

APPLICATION CERTIFICATION
On Behalf of
MING YUNG HUNG ENTERPRISE(CAMBODIA) CO,LTD
RGB FLEX LIGHT

Model No.: NEONM-0.66-24-036-E-F, NEONM-0.66-8-036-E-F,
NEONM-0.66-10-036-E-F, NEONM-0.66-12-036-E-F, NEONM-0.66-14-036-E-F,
NEONM-0.66-16-036-E-F, NEONM-0.66-18-036-E-F, NEONM-0.66-20-036-E-F,
NEONM-0.66-22-036-E-F, NEONM-0.66-30-036-E-F, NEONM-0.66-36-036-E-F,
NEONM-0.66-50-036-E-F, NEONM-0.66-48-036-E-F, NEONM-0.66-60-036-E-F,
NEONM-0.66-84-036-E-F;

FCC ID: 2AXYU-NEONM

Prepared for : MING YUNG HUNG ENTERPRISE(CAMBODIA)
CO,LTD
Address : Phum Kantouk Choeng, Sangkat Kantouk, Khan Kambol,
Phnom Penh, Kingdom of Cambodia
Prepared by : Shenzhen Accurate Technology Co., Ltd.
Address : F1, Bldg. A, Changyuan New Material Port, Keyuan Rd.
Science & Industry Park, Nanshan, Shenzhen, Guangdong
P.R. China

Tel: (0755) 26503290
Fax: (0755) 26503396

Report Number : RTZ201021002-RF
Date of Test : Nov. 11, 2020 to Nov. 18, 2020
Date of Report : Nov. 18, 2020

TABLE OF CONTENTS

Description	Page
Test Report Certification	
1. GENERAL INFORMATION	4
1.1. Description of Device (EUT)	4
1.2. Description of Test Facility	5
1.3. Measurement Uncertainty	5
2. MEASURING DEVICE AND TEST EQUIPMENT.....	6
2.1. For Radiated Emission Measurement.....	6
3. SUMMARY OF TEST RESULTS	7
4. THE FIELD STRENGTH OF RADIATION EMISSION.....	8
4.1. Block Diagram of Test Setup	8
4.2. The Field Strength of Radiation Emission Measurement Limits	9
4.3. Configuration of EUT on Measurement.....	10
4.4. Operating Condition of EUT	10
4.5. Test Procedure	10
4.6. The Field Strength of Radiation Emission Measurement Results	11
5. 20DB OCCUPIED BANDWIDTH	13
5.1. Block Diagram of Test Setup	13
5.2. The Bandwidth of Emission Limit According To FCC Part 15 Section 15.231(c).....	13
5.3. EUT Configuration on Measurement	13
5.4. Operating Condition of EUT	13
5.5. Test Procedure	14
5.6. Measurement Result	14
6. RELEASE TIME MEASUREMENT	15
6.1. Block Diagram of Test Setup	15
6.2. Release Time Measurement According To FCC Part 15 Section 15.231(a).....	15
6.3. EUT Configuration on Measurement	15
6.4. Operating Condition of EUT	15
6.5. Test Procedure	16
6.6. Measurement Result	16
7. AVERAGE FACTOR MEASUREMENT.....	17
7.1. Block Diagram of Test Setup	17
7.2. Average factor Measurement according to ANSI C63.10-2013	17
7.3. EUT Configuration on Measurement	17
7.4. Operating Condition of EUT	18
7.5. Test Procedure	18
7.6. Measurement Result	18
8. ANTENNA REQUIREMENT	19
8.1. The Requirement	19
8.2. Antenna Construction.....	19

Test Report Certification

Applicant : MING YUNG HUNG ENTERPRISE(CAMBODIA) CO,LTD
Manufacturer 1 : LAMUES LIGHT ENTERPRISE CO.,LTD
Manufacturer 2 : MING YUNG HUNG MATERIAL OF LIGHTS CO., LTD
Product : RGB FLEX LIGHT
Model No. : NEONM-0.66-24-036-E-F, NEONM-0.66-8-036-E-F,
NEONM-0.66-10-036-E-F, NEONM-0.66-12-036-E-F,
NEONM-0.66-14-036-E-F, NEONM-0.66-16-036-E-F,
NEONM-0.66-18-036-E-F, NEONM-0.66-20-036-E-F,
NEONM-0.66-22-036-E-F, NEONM-0.66-30-036-E-F,
NEONM-0.66-36-036-E-F, NEONM-0.66-50-036-E-F,
NEONM-0.66-48-036-E-F, NEONM-0.66-60-036-E-F,
NEONM-0.66-84-036-E-F;
(Note: These samples are same.NEONM-0.66-24-036-E-F for test only.).
Trade name : N/A

Measurement Procedure Used:

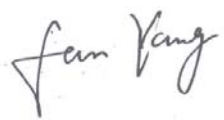
FCC Rules and Regulations Part 15 Subpart C Section 15.231a ANSI C63.10-2013

The device described above is tested by Shenzhen Accurate Technology Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C Section 15.231a. The measurement results are contained in this test report and Shenzhen Accurate Technology Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

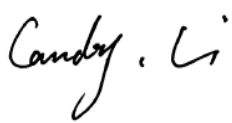
This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Shenzhen Accurate Technology Co., Ltd..

Date of Test : Nov. 11, 2020 to Nov. 18, 2020
Date of Report : Nov. 18, 2020

Prepared by :


(Fan Yang, Engineer)

Approved & Authorized Signer :


(Candy Li, RF Engineer)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

EUT	: RGB FLEX LIGHT
Model Number	: NEONM-0.66-24-036-E-F, NEONM-0.66-8-036-E-F, NEONM-0.66-10-036-E-F, NEONM-0.66-12-036-E-F, NEONM-0.66-14-036-E-F, NEONM-0.66-16-036-E-F, NEONM-0.66-18-036-E-F, NEONM-0.66-20-036-E-F, NEONM-0.66-22-036-E-F, NEONM-0.66-30-036-E-F, NEONM-0.66-36-036-E-F, NEONM-0.66-50-036-E-F, NEONM-0.66-48-036-E-F, NEONM-0.66-60-036-E-F, NEONM-0.66-84-036-E-F; (Note: These samples are same. NEONM-0.66-24-036-E-F for test only.).
Power Supply	: DC 3V(Powered by battery)
Modulation:	: ASK(amplitude modulation)
antenna gain	: 0dBi
TX Frequency	: 433.96MHz
Type of Antenna	: PCB antenna
Applicant	: MING YUNG HUNG ENTERPRISE(CAMBODIA) CO.,LTD
Address	: Phum Kantouk Choeng, Sangkat Kantouk, Khan Kambol, Phnom Penh, Kingdom of Cambodia
Manufacturer 1 Address	: LAMUES LIGHT ENTERPRISE CO.,LTD Trapeang Chrey, Kakap, Por Sen Chey, Phnom Penh, Cambodia
Manufacturer 2 Address	: MING YUNG HUNG MATERIAL OF LIGHTS CO., LTD Du Bi Village Duruan Town Jiangmen City, Guangdong Province, China
Date of sample received	: Oct. 21, 2020
Date of Test	: Nov. 11, 2020 to Nov. 18, 2020
Sample No.	: RTZ201021002-RF-S1

