

FCC RADIO TEST REPORT FCC ID: 2AEBGJLP-RF-H

Product Name:	Laser Presenter	
Trademark:	N/A	
Model Number:	JLP-RF-H	
Prepared For :	Chengyu science and Technology (shengzhen) Company Limited	
Address :	3F,Buliding 2,No.119,Xin'er Rd.,Xin'er Community,Xinqiao,Shajing Street,Ba 'an District,Shenzhen,Guangdong,China	
Prepared By :	Shenzhen BCTC Technology Co., Ltd.	
Address :	No.101,Yousong Road,Longhua New District, Shenzhen,China	
Test Date:	Feb. 27 - Mar. 02, 2015	
Date of	Mar. 02, 2015	
Report No.:	BCTC-150205625R	

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VERIFICATION OF COMPLIANCE

Applicant:	Chengyu science and Technology (shengzhen) Company Limited
Address	3F,Buliding 2,No.119,Xin'er Rd.,Xin'er Community,Xinqiao,Shajing Street,
Addiess	Bao'an District,Shenzhen,Guangdong,China
Manufacturer Name: Chengyu science and Technology (shengzhen) Company Limited	
Address:	3F,Buliding 2,No.119,Xin'er Rd.,Xin'er Community,Xinqiao,Shajing Street,
Address.	Bao'an District,Shenzhen,Guangdong,China
Product Description:	Laser Presenter
Brand Name:	N/A
Model Name:	JLP-RF-H
Model difference:	N/A
Test procedure	ANSI C63.4:2003
Standards	FCC PART15.249

Prepared by(Engineer):

Frie Yang Sophie w

Reviewer(Quality Manager):

Approved & Authorized Signer(Manager):



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1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15, Subpart C (15.249)					
Standard Section	Test Item	Judgment	Remark		
15.207	Conducted Emission	N/A			
15.203	Antenna Requirement	Pass			
15.249	Radiated Spurious Emission	Pass			
15.249	Occupied Bandwidth	Pass			
15.205	Band Edge Emission	Pass			

NOTE: (1)" N/A" denotes test is not applicable in this Test Report



1.1 TEST FACILITY

Shenzhen BCTC Technology Co., Ltd.

Add.: No.101, Yousong Road, Longhua New District, Shenzhen, China

FCC Registered No.: 187086

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $\mathbf{y} \pm \mathbf{U}$, where expended uncertainty \mathbf{U} is based on a standard uncertainty multiplied by a coverage factor of $\mathbf{k=2}$, providing a level of confidence of approximately 95 % $^{\circ}$

No.	Item	Uncertainty
1	Conducted Emission Test	±1.38dB
2	RF power,conducted	±0.16dB
3	Spurious emissions,conducted	±0.21dB
4	All emissions,radiated(<1G)	±4.68dB
5	All emissions,radiated(>1G)	±4.89dB
6	Temperature	±0.5°C
7	Humidity	±2%



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	Laser Presenter			
Trade Name	N/A			
Model Name	JLP-RF-H			
Serial Model	N/A			
Model Difference	N/A			
	Operation Frequency:	2402~2478MHz GFSK		
	Modulation Type: Antenna Designation:	Integrated antenna		
	Antenna Gain(Peak)	1.1 dBi		
Product Description	Field strength	102.2dbuv/m@3m		
	Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.			
Battery	1.5V*2cell "AA" alkaline battery			
Adapter	N/A			

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

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2.

Channel	Frequency (MHz)
01	2402
02	2403
40	2441
41	2442
75	2477
76	2478

3

Table for Filed Antenna

Ant	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
1	N/A	N/A	Integrated antenna	NA	1.1	Antenna



2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	CH1
Mode 2	CH40
Mode 3	CH76
Mode 4	Charge Mode

For Conducted Emission				
Final Test Mode Description				
Mode 4 Charge Mode				

For Radiated Emission				
Final Test Mode Description				
Mode 1	CH1			
Mode 2	CH40			
Mode 3	CH76			

Note:

- (1) The measurements are performed at the highest, middle, lowest available channels.
- (2) The EUT use new battery.





