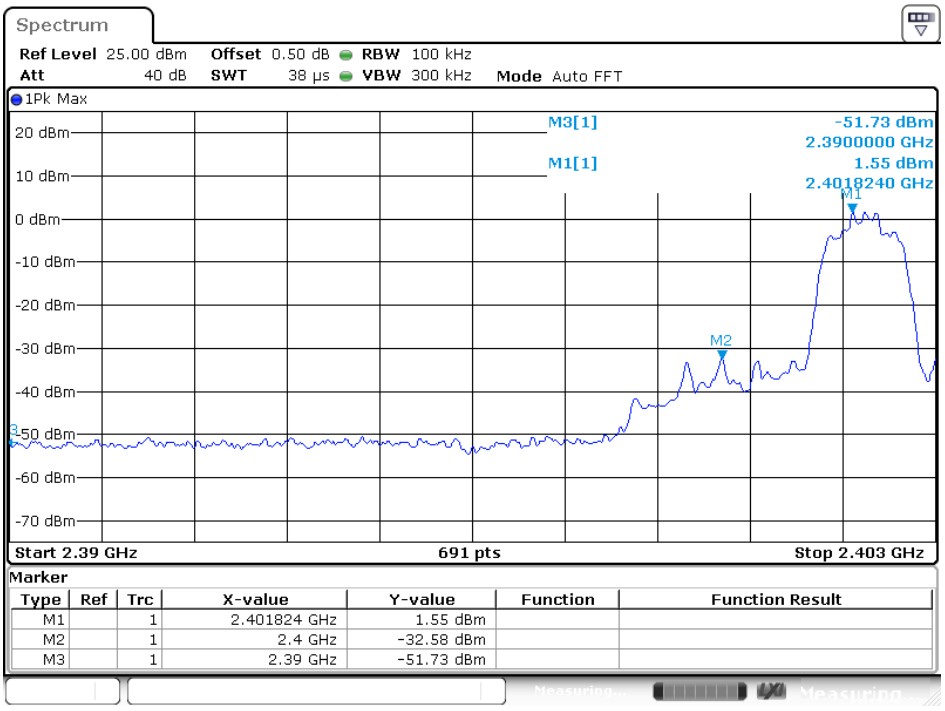
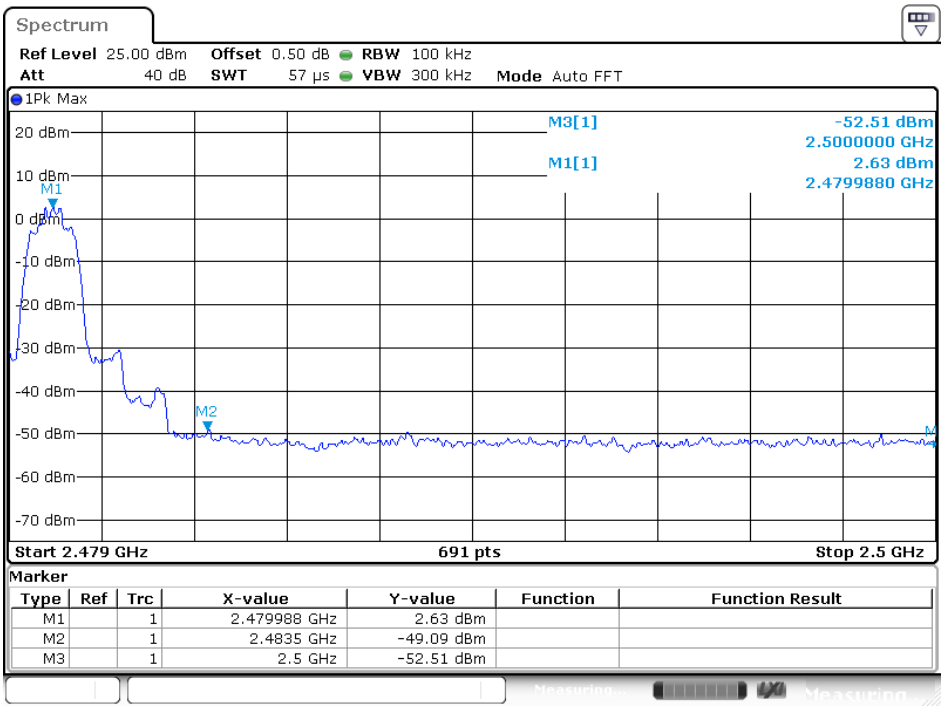
8DPSK


Spectrum
Ref Level 25.00 dBm Offset 0.50 dB RBW 100 kHz
Att 40 dB SWT 38 µs VBW 300 kHz Mode Auto FFT
1Pk Max
M3[1] -51.73 dBm
2.3900000 GHz
M1[1] 1.55 dBm
2.4018240 GHz
20 dBm
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
Start 2.39 GHz
691 pts
Stop 2.403 GHz
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 2.401824 GHz 1.55 dBm
M2 1 2.4 GHz -32.58 dBm
M3 1 2.39 GHz -51.73 dBm


Spectrum
Ref Level 25.00 dBm Offset 0.50 dB RBW 100 kHz
Att 40 dB SWT 57 µs VBW 300 kHz Mode Auto FFT
1Pk Max
M3[1] -52.51 dBm
2.5000000 GHz
M1[1] 2.63 dBm
2.4799880 GHz
20 dBm
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
Start 2.479 GHz
691 pts
Stop 2.5 GHz
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 2.479988 GHz 2.63 dBm
M2 1 2.4835 GHz -49.09 dBm
M3 1 2.5 GHz -52.51 dBm

Radiated Band Edge Result

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

   Result = Reading + Corrected Factor
3. Display the measurement of peak values.

Test Procedure:

The EUT and its simulators are placed on a turntable, which is 1.5 meter high above ground(Above 1GHz). The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bi-log antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the EUT location must be manipulated according to ANSI C63.10:2013 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

Let the EUT work in TX (Hopping off, Hopping on) modes measure it.
We select 2402MHz, 2480MHz TX frequency to transmit(Hopping off mode).
We select 2402-2480MHz TX frequency to transmit(Hopping on mode).

During the radiated emission test, the spectrum analyzer was set with the following configurations:
1.The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for peak measurement with peak detector at frequency above 1GHz.
2.The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average measurement with peak detection at frequency above 1GHz.
3.All modes of operation were investigated and the worst-case emissions are reported.

Non-hopping mode

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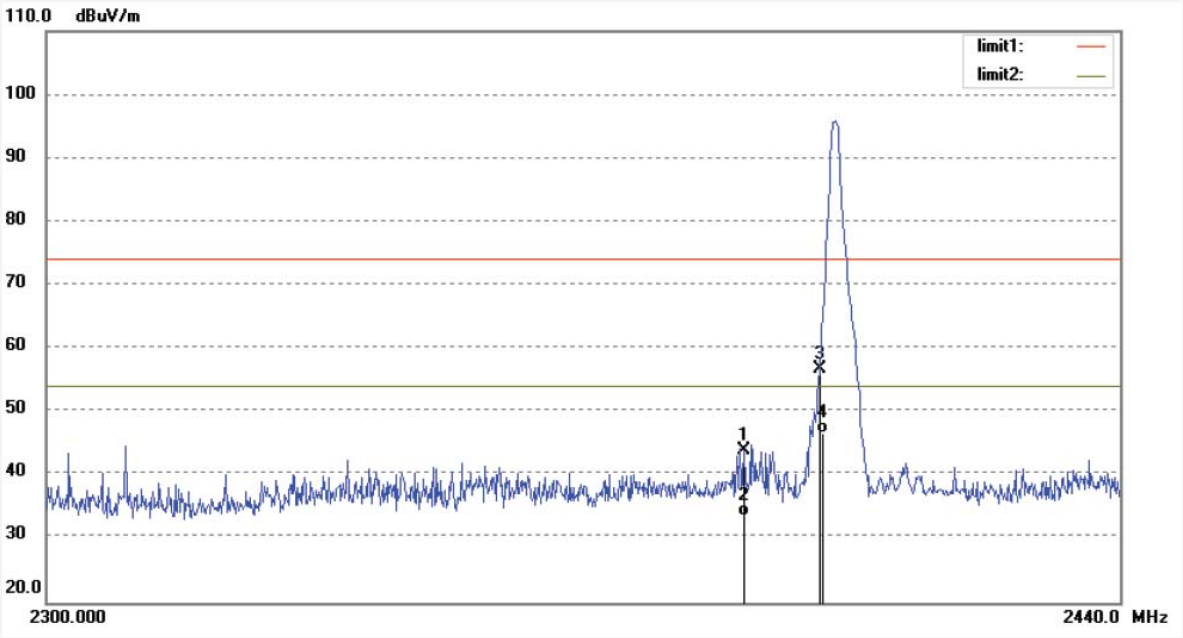
Job No.: JC #61
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: OttoTurntable
Mode: TX 2402MHz(GFSK)
Model: CR6033A-GY
Manufacturer: TIMSEN INTERNATIONAL LIMITED

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 18/01/12/
Time: 9/16/31
Engineer Signature: JAMES
Distance: 3m

Note: Report NO.:ATE20172608



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	49.90	-5.89	44.01	74.00	-29.99	peak	150	246	
2	2390.000	39.52	-5.89	33.63	54.00	-20.37	AVG	150	246	
3	2400.000	62.58	-5.80	56.78	74.00	-17.22	peak	150	333	
4	2400.000	52.41	-5.80	46.61	54.00	-7.39	AVG	150	333	

