



# FCC RADIO TEST REPORT

Applicant : Ubiquiti Inc.  
Address : 685 Third Avenue, New York, New York 10017,  
USA  
Equipment : UniFi Connect 21  
Model No. : UC-Display21  
Trade Name : UBIQUITI  
FCC ID. : SWX-UCD21

**I HEREBY CERTIFY THAT :**

The sample was received on Apr. 01, 2021 and the testing was completed on Jun. 17, 2021 at CerpPASS Technology Corp. The test result refers exclusively to the test presented test model / sample. Without written approval of CerpPASS Technology Corp., the test report shall not be reproduced except in full.

Approved by:

Mark Liao / Supervisor

Laboratory Accreditation:

CerpPASS Technology Corporation Test Laboratory





CONTENTS

- 1. Summary of Test Procedure and Test Results ..... 5
  - 1.1. Applicable Standards .....5
- 2. Test Configuration of Equipment under Test ..... 6
  - 2.1. Feature of Equipment under Test.....6
  - 2.2. Carrier Frequency of Channels ..... 7
  - 2.3. Test Mode and Test Software .....9
  - 2.4. Description of Test System..... 10
  - 2.5. General Information of Test..... 11
  - 2.6. Measurement Uncertainty ..... 11
- 3. Test Equipment and Ancillaries Used for Tests ..... 12
- 4. Antenna Requirements ..... 14
  - 4.1. Standard Applicable ..... 14
  - 4.2. Antenna Construction and Directional Gain..... 14
- 5. Test of AC Power Line Conducted Emission ..... 15
  - 5.1. Test Limit ..... 15
  - 5.2. Test Procedures ..... 15
  - 5.3. Typical Test Setup ..... 16
  - 5.4. Test Result and Data ..... 17
  - 5.5. Test Photographs ..... 19
- 6. Test of Spurious Emission (Radiated) ..... 20
  - 6.1. Test Limit ..... 20
  - 6.2. Test Procedures ..... 21
  - 6.3. Typical Test Setup ..... 22
  - 6.4. Test Result and Data (9kHz ~ 30MHz)..... 23
  - 6.5. Test Result and Data (30MHz ~ 1GHz)..... 23
  - 6.6. Test Result and Data (1GHz ~ 40GHz)..... 25
  - 6.7. Restricted Bands of Operation ..... 109
  - 6.8. Test Photographs (30MHz ~ 1GHz) ..... 110
  - 6.9. Test Photographs (1GHz ~ 40GHz) ..... 111
- 7. On Time, Duty Cycle and Measurement methods ..... 113
  - 7.1. Test Limit ..... 113
  - 7.2. Test Procedure ..... 113
  - 7.3. Test Setup Layout ..... 113
  - 7.4. Test Result and Data ..... 113
  - 7.5. Measurement Methods ..... 113
- 8. 6dB Bandwidth & 99% Occupied Bandwidth ..... 115
  - 8.1. Test Limit ..... 115
  - 8.2. Test Procedure ..... 115
  - 8.3. Test Setup Layout ..... 115
  - 8.4. Test Result and Data (6dB Bandwidth) ..... 116
  - 8.5. Test Result and Data (99% Occupied Bandwidth) ..... 117
- 9. 26dB Bandwidth & 99% Occupied Bandwidth ..... 124



- 9.1. Test Limit ..... 124
- 9.2. Test Procedure ..... 124
- 9.3. Test Setup Layout ..... 124
- 9.4. Test Result and Data (26dB Bandwidth) ..... 125
- 9.5. Test Result and Data (99% Occupied Bandwidth) ..... 127
- 10. Average Power..... 143
  - 10.1. Test Limit ..... 143
  - 10.2. Test Procedure ..... 144
  - 10.3. Test Setup Layout ..... 144
  - 10.4. Test Result and Data ..... 145
- 11. Power Spectral Density ..... 152
  - 11.1. Test Limit ..... 152
  - 11.2. Test Procedure ..... 152
  - 11.3. Test Setup Layout ..... 152
  - 11.4. Test Result and Data ..... 153
- 12. Radio Frequency Exposure ..... 164
  - 12.1. Applicable Standards ..... 164
  - 12.2. EUT Specification ..... 164
  - 12.3. Test Results ..... 164
  - 12.4. Calculation..... 165
  - 12.5. Maximum Permissible Exposure ..... 166