2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

E-1 EUT

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2.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

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Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
E-1	Laser Presenter	N/A	JLP-RF-H	N/A	EUT

Item	Shielded Type	Ferrite Core	Length	Note

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in <code>"Length_"</code> column.

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2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation Test equipment

- Kaan	allon rest equip	JIIICIIL					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibratio n period
1	Spectrum Analyzer	Agilent	E4407B	MY4510804 0	2014.07.06	2015.07.05	1 year
2	Test Receiver	R&S	ESPI	101318	2014.06.07	2015.06.06	1 year
3	Bilog Antenna	TESEQ	CBL6111D	31216	2014.07.06	2015.07.05	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	620026441 6	2014.06.07	2015.06.06	1 year
5	Spectrum Analyzer	ADVANTEST	R3132	150900201	2014.06.07	2015.06.06	1 year
6	Horn Antenna	EM	EM-AH-101 80	2011071402	2014.07.06	2015.07.05	1 year
7	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	2014.07.06	2015.07.05	1 year
8	Amplifier	EM	EM-30180	060538	2013.12.22	2014.12.21	1 year
9	Amplifier	EM	EM-30180	060538	2014.12.22	2015.12.21	1 year
9-1	Loop Antenna	ARA	PLA-1030/B	1029	2014.06.08	2015.06.07	1 year
10	Power Meter	R&S	NRVS	100696	2014.07.06	2015.07.05	1 year
11	Power Sensor	R&S	URV5-Z4	0395.1619. 05	2014.07.06	2015.07.05	1 year
12	RF cables	R&S	N/A	N/A	2014.07.06	2015.07.05	1 year

Conduction Test equipment

	dollori rest equip	mont					
Item	Kind of Equipment	Manufactu rer	Type No.	Serial No.	Last calibration	Calibrated until	Calibratio n period
1	Test Receiver	R&S	ESCI	101160	2014.06.06	2015.06.05	1 year
2	LISN	R&S	ENV216	101313	2014.08.24	2015.08.23	1 year
3	LISN	EMCO	3816/2	00042990	2014.08.24	2015.08.23	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	620026441 7	2014.06.07	2015.06.06	1 year
5	Passive Voltage Probe	R&S	ESH2-Z3	100196	2014.06.07	2015.06.06	1 year
6	Absorbing clamp	R&S	MOS-21	100423	2014.06.08	2015.06.07	1 year
7	RF cables	R&S	N/A	N/A	2014.07.06	2015.07.05	1 year



3. TEST RESULT

3.1 ANTENNA REQUIREMENT

3.1.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 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.

3.1.2 EUT ANTENNA

The EUT antenna is Integrated antenna. It comply with the standard requirement.

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3.2 CONDUCTED EMISSION MEASUREMENT

3.2.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

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FREQUENCY (MHz)	Class A	(dBuV)	Class B	(dBuV)	Standard
FREQUENCT (MHZ)	Quasi-peak	Average	Quasi-peak	Average	Stariuaru
0.15 -0.5			66 - 56 *	56 - 46 *	CISPR
0.50 -5.0			56.00	46.00	CISPR
5.0 -30.0			60.00	50.00	CISPR

0.15 -0.5		66 - 56 *	56 - 46 *	LP002.
0.50 -5.0		56.00	46.00	LP002.
5.0 -30.0		60.00	50.00	LP002.

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz



3.2.2 TEST PROCEDURE

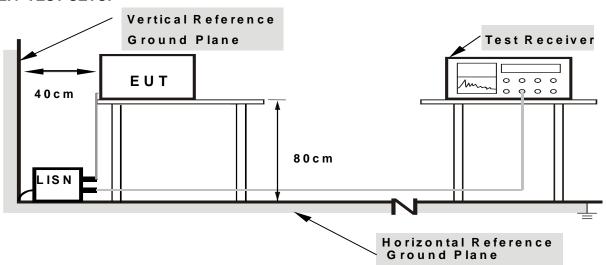
- a. The EUT was placed 0.4 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item -EUT Test Photos.