Note: Average measurement with peak detection at No.2&4

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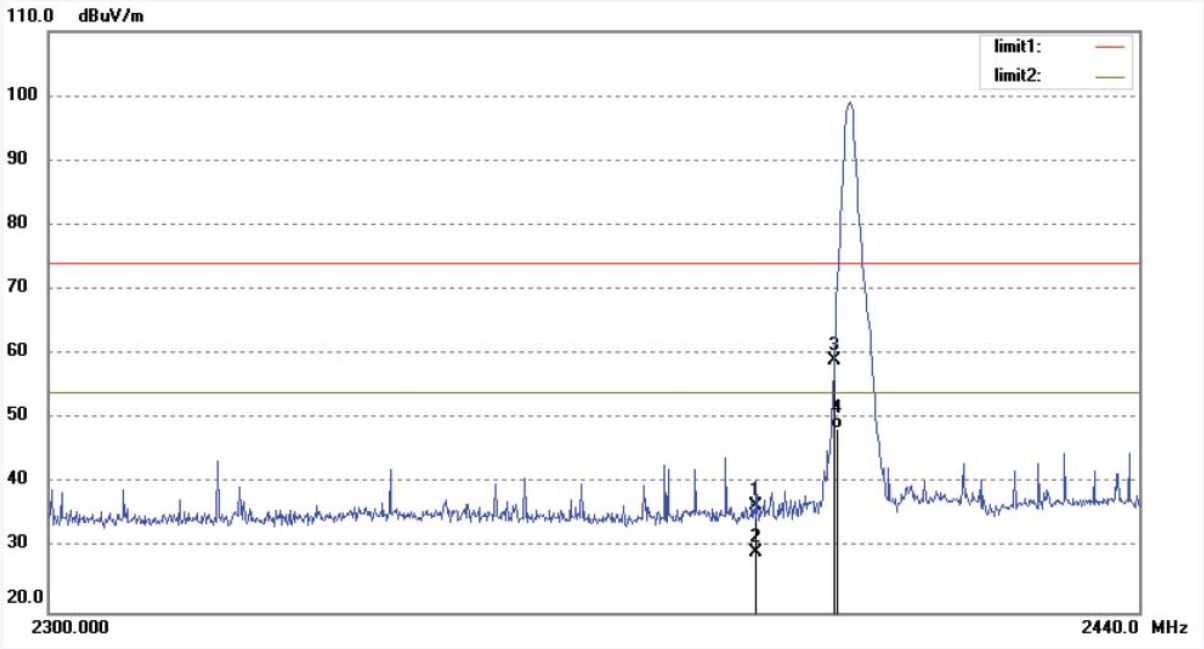
Job No.: JC #62
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Otto Turntable
Mode: TX 2402MHz(GFSK)
Model: CR6033A-GY
Manufacturer: TIMSEN INTERNATIONAL LIMITED

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 18/01/12/
Time: 9/20/00
Engineer Signature: JAMES
Distance: 3m

Note: Report NO.:ATE20172608



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	42.34	-5.89	36.45	74.00	-37.55	peak	150	223	
2	2390.000	35.12	-5.89	29.23	74.00	-44.77	peak	150	223	
3	2400.000	64.79	-5.80	58.99	74.00	-15.01	peak	150	146	
4	2400.000	54.23	-5.80	48.43	54.00	-5.57	AVG	150	146	

Note: Average measurement with peak detection at No.2&4

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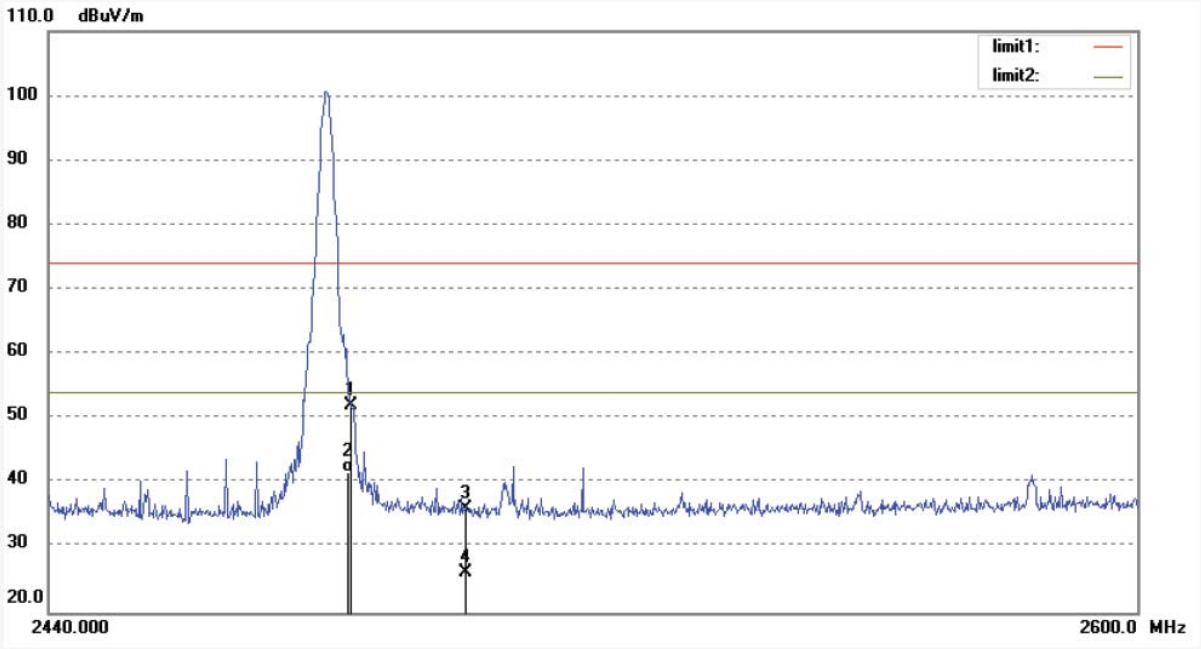
Job No.: JC #63
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Otto Turntable
Mode: TX 2480MHz(GFSK)
Model: CR6033A-GY
Manufacturer: TIMSEN INTERNATIONAL LIMITED

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 18/01/12/
Time: 9/25/19
Engineer Signature: JAMES
Distance: 3m

Note: Report NO.:ATE20172608



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	57.50	-5.51	51.99	74.00	-22.01	peak	150	24	
2	2483.500	47.26	-5.51	41.75	54.00	-12.25	AVG	150	24	
3	2500.000	41.53	-5.50	36.03	74.00	-37.97	peak	150	332	
4	2500.000	31.72	-5.50	26.22	74.00	-47.78	peak	150	332	

Note: Average measurement with peak detection at No.2&4

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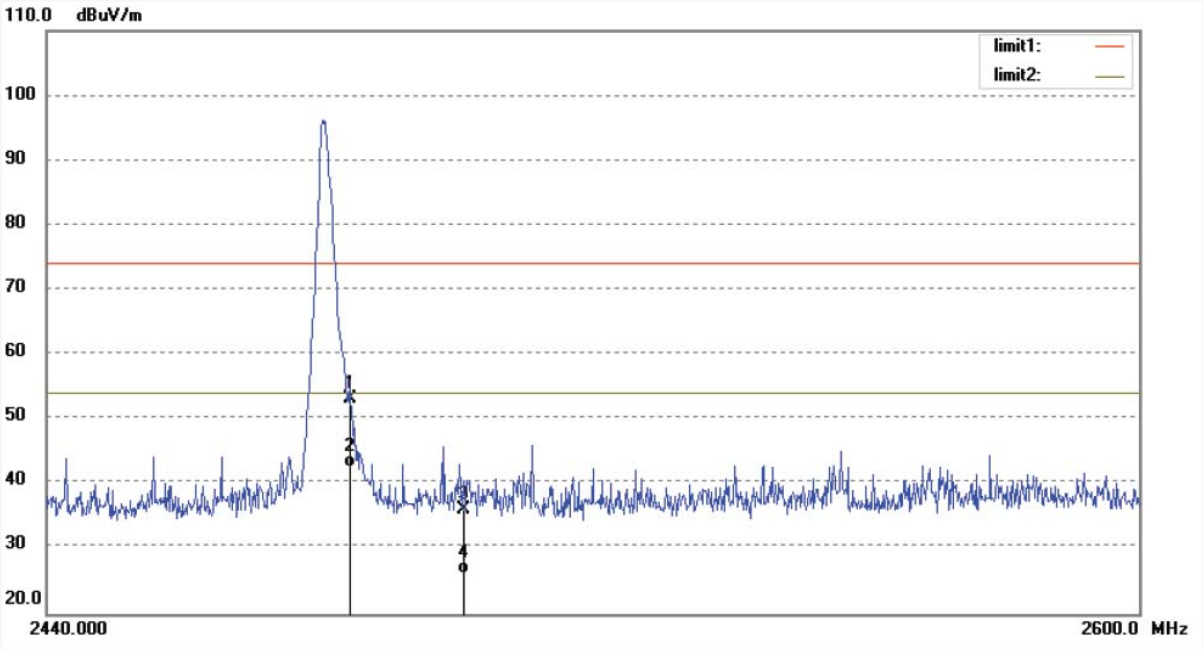
Job No.: JC #64
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Otto Turntable
Mode: TX 2480MHz(GFSK)
Model: CR6033A-GY
Manufacturer: TIMSEN INTERNATIONAL LIMITED

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 18/01/12/
Time: 9/38/50
Engineer Signature: JAMES
Distance: 3m

Note: Report NO.:ATE20172608



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	58.75	-5.51	53.24	74.00	-20.76	peak	150	241	
2	2483.500	48.02	-5.51	42.51	54.00	-11.49	AVG	150	241	
3	2500.000	41.57	-5.50	36.07	74.00	-37.93	peak	150	111	
4	2500.000	31.63	-5.50	26.13	54.00	-27.87	AVG	150	111	

Note: Average measurement with peak detection at No.2&4

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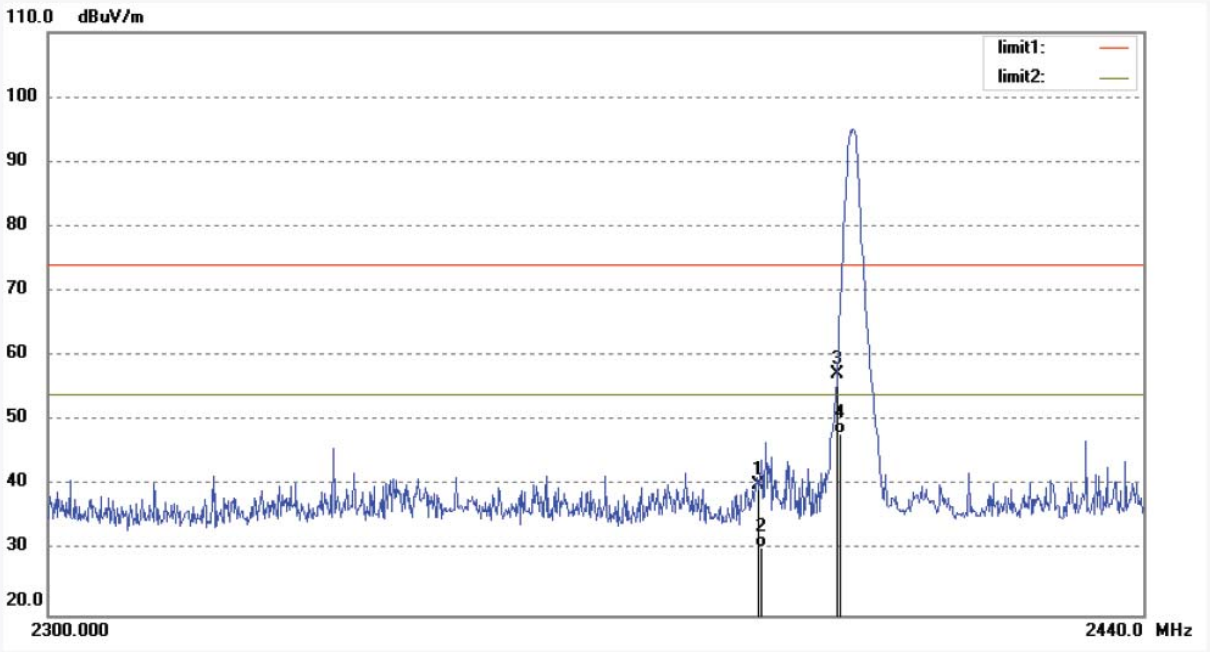
Job No.: JC #65
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Otto Turntable
Mode: TX 2402MHz(π/4 DQPSK)
Model: CR6033A-GY
Manufacturer: TIMSEN INTERNATIONAL LIMITED

