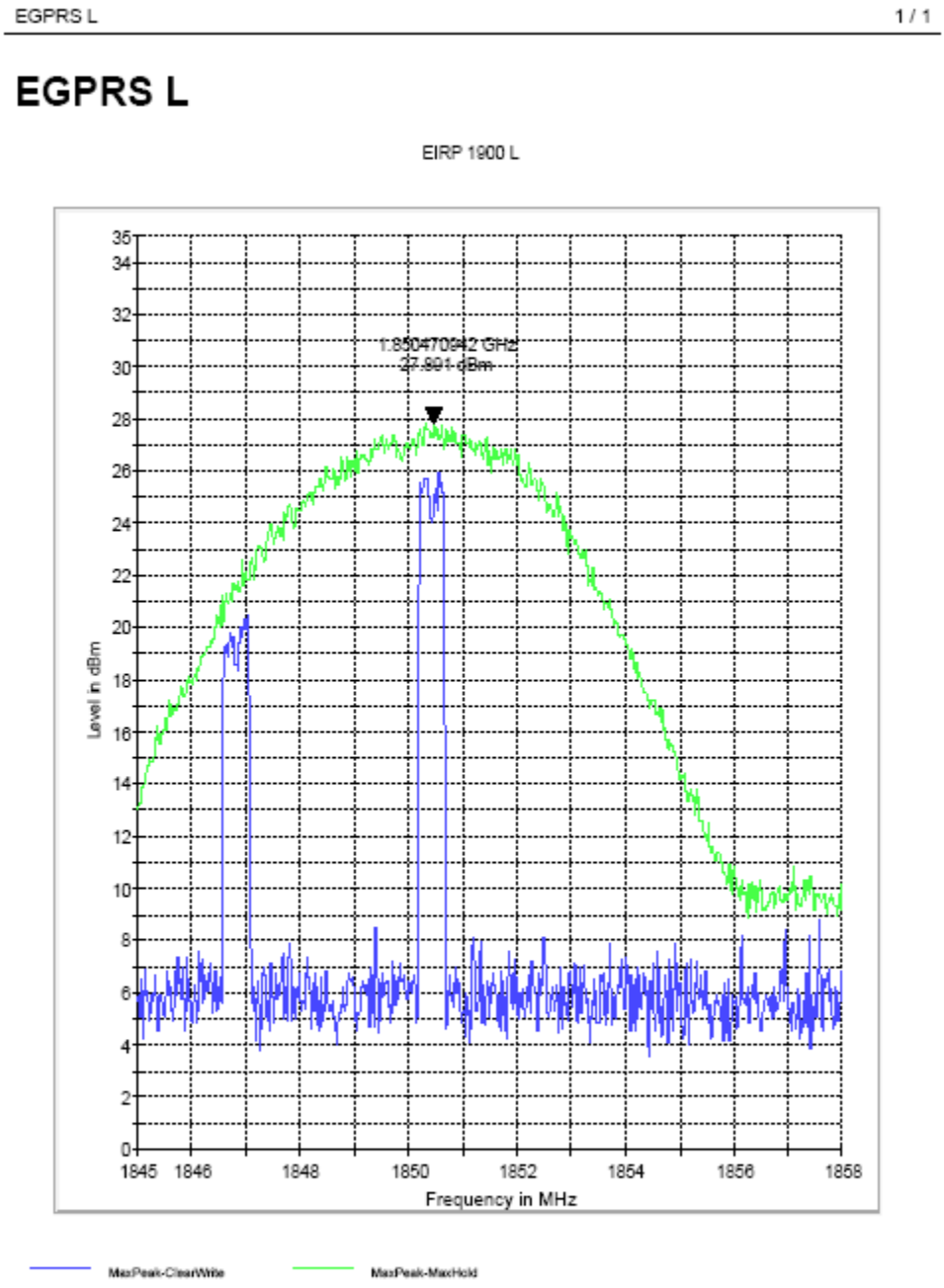
Test

EIRP 1900 H



11/16/2009 mdouat EMC32 V8.10.10 11:11:47

EIRP (EGPRS 1900) CHANNEL 512 §24.232(b)



EIRP (EGPRS 1900) CHANNEL 661 §24.232(b)

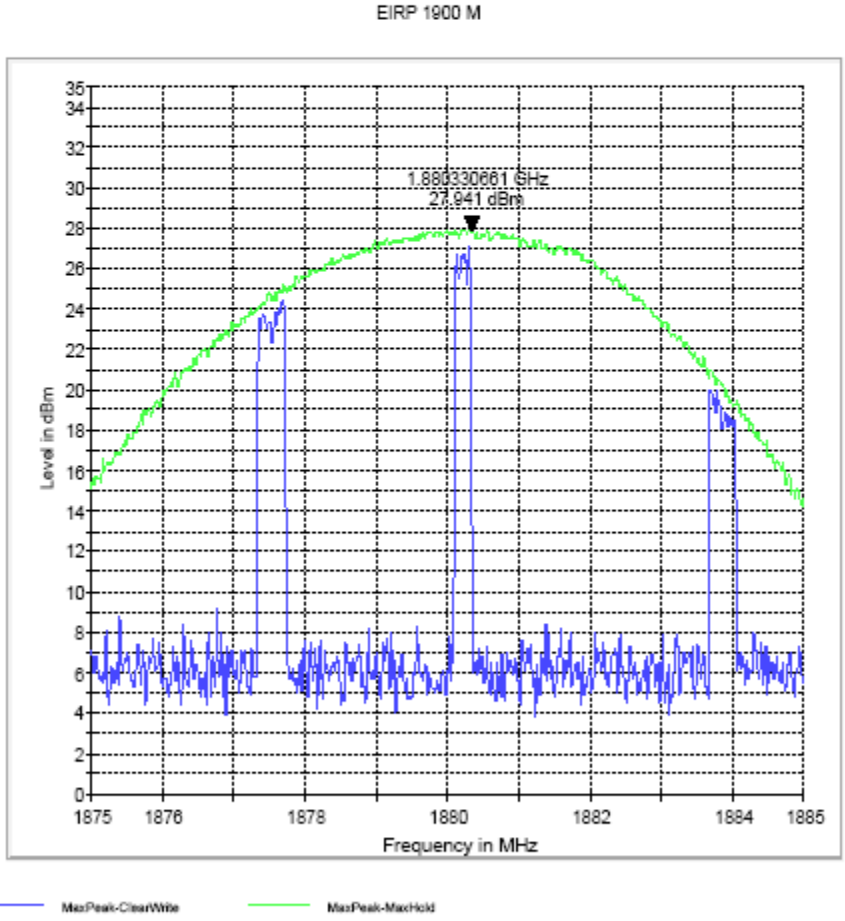
M 1 / 1

EUT Information

Description:

EUT Name:	Raven XE
Manufacturer:	Sierra Wireless
Serial Number:	
Hardware Rev:	
Software Rev:	
Comment:	

M



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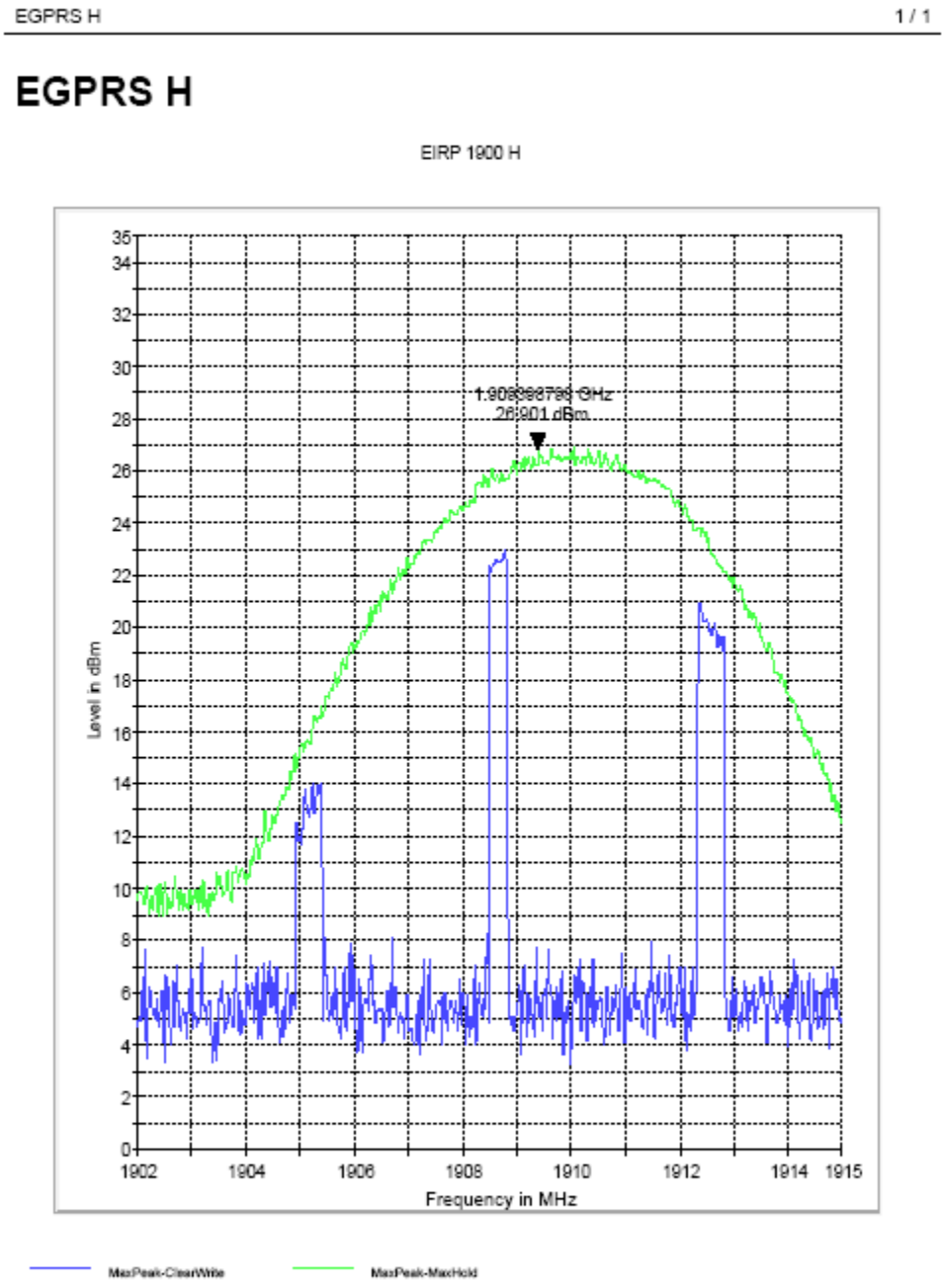
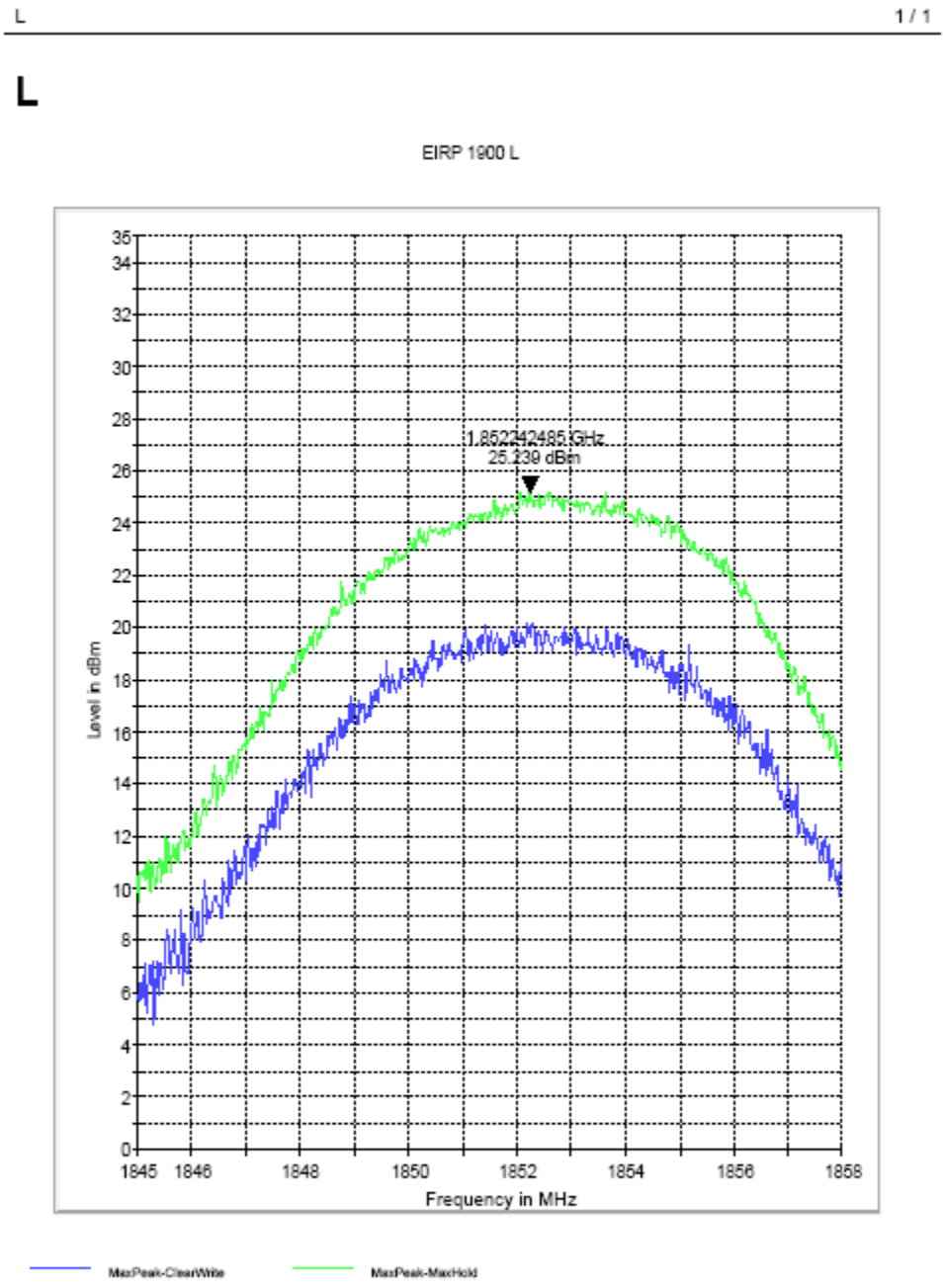


EIRP (UMTS FDD2) CHANNEL 9262 §24.232(b)