1.2. Description of Test Facility

EMC Lab	:	Recognition of accreditation by Federal Communications Commission (FCC) The Designation Number is CN1189 The Registration Number is 708358 Listed by Innovation, Science and Economic Development Canada (ISED) The Registration Number is 5077A-2 Accredited by China National Accreditation Service for Conformity Assessment (CNAS) The Registration Number is CNAS L3193 Accredited by American Association for Laboratory Accreditation (A2LA) The Certificate Number is 4297.01
Name of Firm	:	Shenzhen Accurate Technology Co., Ltd.
Site Location	:	1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China

1.3. Measurement Uncertainty

Radiated emission expanded uncertainty (9kHz-30MHz)	:	U=2.66dB, k=2
Radiated emission expanded uncertainty (30MHz-1000MHz)	:	U=4.28dB, k=2
Radiated emission expanded uncertainty (1G-18GHz)	:	U=4.98dB, k=2
Radiated emission expanded uncertainty (18G-26.5GHz)	:	U=5.06dB, k=2
Conduction Emission Expanded Uncertainty (Mains ports, 9kHz-30MHz)	:	U=2.72dB, k=2

2. MEASURING DEVICE AND TEST EQUIPMENT

2.1. For Radiated Emission Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde& Schwarz	ESR	101817	Jan.04, 2020	1 Year
2.	Spectrum Analyzer	Rohde&Schwarz	FSV40	101495	Jan.04, 2020	1 Year
3.	Pre-Amplifier	Agilent	8447D	294A10619	Jan.04, 2020	1 Year
4.	Pre-Amplifier	Rohde&Schwarz	CBLU11835 40-01	3791	Jan.04, 2020	1 Year
5.	50 Coaxial Switch	Anritsu Corp	MP59B	6200237248	Jan.04, 2020	1 Year
6.	Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan.05, 2020	1 Year
7.	Horn Antenna	Schwarzbeck	BBHA9120 D	9120D-1067	Jan.05, 2020	1 Year
8.	EMI TEST RECEIVER	ROHDE& SCHWARZ	ESPI	101526/003	Jan.04, 2020	1 Year
9.	Radiated Emission Test Software: EZ_EMC V1.1.4.2					

3. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
Section 15.207	Conducted Emission	N/A
Section 15.231(b)	Radiated Emission	Compliant
Section 15.231(c)	20dB Bandwidth	Compliant
Section 15.231(a)(1)	Release Time Measurement	Compliant
Section 15.203	Antenna Requirement	Compliant

The product is a manually operated transmitter.
Section 15.231 (a) (2), (3), (4) and (5) are not applicable.

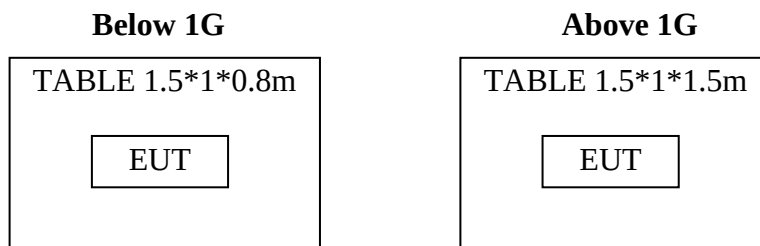
Note 1: The power supply mode of the EUT is DC 3V from battery, According to the FCC standard requirements, conducted emission is not applicable

Note 2: All the buttons of EUT transmit same signal, so just one was tested and recorded in the report.

4. THE FIELD STRENGTH OF RADIATION EMISSION

4.1. Block Diagram of Test Setup

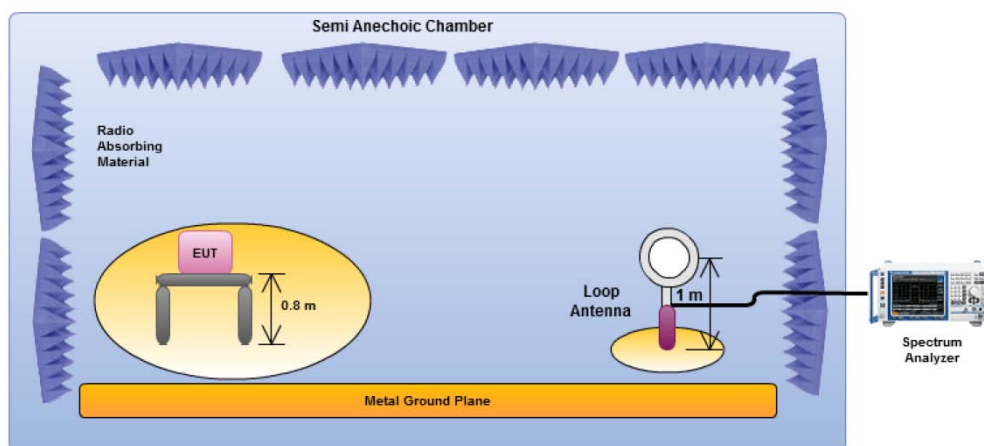
4.1.1. Block diagram of connection between the EUT and simulators



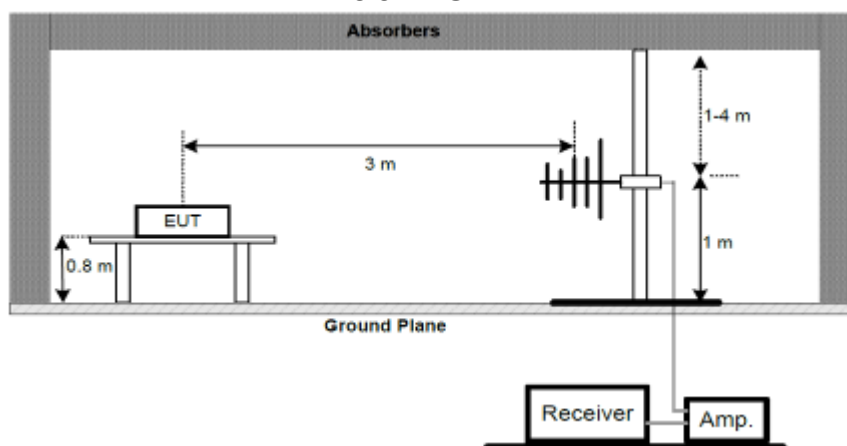
(EUT: RGB FLEX LIGHT)