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 18/01/12/
Time: 9/42/57
Engineer Signature: JAMES
Distance: 3m

Note: Report NO.:ATE20172608



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	46.04	-5.89	40.15	74.00	-33.85	peak	150	154	
2	2390.000	36.25	-5.89	30.36	54.00	-23.64	AVG	150	154	
3	2400.000	63.15	-5.80	57.35	74.00	-16.65	peak	150	222	
4	2400.000	53.74	-5.80	47.94	54.00	-6.06	AVG	150	222	

Note: Average measurement with peak detection at No.2&4

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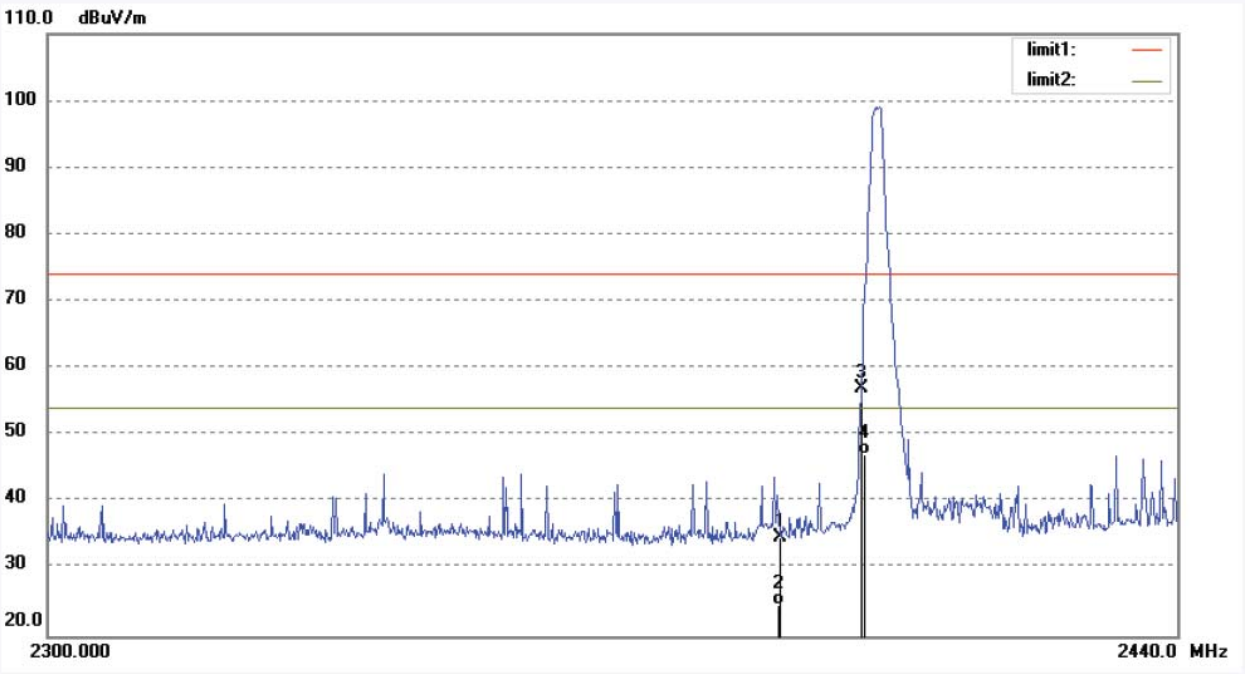
Job No.: JC #66
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Otto Turntable
Mode: TX 2402MHz(π/4 DQPSK)
Model: CR6033A-GY
Manufacturer: TIMSEN INTERNATIONAL LIMITED

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 18/01/12/
Time: 9/45/58
Engineer Signature: JAMES
Distance: 3m

Note: Report NO.:ATE20172608



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	40.65	-5.89	34.76	74.00	-39.24	peak	150	36	
2	2390.000	30.47	-5.89	24.58	54.00	-29.42	AVG	150	36	
3	2400.000	62.92	-5.80	57.12	74.00	-16.88	peak	150	113	
4	2400.000	52.94	-5.80	47.14	54.00	-6.86	AVG	150	113	

Note: Average measurement with peak detection at No.2&4

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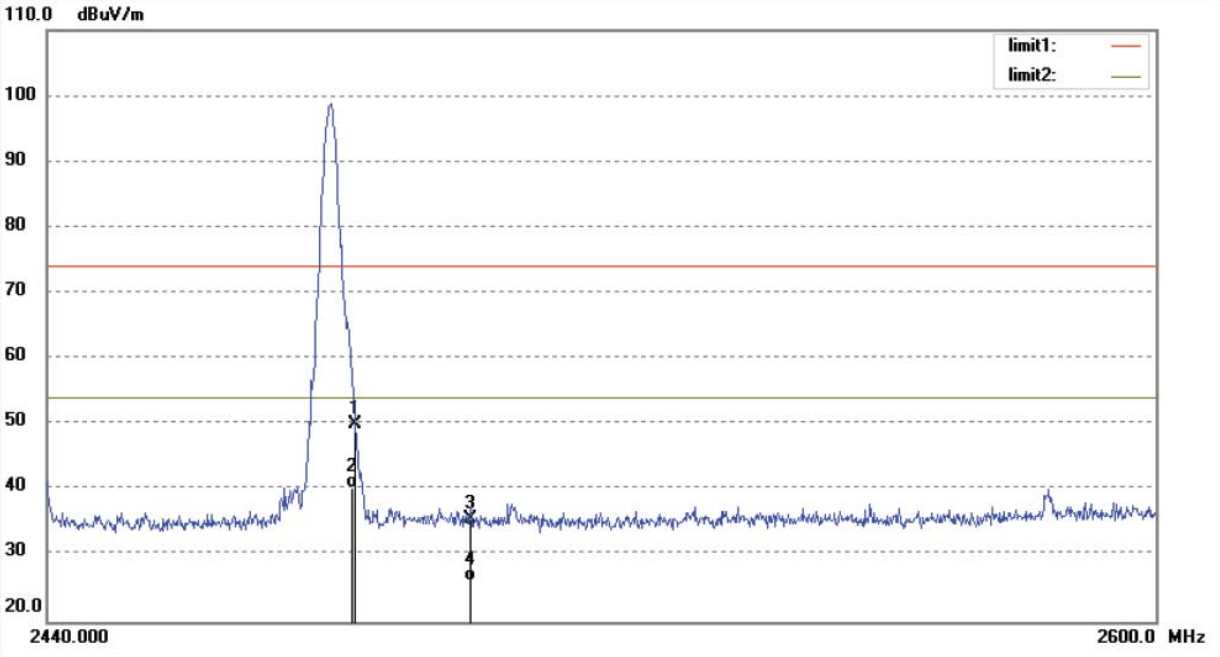
Job No.: JC #67
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Otto Turntable
Mode: TX 2480MHz(π/4 DQPSK)
Model: CR6033A-GY
Manufacturer: TIMSEN INTERNATIONAL LIMITED

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 18/01/12/
Time: 9/49/54
Engineer Signature: JAMES
Distance: 3m

Note: Report NO.:ATE20172608



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	55.46	-5.51	49.95	74.00	-24.05	peak	150	158	
2	2483.500	45.78	-5.51	40.27	54.00	-13.73	AVG	150	158	
3	2500.000	41.18	-5.50	35.68	74.00	-38.32	peak	150	246	
4	2500.000	31.64	-5.50	26.14	54.00	-27.86	AVG	150	246	

Note: Average measurement with peak detection at No.2&4

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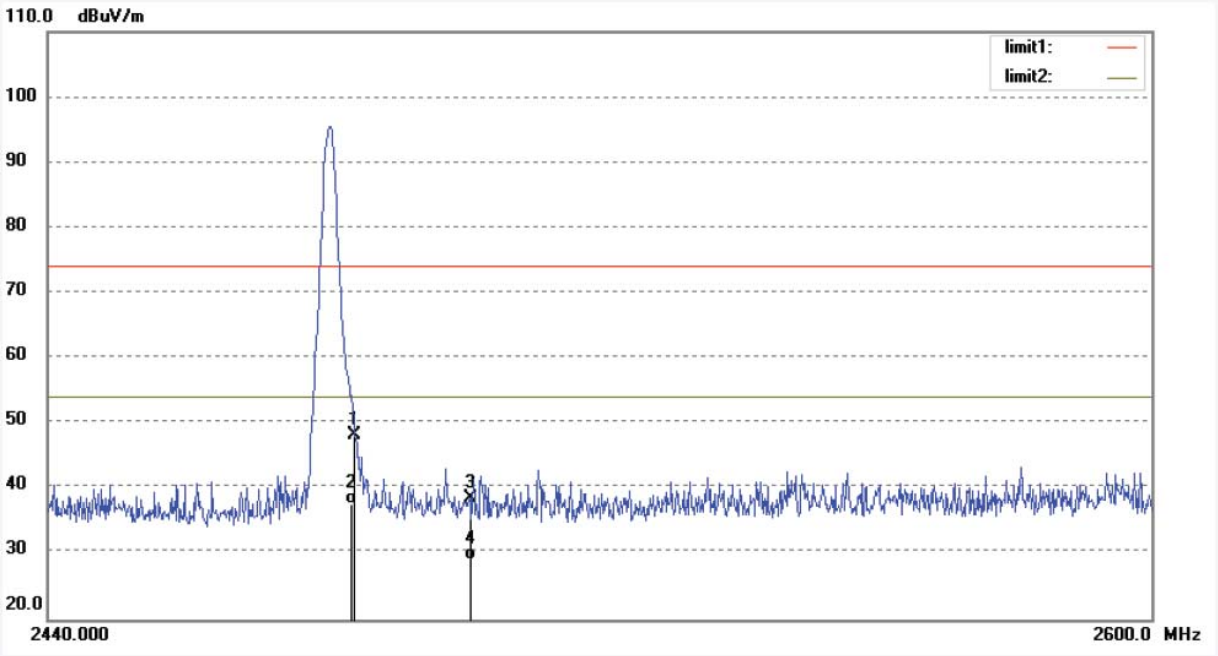
Job No.: JC #68
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Otto Turntable
Mode: TX 2480MHz(π/4 DQPSK)
Model: CR6033A-GY
Manufacturer: TIMSEN INTERNATIONAL LIMITED