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3.2.3 DEVIATION FROM TEST STANDARD

No deviation

3.2.4 TEST SETUP



Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes



3.2.5 TEST RESULT

EUT:	Laser Presenter	Model Name. :	JLP-RF-H
Temperature :	26 ℃	Relative Humidity:	54%
Pressure:	1010hPa	Phase :	L
Test Voltage :	N/A	Test Mode:	N/A

NOTE: To Conducted Emission, not suitable for battery devices.



3.3 RADIATED EMISSION MEASUREMENT

3.3.1 Radiated Emission Limits (FCC 15.209)

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

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Note:

- (1) The tighter limit applies at the band edges.
- (2) Emission level (dBuV/m)=20log Emission level (uV/m).

LIMITS OF RADIATED EMISSION MEASUREMENT (FCC 15.249)

Frequency of Emission (MHz)	Field Strength of fundamental ((millivolts /meter)	Field Strength of Harmonics (microvolts/meter)
2400 - 2483.5	50	500

Notes:

(1) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted band)	1MHz / 1MHz for Peak

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP



3.3.2 TEST PROCEDURE

a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.

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- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3m meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported

3.3.3 DEVIATION FROM TEST STANDARD

No deviation

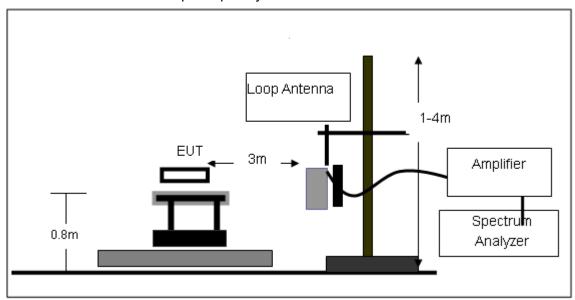
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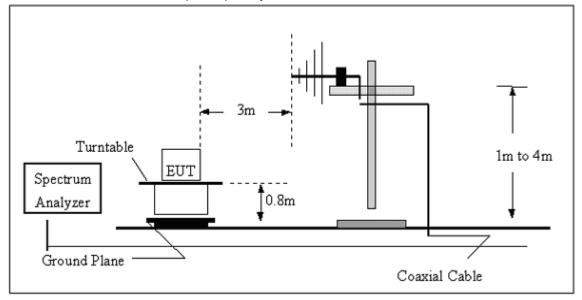


3.3.4 TEST SETUP

(A) Radiated Emission Test-Up Frequency Below 30MHz



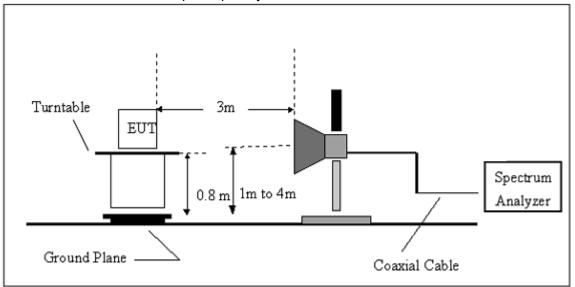
(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



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(C) Radiated Emission Test-Up Frequency Above 1GHz





3.3.5 TEST RESULTS (BLOW 30MHz)

EUT:	Laser Presenter	Model Name. :	JLP-RF-H
Temperature :	20 ℃	Relative Humidtity:	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX	Polarization :	

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Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
				PASS
		-1		PASS

NOTE:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor =40 log (specific distance/test distance)(dB); Limit line = specific limits(dBuv) + distance extrapolation factor.