**History of this test report**

Report No.	Issue Date	Description
21030230-TRFCC05	Jun. 30, 2021	Original



# 1. Summary of Test Procedure and Test Results

## 1.1. Applicable Standards

**ANSI C63.10:2013**

**FCC Rules and Regulations Part 15 Subpart E §15.407**

**KDB 789033**

FCC Rule	Description of Test	Result
15.203	Antenna Requirement	PASS
15.207(a)	AC Power Line Conducted Emission	PASS
15.407(b) 15.209	Radiated Spurious Emission	PASS
15.407(a)	26 dB & Occupied Bandwidth	PASS
15.407	6 dB Bandwidth	PASS
15.407 (a) & (a)(3)	Average Power	PASS
15.407(a)	Power Spectral Density	PASS
2.1091	Radio Frequency Exposure	PASS

\*The lab has reduced the uncertainty risk factor from test equipment, environment and staff technicians which according to the standard on contract. Therefore, the test result will only be determined by standard requirement.

\*This EUT has been also tested and compiled with the requirement of FCC Part 15, Subpart B, recorded in a separate test report(21030206-TEFV01).



## 2. Test Configuration of Equipment under Test

### 2.1. Feature of Equipment under Test

Frequency Range	NFC: 13.553MHz~13.567MHz BT / BLE: 2400-2483.5MHz 802.11b/g/n: 2400-2483.5MHz 802.11a/n/ac: 5150-5250MHz, 5250-5350MHz, 5470-5725MHz, 5725-5850MHz
Modulation Type	NFC: ASK BT: GFSK, $\pi/4$ -DQPSK, 8DPSK BLE: GFSK WLAN: 2.4GHz: 802.11b: CCK, DQPSK, DBPSK 802.11g/n: BPSK, QPSK, 16QAM, 64QAM, 5GHz: 802.11n/a: BPSK, QPSK, 16QAM, 64QAM 802.11ac: BPSK, QPSK, 16QAM, 64QAM, 256QAM
Modulation Technology	DSSS, OFDM, FHSS, DTS,
Data Rate	BT: GFSK: 1Mbps, $\pi/4$ -DQPSK: 2Mbps, 8DPSK: 3Mbps BLE: GFSK: 1Mbps WLAN: 2.4GHz: 802.11b: 1, 2, 5.5, 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11n: MCS0 – MCS7, HT20/40 5GHz: 802.11a: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11n: MCS0 – MCS7, HT20/40 802.11ac: MCS0 – MCS9, VHT20/40/80
Antenna Type	Internal Antenna
Antenna Gain	For NFC: 13.553MHz~13.567MHz: ANT B: 0dBi, ANT C: 0dBi For BT / BLE: 2400MHz~2483.5MHz: ANT A: 4.20dBi For WLAN: 2400MHz~2483.5MHz: ANT A: 4.20dBi 5150MHz~5250MHz: ANT A: 5.00dBi 5250MHz~5350MHz: ANT A: 5.00dBi 5470MHz~5725MHz: ANT A: 5.00dBi 5725MHz~5850MHz: ANT A: 5.00dBi

Note:

1. EUT support TPC Function.
2. WLAN and BT can simultaneously transmission.
3. EUT supports DFS Client Mode, without radar detection.
4. EUT support indoor / outdoor function.
5. For more details, please refer to the User's manual of the EUT.