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 18/01/12/
Time: 9/51/49
Engineer Signature: JAMES
Distance: 3m

Note: Report NO.:ATE20172608



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	53.77	-5.51	48.26	74.00	-25.74	peak	150	163	
2	2483.500	43.26	-5.51	37.75	54.00	-16.25	AVG	150	163	
3	2500.000	44.15	-5.50	38.65	74.00	-35.35	peak	150	115	
4	2500.000	34.67	-5.50	29.17	54.00	-24.83	AVG	150	115	

Note: Average measurement with peak detection at No.2&4

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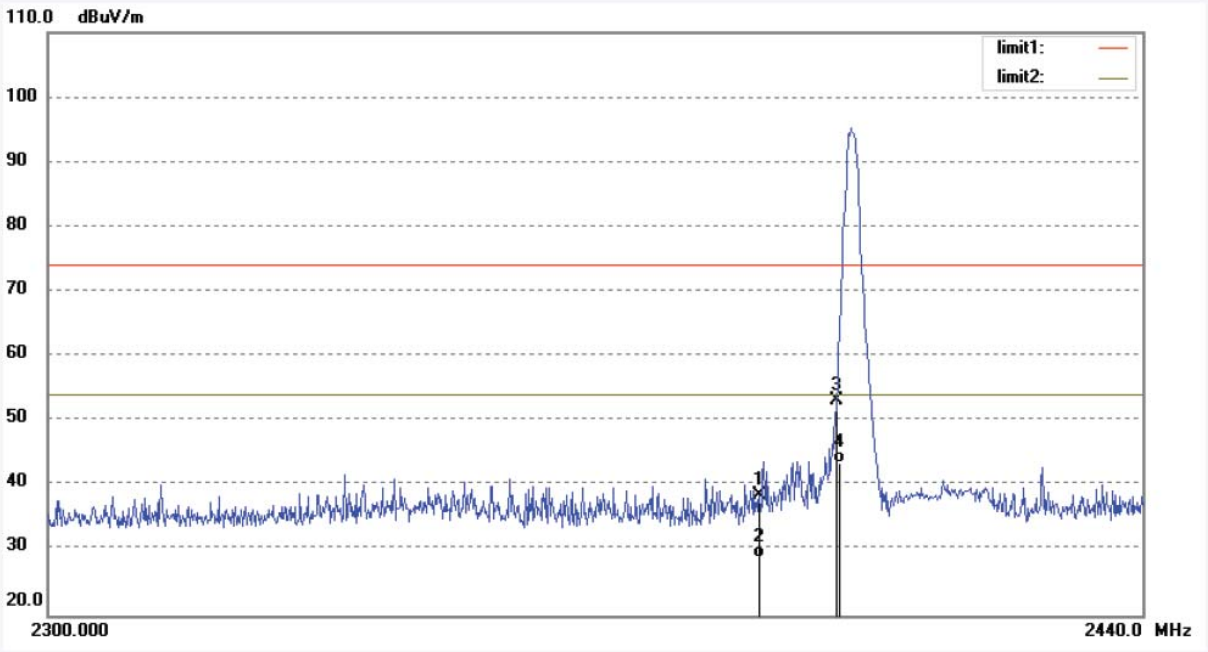
Job No.: JC #69
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Otto Turntable
Mode: TX 2402MHz(8DPSK)
Model: CR6033A-GY
Manufacturer: TIMSEN INTERNATIONAL LIMITED

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 18/01/12/
Time: 9/55/07
Engineer Signature: JAMES
Distance: 3m

Note: Report NO.:ATE20172608



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	44.53	-5.89	38.64	74.00	-35.36	peak	150	125	
2	2390.000	34.78	-5.89	28.89	54.00	-25.11	AVG	150	125	
3	2400.000	59.06	-5.80	53.26	74.00	-20.74	peak	150	246	
4	2400.000	49.33	-5.80	43.53	54.00	-10.47	AVG	150	246	

Note: Average measurement with peak detection at No.2&4

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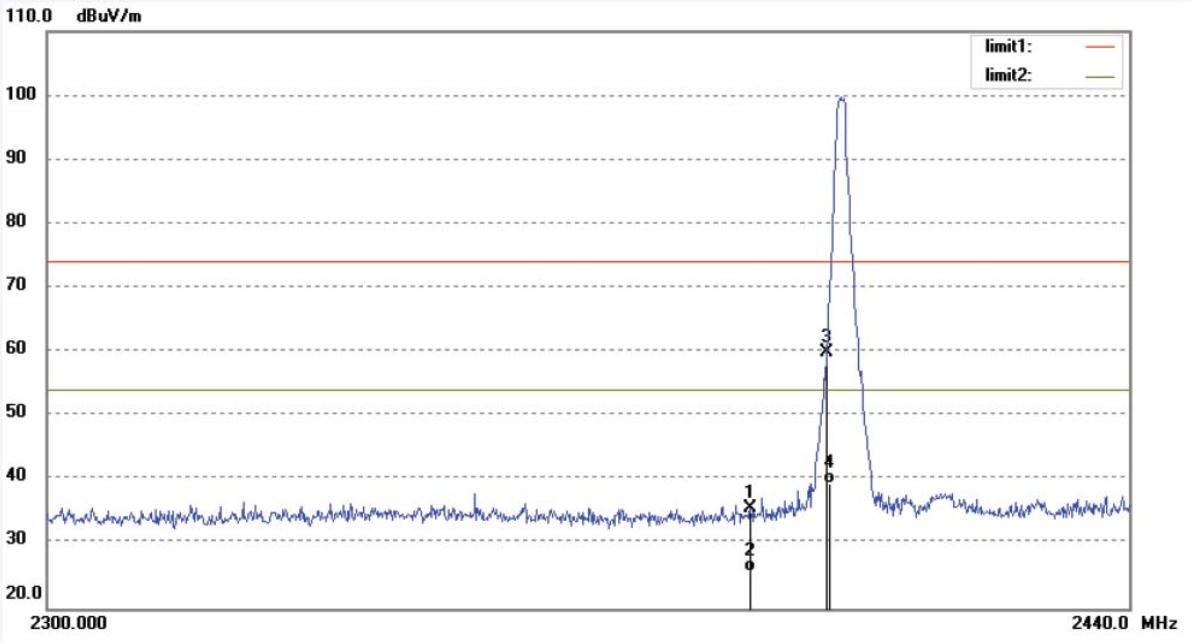
Job No.: JC #70
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Otto Turntable
Mode: TX 2402MHz(8DPSK)
Model: CR6033A-GY
Manufacturer: TIMSEN INTERNATIONAL LIMITED

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 18/01/12/
Time: 9/57/00
Engineer Signature: JAMES
Distance: 3m

Note: Report NO.:ATE20172608



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	41.44	-5.89	35.55	74.00	-38.45	peak	150	106	
2	2390.000	31.58	-5.89	25.69	54.00	-28.31	AVG	150	106	
3	2400.000	65.72	-5.80	59.92	74.00	-14.08	peak	150	134	
4	2400.000	45.21	-5.80	39.41	54.00	-14.59	AVG	150	134	

Note: Average measurement with peak detection at No.2&4

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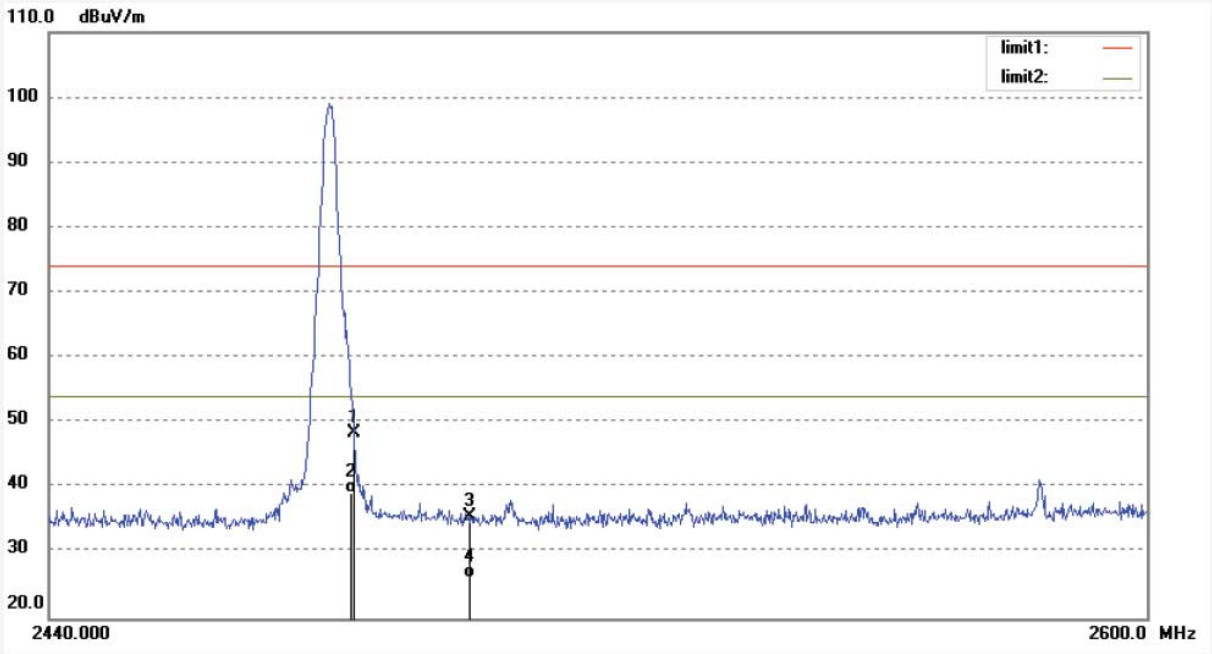
Job No.: JC #71
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Otto Turntable
Mode: TX 2480MHz(8DPSK)
Model: CR6033A-GY
Manufacturer: TIMSEN INTERNATIONAL LIMITED

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 18/01/12/
Time: 9/59/51
Engineer Signature: JAMES
Distance: 3m

Note: Report NO.:ATE20172608



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	54.06	-5.51	48.55	74.00	-25.45	peak	150	222	
2	2483.500	44.71	-5.51	39.20	54.00	-14.80	AVG	150	222	
3	2500.000	41.06	-5.50	35.56	74.00	-38.44	peak	150	34	
4	2500.000	31.69	-5.50	26.19	54.00	-27.81	AVG	150	34	