3.3.6 TEST RESULTS (BETWEEN 30 – 1000 MHZ)

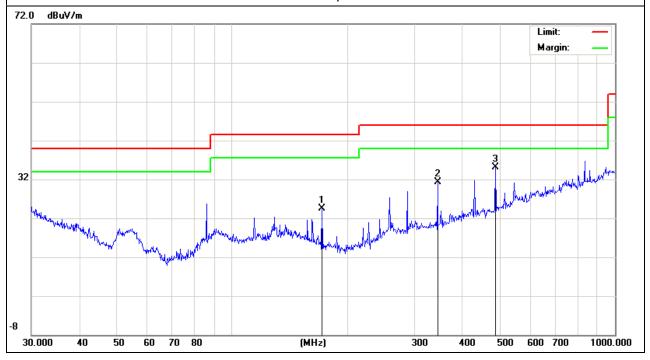
EUT:	Laser Presenter	Model Name :	JLP-RF-H
Temperature:	20 ℃	Relative Humidity:	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX	Polarization :	Vertical

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Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
171.9945	14.6	9.89	24.49	43.5	-19.01	peak
344.3854	16.17	15.22	31.39	46	-14.61	peak
487.315	16.08	19.01	35.09	46	-10.91	peak

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.



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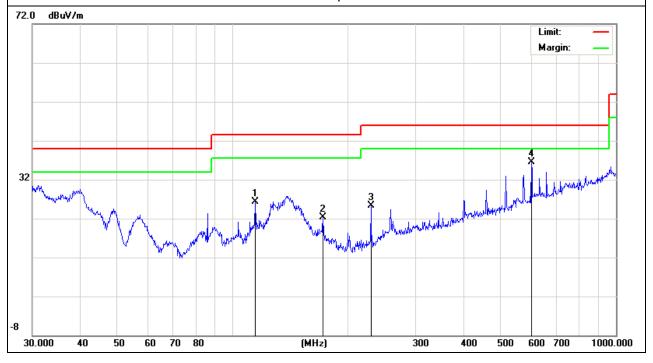
EUT.			
EUT:	Laser Presenter	Model Name :	JLP-RF-H
Temperature:	20 ℃	Relative Humidity:	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX	Polarization :	Horizontal

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Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Dotostor Typo
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
114.5146	14.58	11.66	26.24	43.5	-17.26	peak
171.9945	12.46	9.89	22.35	43.5	-21.15	peak
229.2931	14.95	10.39	25.34	46	-20.66	peak
601.4265	15.29	21.15	36.44	46	-9.56	peak

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.





3.3.7 TEST RESULTS (ABOVE 1000 MHZ)

EUT:	Laser Presenter	Model Name :	JLP-RF-H
Temperature :	20 ℃	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX /2402MHz	Polarization :	Horizontal

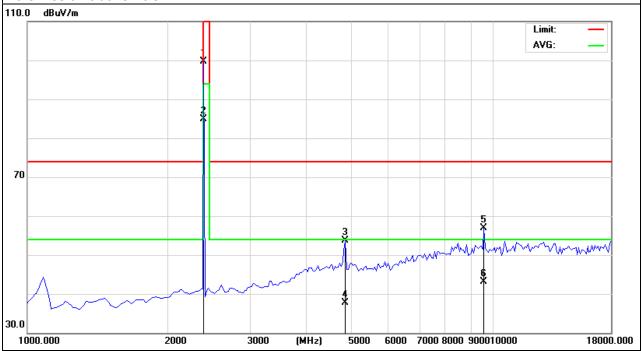
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Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2402	112.63	-12.99	99.64	114.0 0	-14.36	peak
2402	97.96	-12.99	84.97	94	-9.03	AVG
4804	57.27	-3.57	53.7	74	-20.3	peak
4804	41.23	-3.57	37.66	54	-16.34	AVG
9608	55.06	1.78	56.84	74	-17.16	peak
9608	41.23	1.78	43.01	54	-10.99	AVG

Remark:

Factor = Antenna Factor + Cable Loss – Pre-amplifier.