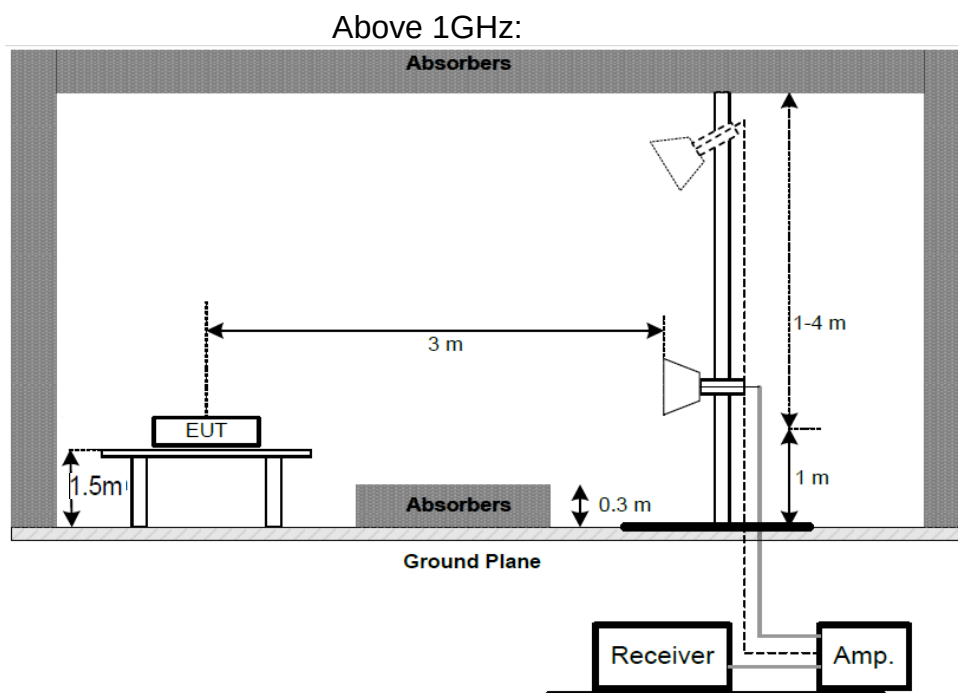
4.1.2. Semi-Anechoic Chamber Test Setup Diagram

Below 30MHz



Below 1GHz:





4.2.The Field Strength of Radiation Emission Measurement Limits

4.2.1.Radiation Emission Measurement Limits According to FCC Part 15 Section 15.231(b)

Frequency Range of Fundamental [MHz]	Field Strength of Fundamental Emission [Average] [μV/m]	Field Strength of Spurious Emission [Average] [μV/m]
40.66-40.70	2250	225
70-130	1250	125
130-174	1250-3750	125-375
174-260	3750	375
260-470	3750-12500	375-1250
Above 470	12500	1250

Where F is the frequency in MHz, the formulas for calculating the maximum permitted fundamental field strengths are as follows: for the band 130-174 MHz, $\mu\text{V/m at 3 meters} = 56.81818(F) - 6136.3636$; for the band 260-470 MHz, $\mu\text{V/m at 3 meters} = 41.6667(F) - 7083.3333$. The maximum permitted unwanted emission level is 20 dB below the maximum permitted fundamental level.

4.2.2.Restricted Band Radiation Emission Measurement Limits According to FCC part 15 Section 15.205 and Section15.209.

4.3.Configuration of EUT on Measurement

The following equipment is installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

4.3.1. RGB FLEX LIGHT (EUT)

Model Number : NEONM-0.66-24-036-E-F

Serial Number : NEONM-0.66-8-036-E-F, NEONM-0.66-10-036-E-F,
NEONM-0.66-12-036-E-F, NEONM-0.66-14-036-E-F,
NEONM-0.66-16-036-E-F, NEONM-0.66-18-036-E-F,
NEONM-0.66-20-036-E-F, NEONM-0.66-22-036-E-F,
NEONM-0.66-30-036-E-F, NEONM-0.66-36-036-E-F,
NEONM-0.66-50-036-E-F, NEONM-0.66-48-036-E-F,
NEONM-0.66-60-036-E-F, NEONM-0.66-84-036-E-F;

4.4.Operating Condition of EUT

4.4.1. Setup the EUT and simulator as shown as Section 4.1.

4.4.2. Turn on the power of all equipment.

4.4.3. Let the EUT work in TX continue mode measure it.

4.5.Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground(Below 1GHz). 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.

The bandwidth of test receiver is set at 120 kHz in 30-1000 MHz, and 1 MHz in 1000-5000MHz.

The frequency range from 9kHz to 5000 MHz is checked.

4.6.The Field Strength of Radiation Emission Measurement Results

PASS.

The frequency range 30MHz to 5000MHz is investigated.

EUT:

RGB FLEX LIGHT

Model No.:

NEONM-0.66-24-036-E-F

Power Supply:

DC 3V

Test Mode:

TX

Test Engineer:

Fan

Frequency (MHz)	Reading (dBμV/m)	Factor Corr.	Average Factor	Result (dBμV/m)		Limit (dBμV/m)		Margin (dB)		Polarization
	PEAK	(dB)	(dB)	AV	PEAK	AV	PEAK	AV	PEAK	
433.9600	77.15	-3.32	-8.64	65.19	73.83	80.83	100.83	15.64	27.00	Vertical
867.9200	63.60	2.04	-8.64	57.00	65.64	60.83	80.83	3.83	15.19	
1302.060	58.39	-8.67	-8.64	41.08	49.72	54.00	74.00	12.92	24.28	
1733.995	57.33	-6.08	-8.64	42.61	51.25	60.83	80.83	18.22	29.58	
2169.725	45.82	-2.75	-8.64	34.43	43.07	60.83	80.83	26.40	37.76	
2603.477	47.42	-1.07	-8.64	37.71	46.35	60.83	80.83	23.12	34.48	
3037.926	45.32	-0.52	-8.64	36.16	44.80	60.83	80.83	24.67	36.03	
3905.238	45.18	1.66	-8.64	38.2	46.84	54.00	74.00	15.80	27.16	
433.9600	70.49	-3.32	-8.64	58.53	67.17	80.83	100.83	22.30	33.66	Horizontal
867.9200	53.20	2.04	-8.64	46.6	55.24	60.83	80.83	14.23	25.59	
1302.060	56.99	-8.67	-8.64	39.68	48.32	54.00	74.00	14.32	25.68	
1735.788	56.35	-6.08	-8.64	41.63	50.27	60.83	80.83	19.20	30.56	
2169.725	48.53	-2.75	-8.64	37.14	45.78	60.83	80.83	23.69	35.05	
2603.477	46.06	-1.06	-8.64	36.36	45.00	60.83	80.83	24.47	35.83	
3037.380	45.61	-0.53	-8.64	36.44	45.08	60.83	80.83	24.39	35.75	
3905.585	45.39	1.66	-8.64	38.41	47.05	54.00	74.00	15.59	26.95	

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

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain

3. FCC Limit for Average Measurement = $41.6667(433.96)-7083.3333 = 10998.3478\mu\text{V/m} = 80.83 \text{ dB}\mu\text{V/m}$

Shenzhen Accurate Technology Co., Ltd.

Address: 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China

Tel: +86-755-26503290

Fax: +86-755-26503396

E-mail: webmaster@atc-lab.com

Http://www.atc-lab.com

4. The spectral diagrams in appendix I display the measurement of peak values.
5. Average value= PK value + Average Factor (duty factor)
6. If the peak-detected amplitude can be shown to comply with the average limit, then it is not necessary to perform a separate average measurement.
7. The EUT is tested radiation emission in three axes(X,Y,Z). The worst emissions are reported in three axes.