Note: Average measurement with peak detection at No.2&4

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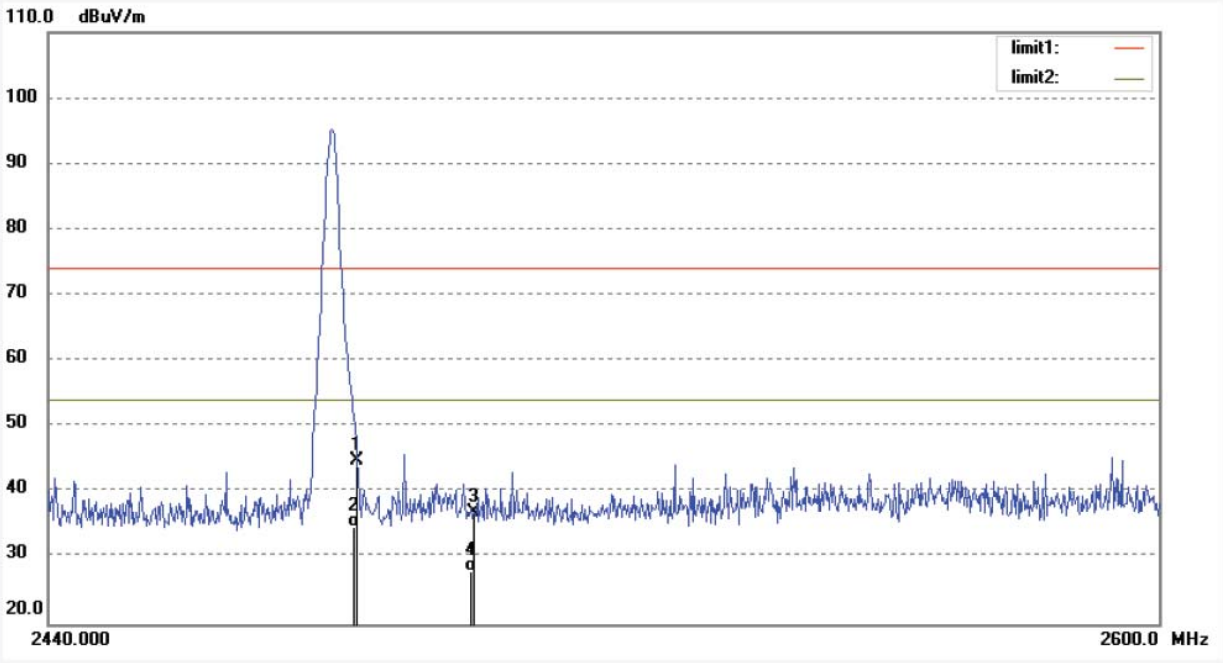
Job No.: JC #72	Polarization: Vertical
Standard: FCC PK	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 18/01/12/
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 10/02/08
EUT: Otto Turntable	Engineer Signature: JAMES
Mode: TX 2480MHz(8DPSK)	Distance: 3m
Model: CR6033A-GY	
Manufacturer: TIMSEN INTERNATIONAL LIMITED	

Note: Report NO.:ATE20172608



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	50.31	-5.51	44.80	74.00	-29.20	peak	150	254	
2	2483.500	40.25	-5.51	34.74	54.00	-19.26	AVG	150	254	
3	2500.000	42.58	-5.50	37.08	74.00	-36.92	peak	150	126	
4	2500.000	33.48	-5.50	27.98	54.00	-26.02	AVG	150	126	

Note: Average measurement with peak detection at No.2&4

Hopping mode

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
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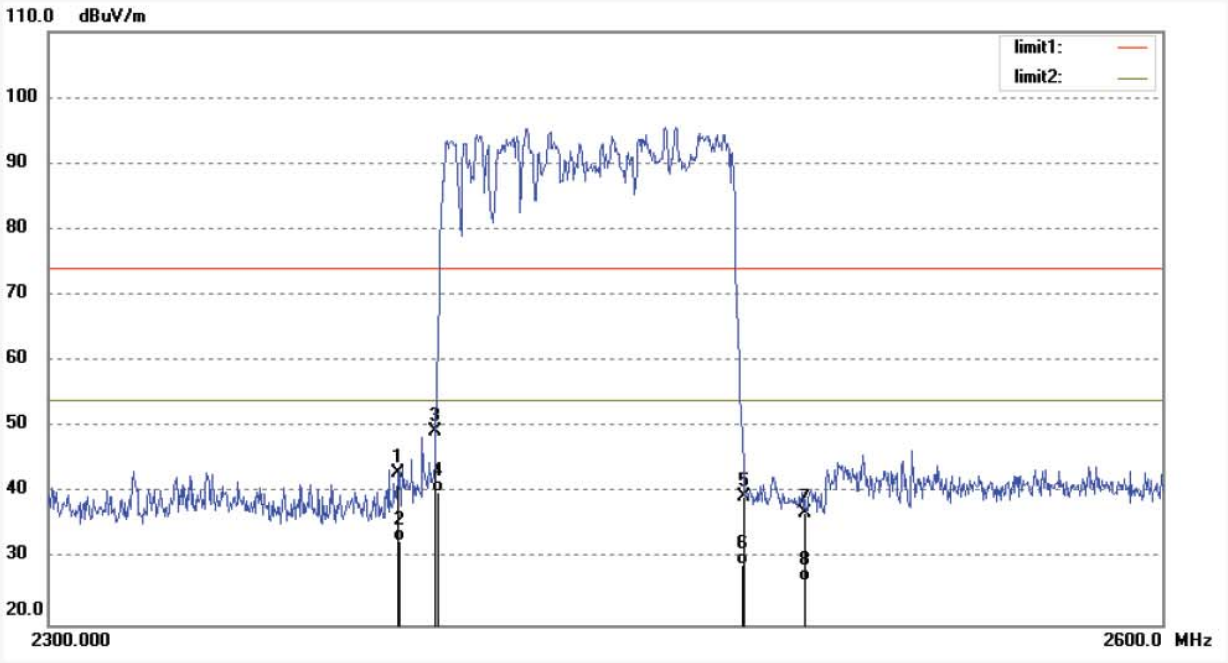
Site: 1# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: JC #73
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Otto Turntable
Mode: HOPPONG(GFSK)
Model: CR6033A-GY
Manufacturer: TIMSEN INTERNATIONAL LIMITED

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 18/01/12/
Time: 10/09/04
Engineer Signature: JAMES
Distance: 3m

Note: Report NO.:ATE20172608



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	48.95	-5.89	43.06	74.00	-30.94	peak	150	121	
2	2390.000	38.64	-5.89	32.75	54.00	-21.25	AVG	150	121	
3	2400.000	55.07	-5.80	49.27	74.00	-24.73	peak	150	264	
4	2400.000	45.85	-5.80	40.05	54.00	-13.95	AVG	150	264	
5	2483.500	44.96	-5.51	39.45	74.00	-34.55	peak	150	114	
6	2483.500	34.57	-5.51	29.06	54.00	-24.94	AVG	150	114	
7	2500.000	42.46	-5.50	36.96	74.00	-37.04	peak	150	331	
8	2500.000	32.18	-5.50	26.68	54.00	-27.32	AVG	150	331	

Note: Average measurement with peak detection at No.2&4&6&8

ACCURATE TECHNOLOGY CO., LTD.
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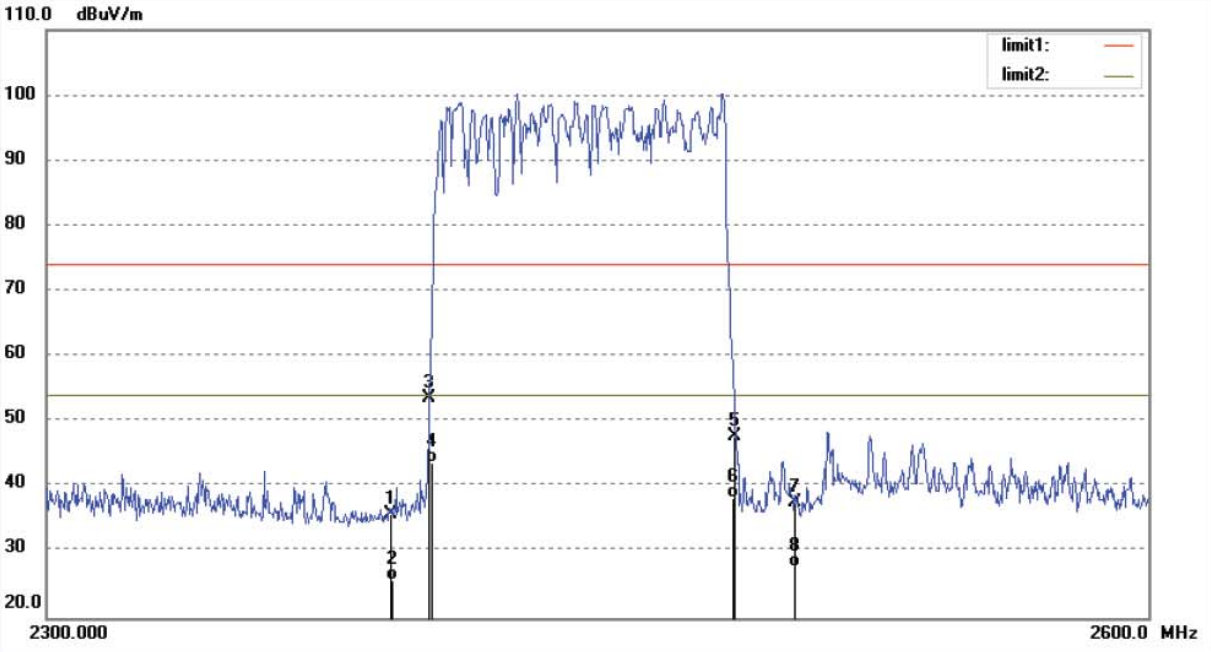
Site: 1# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: JC #74
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Otto Turntable
Mode: HOPPONG(GFSK)
Model: CR6033A-GY
Manufacturer: TIMSEN INTERNATIONAL LIMITED

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 18/01/12/
Time: 10/15/13
Engineer Signature: JAMES
Distance: 3m

Note: Report NO.:ATE20172608



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	41.75	-5.89	35.86	74.00	-38.14	peak	150	10	
2	2390.000	31.59	-5.89	25.70	54.00	-28.30	AVG	150	10	
3	2400.000	59.44	-5.80	53.64	74.00	-20.36	peak	150	36	
4	2400.000	49.61	-5.80	43.81	54.00	-10.19	AVG	150	36	
5	2483.500	53.29	-5.51	47.78	74.00	-26.22	peak	150	111	
6	2483.500	43.87	-5.51	38.36	54.00	-15.64	AVG	150	111	
7	2500.000	43.23	-5.50	37.73	74.00	-36.27	peak	150	36	
8	2500.000	33.26	-5.50	27.76	54.00	-26.24	AVG	150	36	