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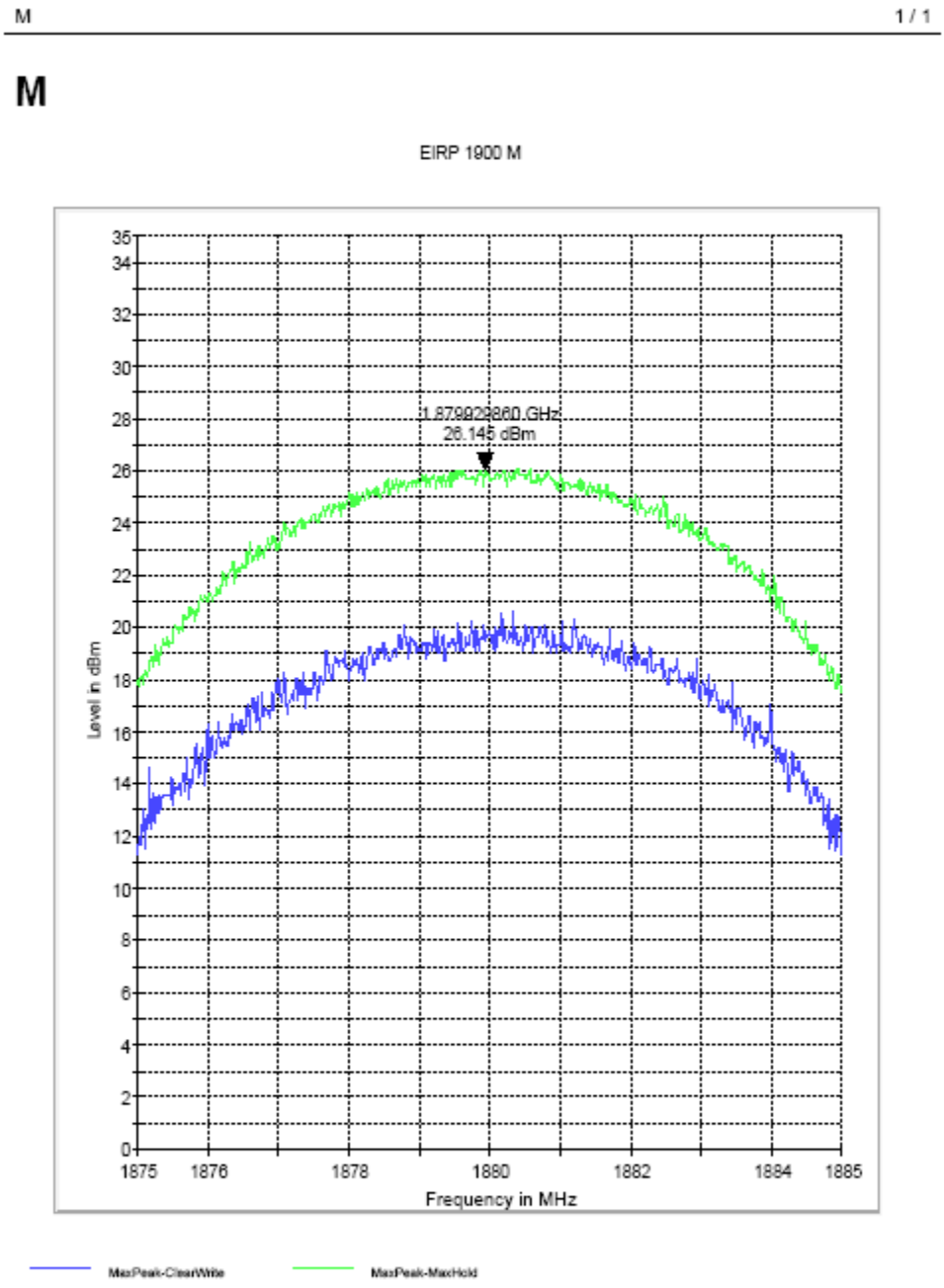
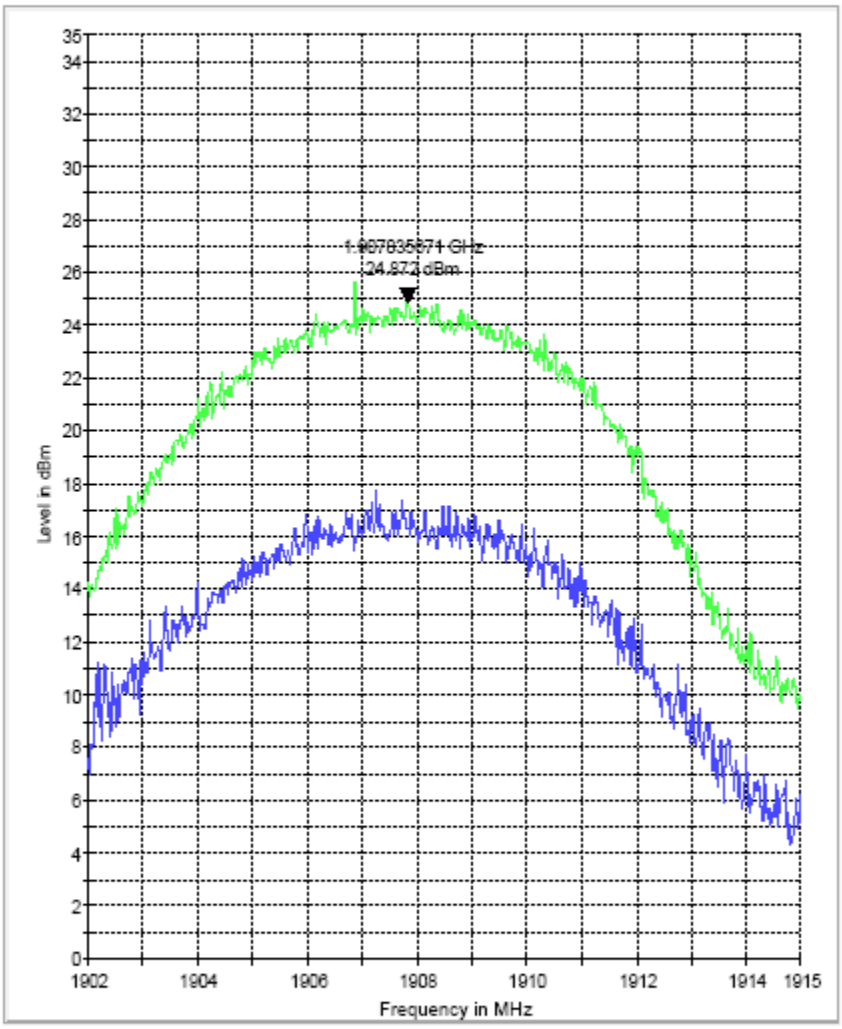


EIRP (UMTS FDD2) CHANNEL 9538 §24.232(b)

H 1 / 1

H

EIRP 1900 H



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5.2 Spurious Emissions Radiated

5.2.1 References

FCC: CFR Part 2.1053, CFR Part 22.917, CFR Part 24.238
IC: RSS 132 Section 4.5 and 6.5; RSS 133 Section 4.4

5.2.2 FCC 2.1053 Measurements required: Field strength of spurious radiation.

Measurements shall be made to detect spurious emissions that may be radiated directly from the cabinet, control circuits, power leads or intermediate circuit elements under normal conditions of installation and operation. Curves or equivalent data shall be supplied showing the magnitude of each harmonic and other spurious emission.

5.2.3 Limits:

(a) *Out of band emissions*. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

For all power levels +30dBm to 0dBm, this becomes a constant specification of -13dBm.

5.2.3.1 FCC 22.917 Emission limitations for cellular equipment.

The rules in this section govern the spectral characteristics of emissions in the Cellular Radiotelephone Service.
(b) *Measurement procedure.* Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (*i.e.* 100 kHz of 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

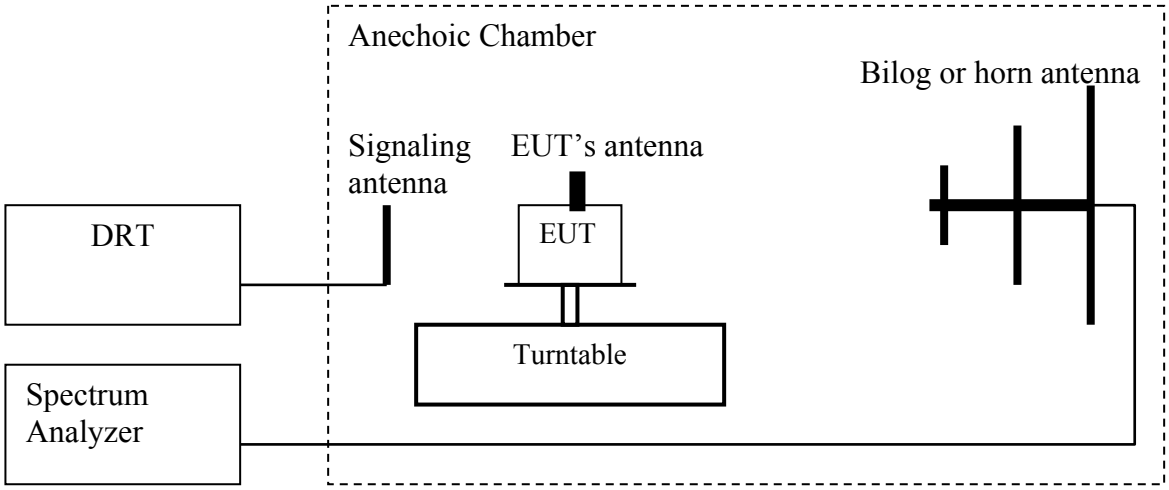
5.2.3.2 FCC 24.238 Emission limitations for Broadband PCS equipment.

The rules in this section govern the spectral characteristics of emissions in the Broadband Personal Communications Service.
(b) Measurement procedure. Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (*i.e.* 100 kHz of 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the

carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

5.2.4 Radiated out of band measurement procedure:

Ref: TIA-603C 2004- 2.2.12 Unwanted emissions: Radiated Spurious



1. Connect the equipment as shown in the above diagram with the EUT's antenna in a horizontal orientation.
2. Adjust the settings of the Digital RadioCommunication Tester (DRT) to set the EUT to its maximum power at the required channel.
3. Set the spectrum analyzer to measure peak hold with the required settings.
4. Place the measurement antenna in a horizontal orientation. Rotate the EUT 360°. Raise the measurement antenna up to 4 meters in 0.5 meters increments and rotate the EUT 360° at each height to maximize all emissions. Measure and record all spurious emissions (**LVL**) up to the tenth harmonic of the carrier frequency.
5. Replace the EUT with a horizontally polarized half wave dipole or known gain antenna. The center of the antenna should be at the same location as the center of the EUT's antenna.
6. Connect the antenna to a signal generator with known output power and record the path loss in dB (**LOSS)**. **LOSS** = Generator Output Power (dBm) – Analyzer reading (dBm).
7. Determine the level of spurious emissions using the following equation:
   Spurious (dBm) = **LVL** (dBm) + **LOSS** (dB):
8. Repeat steps 4, 5 and 6 with all antennas vertically polarized.
9. Determine the level of spurious emissions using the following equation:
   Spurious (dBm) = **LVL** (dBm) + **LOSS** (dB):
10. Measurements are to be performed with the EUT set to the low, middle and high channel of each frequency band.
    (N**ote:** Steps 5 and 6 above are performed prior to testing and **LOSS** is recorded by test software. Steps 3, 4 and 7 above are performed with test software.)

Spectrum analyzer settings: RBW=VBW=1MHz

Measurement Survey:

The site is constructed in accordance with ANSI C63.4 requirements and is recognized by the FCC to be in compliance for a 3m site. The spectrum is scanned from 30MHz to the 10th harmonic of the highest frequency generated by the EUT.
Radiated emissions measurements were made only at the upper, middle, and lower carrier frequencies of the GSM-850 & PCS-1900 bands. It was decided that measurements at these three carrier frequencies would be sufficient to demonstrate compliance with emissions limits because it was seen that all the significant spurs occur well outside the band and no radiation was seen from a carrier in one block of the GSM-850 & PCS-1900 band into any of the other blocks respectively. The equipment must still, however, meet emissions requirements with the carrier at all frequencies over which it is capable of operating and it is the manufacturer's responsibility to verify this.

Radiated emission measurements were made only with Circuit Switched mode GMSK modulation because this mode represents the worse case emission for all the modulations for GSM. All measurements are done in horizontal and vertical polarization; the plots show the worst case where it is not indicated otherwise.
Unless mentioned otherwise, the peaks in the plots are from the carrier frequency.

Radiated emissions measurements were made also with UMTS FDD mode where the EUT supports such technology.

5.2.5 Radiated out of band emissions results on EUT- Transmit Mode:

5.2.5.1 Test Results Transmitter Spurious Emission GSM850:

Harmonic	Tx ch-128 Freq. (MHz)	Level (dBm)	Tx ch-190 Freq. (MHz)	Level (dBm)	Tx ch-251 Freq. (MHz)	Level (dBm)
1	**824.2**	-	**836.6**	-	**848.8**	-
2	**1648.4**	NF	**1673.2**	NF	**1697.6**	NF
3	**2472.6**	NF	**2509.8**	NF	**2546.4**	NF
4	**3296.8**	NF	**3346.4**	NF	**3395.2**	NF
5	**4121**	NF	**4183**	NF	**4244**	NF
6	**4945.2**	NF	**5019.6**	NF	**5092.8**	NF
7	**5769.4**	NF	**5856.2**	NF	**5941.6**	NF
8	**6593.6**	NF	**6692.8**	NF	**6790.4**	NF
9	**7417.8**	NF	**7529.4**	NF	**7639.2**	NF
10	**8242**	NF	**8366**	NF	**8488**	NF
NF = Noise Floor						

Radiated Spurious Emissions (GSM-850) Tx: 30MHz – 1GHz

Low Channel

***Peak over the limit is the carrier frequency**

EUT Information

Description:

EUT Name:

Manufacturer: Kobelco Cranes

Serial Number:

Hardware Rev:

Software Rev:

Comment:

FCC 22 30-1000MHz Low Channel

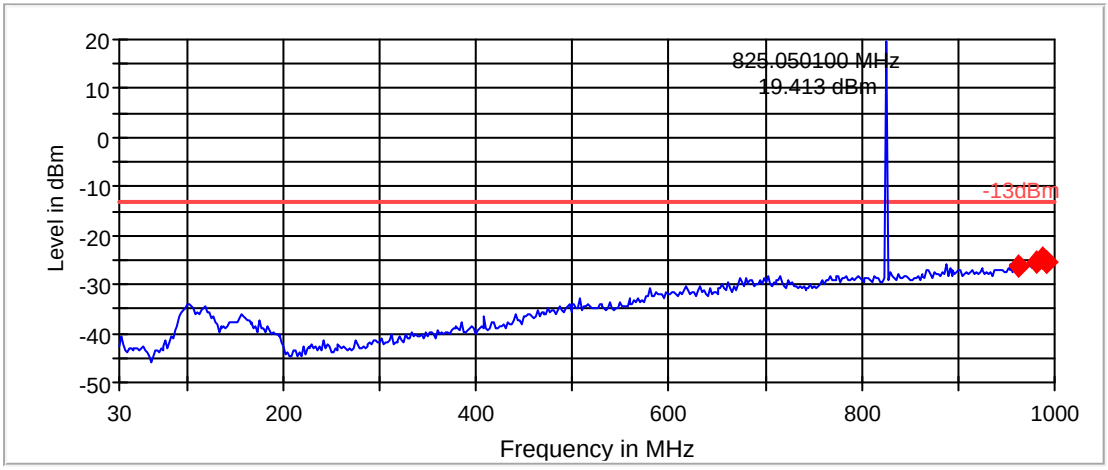
Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
824.264684	20.4	20.000	100.000	120.0	H	292.0	-71.3	-33.4	-13.0
962.383808	-26.4	20.000	100.000	120.0	H	189.0	-69.7	13.4	-13.0
981.764835	-25.4	20.000	100.000	163.0	H	89.0	-69.4	12.4	-13.0
987.944538	-24.5	20.000	100.000	144.0	H	1.0	-69.3	11.5	-13.0
992.055437	-25.3	20.000	100.000	150.0	V	99.0	-68.8	12.3	-13.0
992.571264	-25.3	20.000	100.000	170.0	V	77.0	-68.8	12.3	-13.0

(continuation of the "Final Result 1" table from column 10 ...)

Frequency (MHz)	Comment
824.264684	
962.383808	
981.764835	
987.944538	
992.055437	
992.571264	

FCC 22 30-1000MHz



Mid Channel

EUT Information

Description:
EUT Name:
Manufacturer: Kobelco Cranes
Serial Number:
Hardware Rev:
Software Rev:
Comment:

FCC 22 30-1000MHz Mid Channel

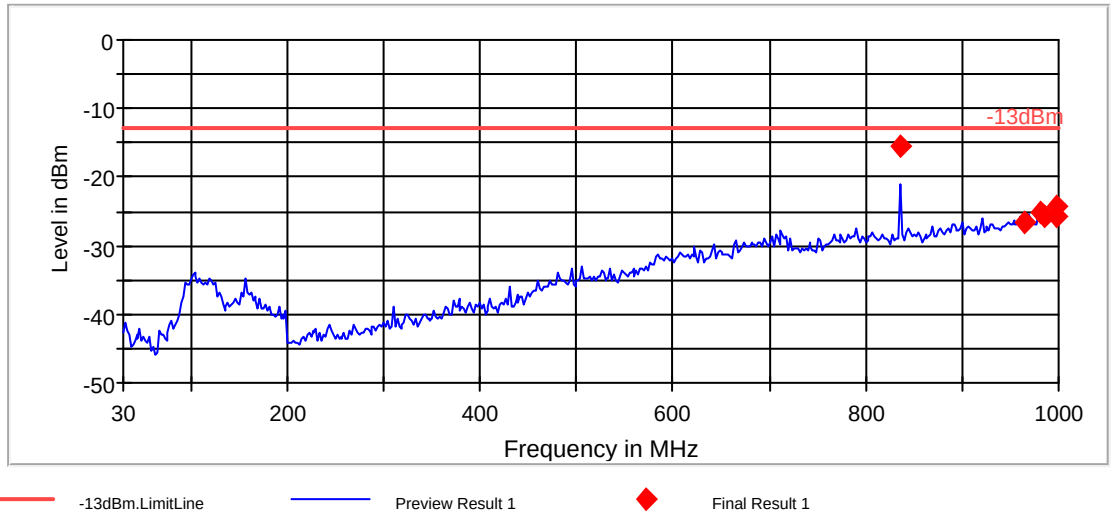
Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
836.554135	-15.4	20.000	100.000	120.0	H	292.0	-71.1	2.4	-13.0
964.363965	-26.7	20.000	100.000	120.0	H	202.0	-69.6	13.7	-13.0
980.352827	-25.1	20.000	100.000	120.0	V	9.0	-69.3	12.1	-13.0
985.829411	-25.8	20.000	100.000	120.0	V	248.0	-69.1	12.8	-13.0
998.266533	-25.8	20.000	100.000	170.0	V	1.0	-68.6	12.8	-13.0
998.521698	-24.2	20.000	100.000	120.0	V	89.0	-68.6	11.2	-13.0

(continuation of the "Final Result 1" table from column 10 ...)