8. Pulse Desensitization Correction Factor

Pulse Width (PW) = 0.22ms

$2/PW = 2/0.22\text{ms} = 9.09\text{kHz}$

RBW (100 kHz) > 2/PW (9.09kHz)

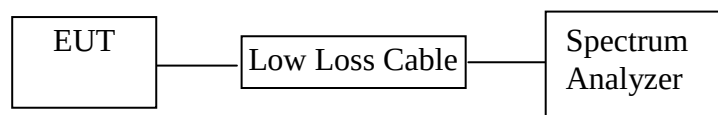
Therefore PDCF is not needed

9. 9 kHz~30 MHz Field Strength of Unwanted Emissions. Peak or Quasi-Peak measurement.

The measurements with active loop antenna were greater than 20dB below the limit, so the test data were not recorded in the test report.

5. 20DB OCCUPIED BANDWIDTH

5.1. Block Diagram of Test Setup



(EUT: RGB FLEX LIGHT)

5.2. The Bandwidth of Emission Limit According To FCC Part 15 Section

15.231(c)

The bandwidth of emission shall be no wider than 0.25% of the center frequency. Therefore, the bandwidth of the emission limit is $433.96 \text{ MHz} \times 0.25\% = 1084.9 \text{ kHz}$. Bandwidth is determined at the two points 20 dB down from the top of modulated carrier.

5.3. EUT Configuration on Measurement

The following equipment are installed on the bandwidth of emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

5.3.1. RGB FLEX LIGHT (EUT)

Model Number : NEONM-0.66-24-036-E-F
Serial Number : NEONM-0.66-8-036-E-F, NEONM-0.66-10-036-E-F,
NEONM-0.66-12-036-E-F, NEONM-0.66-14-036-E-F,
NEONM-0.66-16-036-E-F, NEONM-0.66-18-036-E-F,
NEONM-0.66-20-036-E-F, NEONM-0.66-22-036-E-F,
NEONM-0.66-30-036-E-F, NEONM-0.66-36-036-E-F,
NEONM-0.66-50-036-E-F, NEONM-0.66-48-036-E-F,
NEONM-0.66-60-036-E-F, NEONM-0.66-84-036-E-F;

5.4. Operating Condition of EUT

5.4.1. Setup the EUT and simulator as shown at Section 5.1.

5.4.2. Turn on the power of all equipment.

5.4.3. Let the EUT work in TX mode measure it.

5.5. Test Procedure

5.5.1. Set SPA Center Frequency = Fundamental frequency, RBW = 10 kHz, VBW = 30 kHz, Span = 200kHz.

5.5.2. Set SPA Max hold, Mark peak, -20 dB.

5.6. Measurement Result

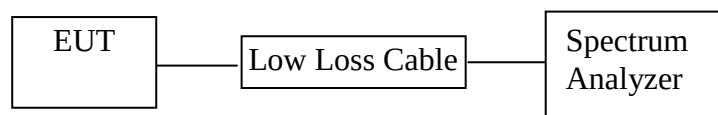
The EUT does meet the FCC requirement.

-20 dB bandwidth = 52.8 kHz < 1084.9 kHz.

The spectral diagrams in appendix I.

6. RELEASE TIME MEASUREMENT

6.1. Block Diagram of Test Setup



(EUT: RGB FLEX LIGHT)

6.2. Release Time Measurement According To FCC Part 15 Section 15.231(a)

Section 15.231(a) (1) A manually operated transmitter shall employ a switch that will automatically deactivate the transmitter within not more than 5 seconds of being released.

6.3. EUT Configuration on Measurement

The following equipment are installed on Release Time Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

6.3.1. RGB FLEX LIGHT (EUT)

Model Number : NEONM-0.66-24-036-E-F
Serial Number : NEONM-0.66-8-036-E-F, NEONM-0.66-10-036-E-F,
NEONM-0.66-12-036-E-F, NEONM-0.66-14-036-E-F,
NEONM-0.66-16-036-E-F, NEONM-0.66-18-036-E-F,
NEONM-0.66-20-036-E-F, NEONM-0.66-22-036-E-F,
NEONM-0.66-30-036-E-F, NEONM-0.66-36-036-E-F,
NEONM-0.66-50-036-E-F, NEONM-0.66-48-036-E-F,
NEONM-0.66-60-036-E-F, NEONM-0.66-84-036-E-F;

6.4. Operating Condition of EUT

- 6.4.1. Setup the EUT and simulator as shown at Section 6.1.
- 6.4.2. Turn on the power of all equipment.
- 6.4.3. Let the EUT work in TX mode measure it.

6.5. Test Procedure

6.5.1. Set SPA Center Frequency = Fundamental frequency, RBW = 100 kHz, VBW = 300 kHz, Span = 0 Hz. Sweep time = 5s.

6.5.2. Set EUT as normal operation and press Transmitter button.

6.5.3. Set SPA View. Delta Mark time.

6.6. Measurement Result

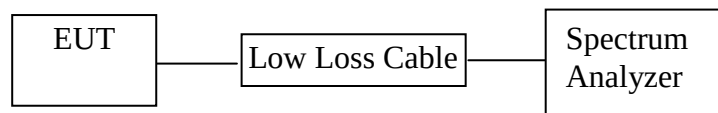
The release time less than 5 seconds.

Release Time = 1.13s

The spectral diagrams in appendix I.

7. AVERAGE FACTOR MEASUREMENT

7.1. Block Diagram of Test Setup



(EUT: RGB FLEX LIGHT)

7.2. Average factor Measurement according to ANSI C63.10-2013

ANSI C63.10-2013 Section 7.5 Unless otherwise specified, when the radiated emission limits are expressed in terms of the average value of the emission, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 s (100 ms). In cases where the pulse train exceeds 0.1 s, the measured field strength shall be determined during a 0.1 s interval.⁶⁴ The following procedure is an example of how the average value may be determined. The average field strength may be found by measuring the peak pulse amplitude (in log equivalent units) and determining the duty cycle correction factor (in dB) associated with the pulse modulation as shown in Equation (10):

Average factor in dB = 20 log (duty cycle)

7.3. EUT Configuration on Measurement

The following equipment are installed on average factor Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

7.3.1. RGB FLEX LIGHT (EUT)

Model Number	:	NEONM-0.66-24-036-E-F
Serial Number	:	NEONM-0.66-8-036-E-F, NEONM-0.66-10-036-E-F, NEONM-0.66-12-036-E-F, NEONM-0.66-14-036-E-F, NEONM-0.66-16-036-E-F, NEONM-0.66-18-036-E-F, NEONM-0.66-20-036-E-F, NEONM-0.66-22-036-E-F, NEONM-0.66-30-036-E-F, NEONM-0.66-36-036-E-F, NEONM-0.66-50-036-E-F, NEONM-0.66-48-036-E-F, NEONM-0.66-60-036-E-F, NEONM-0.66-84-036-E-F;

7.4. Operating Condition of EUT

- 7.4.1. Setup the EUT and simulator as shown as Section 7.1.
- 7.4.2. Turn on the power of all equipment.
- 7.4.3. Let the EUT work in TX mode measure it.

7.5. Test Procedure

- 7.5.1. The time period over which the duty cycle is measured is 100 milliseconds, or the repetition cycle, whichever is a shorter time frame. The worst case (highest percentage on) duty cycle is used for the calculation.
- 7.5.2. Set SPA Center Frequency = Fundamental frequency, RBW = 100 kHz, VBW = 300 kHz, Span = 0 Hz.
- 7.5.3. Set EUT as normal operation.
- 7.5.4. Set SPA View. Delta Mark time.