Note: Average measurement with peak detection at No.2&4&6&8

ACCURATE TECHNOLOGY CO., LTD.
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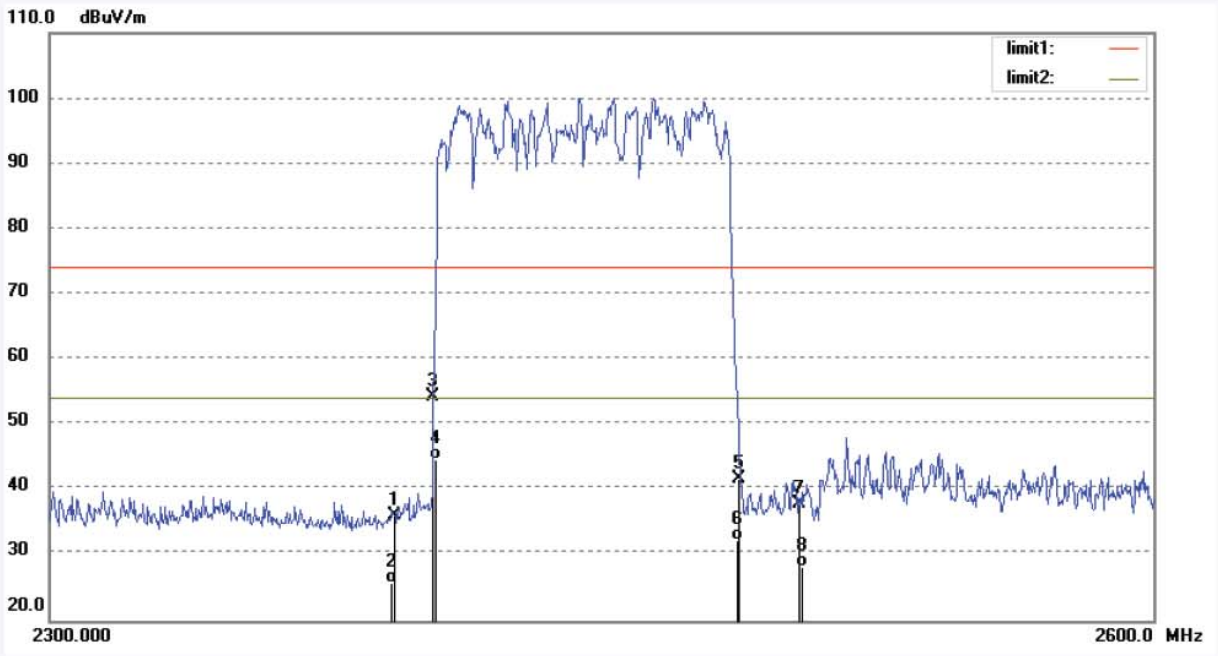
Site: 1# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: JC #75
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Otto Turntable
Mode: HOPPONG(π/4 DQPSK)
Model: CR6033A-GY
Manufacturer: TIMSEN INTERNATIONAL LIMITED

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 18/01/12/
Time: 10/20/23
Engineer Signature: JAMES
Distance: 3m

Note: Report NO.:ATE20172608



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	41.94	-5.89	36.05	74.00	-37.95	peak	150	102	
2	2390.000	31.59	-5.89	25.70	54.00	-28.30	AVG	150	102	
3	2400.000	60.15	-5.80	54.35	74.00	-19.65	peak	150	111	
4	2400.000	50.43	-5.80	44.63	54.00	-9.37	AVG	150	111	
5	2483.500	47.27	-5.51	41.76	74.00	-32.24	peak	150	146	
6	2483.500	37.84	-5.51	32.33	54.00	-21.67	AVG	150	146	
7	2500.000	43.47	-5.50	37.97	74.00	-36.03	peak	150	132	
8	2500.000	33.68	-5.50	28.18	54.00	-25.82	AVG	150	132	

Note: Average measurement with peak detection at No.2&4&6&8

ACCURATE TECHNOLOGY CO., LTD.
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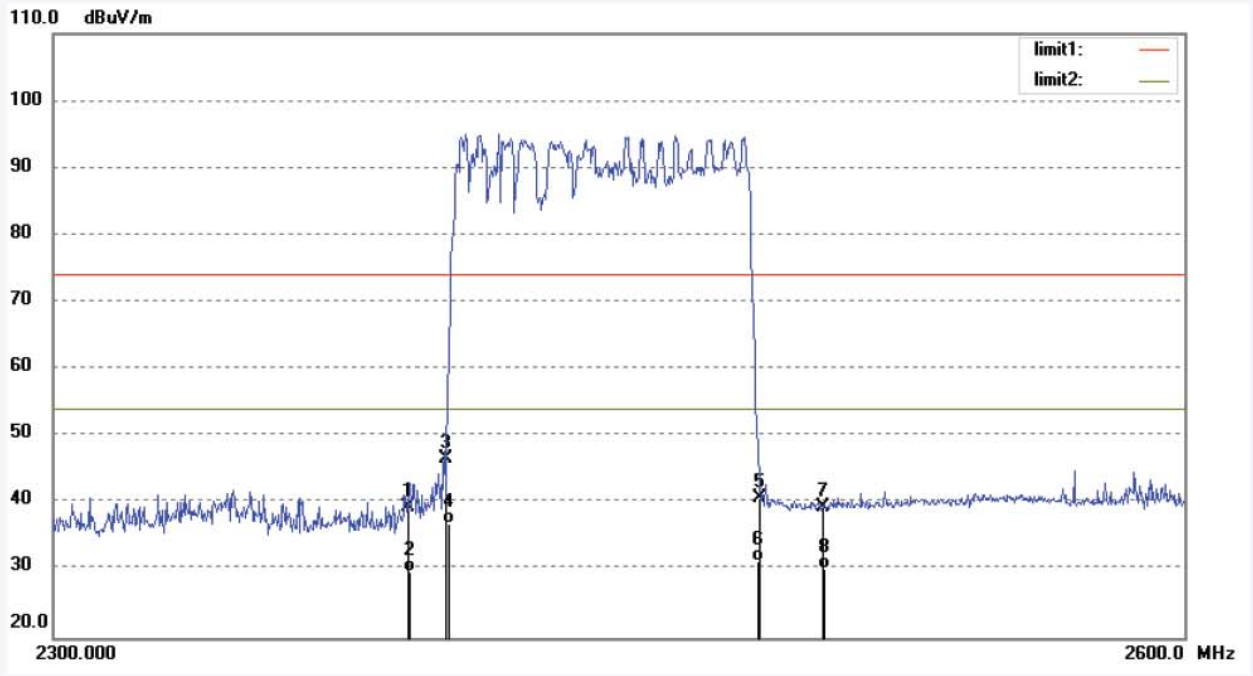
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 1# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: JC #76
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Otto Turntable
Mode: HOPPONG(π/4 DQPSK)
Model: CR6033A-GY
Manufacturer: TIMSEN INTERNATIONAL LIMITED

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 18/01/12/
Time: 10/26/51
Engineer Signature: JAMES
Distance: 3m

Note: Report NO.:ATE20172608



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	45.26	-5.89	39.37	74.00	-34.63	peak	150	25	
2	2390.000	35.62	-5.89	29.73	54.00	-24.27	AVG	150	25	
3	2400.000	52.57	-5.80	46.77	74.00	-27.23	peak	150	34	
4	2400.000	42.68	-5.80	36.88	54.00	-17.12	AVG	150	34	
5	2483.500	46.31	-5.51	40.80	74.00	-33.20	peak	150	111	
6	2483.500	36.94	-5.51	31.43	54.00	-22.57	AVG	150	111	
7	2500.000	45.03	-5.50	39.53	74.00	-34.47	peak	150	332	
8	2500.000	35.66	-5.50	30.16	54.00	-23.84	AVG	150	332	

Note: Average measurement with peak detection at No.2&4&6&8

ACCURATE TECHNOLOGY CO., LTD.
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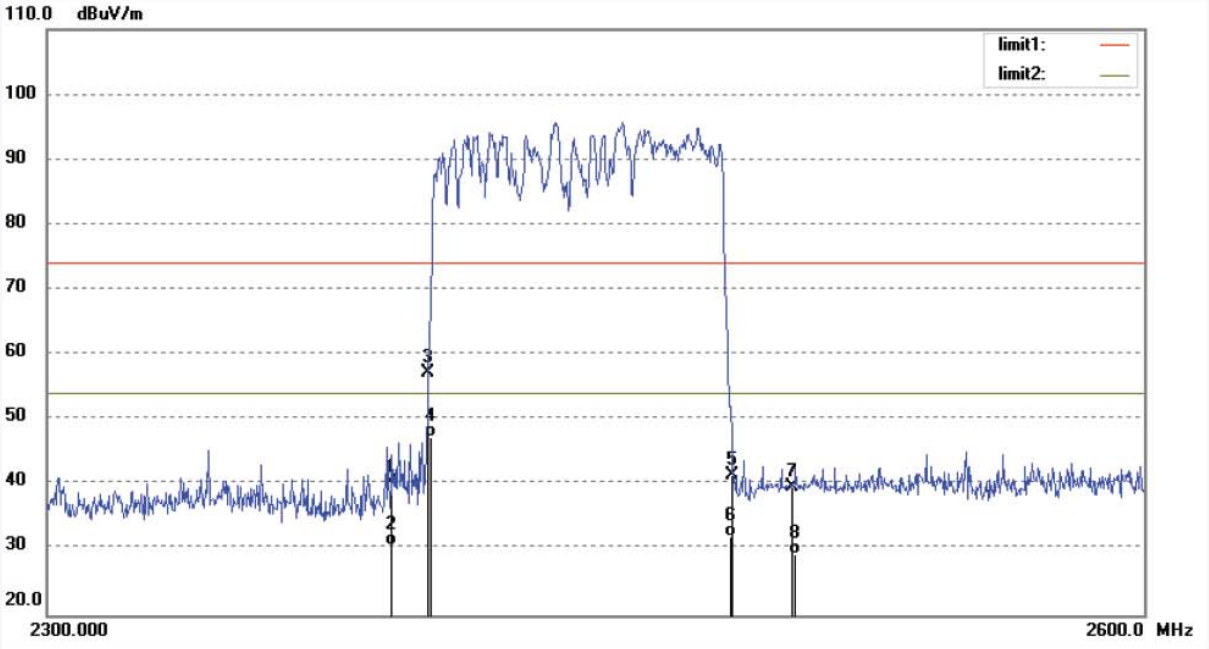
Site: 1# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: JC #77
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Otto Turntable
Mode: HOPPONG(8DPSK)
Model: CR6033A-GY
Manufacturer: TIMSEN INTERNATIONAL LIMITED