## 2.2. Carrier Frequency of Channels

Band: 5150MHz-5250MHz

802.11a, 802.11n HT20, 802.11ac VHT20,

Channel	Frequency(MHz)	Channel	Frequency(MHz)
<b>*36</b>	<b>5180</b>	44	5220
<b>*40</b>	<b>5200</b>	<b>*48</b>	<b>5240</b>

802.11n HT40, 802.11ac VHT40,

Channel	Frequency(MHz)	Channel	Frequency(MHz)
<b>*38</b>	<b>5190</b>	<b>*46</b>	<b>5230</b>

802.11ac VHT80 ,

Channel	Frequency(MHz)
<b>*42</b>	<b>5210</b>

Band: 5250MHz -5350MHz

802.11a, 802.11n HT20, 802.11ac VHT20,

Channel	Frequency(MHz)	Channel	Frequency(MHz)
<b>*52</b>	<b>5260</b>	<b>*60</b>	<b>5300</b>
56	5280	<b>*64</b>	<b>5320</b>

802.11n HT40, 802.11ac VHT40,

Channel	Frequency(MHz)	Channel	Frequency(MHz)
<b>*54</b>	<b>5270</b>	<b>*62</b>	<b>5310</b>

802.11ac VHT80,

Channel	Frequency(MHz)
<b>*58</b>	<b>5290</b>

Band: 5470MHz -5725MHz

802.11a, 802.11n HT20, 802.11ac VHT20

Channel	Frequency(MHz)	Channel	Frequency(MHz)
<b>*100</b>	<b>5500</b>	124	5620
104	5520	128	5640
108	5540	132	5660
112	5560	136	5680
<b>*116</b>	<b>5580</b>	<b>*140</b>	<b>5700</b>
120	5600		

802.11n HT40, 802.11ac VHT40,

Channel	Frequency(MHz)	Channel	Frequency(MHz)
<b>*102</b>	<b>5510</b>	126	5630
<b>*110</b>	<b>5550</b>	<b>*134</b>	<b>5670</b>
118	5590		

802.11ac VHT80,

Channel	Frequency(MHz)	Channel	Frequency(MHz)
<b>*106</b>	<b>5530</b>	<b>*122</b>	<b>5610</b>



Band 3: Straddle Channel

802.11a, 802.11n HT 20, 802.11ac VHT20,

Channel	Frequency(MHz)
<b>*144</b>	<b>5720</b>

802.11n HT40, 802.11ac VHT40,

Channel	Frequency(MHz)
<b>*142</b>	<b>5710</b>

802.11ac VHT80,

Channel	Frequency(MHz)
<b>*138</b>	<b>5690</b>

Band: 5725MHz -5850MHz

802.11a, 802.11n HT20, 802.11ac VHT20,

Channel	Frequency(MHz)	Channel	Frequency(MHz)
<b>*149</b>	<b>5745</b>	161	5805
153	5765	<b>*165</b>	<b>5825</b>
<b>*157</b>	<b>5785</b>		

802.11n HT40, 802.11ac VHT40,

Channel	Frequency(MHz)	Channel	Frequency(MHz)
<b>*151</b>	<b>5755</b>	<b>*159</b>	<b>5795</b>

802.11ac VHT80,

Channel	Frequency(MHz)
<b>*155</b>	<b>5775</b>

Note: Channels remarked \* are selected to perform test.





### 2.3. Test Mode and Test Software

- a. During testing, the interface cables and equipment positions were varied according to ANSI C63.10.
- b. The complete test system included remote workstation and EUT for RF test. The remote workstation included Notebook.
- c. An executive program, "QRCT ver.4.0.00129.0" under Windows OS system was executed to transmit and receive data via WLAN.
- d. The following test modes were performed for the test:

Conducted Emissions from the AC mains power ports	
Test Mode	Operating Description
1	802.11a (6Mbps) , Power from POE
2	802.11n HT20 (6.5Mbps) , Power from POE
3	802.11n HT40 (13.5Mbps) , Power from POE
4	802.11ac VHT20 (6.5Mbps) , Power from POE
5	802.11ac VHT40 (13.5Mbps) , Power from POE
6	802.11ac VHT80 (29.3Mbps) , Power from POE
caused "Test Mode 4" generated the worst case, it was reported as the final data.	
Radiation Emissions (9KHz ~30MHz & 30MHz ~ 1GHz)	
Test Mode	Operating Description
1	802.11a (6Mbps) , Power from POE
2	802.11n HT20 (6.5Mbps) , Power from POE
3	802.11n HT40 (13.5Mbps) , Power from POE
4	802.11ac VHT20 (6.5Mbps) , Power from POE
5	802.11ac VHT40 (13.5Mbps) , Power from POE
6	802.11ac VHT80 (29.3Mbps) , Power from POE
caused "Test Mode 4" generated the worst case, it was reported as the final data.	
Radiation Emissions (1GHz ~ 40GHz)	
Test Mode	Operating Description
1	802.11a (6Mbps) , Power from POE
2	802.11n HT20 (6.5Mbps) , Power from POE
3	802.11n HT40 (13.5Mbps) , Power from POE
4	802.11ac VHT20 (6.5Mbps) , Power from POE
5	802.11ac VHT40 (13.5Mbps) , Power from POE
6	802.11ac VHT80 (29.3Mbps) , Power from POE
caused "Test Mode 1, 4~6" generated the worst case, they were reported as the final data.	

Modulation Type	TX CONFIGURATION
802.11a	1TX
802.11n HT20	1TX
802.11n HT40	1TX
802.11ac VHT20	1TX
802.11ac VHT40	1TX
802.11ac VHT80	1TX



### 2.4. Description of Test System

RF Conducted				
Equipment	Brand	Model	Length/Type	Power cord/Length/Type
Notebook	DELL	Vostro 3560	N/A	Adapter / 1.8m / NS
RJ45 Cable	N/A	N/A	1.2m / NS	N/A
Micro USB Cable	kolin	EX-DLCP07	1m / NS	N/A
POE	UBIQUITI	GP-H480-050G	N/A	0.6m / NS
Radiated Emissions				
Equipment	Brand	Model	Length/Type	Power cord/Length/Type
Notebook	ASUS	P2430U	N/A	Adapter / 1.8m / NS
RJ45 Cable	N/A	N/A	15m / S	N/A
Micro USB Cable	kolin	EX-DLCP07	1m / NS	N/A
POE	UBIQUITI	GP-H480-050G	N/A	0.6m / NS
AC Power Line Conducted Emission				
Equipment	Brand	Model	Length/Type	Power cord/Length/Type
Notebook	DELL	Vostro 3560	N/A	Adapter / 1.8m / NS
RJ45 Cable	N/A	N/A	1.2m / NS	N/A
Micro USB Cable	kolin	EX-DLCP07	1m / NS	N/A
POE	UBIQUITI	GP-H480-050G	N/A	0.6m / NS

**2.5. General Information of Test**

Test Site	<b>Cerpass Technology Corporation Test Laboratory</b> Address: No.10, Ln. 2, Lianfu St., Luzhu Dist., Taoyuan City 33848, Taiwan (R.O.C.) Tel:+886-3-3226-888 Fax:+886-3-3226-881	
	FCC	TW1439, TW1079
	IC	4934E-1, 4934E-2
	VCCI	T-2205 for Telecommunication test C-4663 for Conducted emission test R-4218 for Radiated emission test G-10812, G-10813 for radiated disturbance above 1GHz
Frequency Range Investigated:	Conducted: from 150kHz to 30 MHz Radiation: from 30 MHz to 40,000MHz	
Test Distance:	The test distance of radiated emission from antenna to EUT is 3 M.	