7.6. Measurement Result

The duty cycle is simply the on time divided by the period:

Effective period of one cycle = $(1 \times 0.6) + (28 \times 0.22)$ ms = 6.76 ms

One cycle = 18.5ms

Duty cycle = $6.76\text{ms} / 18.5\text{ms} = 0.37$

Therefore, the average factor is found by $20 \times \log(0.37) = -8.64\text{dB}$

The spectral diagrams in appendix I.

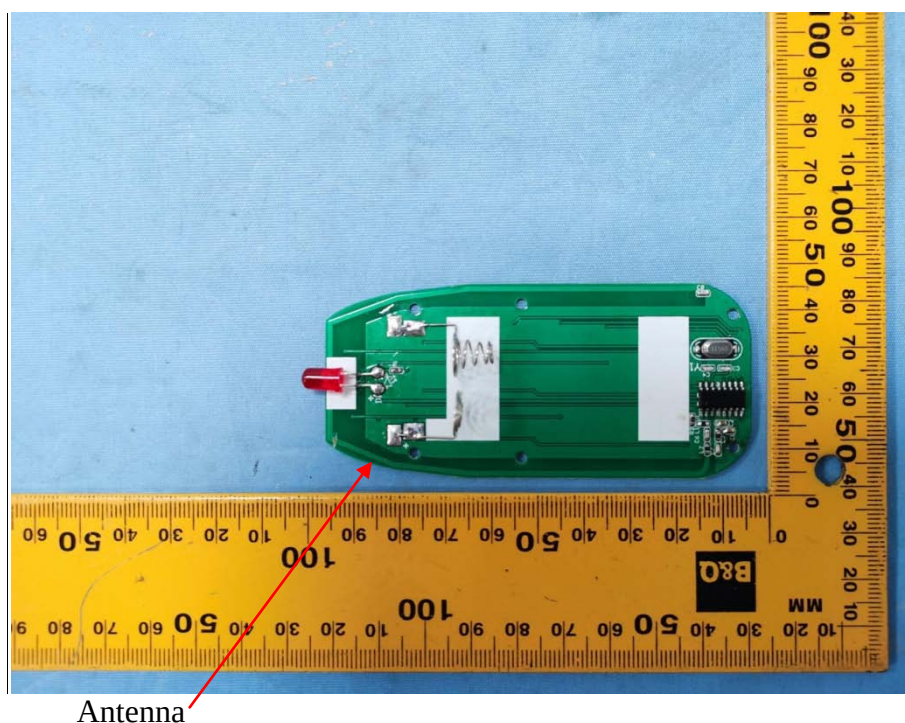
8. ANTENNA REQUIREMENT

8.1.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.

8.2.Antenna Construction

Device is equipped with PCB antenna, which isn't displaced by other antenna. The Antenna gain of EUT is 0dBi. Therefore, the equipment complies with the antenna requirement of Section 15.203.



Antenna

APPENDIX I (Test Curves)



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber

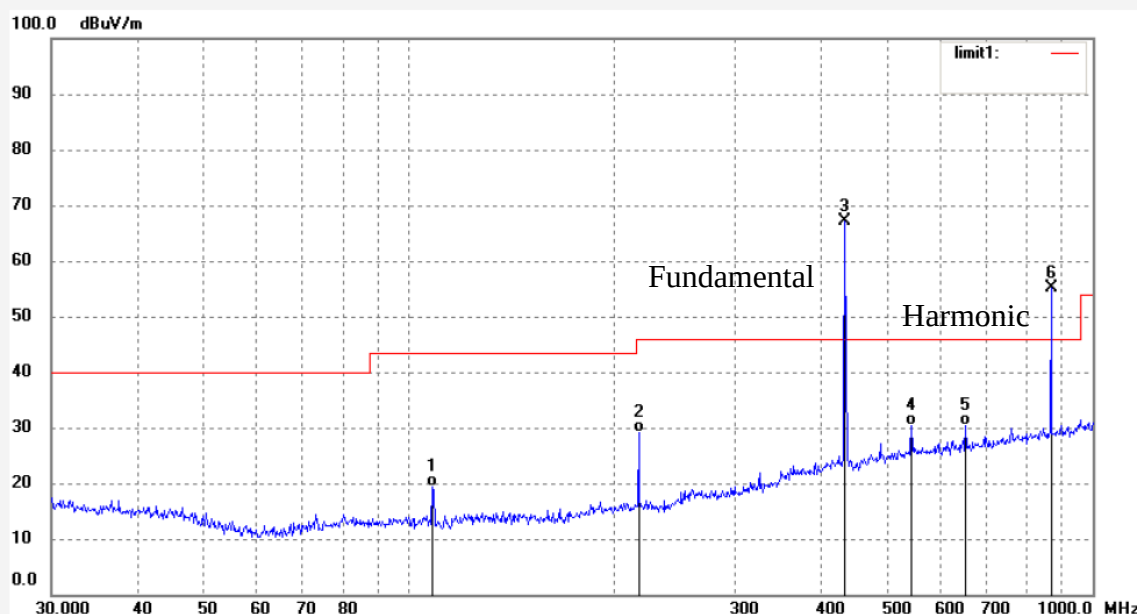
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: FAN #171
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: RGB FLEX LIGHT
Mode: TX
Model: NEONM-0.66-24-036-E-F(56360)
Manufacturer: LAMUES LIGHT ENTERPRISE CO., LTD

Polarization: Horizontal
Power Source: DC 3V
Date: 2020/11/11/
Time: 10/02/45
Engineer Signature: Fan
Distance: 3M

Note: Report No.: RTZ201021001-RF



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	108.2667	32.17	-12.71	19.46	43.50	-24.04	QP	100	356	
2	216.7828	38.92	-9.81	29.11	46.00	-16.89	QP	100	115	
3	433.9600	70.49	-3.32	67.17	100.83	-33.66	peak	100	2	
4	543.2740	31.74	-1.37	30.37	46.00	-15.63	QP	200	37	
5	651.9415	30.94	-0.62	30.32	46.00	-15.68	QP	200	164	
6	867.9200	53.20	2.04	55.24	80.83	-25.59	peak	100	220	



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.: FAN #170

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: RGB FLEX LIGHT

Mode: TX

Model: NEONM-0.66-24-036-E-F(56360)