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 18/01/12/
Time: 10/37/02
Engineer Signature: JAMES
Distance: 3m

Note: Report NO.:ATE20172608



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	46.33	-5.89	40.44	74.00	-33.56	peak	150	241	
2	2390.000	36.57	-5.89	30.68	54.00	-23.32	AVG	150	241	
3	2400.000	63.11	-5.80	57.31	74.00	-16.69	peak	150	311	
4	2400.000	53.11	-5.80	47.31	54.00	-6.69	AVG	150	311	
5	2483.500	47.01	-5.51	41.50	74.00	-32.50	peak	150	146	
6	2483.500	37.59	-5.51	32.08	54.00	-21.92	AVG	150	146	
7	2500.000	45.26	-5.50	39.76	74.00	-34.24	peak	150	164	
8	2500.000	34.87	-5.50	29.37	54.00	-24.63	AVG	150	164	

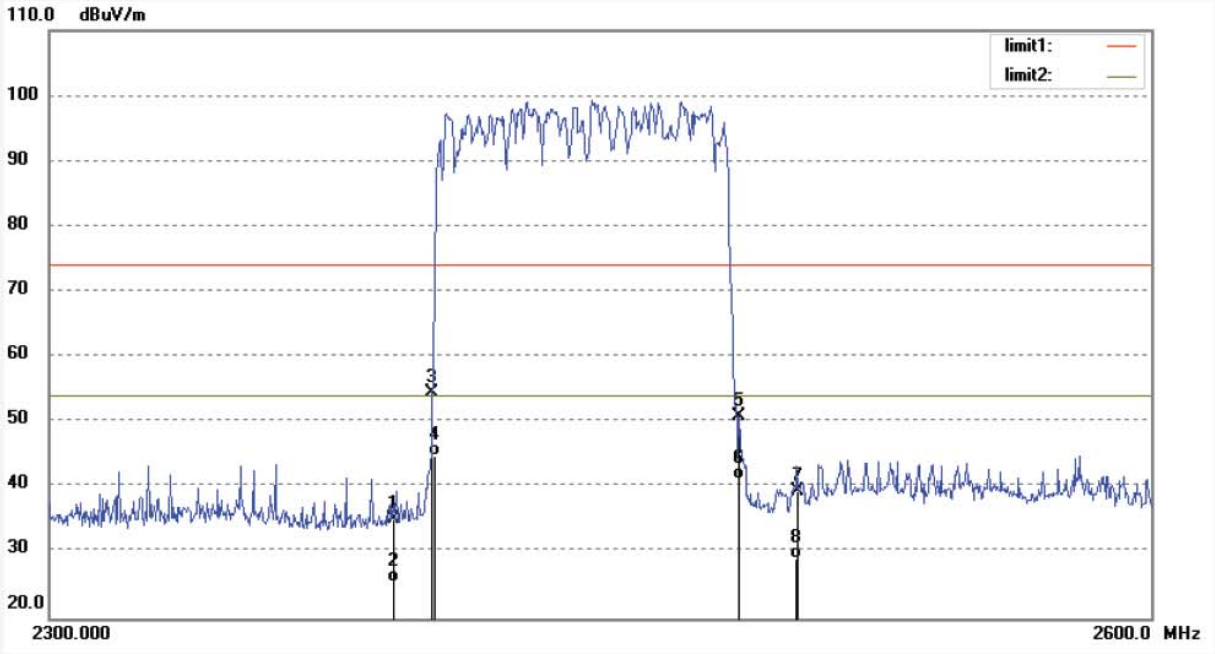
Note: Average measurement with peak detection at No.2&4&6&8

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 1# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: JC #78
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Otto Turntable
Mode: HOPPONG(8DPSK)
Model: CR6033A-GY
Manufacturer: TIMSEN INTERNATIONAL LIMITED

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 18/01/12/
Time: 10/41/15
Engineer Signature: JAMES
Distance: 3m

Note: Report NO.:ATE20172608



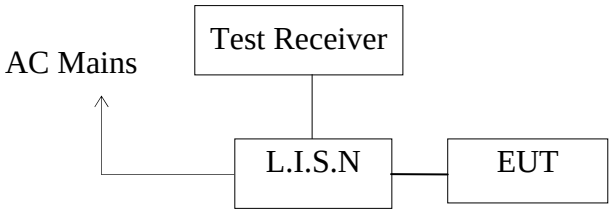
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	41.10	-5.89	35.21	74.00	-38.79	peak	150	113	
2	2390.000	31.42	-5.89	25.53	54.00	-28.47	AVG	150	113	
3	2400.000	60.32	-5.80	54.52	74.00	-19.48	peak	150	36	
4	2400.000	50.68	-5.80	44.88	54.00	-9.12	AVG	150	36	
5	2483.500	56.50	-5.51	50.99	74.00	-23.01	peak	150	120	
6	2483.500	46.77	-5.51	41.26	54.00	-12.74	AVG	150	120	
7	2500.000	44.94	-5.50	39.44	74.00	-34.56	peak	150	46	
8	2500.000	34.51	-5.50	29.01	54.00	-24.99	AVG	150	46	

Note: Average measurement with peak detection at No.2&4&6&8

12. AC POWER LINE CONDUCTED EMISSION FOR FCC PART 15 SECTION 15.207(A)

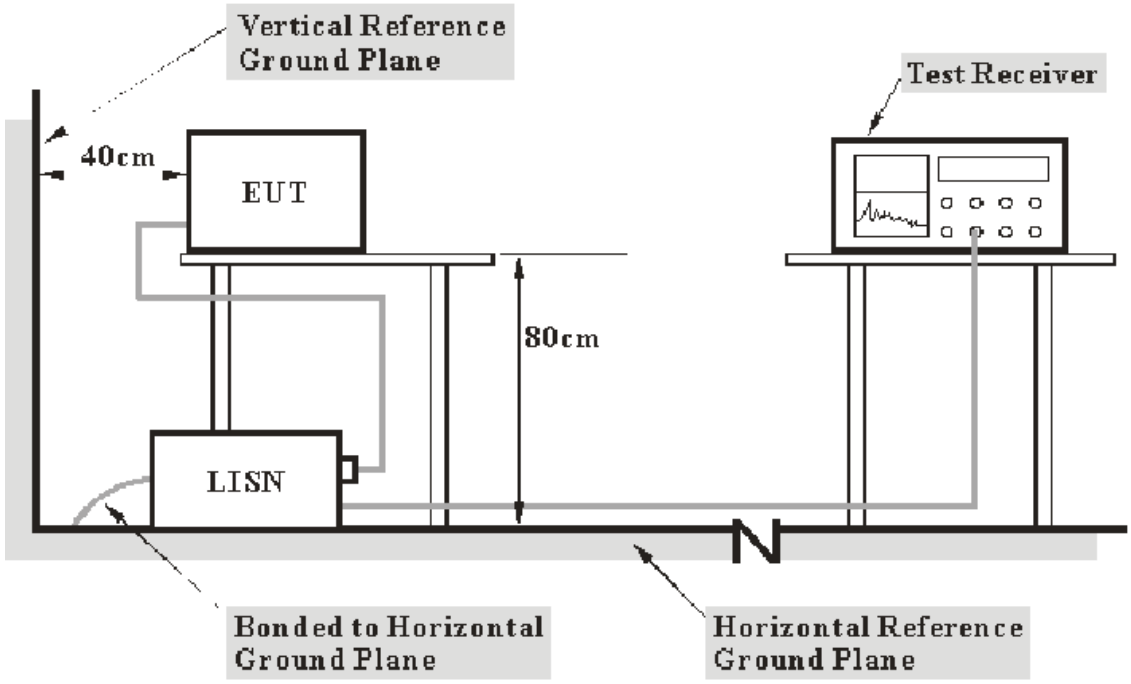
12.1. Block Diagram of Test Setup

12.1.1. Block diagram of connection between the EUT and simulators



(EUT: Otto Turntable)

12.1.2. Test System Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

12.2.Power Line Conducted Emission Measurement Limits

Frequency (MHz)	Limit dB(μV)	
	Quasi-peak Level	Average Level
0.15 - 0.50	66.0 – 56.0 *	56.0 – 46.0 *
0.50 - 5.00	56.0	46.0
5.00 - 30.00	60.0	50.0
NOTE1: The lower limit shall apply at the transition frequencies. NOTE2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.		

12.3.Configuration of EUT on Measurement

The equipments are installed on Power Line Conducted Emission Measurement to meet the commission requirement and operating regulations in a manner, which tends to maximize its emission characteristics in a normal application.

12.4.Operating Condition of EUT

12.4.1.Setup the EUT and simulator as shown as Section 12.1.

12.4.2.Turn on the power of all equipment.

12.4.3.Let the EUT work in test mode and measure it.

12.5.Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2013 on Conducted Emission Measurement.
The bandwidth of test receiver (R & S ESCS30) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

12.6.Data Sample

Frequency (MHz)	Transducer value (dB)	QuasiPeak Level (dBμV)	Average Level (dBμV)	QuasiPeak Limit (dBμV)	Average Limit (dBμV)	QuasiPeak Margin (dB)	Average Margin (dB)	Remark (Pass/Fail)
10.51000	11.6	42.60	27.90	60.0	50.0	-17.4	-22.1	Pass

Frequency(MHz) = Emission frequency in MHz
Transducer value(dB) = Insertion loss of LISN + Cable Loss
Level(dBμV) = Quasi-peak Reading/Average Reading + Transducer value
Limit (dBμV) = Limit stated in standard
Margin = Limit (dBμV) - Level (dBμV)

Calculation Formula:
Margin = Limit (dBμV) - Level (dBμV)

12.7.Power Line Conducted Emission Measurement Results

PASS.

The frequency range from 150kHz to 30MHz is checked.