Frequency (MHz)	Comment
836.554135	
964.363965	
980.352827	
985.829411	
998.266533	
998.521698	

FCC 22 30-1000MHz



High Channel
***Peak over the limit is the carrier frequency**

EUT Information

Description:
EUT Name:
Manufacturer: Kobelco Cranes
Serial Number:
Hardware Rev:
Software Rev:
Comment:

FCC 22 30-1000MHz High Channel

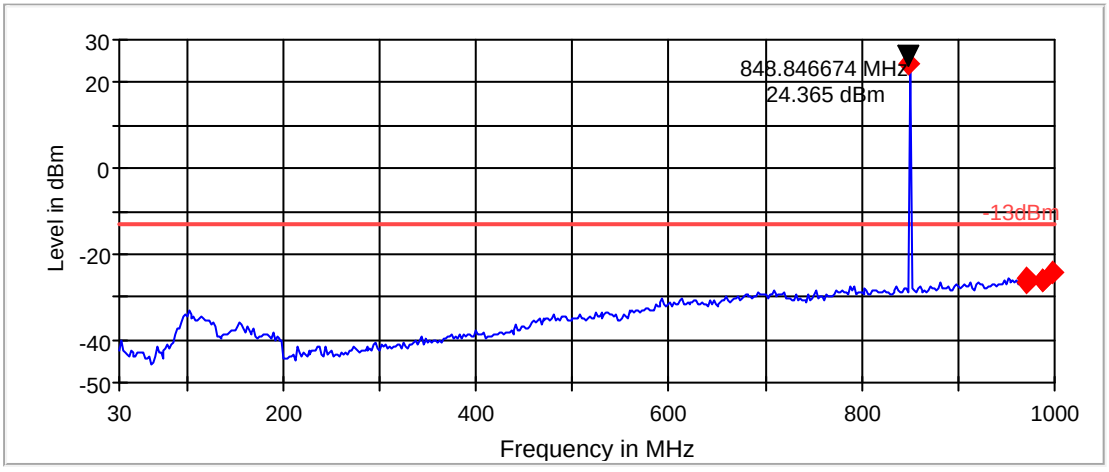
Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
848.846674	24.4	20.000	100.000	120.0	V	1.0	-70.7	-37.4	-13.0
970.122335	-25.5	20.000	100.000	170.0	H	22.0	-69.6	12.5	-13.0
971.203741	-26.6	20.000	100.000	170.0	H	18.0	-69.5	13.6	-13.0
987.621357	-26.2	20.000	100.000	120.0	V	1.0	-69.0	13.2	-13.0
988.438726	-26.0	20.000	100.000	152.0	V	258.0	-69.0	13.0	-13.0
997.415238	-24.5	20.000	100.000	120.0	V	22.0	-68.6	11.5	-13.0

(continuation of the "Final Result 1" table from column 10 ...)

Frequency (MHz)	Comment
848.846674	
970.122335	
971.203741	
987.621357	
988.438726	
997.415238	

FCC 22 30-1000MHz



Radiated Spurious Emissions (GSM-850): 1GHz – 9GHz
Low Channel

FCC 22 1-9GHz Low Channel 1 / 1

EUT Information

Description:
EUT Name:
Manufacturer: Kobelco Cranes
Serial Number:
Hardware Rev:
Software Rev:
Comment:

FCC 22 1-9GHz Low Channel

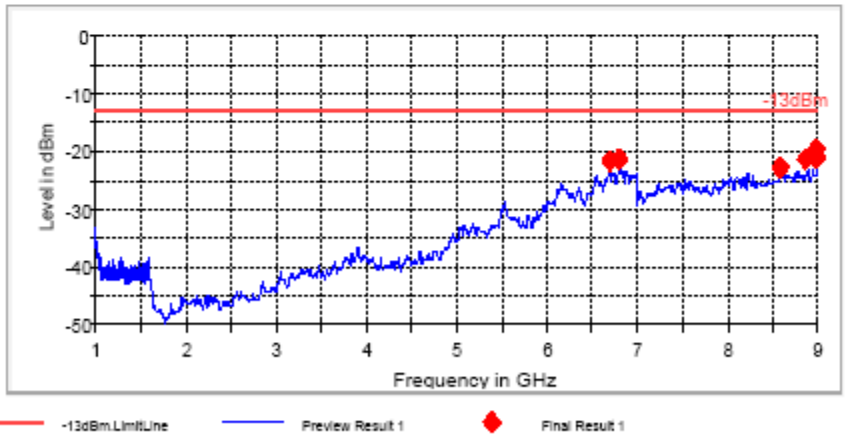
Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
6702.771118	-21.7	1000.000	1000.000	120.0	H	112.0	-56.4	8.7	-13.0
6793.487570	-21.3	1000.000	1000.000	120.0	H	163.0	-56.4	8.3	-13.0
8583.438379	-22.8	1000.000	1000.000	145.0	H	287.0	-52.6	9.8	-13.0
8868.724955	-21.3	1000.000	1000.000	145.0	H	202.0	-51.9	8.3	-13.0
8978.987976	-21.0	1000.000	1000.000	120.0	H	112.0	-51.4	8.0	-13.0
8988.535635	-19.7	1000.000	1000.000	145.0	H	86.0	-51.2	6.7	-13.0

(continuation of the "Final Result 1" table from column 10 ...)

Frequency (MHz)	Comment
6702.771118	
6793.487570	
8583.438379	
8868.724955	
8978.987976	
8988.535635	

FCC 22 1-9GHz



11/3/2009 knavares EMC32 V8.10.10 8:39:59

Mid Channel

FCC 22 1-9GHz Mid Channel 1 / 1

EUT Information

Description:
EUT Name:
Manufacturer: Kobelco Cranes
Serial Number:
Hardware Rev:
Software Rev:
Comment:

FCC 22 1-9GHz Mid Channel

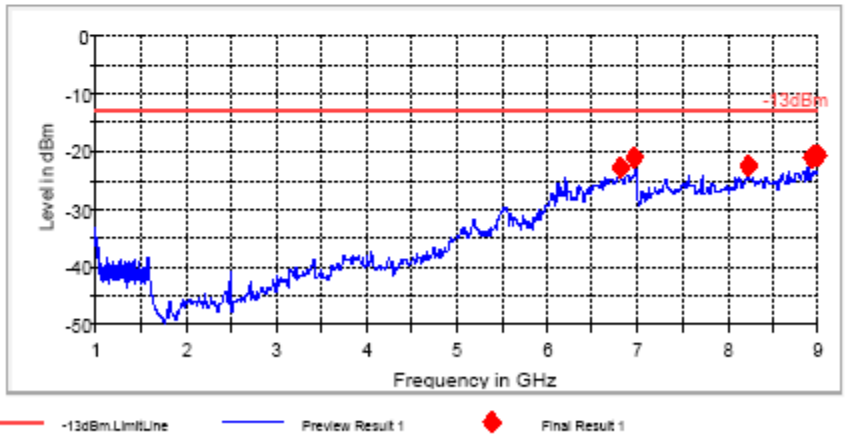
Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
6810.256476	-22.7	1000.000	1000.000	120.0	V	22.0	-57.9	9.7	-13.0
6969.535161	-20.9	1000.000	1000.000	120.0	H	186.0	-56.3	7.9	-13.0
8221.910008	-22.6	1000.000	1000.000	145.0	H	22.0	-53.3	9.6	-13.0
8938.430304	-21.1	1000.000	1000.000	120.0	H	197.0	-51.7	8.1	-13.0
8956.022339	-20.9	1000.000	1000.000	145.0	H	0.0	-51.5	7.9	-13.0
8998.566954	-20.7	1000.000	1000.000	120.0	H	180.0	-51.3	7.7	-13.0

(continuation of the "Final Result 1" table from column 10 ...)

Frequency (MHz)	Comment
6810.256476	
6969.535161	
8221.910008	
8938.430304	
8956.022339	
8998.566954	

FCC 22 1-9GHz



11/3/2009 knavares EMC32 V8.10.10 8:51:21

High Channel

EUT Information

Description:
EUT Name:
Manufacturer: Kobelco Cranes
Serial Number:
Hardware Rev:
Software Rev:
Comment:

FCC 22 1-9GHz High Channel

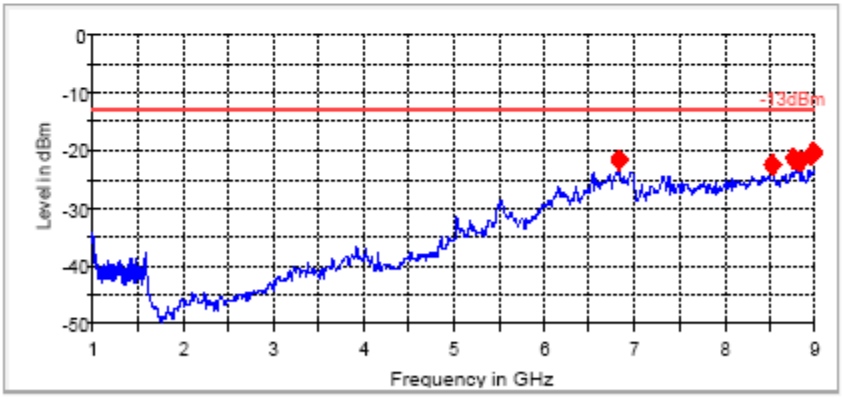
Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
6826.896804	-21.7	1000.000	1000.000	145.0	H	22.0	-56.4	8.7	-13.0
8532.624207	-22.5	1000.000	1000.000	145.0	H	287.0	-52.6	9.5	-13.0
8757.378819	-21.3	1000.000	1000.000	120.0	H	6.0	-51.9	8.3	-13.0
8838.823475	-21.9	1000.000	1000.000	120.0	H	22.0	-52.0	8.9	-13.0
8971.785917	-20.6	1000.000	1000.000	120.0	H	265.0	-51.5	7.6	-13.0
8981.332665	-20.6	1000.000	1000.000	120.0	H	22.0	-51.3	7.6	-13.0

(continuation of the "Final Result 1" table from column 10 ...)

Frequency (MHz)	Comment
6826.896804	
8532.624207	
8757.378819	
8838.823475	
8971.785917	
8981.332665	

FCC 22 1-9GHz



5.2.5.2 Test Results Transmitter Spurious Emission UMTS FDDV

Harmonic	Tx ch-4132 Freq. (MHz)	Level (dBm)	Tx ch-4183 Freq. (MHz)	Level (dBm)	Tx ch-4233 Freq. (MHz)	Level (dBm)
1	**826.4**	-	**836.6**	-	**846.6**	-
2	**1652.8**	NF	**1673.2**	NF	**1693.2**	NF
3	**2479.2**	NF	**2509.8**	NF	**2539.8**	NF
4	**3305.6**	NF	**3346.4**	NF	**3386.4**	NF
5	**4132**	NF	**4183**	NF	**4233**	NF
6	**4958.4**	NF	**5019.6**	NF	**5079.6**	NF
7	**5784.8**	NF	**5856.2**	NF	**5926.2**	NF
8	**6611.2**	NF	**6692.8**	NF	**6772.8**	NF
9	**7437.6**	NF	**7529.4**	NF	**7619.4**	NF
10	**8264**	NF	**8366**	NF	**8466**	NF
NF= Noise Floor						

Radiated Spurious Emissions (UMTS FDDV) Tx: 30MHz – 1GHz

Low Channel

***Peak over the limit is the carrier frequency**

EUT Information

Description:

EUT Name:

Manufacturer: Kobelco Cranes

Serial Number:

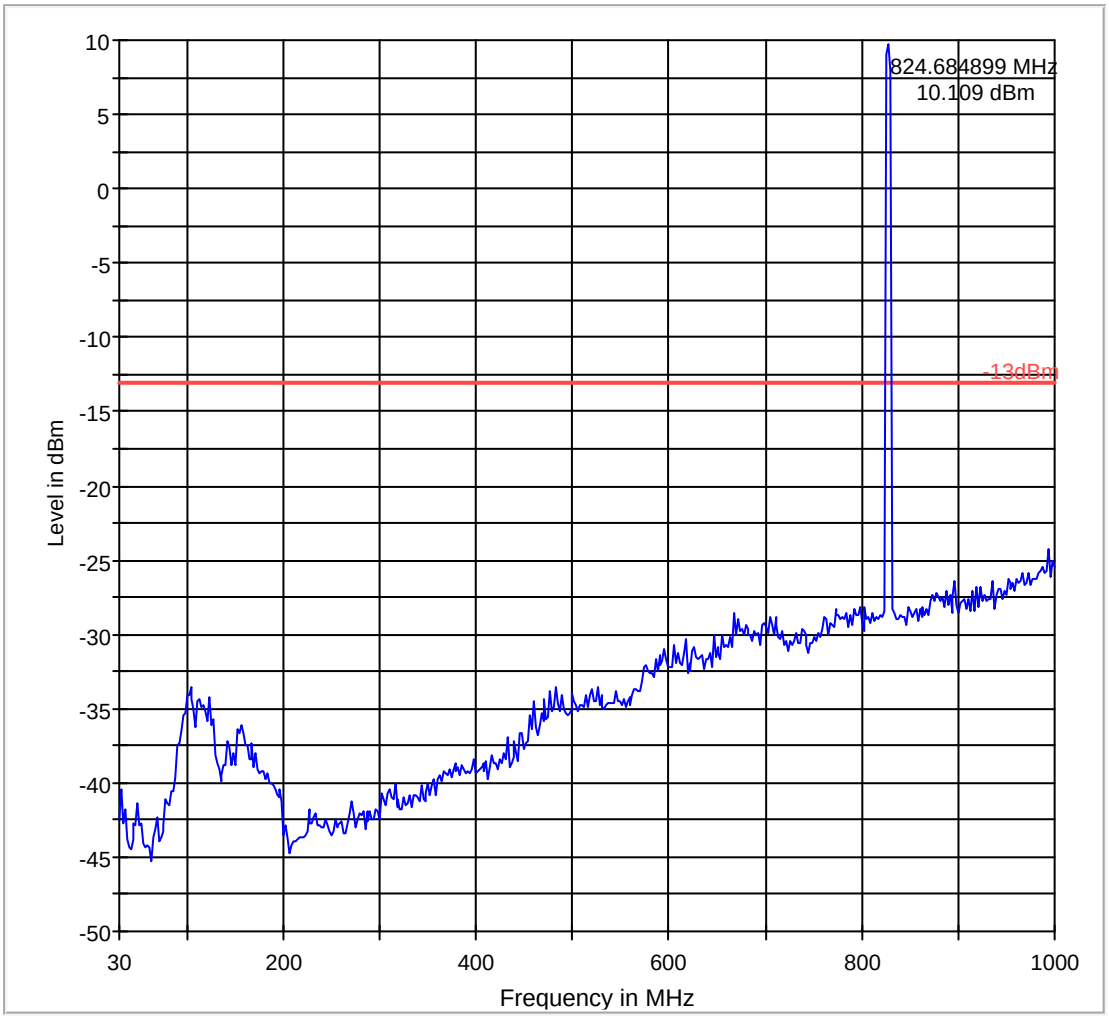
Hardware Rev:

Software Rev:

Comment:

FCC 22 30-1000MHz Low Channel

FCC 22 30-1000MHz



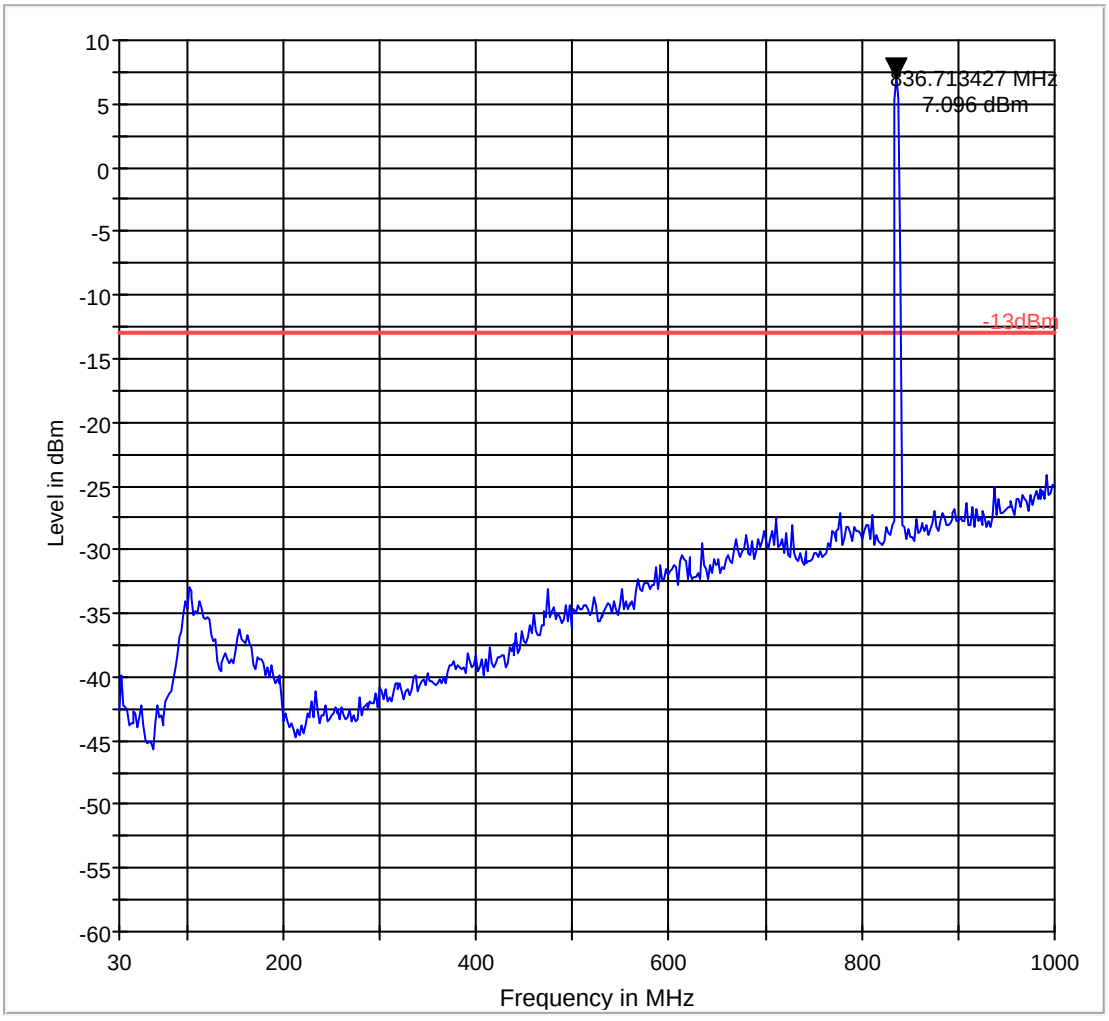
Mid Channel
***Peak over the limit is the carrier frequency**

EUT Information

Description:
EUT Name:
Manufacturer: Kobelco Cranes
Serial Number:
Hardware Rev:
Software Rev:
Comment:

FCC 22 30-1000MHz Mid Channel

FCC 22 30-1000MHz



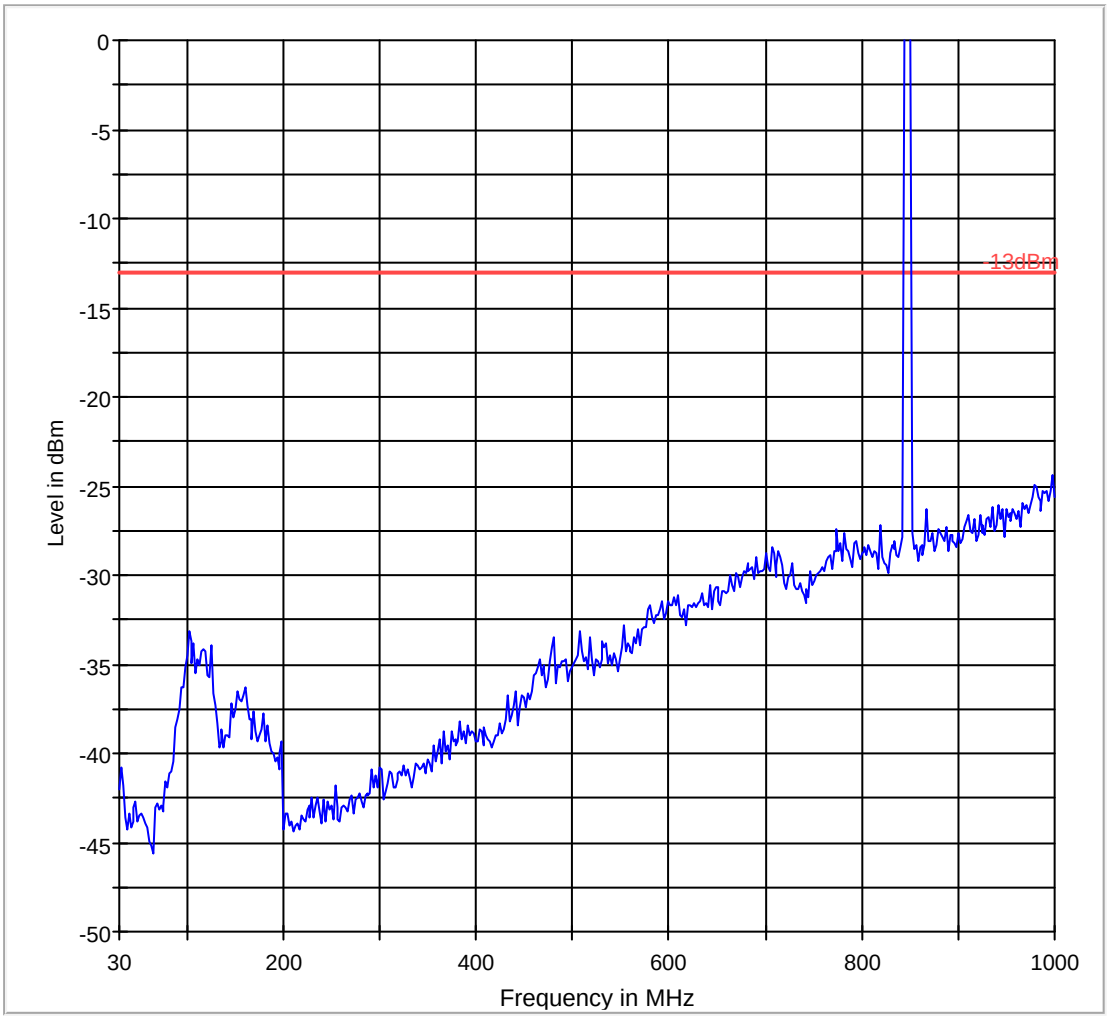
High Channel
***Peak over the limit is the carrier frequency**

EUT Information

Description:
EUT Name:
Manufacturer: Kobelco Cranes
Serial Number:
Hardware Rev:
Software Rev:
Comment:

FCC 22 30-1000MHz High Channel

FCC 22 30-1000MHz



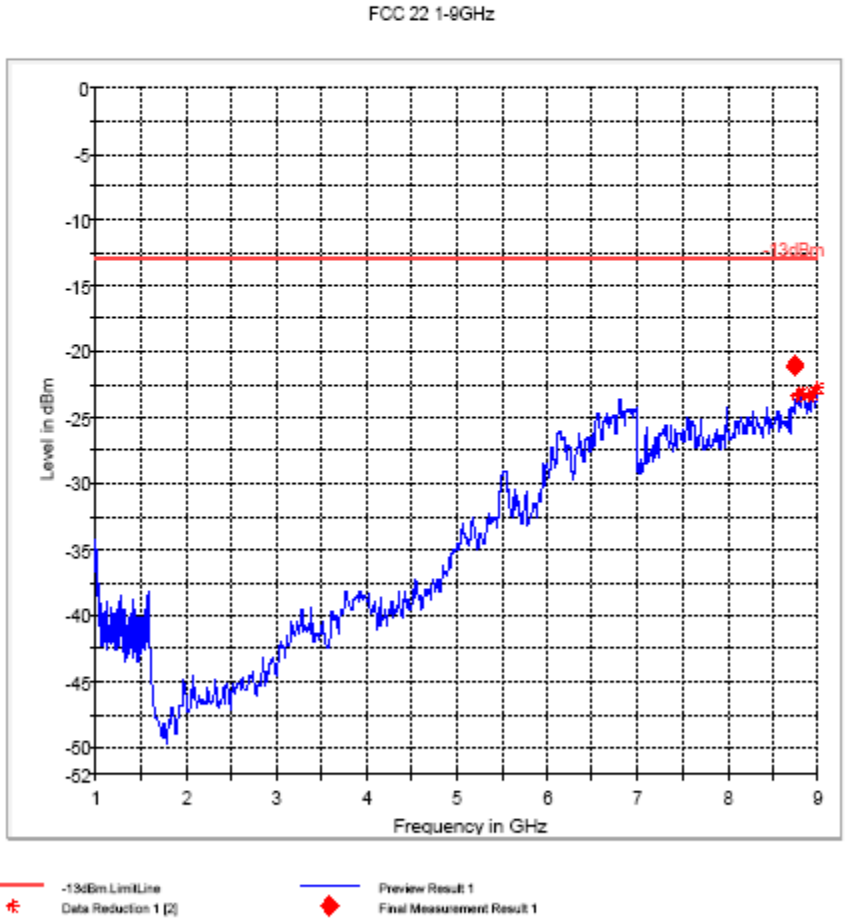
Radiated Spurious Emissions (UMTS FDDV) Tx: 1GHz – 9GHz
Low Channel

FCC 22 1-9GHz Low Channel 1 / 1

EUT Information

Description:
EUT Name:
Manufacturer: Kobelco Cranes
Serial Number:
Hardware Rev:
Software Rev:
Comment:

FCC 22 1-9GHz Low Channel



11/4/2009 smoon EMC32 V8.10.10 4:07:49

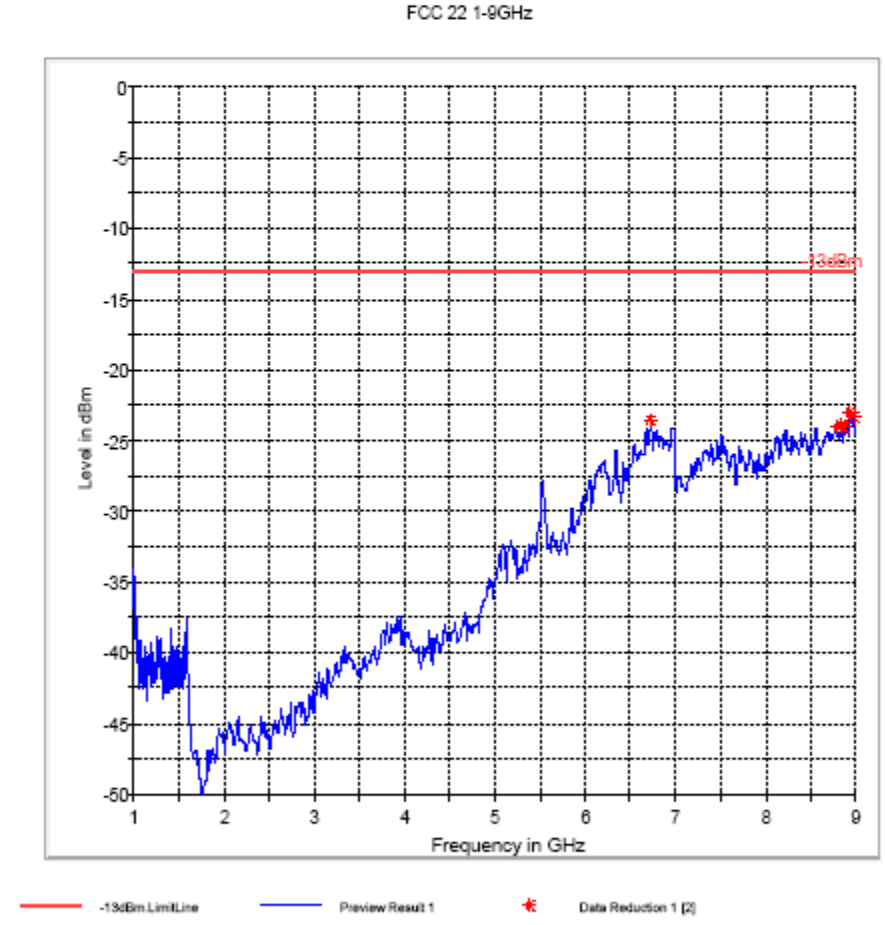
Mid Channel

FCC 22 1-9GHz Mid Channel 1 / 1

EUT Information

Description:
EUT Name:
Manufacturer: Kobelco Cranes
Serial Number:
Hardware Rev:
Software Rev:
Comment:

FCC 22 1-9GHz Mid Channel



11/4/2009 smoon EMC32 V8.10.10 4:13:27

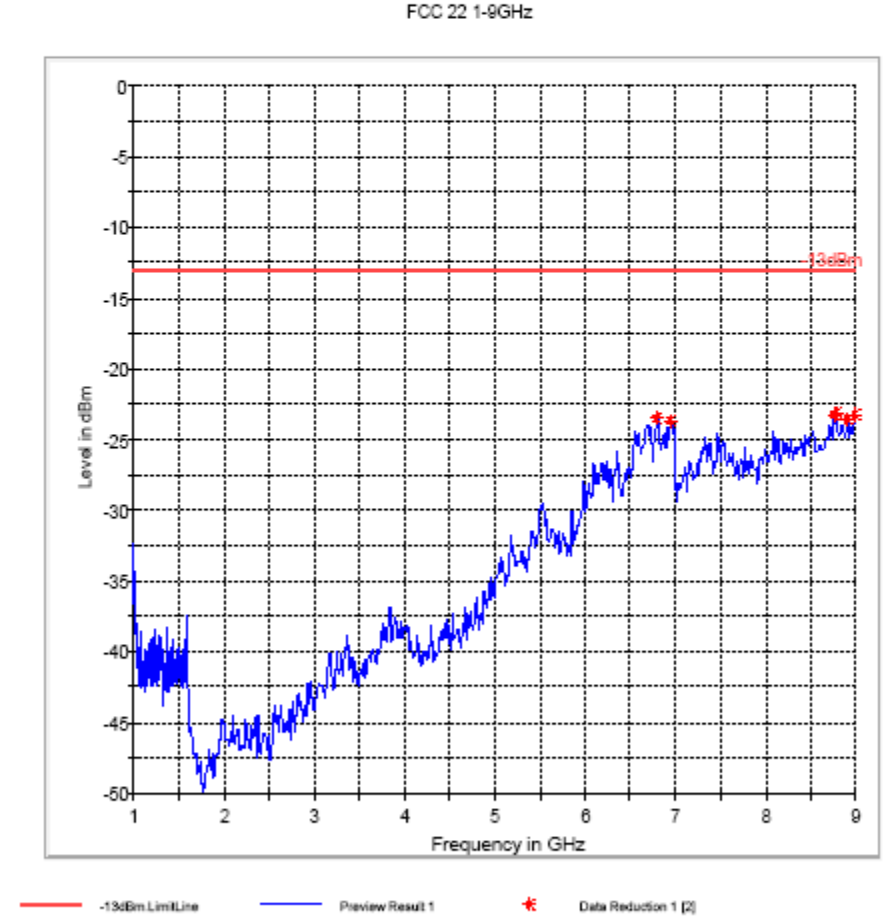
High Channel

FCC 22 1-9GHz High Channel 1 / 1

EUT Information

Description:
EUT Name:
Manufacturer: Kobelco Cranes
Serial Number:
Hardware Rev:
Software Rev:
Comment:

FCC 22 1-9GHz High Channel



11/4/2009 smoon EMC32 V8.10.10 4:17:28

5.2.5.3 Test Results Transmitter Spurious Emission PCS-1900:

Harmonic	Tx ch-512 Freq.(MHz)	Level (dBm)	Tx ch-661 Freq. (MHz)	Level (dBm)	Tx ch-810 Freq. (MHz)	Level (dBm)
1	**1850.2**	-	**1880.0**	-	**1909.8**	-
2	**3700.4**	NF	**3760**	NF	**3819.6**	NF
3	**5550.6**	NF	**5640**	NF	**5729.4**	NF
4	**7400.8**	NF	**7520**	NF	**7639.2**	NF
5	**9251**	NF	**9400**	NF	**9549**	NF
6	**11101.2**	NF	**11280**	NF	**11458.8**	NF
7	**12951.4**	NF	**13160**	NF	**13368.6**	NF
8	**14801.6**	NF	**15040**	NF	**15278.4**	NF
9	**16651.8**	NF	**16920**	NF	**17188.2**	NF
10	**18502**	NF	**18800**	NF	**19098**	NF
NF = Noise Floor						

Radiated Spurious Emissions (PCS 1900) Tx: 30MHz – 1GHz

Low Channel

EUT Information

Description:
EUT Name:
Manufacturer: Kobelco Cranes
Serial Number:
Hardware Rev:
Software Rev:
Comment:

FCC 24 30-1000MHz Low Channel

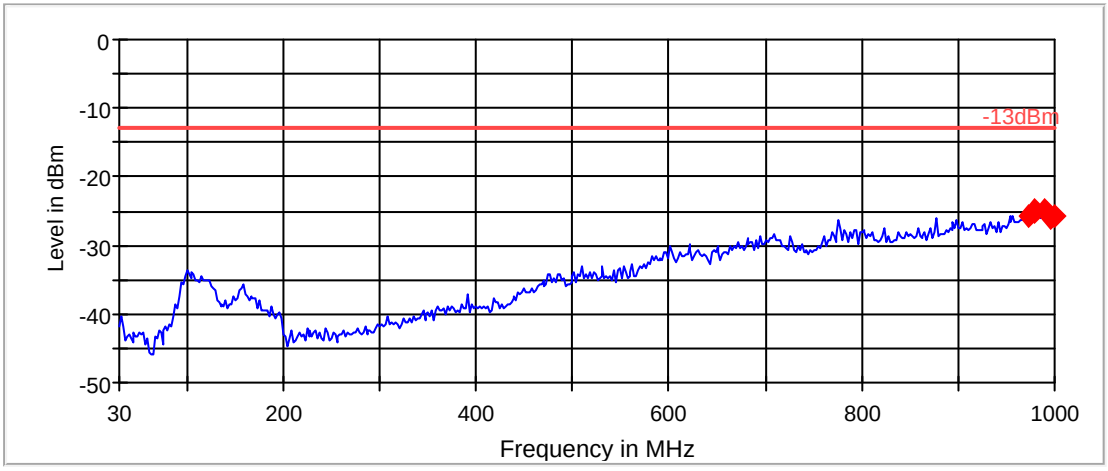
Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
972.907372	-25.7	20.000	100.000	170.0	H	189.0	-69.5	12.7	-13.0
978.939890	-24.9	20.000	100.000	170.0	V	279.0	-69.3	11.9	-13.0
979.110204	-25.2	20.000	100.000	120.0	V	11.0	-69.3	12.2	-13.0
989.376468	-24.8	20.000	100.000	170.0	V	107.0	-68.9	11.8	-13.0
995.535096	-26.1	20.000	100.000	170.0	H	257.0	-69.2	13.1	-13.0
999.218437	-25.6	20.000	100.000	170.0	V	22.0	-68.5	12.6	-13.0

(continuation of the "Final Result 1" table from column 10 ...)

Frequency (MHz)	Comment
972.907372	
978.939890	
979.110204	
989.376468	
995.535096	
999.218437	

FCC 22 30-1000MHz



Mid Channel

EUT Information

Description:
EUT Name:
Manufacturer: Kobelco Cranes
Serial Number:
Hardware Rev:
Software Rev:
Comment:

FCC 24 30-1000MHz Mid Channel

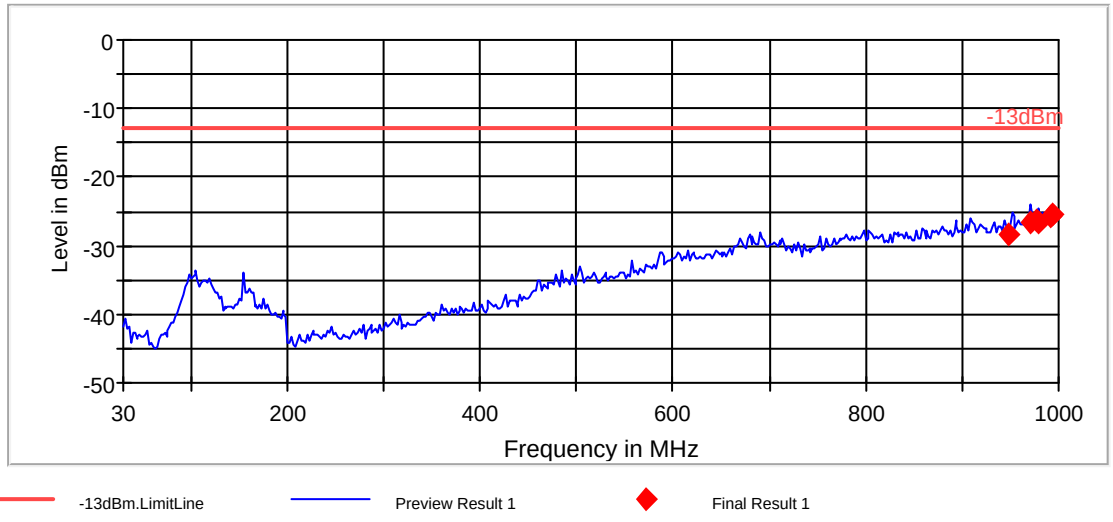
Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
947.961369	-28.3	20.000	100.000	170.0	V	197.0	-70.4	15.3	-13.0
970.365038	-26.5	20.000	100.000	170.0	H	248.0	-69.6	13.5	-13.0
977.750025	-26.2	20.000	100.000	120.0	V	22.0	-69.4	13.2	-13.0
980.176326	-26.6	20.000	100.000	163.0	H	112.0	-69.4	13.6	-13.0
992.660124	-25.8	20.000	100.000	120.0	V	292.0	-68.8	12.8	-13.0
993.009858	-25.4	20.000	100.000	145.0	H	69.0	-69.3	12.4	-13.0

(continuation of the "Final Result 1" table from column 10 ...)

Frequency (MHz)	Comment
947.961369	
970.365038	
977.750025	
980.176326	
992.660124	
993.009858	

FCC 22 30-1000MHz



High Channel

EUT Information

Description:
EUT Name:
Manufacturer: Kobelco Cranes
Serial Number:
Hardware Rev:
Software Rev:
Comment:

FCC 24 30-1000MHz High Channel

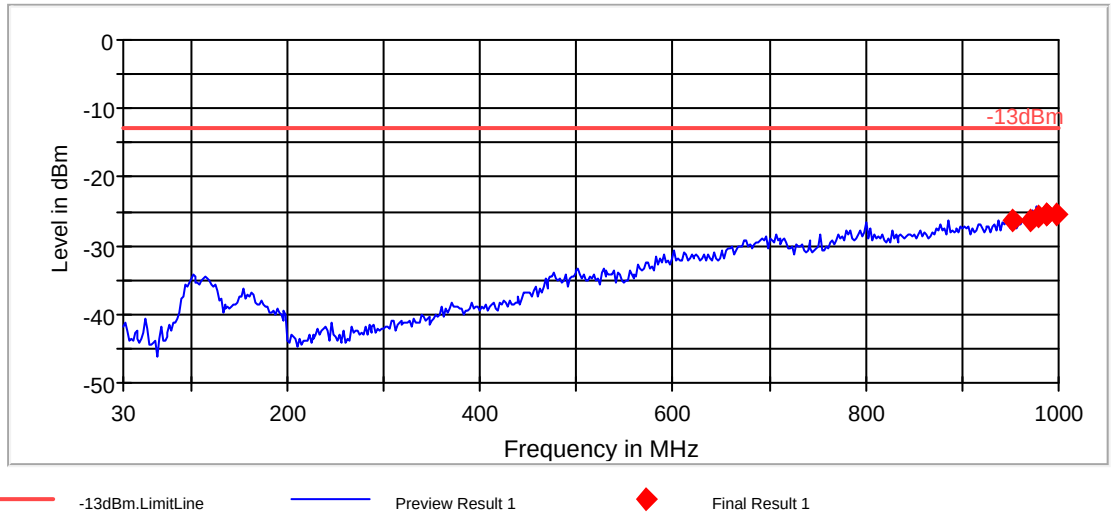
Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
951.751492	-26.3	20.000	100.000	154.0	H	280.0	-69.8	13.3	-13.0
971.820569	-26.4	20.000	100.000	120.0	V	292.0	-69.6	13.4	-13.0
979.227643	-25.9	20.000	100.000	163.0	V	188.0	-69.3	12.9	-13.0
987.911066	-25.3	20.000	100.000	145.0	H	9.0	-69.3	12.3	-13.0
988.158219	-25.3	20.000	100.000	120.0	H	112.0	-69.3	12.3	-13.0
997.915832	-25.4	20.000	100.000	170.0	V	169.0	-68.6	12.4	-13.0

(continuation of the "Final Result 1" table from column 10 ...)

Frequency (MHz)	Comment
951.751492	
971.820569	
979.227643	
987.911066	
988.158219	
997.915832	

FCC 22 30-1000MHz



Radiated Spurious Emissions (PCS 1900) Tx: 1GHz – 18GHz
Low Channel

FCC 24 1-18GHz Low Channel 1 / 1

EUT Information
Description:
EUT Name:
Manufacturer: Kobelco Cranes
Serial Number:
Hardware Rev:
Software Rev:
Comment:

FCC 24 1-18GHz Low Channel

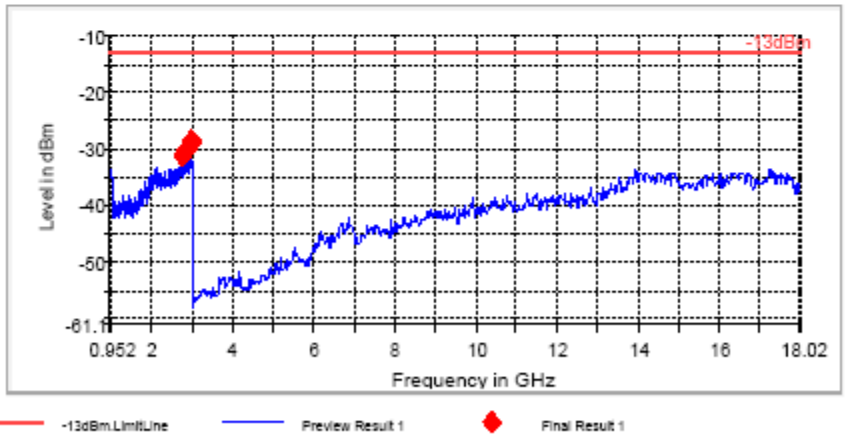
Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
2760.342660	-31.1	1000.000	1000.000	120.0	H	22.0	-66.9	18.1	-13.0
2821.525351	-30.2	1000.000	1000.000	120.0	H	202.0	-66.7	17.2	-13.0
2944.290518	-29.1	1000.000	1000.000	120.0	H	22.0	-65.6	16.1	-13.0
2955.487078	-28.4	1000.000	1000.000	120.0	H	292.0	-65.5	15.4	-13.0
2959.585787	-28.4	1000.000	1000.000	120.0	V	112.0	-65.4	15.4	-13.0
2978.017876	-29.0	1000.000	1000.000	145.0	V	15.0	-65.2	16.0	-13.0

(continuation of the "Final Result 1" table from column 10 ...)

Frequency (MHz)	Comment
2760.342660	
2821.525351	
2944.290518	
2955.487078	
2959.585787	
2978.017876	

FCC 24 1-18GHz



11/3/2009 knavares EMC32 V8.10.10 9:21:50

Mid Channel

FCC 24 1-18GHz Mid Channel 1 / 1

EUT Information

Description:
EUT Name:
Manufacturer: Kobelco Cranes
Serial Number:
Hardware Rev:
Software Rev:
Comment:

FCC 24 1-18GHz Mid Channel

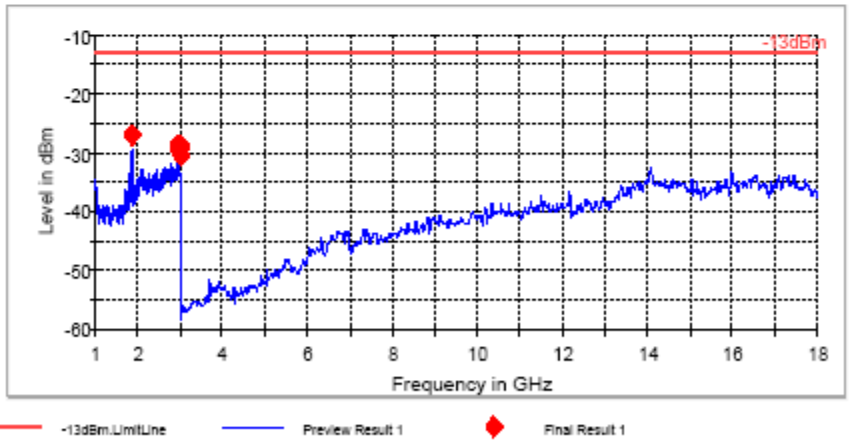
Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
1880.500194	-26.8	1000.000	1000.000	120.0	H	85.0	-69.5	13.8	-13.0
2932.872453	-29.4	1000.000	1000.000	120.0	H	0.0	-65.8	16.4	-13.0
2948.813941	-28.8	1000.000	1000.000	120.0	V	85.0	-65.4	15.8	-13.0
2959.027621	-28.7	1000.000	1000.000	145.0	H	112.0	-65.4	15.7	-13.0
2969.862013	-29.2	1000.000	1000.000	145.0	V	22.0	-65.3	16.2	-13.0
2995.299960	-30.3	1000.000	1000.000	145.0	H	292.0	-65.2	17.3	-13.0

(continuation of the "Final Result 1" table from column 10 ...)

Frequency (MHz)	Comment
1880.500194	
2932.872453	
2948.813941	
2959.027621	
2969.862013	
2995.299960	

FCC 24 1-18GHz



11/3/2009 EMC32 EMC32 V8.30.0 9:35:17

High Channel

FCC 24 1-18GHz High Channel 1 / 1

EUT Information

Description:
EUT Name:
Manufacturer: Kobelco Cranes
Serial Number:
Hardware Rev:
Software Rev:
Comment:

FCC 24 1-18GHz High Channel

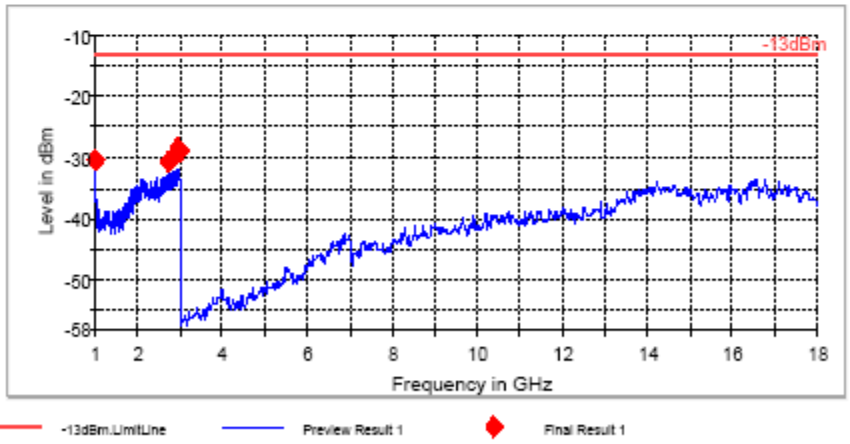
Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
1000.541082	-30.6	1000.000	1000.000	120.0	H	112.0	-67.1	17.6	-13.0
2734.555707	-30.7	1000.000	1000.000	145.0	H	270.0	-67.0	17.7	-13.0
2826.391384	-29.9	1000.000	1000.000	120.0	H	112.0	-66.6	16.9	-13.0
2946.721889	-28.5	1000.000	1000.000	145.0	H	22.0	-65.6	15.5	-13.0
2958.795342	-28.8	1000.000	1000.000	121.0	H	22.0	-65.4	15.8	-13.0
2970.554549	-29.0	1000.000	1000.000	120.0	H	163.0	-65.4	16.0	-13.0

(continuation of the "Final Result 1" table from column 10 ...)