No emission above 18GHz.



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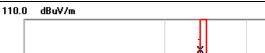
EUT:	Laser Presenter	Model Name :	JLP-RF-H
Temperature :	20 ℃	Relative Humidity:	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX /2402MHz	Polarization :	Vertical

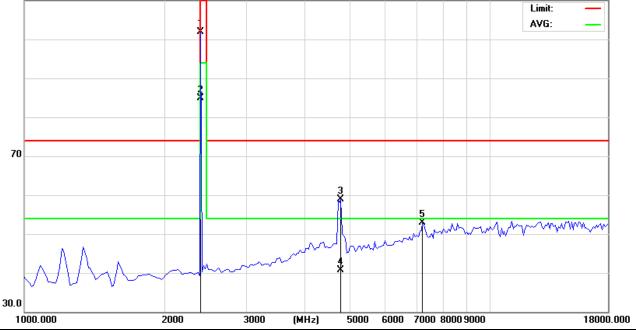
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Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2402	114.81	-12.99	101.82	114.0 0	-12.18	peak
2402	97.87	-12.99	84.88	94	-9.12	AVG
4804	62.49	-3.59	58.9	74	-15.1	peak
4804	44.23	-3.59	40.64	54	-13.36	AVG
7206	53.96	-0.96	53	74	-21	peak

Remark:

Factor = Antenna Factor + Cable Loss – Pre-amplifier. No emission above 18GHz.







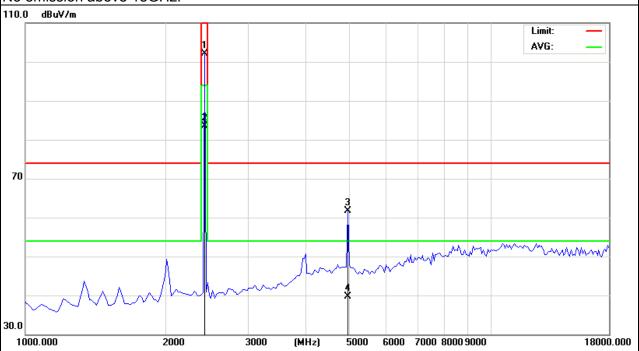
EUT:	Laser Presenter	Model Name :	JLP-RF-H
Temperature :	20 ℃	Relative Humidity:	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX /2441MHz	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Datastar Tuna
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2441	115.13	-12.93	102.2	114.0 0	-11.8	peak
2441	96.45	-12.93	83.52	94	-10.48	AVG
4882	65.25	-3.55	61.7	74	-12.3	peak
4882	43.21	-3.55	39.66	54	-14.34	AVG

Remark:

Factor = Antenna Factor + Cable Loss – Pre-amplifier.

No emission above 18GHz.



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EUT:	Laser Presenter	Model Name :	JLP-RF-H
Temperature:	20 ℃	Relative Humidity:	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX /2441MHz	Polarization :	Vertical

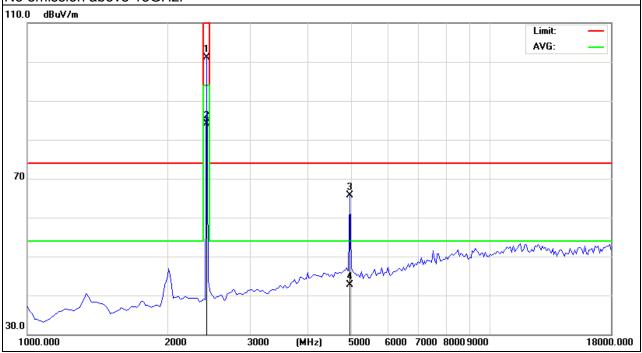
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Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Data star Tura
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2441	114.13	-12.93	101.2	114.0 0	-12.8	peak
2441	97.08	-12.93	84.15	94	-9.85	AVG
4882	69.24	-3.55	65.69	74	-8.31	peak
4882	46.21	-3.55	42.66	54	-11.34	AVG

Remark:

Factor = Antenna Factor + Cable Loss – Pre-amplifier.