Manufacturer: LAMUES LIGHT ENTERPRISE CO., LTD

Polarization: Vertical

Power Source: DC 3V

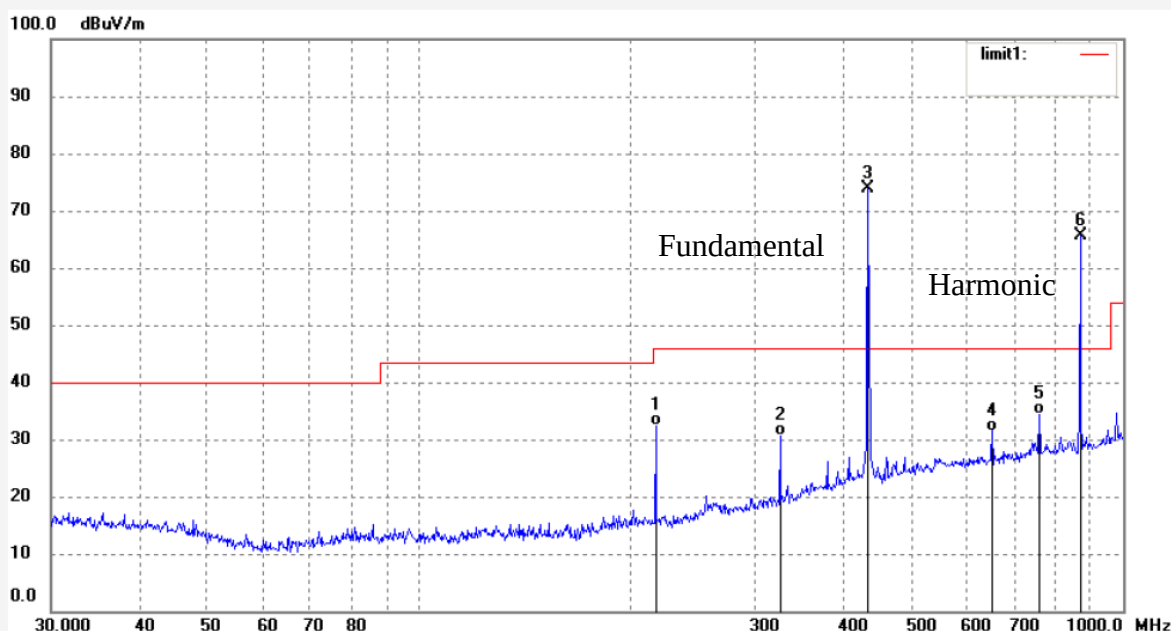
Date: 2020/11/11/

Time: 10/00/57

Engineer Signature: Fan

Distance: 3M

Note: Report No.: RTZ201021001-RF



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	216.7828	42.30	-9.81	32.49	46.00	-13.51	QP	100	139	
2	325.5957	37.15	-6.51	30.64	46.00	-15.36	QP	100	221	
3	433.9600	77.15	-3.32	73.83	100.83	-27.00	peak	100	213	
4	651.9416	32.12	-0.62	31.50	46.00	-14.50	QP	100	90	
5	760.7036	33.43	1.03	34.46	46.00	-11.54	QP	100	13	
6	867.9200	63.60	2.04	65.64	80.83	-15.19	peak	100	24	

Job No.: lhj #1307

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: RGB FLEX LIGHT

Mode: TX

Model: NEONM-0.66-24-036-E-F(56360)

Manufacturer: LAMUES LIGHT ENTERPRISE CO., LTD

Polarization: Horizontal

Power Source: AC 230V/50Hz

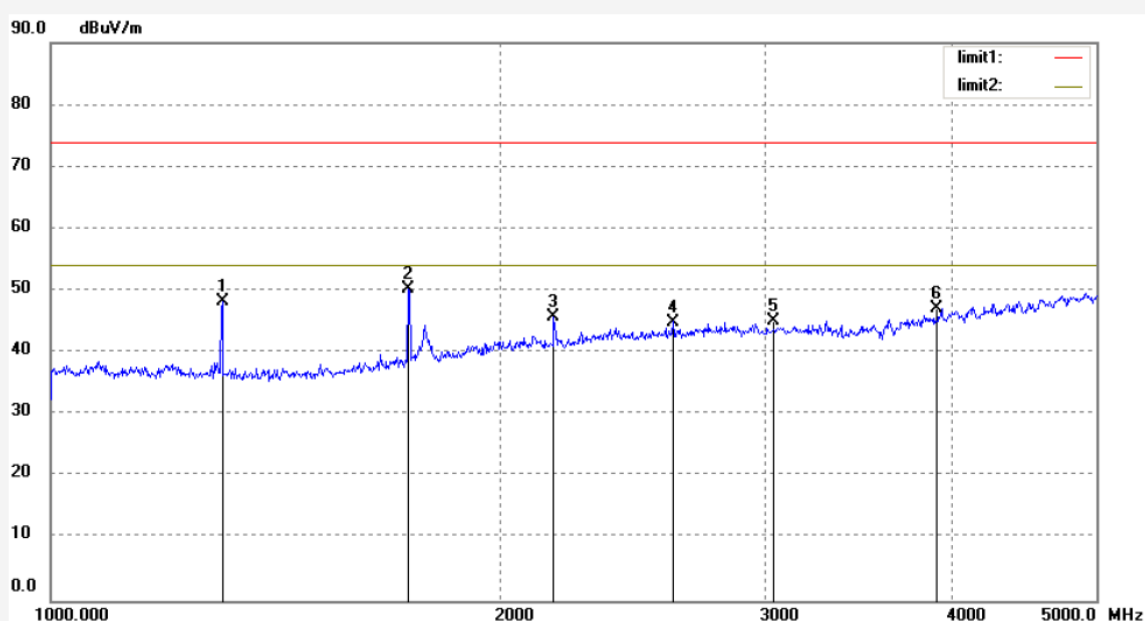
Date: 2020/11/11/

Time: 10/20/28

Engineer Signature: CHARLEY

Distance: 3M

Note: Report No.: RTZ201021002-RF



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1302.060	56.99	-8.67	48.32	74.00	-25.68	peak	150	51	
2	1735.995	56.35	-6.08	50.27	80.83	-30.56	peak	150	132	
3	2169.725	48.53	-2.75	45.78	80.83	-35.05	peak	150	97	
4	2603.477	46.06	-1.06	45.00	80.83	-35.83	peak	150	215	
5	3037.926	45.61	-0.53	45.08	80.83	-35.75	peak	150	110	
6	3905.238	45.39	1.66	47.05	74.00	-26.95	peak	150	236	


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.: lhj #1300

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: RGB FLEX LIGHT

Mode: TX

Model: NEONM-0.66-24-036-E-F(56360)