Test mode : BT communicating (AC 120V/60Hz)
EUT mode : CR6033A-GY

MEASUREMENT RESULT: "HP-2608-01_fin"

2018-1-2 16:42

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.348000	42.10	10.9	59	16.9	QP	L1	GND
0.870000	35.40	11.1	56	20.6	QP	L1	GND
2.076000	27.80	11.3	56	28.2	QP	L1	GND
5.766000	19.40	11.5	60	40.6	QP	L1	GND
20.161500	10.70	11.7	60	49.3	QP	L1	GND

MEASUREMENT RESULT: "HP-2608-01_fin2"

2018-1-2 16:42

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.289500	26.60	10.9	51	23.9	AV	L1	GND
0.775500	31.60	11.1	46	14.4	AV	L1	GND
1.207500	26.90	11.2	46	19.1	AV	L1	GND
2.053500	22.60	11.3	46	23.4	AV	L1	GND
6.180000	14.00	11.5	50	36.0	AV	L1	GND
24.000000	9.30	11.7	50	40.7	AV	L1	GND

MEASUREMENT RESULT: "HP-2608-02_fin"

2018-1-2 16:47

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.231000	44.70	10.9	62	17.7	QP	N	GND
0.402000	37.80	11.0	58	20.0	QP	N	GND
0.906000	33.30	11.1	56	22.7	QP	N	GND
2.427000	25.60	11.3	56	30.4	QP	N	GND
6.135000	19.50	11.5	60	40.5	QP	N	GND
28.810500	11.20	11.8	60	48.8	QP	N	GND

MEASUREMENT RESULT: "HP-2608-02_fin2"

2018-1-2 16:47

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.321000	25.70	10.9	50	24.0	AV	N	GND
0.775500	31.60	11.1	46	14.4	AV	N	GND
1.383000	26.00	11.2	46	20.0	AV	N	GND
2.040000	22.90	11.3	46	23.1	AV	N	GND
5.275500	14.20	11.4	50	35.8	AV	N	GND
24.000000	10.70	11.7	50	39.3	AV	N	GND

Emissions attenuated more than 20 dB below the permissible value are not reported.

The spectral diagrams are attached as below.

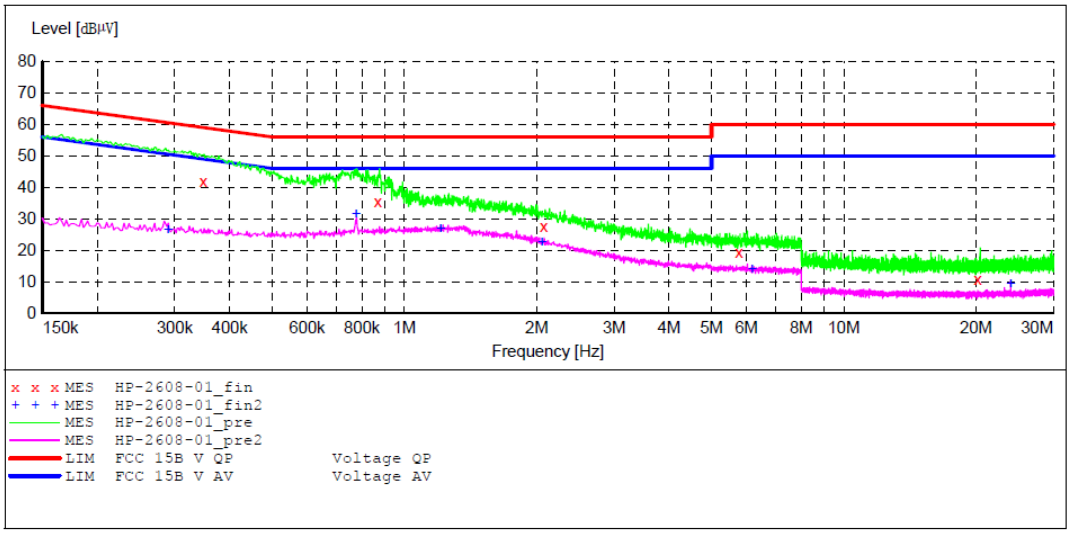
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

```
EUT:                  Otto Turntable  M/N:CR6033A-GY
Manufacturer:         TIMSEN INTERNATIONAL LIMITED
Operating Condition:  BT communicating
Test Site:            2#Shielding Room
Operator:             JAMES
Test Specification:   L   120V/60Hz
Comment:              Report NO.:ATE20172608
Start of Test:        2018-1-2 / 16:39:11
```

SCAN TABLE: "V 150K-30MHz fin"

```
  Short Description:              _SUB_STD_VTERM2 1.70
  Start      Stop       Step      Detector  Meas.     IF      Transducer
  Frequency  Frequency  Width               Time      Bandw.
  150.0 kHz  30.0 MHz   4.5 kHz   QuasiPeak 1.0 s     9 kHz   NSLK8126 2008
                                  Average
```



MEASUREMENT RESULT: "HP-2608-01_fin"

2018-1-2 16:42

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.348000	42.10	10.9	59	16.9	QP	L1	GND
0.870000	35.40	11.1	56	20.6	QP	L1	GND
2.076000	27.80	11.3	56	28.2	QP	L1	GND
5.766000	19.40	11.5	60	40.6	QP	L1	GND
20.161500	10.70	11.7	60	49.3	QP	L1	GND

MEASUREMENT RESULT: "HP-2608-01_fin2"

2018-1-2 16:42

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.289500	26.60	10.9	51	23.9	AV	L1	GND
0.775500	31.60	11.1	46	14.4	AV	L1	GND
1.207500	26.90	11.2	46	19.1	AV	L1	GND
2.053500	22.60	11.3	46	23.4	AV	L1	GND
6.180000	14.00	11.5	50	36.0	AV	L1	GND
24.000000	9.30	11.7	50	40.7	AV	L1	GND

ACCURATE TECHNOLOGY CO.,LTD

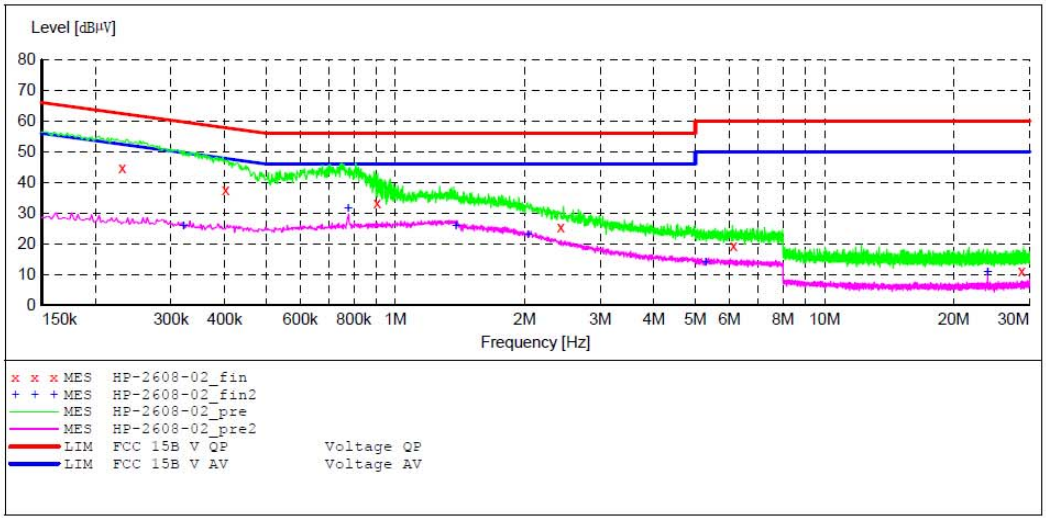
CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: Otto Turntable M/N:CR6033A-GY
Manufacturer: TIMSEN INTERNATIONAL LIMITED
Operating Condition: BT communicating
Test Site: 2#Shielding Room
Operator: JAMES
Test Specification: N 120V/60Hz
Comment: Report NO.:ATE20172608
Start of Test: 2018-1-2 / 16:43:20

SCAN TABLE: "V 150K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
150.0 kHz	30.0 MHz	4.5 kHz	QuasiPeak Average	1.0 s	9 kHz	NSLK8126 2008



MEASUREMENT RESULT: "HP-2608-02_fin"

2018-1-2 16:47

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.231000	44.70	10.9	62	17.7	QP	N	GND
0.402000	37.80	11.0	58	20.0	QP	N	GND
0.906000	33.30	11.1	56	22.7	QP	N	GND
2.427000	25.60	11.3	56	30.4	QP	N	GND
6.135000	19.50	11.5	60	40.5	QP	N	GND
28.810500	11.20	11.8	60	48.8	QP	N	GND

MEASUREMENT RESULT: "HP-2608-02_fin2"

2018-1-2 16:47

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.321000	25.70	10.9	50	24.0	AV	N	GND
0.775500	31.60	11.1	46	14.4	AV	N	GND
1.383000	26.00	11.2	46	20.0	AV	N	GND
2.040000	22.90	11.3	46	23.1	AV	N	GND
5.275500	14.20	11.4	50	35.8	AV	N	GND
24.000000	10.70	11.7	50	39.3	AV	N	GND

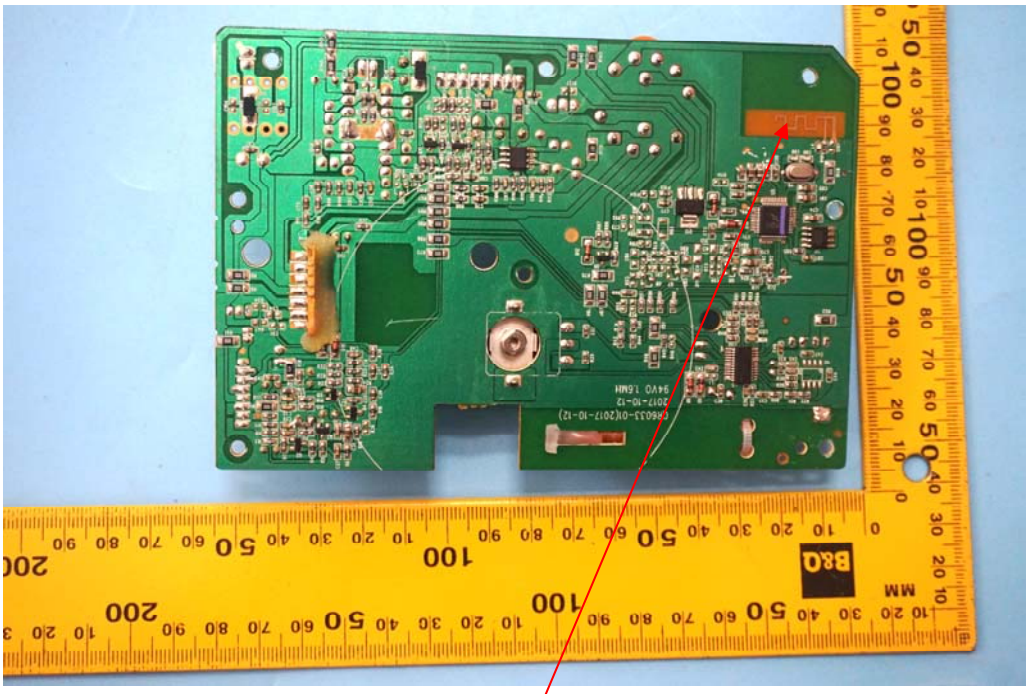
13. ANTENNA REQUIREMENT

13.1. The Requirement

According to Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

13.2. Antenna Construction

Device is equipped with permanent attached antenna, which isn't displaced by other antenna. The Max Antenna gain of EUT is 2dBi. Therefore, the equipment complies with the antenna requirement of Section 15.203.



******* End of Test Report *******