No emission above 18GHz.







EUT:	Laser Presenter	Model Name :	JLP-RF-H
Temperature :	20 ℃	Relative Humidity:	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX /2478MHz	Polarization :	Horizontal

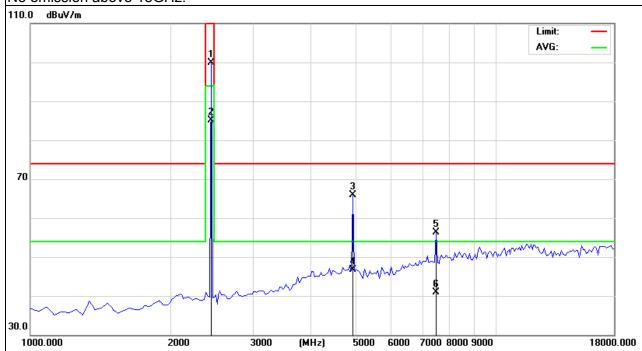
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Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2478	112.82	-12.92	99.9	114.0 0	-14.1	peak
2478	97.98	-12.92	85.06	94	-8.94	AVG
4956	69.42	-3.55	65.87	74	-8.13	peak
4956	50.28	-3.55	46.73	54	-7.27	AVG
7434	56.94	-0.68	56.26	74	-17.74	peak
7434	41.51	-0.68	40.83	54	-13.17	AVG

Remark:

Factor = Antenna Factor + Cable Loss – Pre-amplifier.

No emission above 18GHz.







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EUT:

Model Name : JLP-RF-H Laser Presenter

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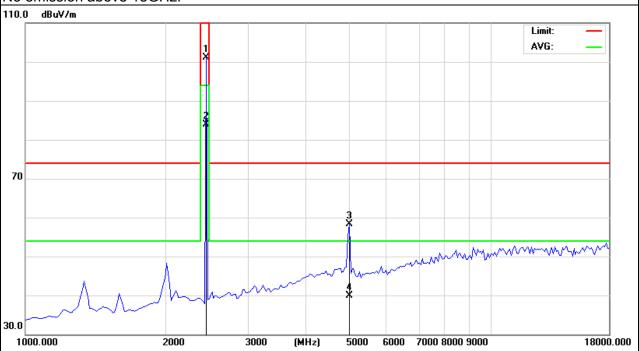
Temperature :	20 ℃	Relative Humidity:	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX /2478MHz	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Datastar Tuna
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2478	114.12	-12.92	101.2	114.0 0	-12.8	peak
2478	96.76	-12.92	83.84	94	-10.16	AVG
4956	62.2	-3.8	58.4	74	-15.6	peak
4956	43.66	-3.8	39.86	54	-14.14	AVG

Remark:

Factor = Antenna Factor + Cable Loss – Pre-amplifier.

No emission above 18GHz.



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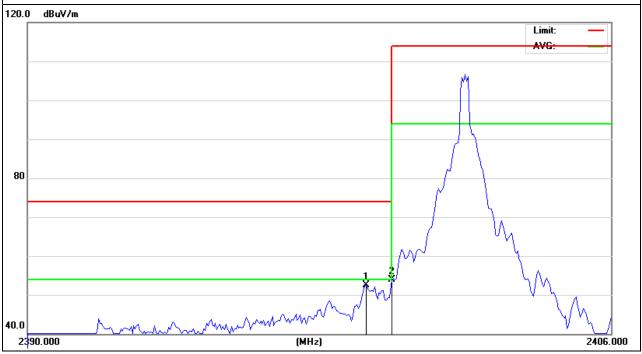
Report No.: BCTC-150205625R