Frequency (MHz)	Comment
1000.541082	
2734.555707	
2826.391384	
2946.721889	
2958.795342	
2970.554549	

FCC 24 1-18GHz



11/3/2009 EMC32 EMC32 V8.30.0 9:47:26

5.2.5.4 Test Results Transmitter Spurious Emission UMTS FDD2:

Harmonic	Tx ch-9262 Freq. (MHz)	Level (dBm)	Tx ch-9400 Freq. (MHz)	Level (dBm)	Tx ch-9538 Freq. (MHz)	Level (dBm)
1	**1852.4**	-	**1880.0**	-	**1907.6**	-
2	**3704.8**	NF	**3760**	NF	**3815.2**	NF
3	**5557.2**	NF	**5640**	NF	**5722.8**	NF
4	**7409.6**	NF	**7520**	NF	**7630.4**	NF
5	**9262**	NF	**9400**	NF	**9538**	NF
6	**11114.4**	NF	**11280**	NF	**11445.6**	NF
7	**12966.8**	NF	**13160**	NF	**13353.2**	NF
8	**14819.2**	NF	**15040**	NF	**15260.8**	NF
9	**16671.6**	NF	**16920**	NF	**17168.4**	NF
10	**18524**	NF	**18800**	NF	**19076**	NF
NF= Noise Floor						

Radiated Spurious Emissions (UMTS FDDII) Tx: 30MHz – 1GHz

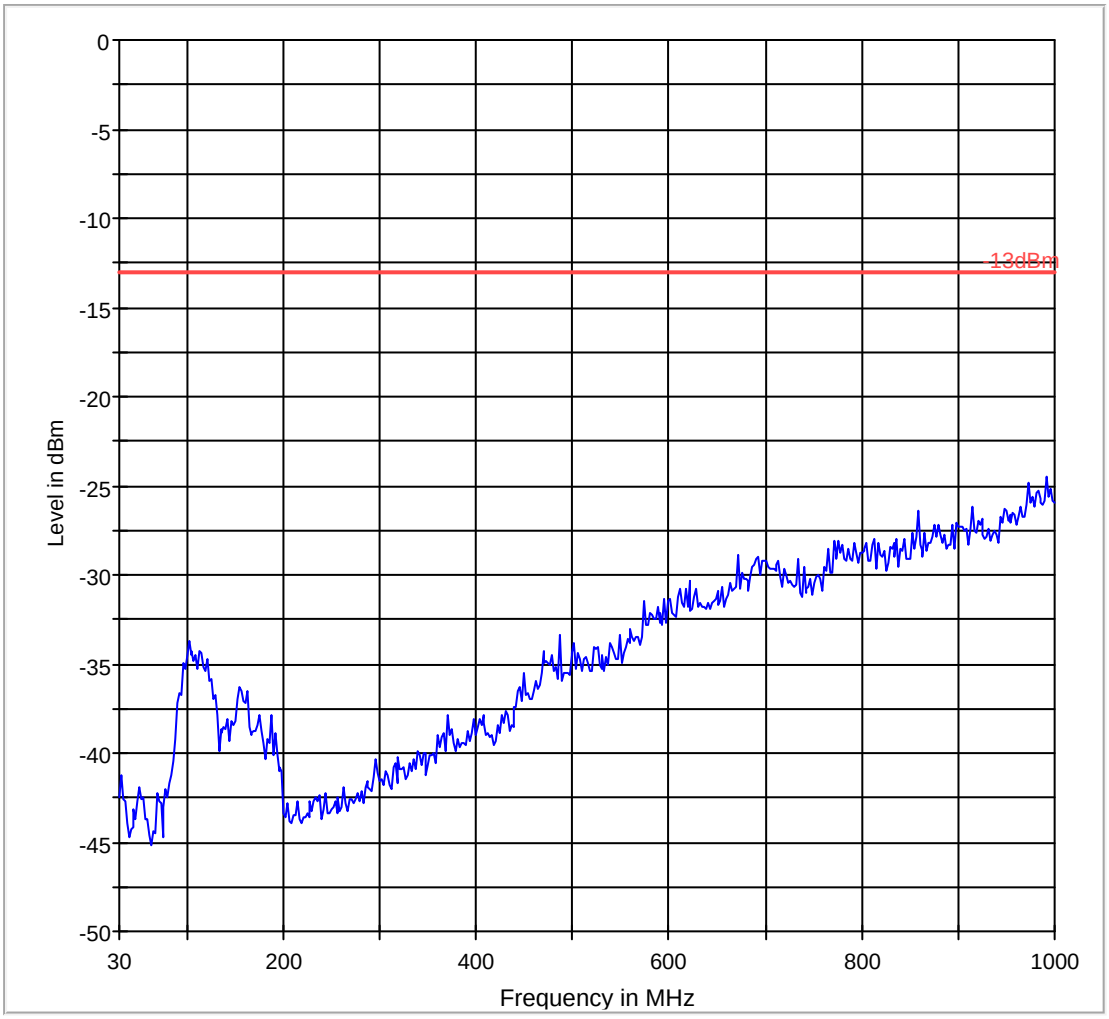
Low Channel

EUT Information

Description:
EUT Name:
Manufacturer: Kobelco Cranes
Serial Number:
Hardware Rev:
Software Rev:
Comment:

FCC 24 30-1000MHz Low Channel

FCC 22 30-1000MHz



Mid Channel

EUT Information

Description:
EUT Name:
Manufacturer: Kobelco Cranes
Serial Number:
Hardware Rev:
Software Rev:
Comment:

FCC 24 30-1000MHz Mid Channel

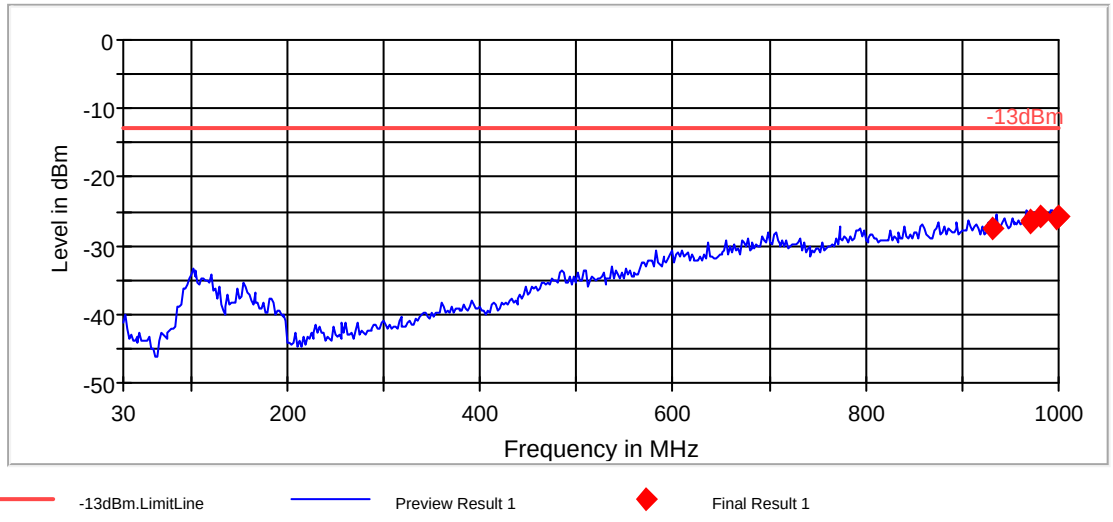
Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
931.941179	-27.5	20.000	100.000	120.0	H	22.0	-70.0	14.5	-13.0
970.402885	-26.5	20.000	100.000	170.0	V	10.0	-69.7	13.5	-13.0
970.451774	-26.4	20.000	100.000	121.0	H	278.0	-69.6	13.4	-13.0
982.337650	-25.7	20.000	100.000	162.0	V	180.0	-69.2	12.7	-13.0
997.785571	-26.0	20.000	100.000	152.0	V	68.0	-68.6	13.0	-13.0
999.059642	-25.7	20.000	100.000	121.0	V	159.0	-68.6	12.7	-13.0

(continuation of the "Final Result 1" table from column 10 ...)

Frequency (MHz)	Comment
931.941179	
970.402885	
970.451774	
982.337650	
997.785571	
999.059642	

FCC 22 30-1000MHz



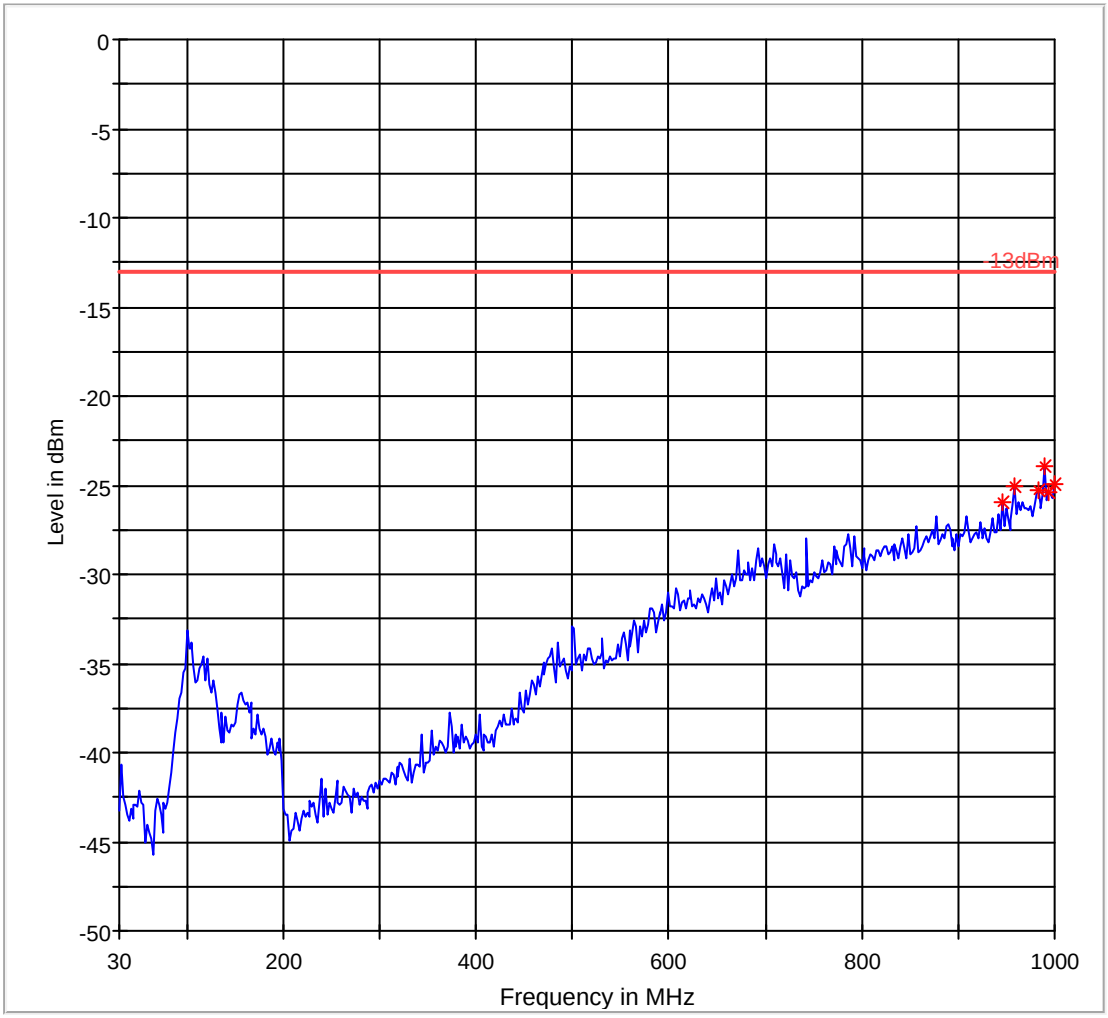
High Channel

EUT Information

Description:
EUT Name:
Manufacturer: Kobelco Cranes
Serial Number:
Hardware Rev:
Software Rev:
Comment:

FCC 24 30-1000MHz High Channel

FCC 22 30-1000MHz



Radiated Spurious Emissions (UMTS FDDII) Tx: 1GHz –18GHz

Low Channel

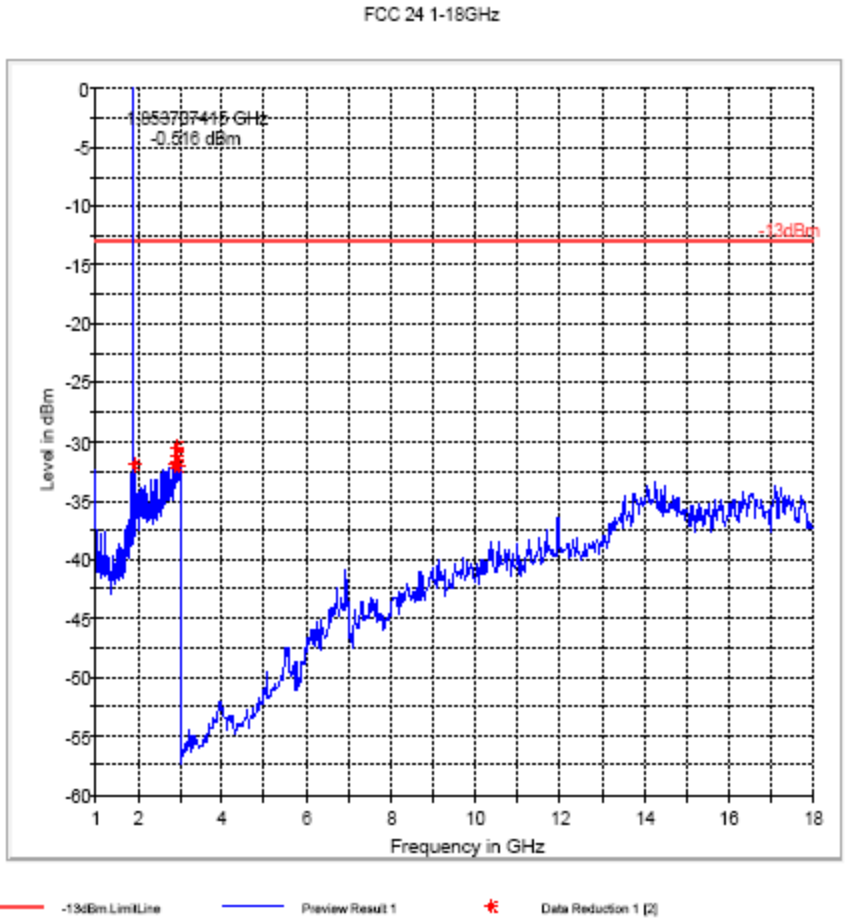
***Peak over the limit is the carrier frequency**

FCC 24 1-18GHz Low Channel 1 / 1

EUT Information

Description:
EUT Name:
Manufacturer: Kobelco Cranes
Serial Number:
Hardware Rev:
Software Rev:
Comment:

FCC 24 1-18GHz Low Channel



11/4/2009 smoon EMC32 V8.10.10 4:38:11

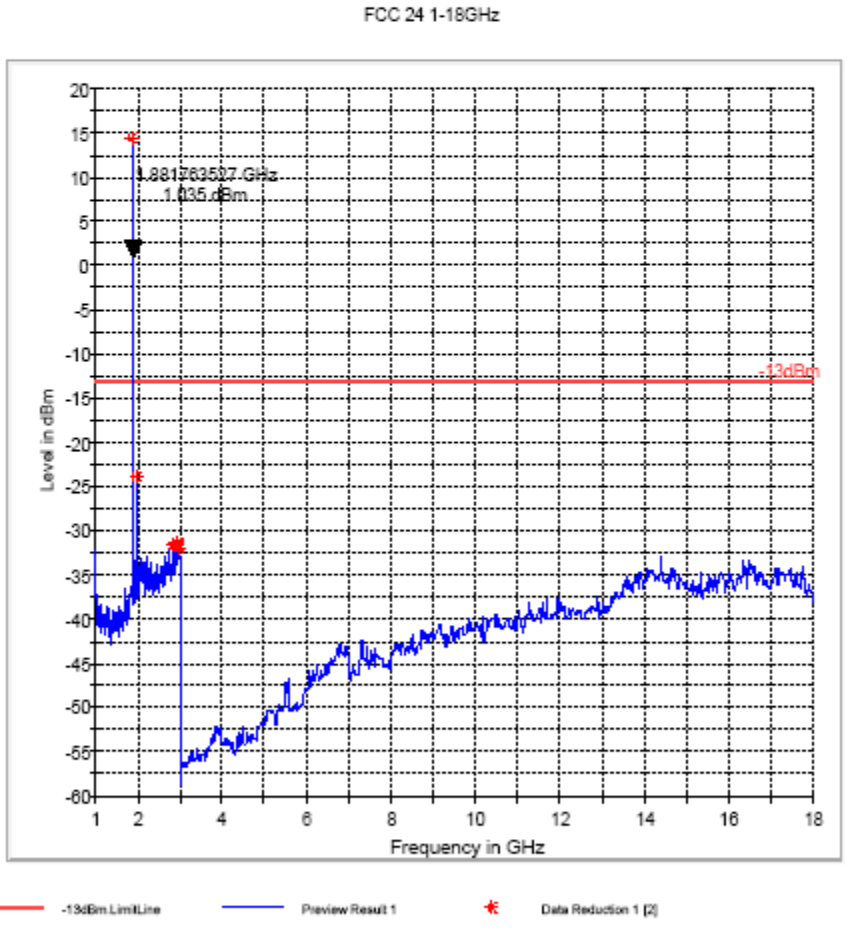
Mid Channel
***Peak over the limit is the carrier frequency**

FCC 24 1-18GHz Mid Channel 1 / 1

EUT Information

Description:
EUT Name:
Manufacturer: Kobelco Cranes
Serial Number:
Hardware Rev:
Software Rev:
Comment:

FCC 24 1-18GHz Mid Channel



11/4/2009 smoon EMC32 V8.10.10 4:31:00

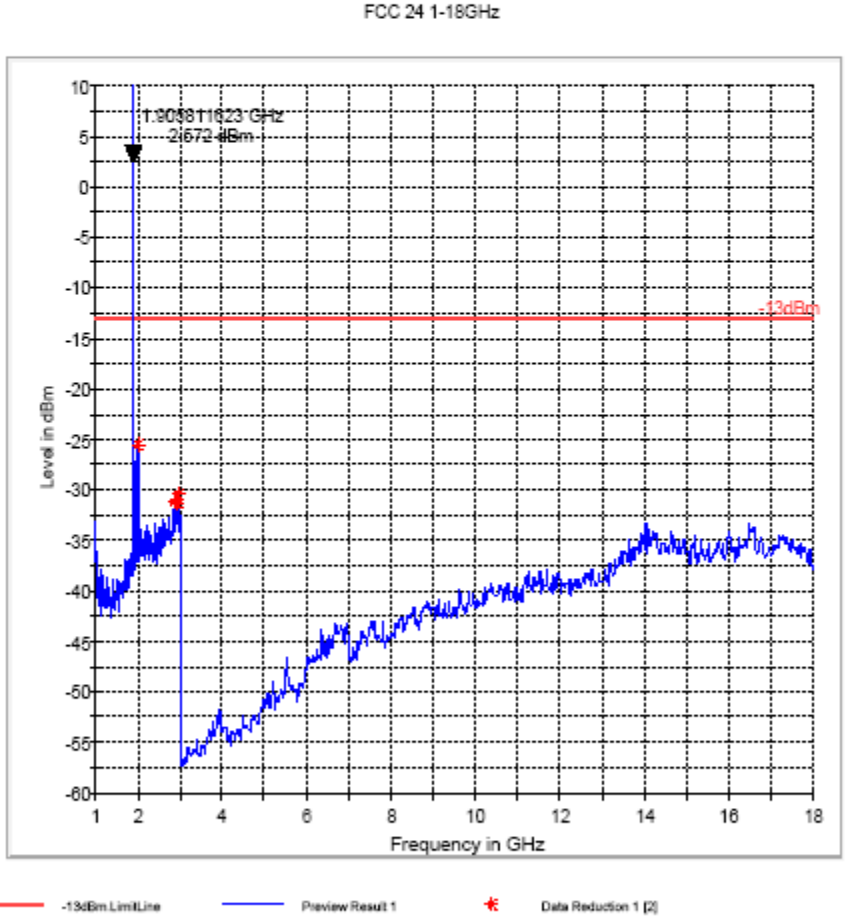
High Channel
***Peak over the limit is the carrier frequency**

FCC 24 1-18GHz High Channel 1 / 1

EUT Information

Description:
EUT Name:
Manufacturer: Kobelco Cranes
Serial Number:
Hardware Rev:
Software Rev:
Comment:

FCC 24 1-18GHz High Channel

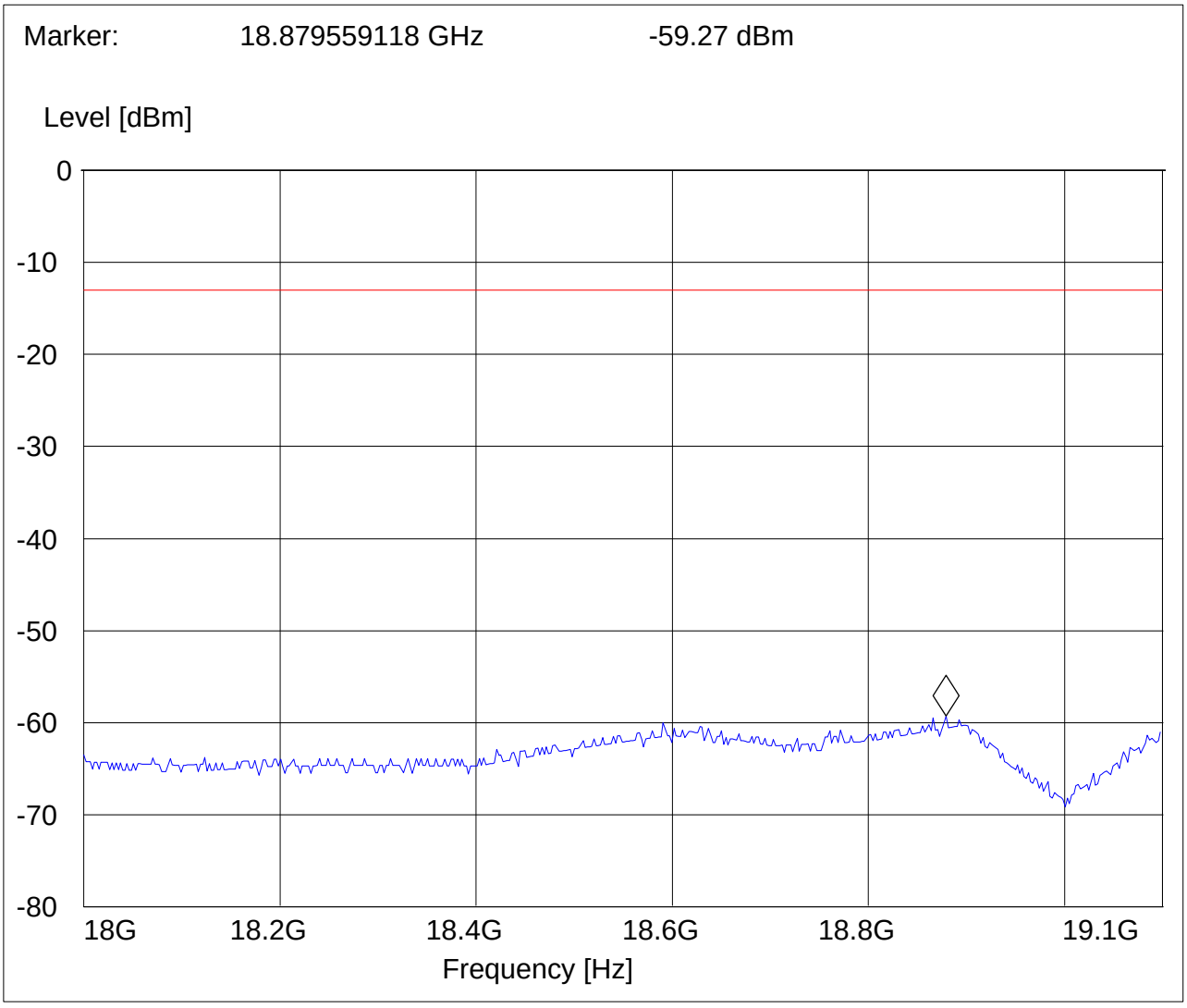


11/4/2009 smoon EMC32 V8.10.10 4:34:40

Transmit Mode: 18GHz-26.5GHz
Note: Worse case representation of all operating modes.
Note: Worse case representation of both H/V measuring antenna polarizations.

Customer:: Kobelco Cranes
Test Mode: FDD II
ANT Orientation: H/V
EUT Orientation: H
Test Engineer: Sam
Voltage: 24v
Comments:
SWEEP TABLE: "FCC 24spuri 18-19.1G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	19.1 GHz	Average	Coupled	1 MHz	DUMMY-DBM



5.2.6 Radiated out of band emissions results on EUT- Receive Mode:

5.2.6.1 References

FCC: CFR Part 15.109, 2.1053
IC: RSS 132 Section 4.6 and 6.6

5.2.6.2 §15.109 Radiated emission limits- Unintentional Radiators:

(a) Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency of emission (MHz)	Field strength (µV/m)
30–88	100 (40dBµV/m)
88–216	150 (43.5 dBµV/m)
216–960	200 (46 dBµV/m)
Above 960	500 (54 dBµV/m)

(b) The field strength of radiated emissions from a Class A digital device, as determined at a distance of 10 meters, shall not exceed the following:

Frequency of emission (MHz)	Field strength (µV/m)
30–88	90
88–216	150
216–960	210
Above 960	300

5.2.6.3 Results

No significant emissions measurable. Plots reported here represent the worse case emissions.

5.2.6.4 Test Results Receiver Spurious Emission

Receive Mode: 30MHz-1GHz

Test 1 / 1

Test

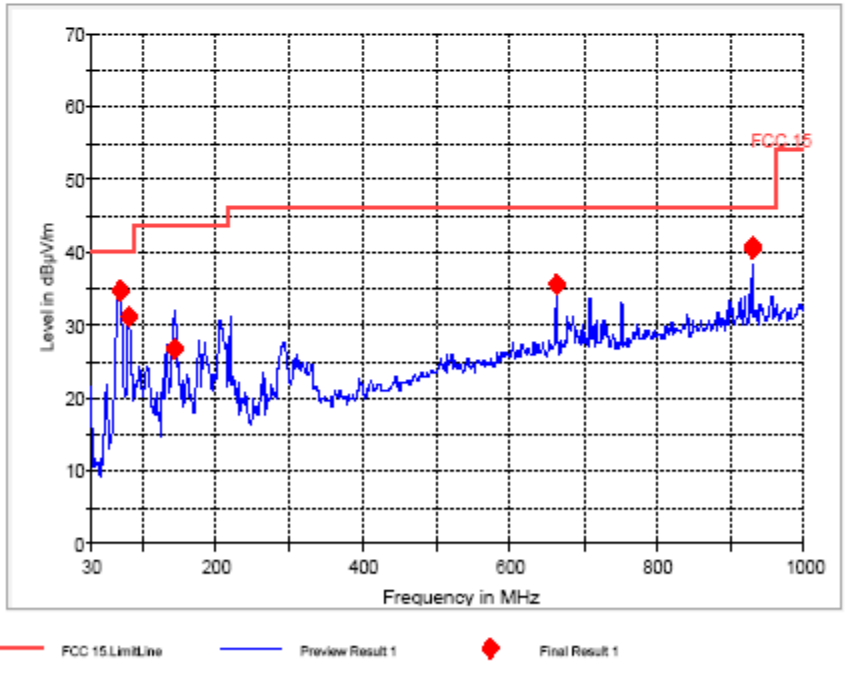
Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
68.965406	34.6	20.000	120.000	170.0	V	292.0	9.0	5.4	40.0
82.251070	31.2	20.000	120.000	120.0	V	287.0	9.7	8.8	40.0
143.444692	26.8	20.000	120.000	120.0	V	292.0	9.5	16.7	43.5
663.607660	35.6	20.000	120.000	120.0	V	168.0	22.5	10.4	46.0
929.055326	40.6	20.000	120.000	170.0	V	9.0	26.3	5.4	46.0
929.060220	40.3	20.000	120.000	170.0	V	9.0	26.3	5.7	46.0

(continuation of the "Final Result 1" table from column 10 ...)

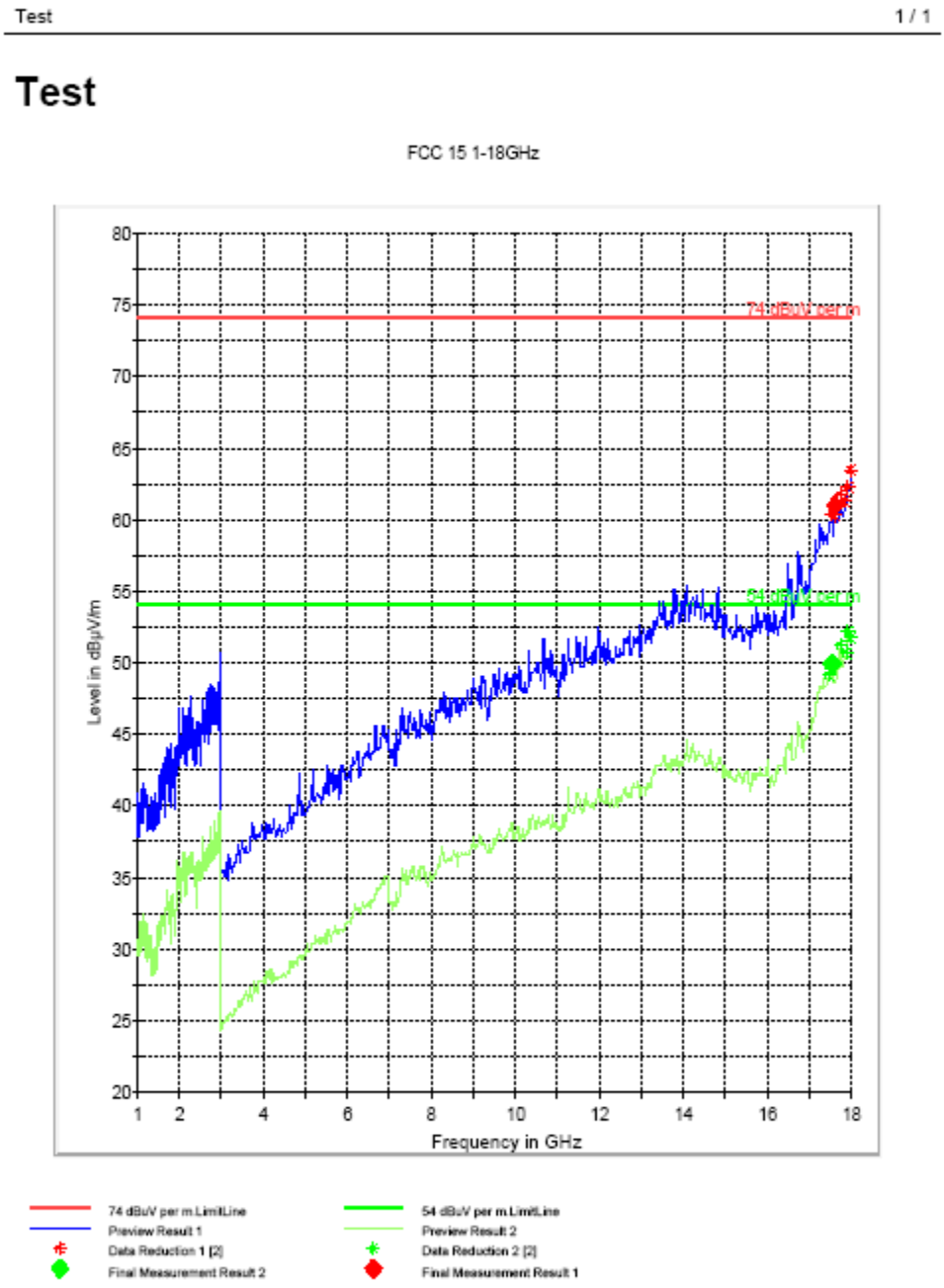
Frequency (MHz)	Comment
68.965406	
82.251070	
143.444692	
663.607660	
929.055326	
929.060220	