Manufacturer: LAMUES LIGHT ENTERPRISE CO., LT6D

Polarization: Vertical

Power Source: AC 230V/50Hz

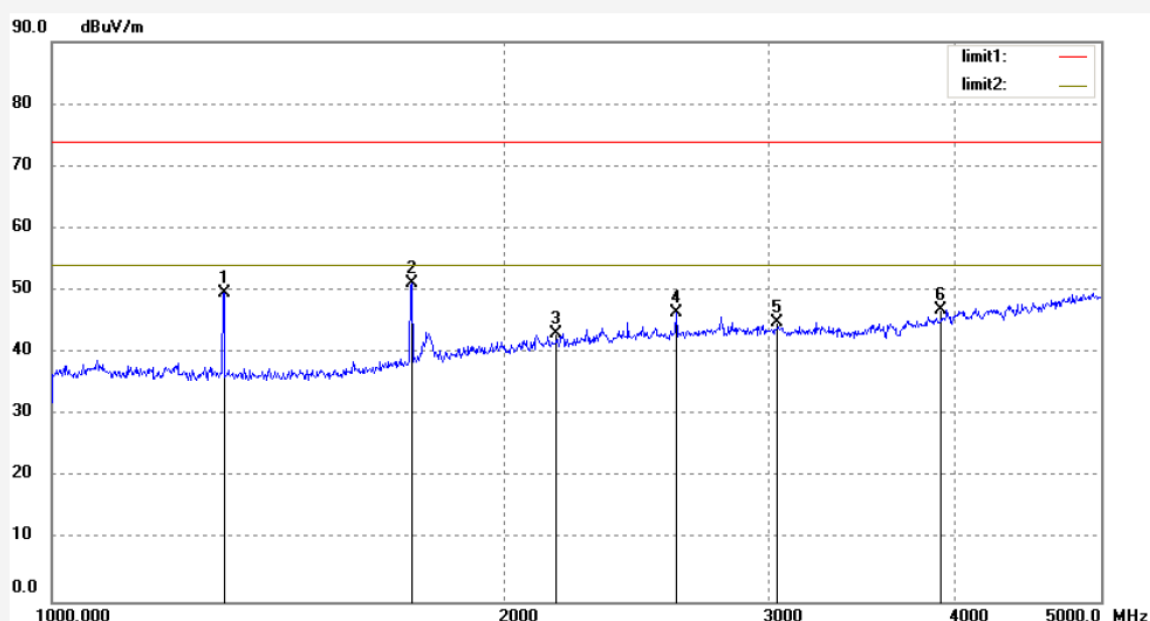
Date: 2020/11/11/

Time: 10/18/13

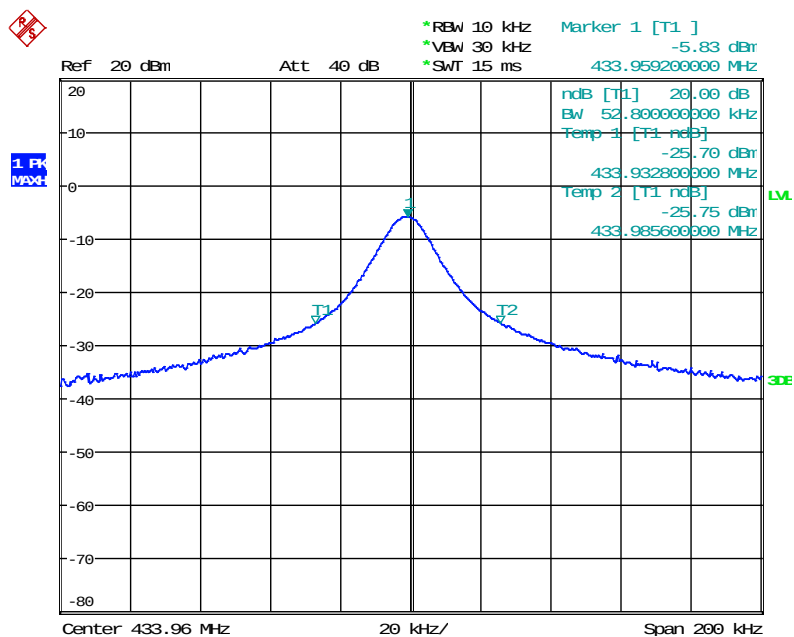
Engineer Signature: CHARLEY

Distance: 3M

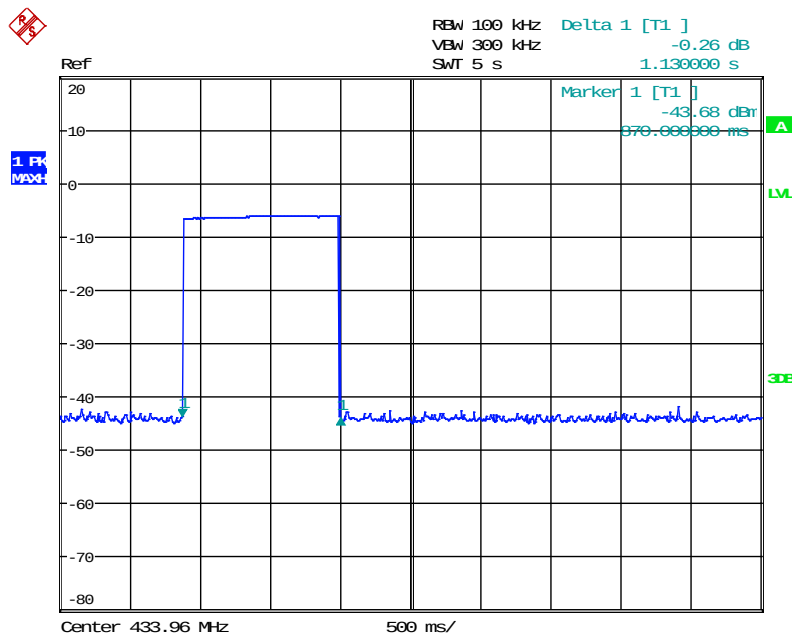
Note: Report No.: RTZ201021002-RF



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1302.060	58.39	-8.67	49.72	74.00	-24.28	peak	150	254	
2	1735.788	57.33	-6.08	51.25	80.83	-29.58	peak	150	136	
3	2169.769	45.82	-2.75	43.07	80.83	-37.76	peak	150	84	
4	2603.477	47.42	-1.07	46.35	80.83	-34.48	peak	150	209	
5	3037.380	45.32	-0.52	44.80	80.83	-36.03	peak	150	328	
6	3905.585	45.18	1.66	46.84	74.00	-27.16	peak	150	142	