Band Edge Emission:

EUT:	Laser Presenter	Model Name :	JLP-RF-H
Temperature:	20 ℃	Relative Humidity:	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX /2402MHz	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Dotoctor Typo
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2399.28	65.51	-12.99	52.52	74	-21.48	peak
2400	66.9	-12.99	53.91	74	-20.09	peak

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



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Horizontal

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Test Mode :

EUT:	Laser Presenter	Model Name :	JLP-RF-H
Temperature :	20 ℃	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC 3.7V

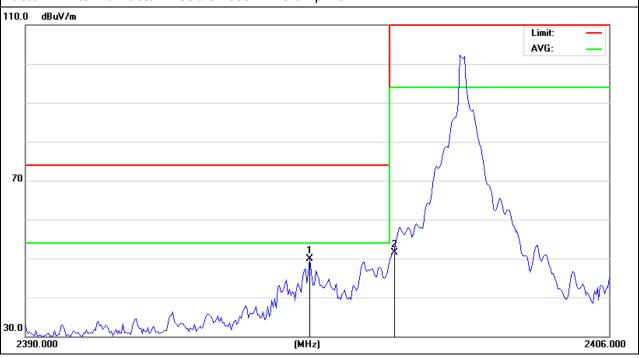
Polarization:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2397.8	62.81	-13	49.81	74	-24.19	peak
2400.00	64.46	-12.99	51.47	74	-22.53	peak

Remark:

Factor = Antenna Factor + Cable Loss – Pre-amplifier.

TX /2402MHz



FCC Report

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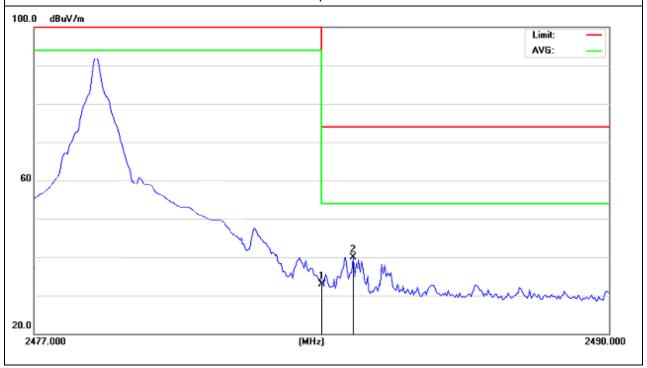
EUT:	Laser Presenter	Model Name :	JLP-RF-H
Temperature :	20 ℃	Relative Humidity:	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX /2478MHz	Polarization :	Vertical

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Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Dotostor Typo
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2483.5	45.74	-12.78	32.96	74	-41.04	peak
2484.215	52.76	-12.78	39.98	74	-34.02	peak

Remark:

Factor = Antenna Factor + Cable Loss – Pre-amplifier.



FCC Report





EUT:	Laser Presenter	Model Name :	JLP-RF-H
Temperature :	20 ℃	Relative Humidity:	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX /2478MHz	Polarization :	Horizontal

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Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Ture
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2483.5	51.11	-12.78	38.33	74	-35.67	peak
2484.313	59.91	-12.78	47.13	74	-26.87	peak

Remark:

Factor = Antenna Factor + Cable Loss – Pre-amplifier.



FCC Report



4. BANDWIDTH TEST

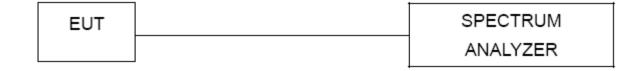
4.1 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting : RBW= 100KHz, VBW≥RBW, Sweep time = Auto.

4.2 DEVIATION FROM STANDARD

No deviation.