FCC 15 30-1000MHz



11/4/2009 smoon EMC32 V8.10.10 9:32:46

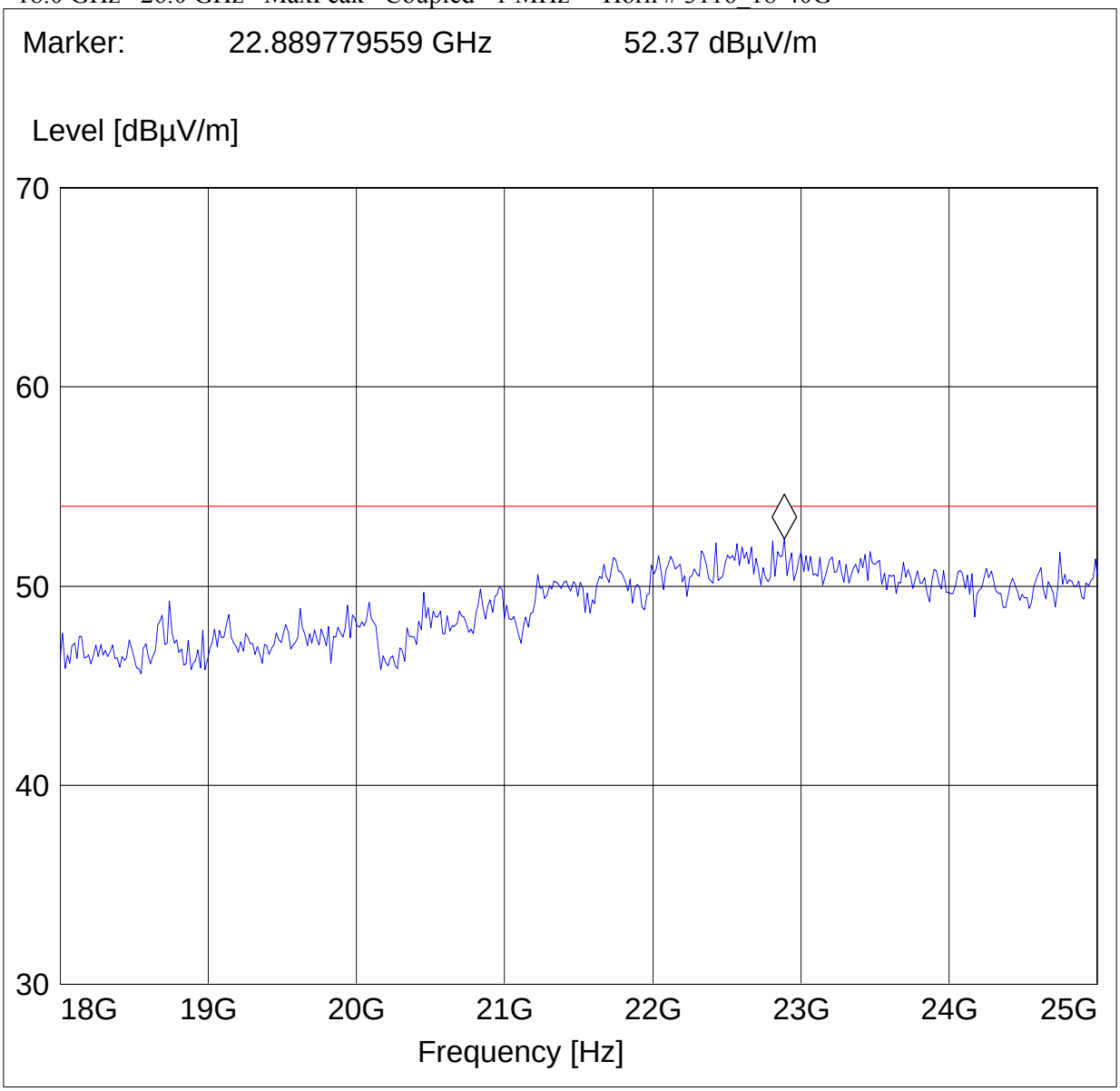
Receive Mode: 1GHz-18GHz



Receive Mode: 18GHz-26.5GHz
EUT:
Customer:: Kobelco Cranes
Test Mode: FDD II
ANT Orientation: H/V
EUT Orientation: H
Test Engineer: Sam
Voltage: 24v
Comments:

SWEEP TABLE: "CANADA RE_18-26.5G"

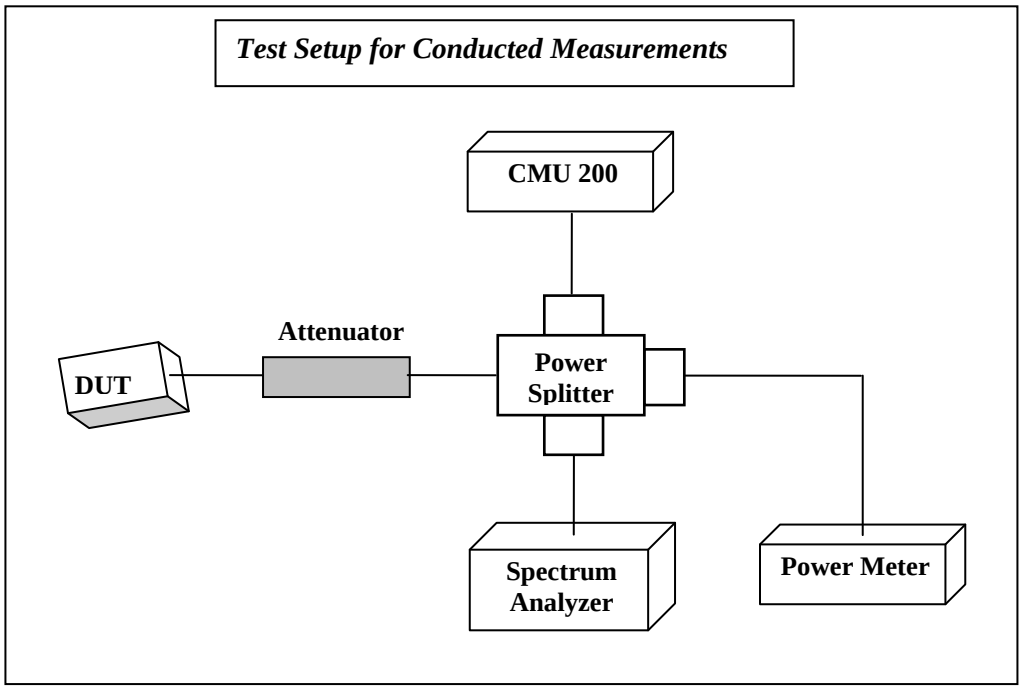
Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.0 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G

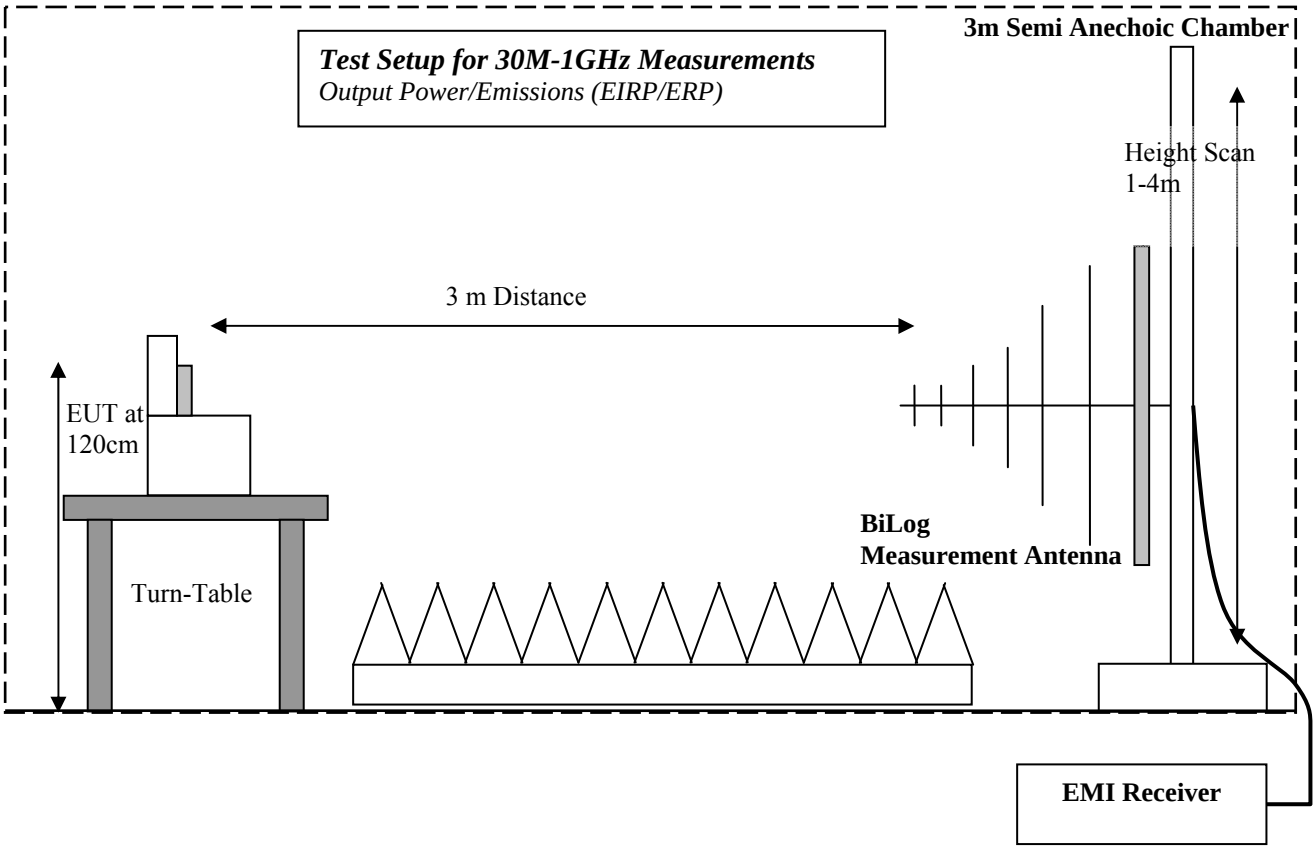


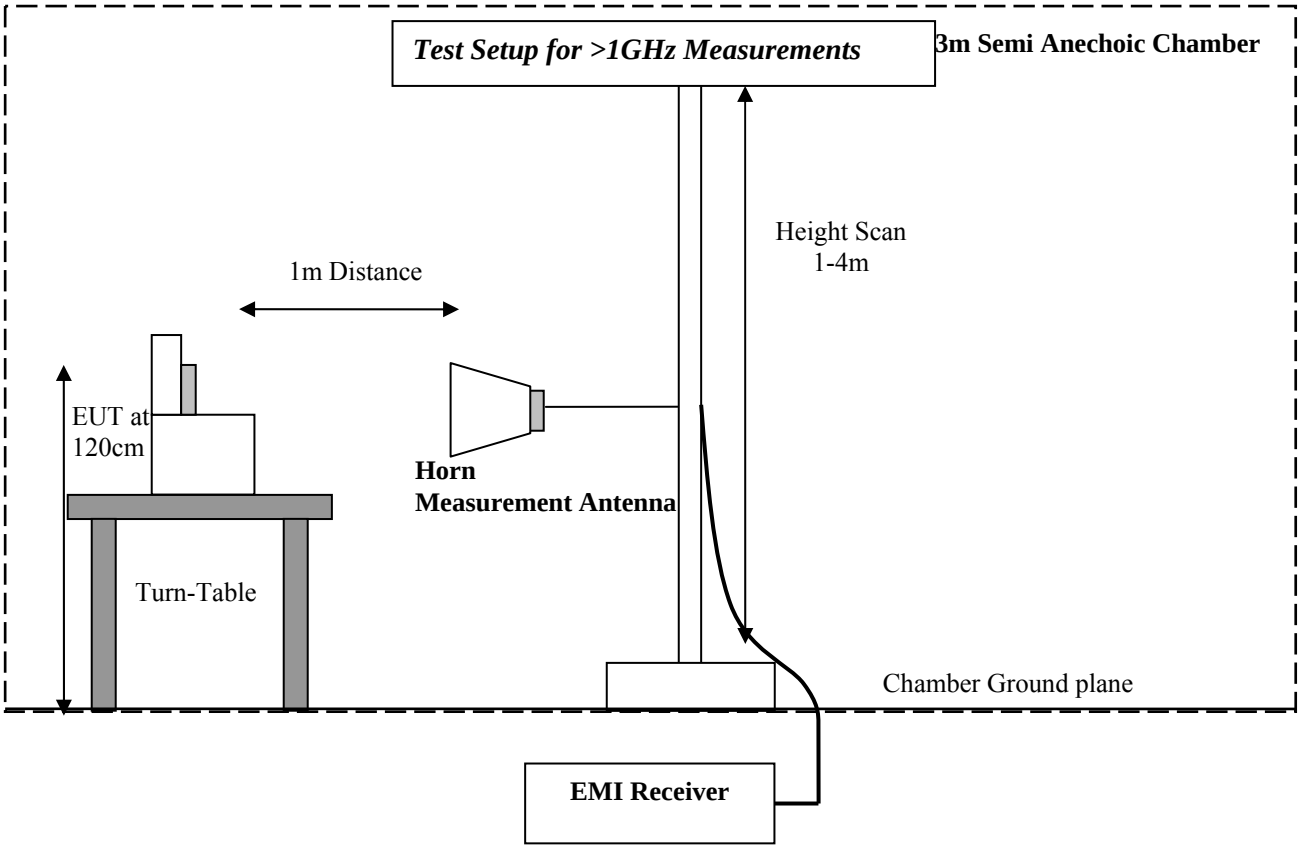
6 Test Equipment And Ancillaries Used For Tests

No	Instrument/Ancillary	Type	Manufacturer	Serial No.	Cal Due	Interval
01	Spectrum Analyzer	ESIB 40	Rohde & Schwarz	100107	May 2010	1 year
02	Spectrum Analyzer	FSEM 30	Rohde & Schwarz	100017	May 2010	1 year
03	Signal Generator	SMY02	Rohde & Schwarz	836878/011	May 2010	1 year
04	Power-Meter	NRVD	Rohde & Schwarz	0857.8008.02	May 2010	1 year
05	Biconilog Antenna	3141	EMCO	0005-1186	June 2010	1 year
06	Horn Antenna (1-18GHz)	SAS-200/571	AH Systems	325	June 2010	1 year
07	Horn Antenna (18-26.5GHz)	3160-09	EMCO	1240	June 2010	1 year
08	Power Splitter	11667B	Hewlett Packard	645348	n/a	n/a
09	Climatic Chamber	VT4004	Voltsch	G1115	May 2010	1 year
10	High Pass Filter	5HC2700	Trilithic Inc.	9926013	n/a	n/a
11	High Pass Filter	4HC1600	Trilithic Inc.	9922307	n/a	n/a
12	Pre-Amplifier	JS4-00102600	Miteq	00616	May 2010	1 year
13	Power Sensor	URV5-Z2	Rohde & Schwarz	DE30807	May 2010	1 year
14	Digital Radio Comm. Tester	CMD-55	Rohde & Schwarz	847958/008	May 2010	1 year
15	Universal Radio Comm. Tester	CMU 200	Rohde & Schwarz	832221/06	May 2010	1 year
16	LISN	ESH3-Z5	Rohde & Schwarz	836679/003	May 2010	1 year
17	Loop Antenna	6512	EMCO	00049838	July 2010	2 years

7 Block Diagrams






Test Setup for >1GHz Measurements
3m Semi Anechoic Chamber
Height Scan
1-4m
1m Distance
EUT at
120cm
Horn
Measurement Antenna
Turn-Table
Chamber Ground plane
EMI Receiver

8 Revision History

Date	Report Name	Changes to report	Report prepared by
2009-11-20	**EMC_CET10_048_09501_FCC22_24**	**Original report**	**Josie Sabado**
2009-12-09	**EMC_CET10_048_09501_FCC22_24_rev1**	**Updated ERP values. Replaces previous report number**	**Josie Sabado**
2009-12-22	**EMC_CET10_048_09501_FCC22_24_rev2**	**Added 18-19.5GHz measurement result under part 24.**	**Peter Mu**