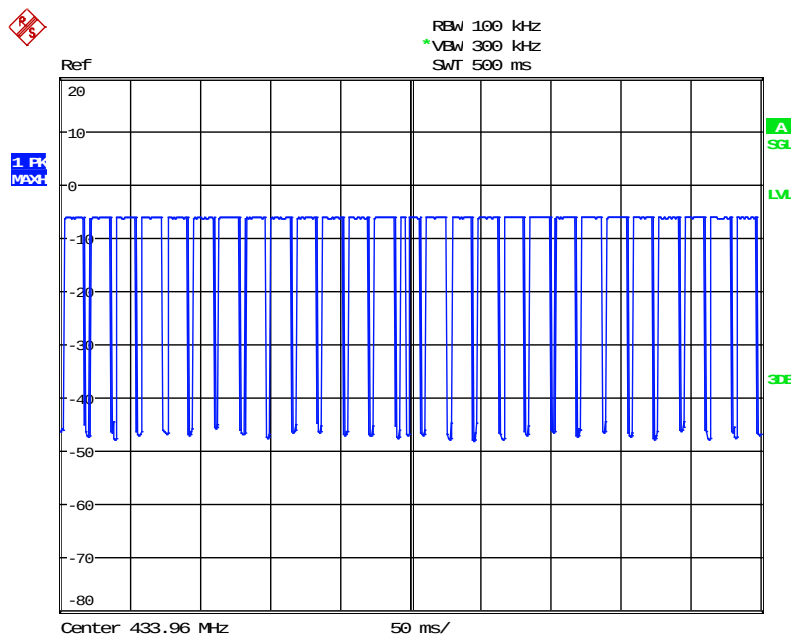


Date: 11.NOV.2020 10:50:30

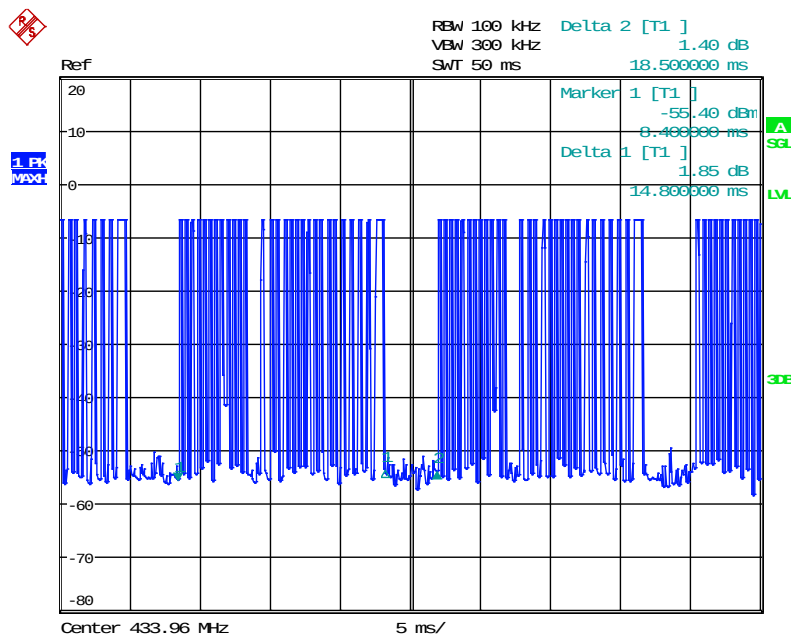


Date: 11.NOV.2020 10:53:49

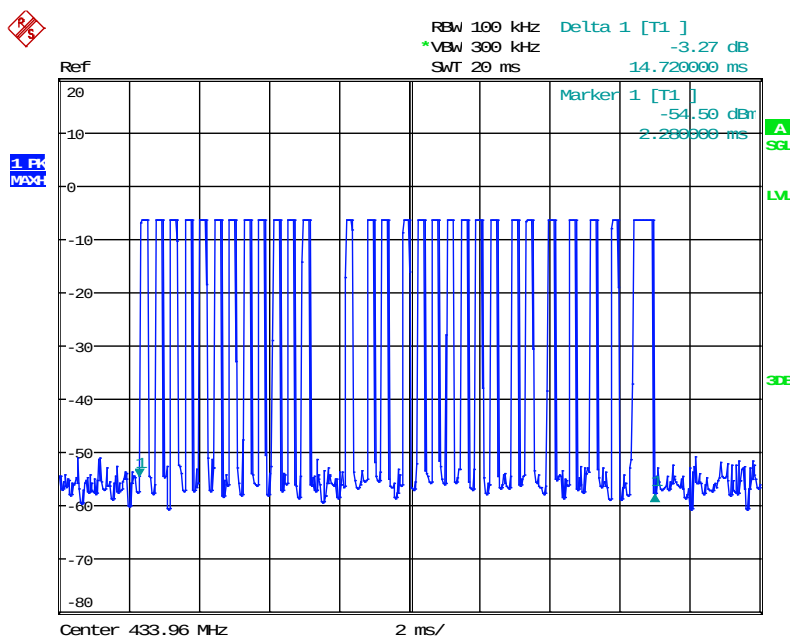
Release Time = 1.13s



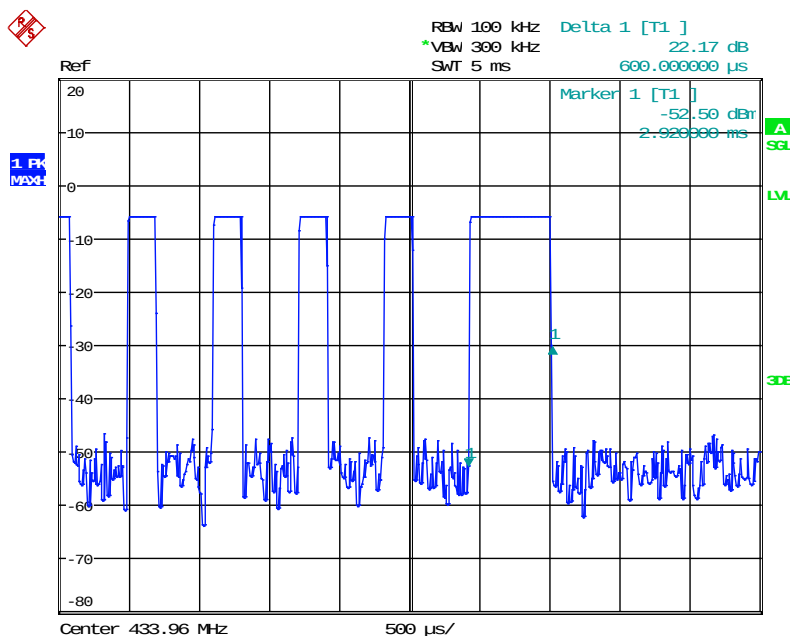
Date: 11.NOV.2020 10:56:05



Date: 17.NOV.2020 12:05:33

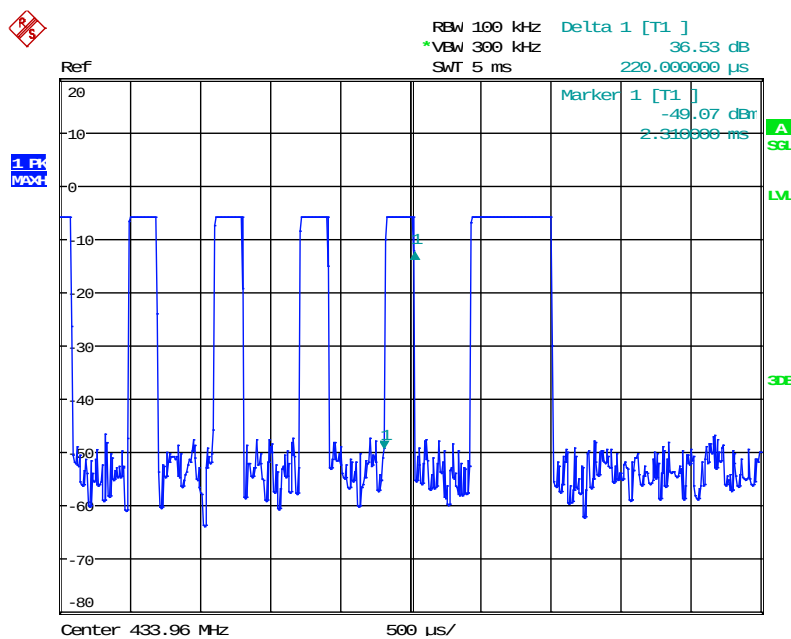


Date: 18.JAN.2020 09:55:39



Date: 11.NOV.2020 10:59:06

The graph shows the duration of 'on' signal. From Marker 1 to Delta 1, duration is 0.6ms.



Date: 11.NOV.2020 11:00:38

The graph shows the duration of 'on' signal. From Marker 1 to Delta 1, duration is 0.22ms.