4.3 TEST SETUP



FCC Report



4.4 TEST RESULTS

EUT:	Laser Presenter	Model Name :	JLP-RF-H
Temperature:	26 ℃	Relative Humidity:	53%
Pressure:	1020 hPa	Test Power :	DC 3.7V
Test Mode :	TX CH 1/40/76		

Test Channel	Frequency	20 dBc Bandwidth	99% Bandwidth	
rest oname	(MHz)	(MHz)	(MHz)	
CH01	2402	0.832	0.975	
CH40	2441	0.937	1.151	
CH79	2478	0.944	1.131	

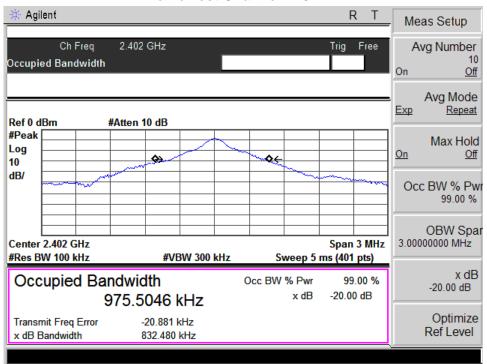
FCC Report Tel: 400-788-9558 0755-33019988



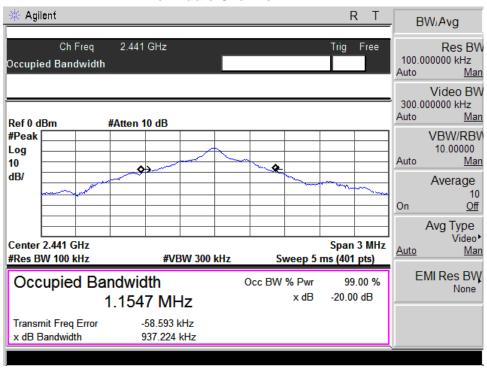


The Lowest Channel:2402MHz

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The Middle Channel: 2441MHz





Transmit Freq Error

x dB Bandwidth

Report No.: BCTC-150205625R

Optimize

Ref Level

The High Channel:2478MHz Agilent R T Meas Setup 2.478 GHz Trig Free Avg Number Ch Freq Occupied Bandwidth On Off Avg Mode Repeat Ref 0 dBm #Atten 10 dB #Peak Max Hold Log <u>On</u> 10 dB/ Occ BW % Pw 99.00 % OBW Spar 3.00000000 MHz Center 2.478 GHz Span 3 MHz #Res BW 100 kHz **#VBW 300 kHz** Sweep 5 ms (401 pts) x dB -20.00 dB Occupied Bandwidth Occ BW % Pwr 99.00 % x dB-20.00 dB 1.1373 MHz

-64.592 kHz

944.655 kHz



5. EUT TEST PHOTO







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EUT PHOTO:









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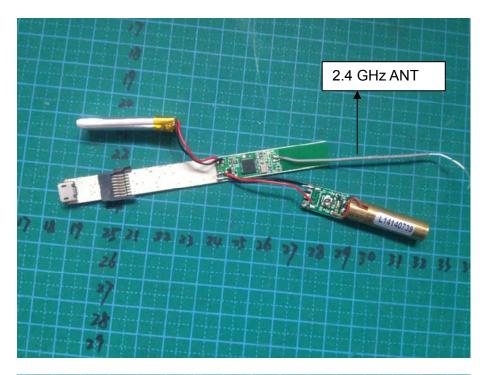








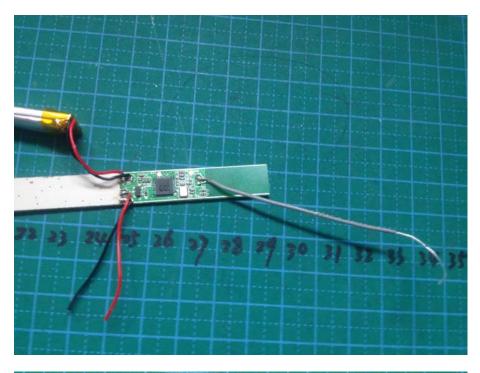




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