Test Item	Test Site	Test Period	Environmental Conditions	Tested By
RF Conducted	RFCON01-NK	2021/06/16~2021/06/17	26.3~32.6°C / 41~51%	Nick Guan
Radiated Emissions	3M02-NK	2021/04/17~2021/06/11	19.4~23.8°C / 40~48%	Nick Guan
AC Power Line Conducted Emission	CON01-NK	2021/06/17	25°C / 45%	Nick Guan

**2.6. Measurement Uncertainty**

Measurement Item	Uncertainty
AC Power Line Conduction(150K~30MHz)	±3.63dB
Radiated Spurious Emission(9KHz~30MHz)	±3.4dB
Radiated Spurious Emission(30MHz~1GHz)	±5.6dB
Radiated Spurious Emission(1GHz~40GHz)	±6.6dB
6dB Bandwidth	±4.4%
26dB Bandwidth	±4.4%
Occupied Bandwidth	±4.4%
Peak Output Power(Conducted Power Meter)	±1.1dB
Power Spectral Density	±1.8dB
Duty Cycle	±1.5%
Frequency Stability	±0.26KHz



### 3. Test Equipment and Ancillaries Used for Tests

Test Item	Radiated Emissions				
Test Site	Semi Anechoic Room(3M02-NK)				
Instrument	Manufacturer	Model No	Serial No	Calibration Date	Valid Date
Bilog Antenna	Schwarzbeck	VULB9168	369	2021/04/26	2022/04/25
Active Loop Antenna	EMCO	6507	40855	2021/06/10	2022/06/09
Horn Antenna	EMCO	3115	31601	2020/10/16	2021/10/15
Horn Antenna	EMCO	3116	31974	2020/09/24	2021/09/23
EMI Receiver	ROHDE & SCHWARZ	ESCI	101423	2020/06/23	2021/06/22
Spectrum Analyzer	ROHDE & SCHWARZ	FSV 40-N	102151	2020/08/03	2021/08/02
Preamplifier	EM Electronics corp.	EM330	60658	2020/10/20	2021/10/19
Preamplifier	EM Electronics corp.	EM330	60660	2021/03/18	2022/03/17
Preamplifier	Agilent	8449B	3008A01954	2021/03/22	2022/03/21
Preamplifier	EMC INSTRUMENTS	EMC184045	980065	2020/11/06	2021/11/05
Cable-3in1(30M-1G)	HARBOUR INDUSTRIES	LL142	CCE1315	2021/04/12	2022/04/11
Cable-0.5m(1G-18G)	HUBER SUHNER	SUCOFLEX 104	805443/4	2020/05/27	2021/05/26
Cable-3m(1G-18G)	HUBER SUHNER	SUCOFLEX 104	805796/4	2020/05/27	2021/05/26
Cable-8m(1G-18G)	HUBER SUHNER	SUCOFLEX 104	805795/4	2020/05/27	2021/05/26
Cable-0.5m(1G-18G)	EMEC	EM104-SMSM-0.5M	CCE1354	2020/06/19	2021/06/18
Cable-3m(1G-18G)	EMEC	EM104-SMSM-3M	CCE1355	2020/06/19	2021/06/18
Cable-8m(1G-18G)	EMEC	EM104-SMSM-8M	CCE1356	2020/06/19	2021/06/18
Cable-0.5m(30M-40G)	HUBER SUHNER	SUCOFLEX 102	28420/2	2021/04/03	2022/04/02
Cable-3m(30M-40G)	HUBER SUHNER	SUCOFLEX 102	MY2608/2	2021/04/09	2022/04/08
Cable-0.5m(1G-40G)	Rapidtek	40GHZ 50CM	38MS-38MS50314	2021/04/08	2022/04/07
Cable-6m(9k~300M)	NA	EMC5D-BM-BM-6	130605	2020/09/18	2021/09/17
E3	AUDIX	v8.2014-8-6	RK-000529	NA	NA

Test Item	RF Conducted				
Test Site	RFCON01-NK				
Instrument	Manufacturer	Model No	Serial No	Calibration Date	Valid Date
Spectrum Analyzer	ROHDE & SCHWARZ	FSV 40-N	101329	2020/07/07	2021/07/06
Bluetooth Tester	ROHDE & SCHWARZ	CBT	101133	2021/04/19	2022/04/18
CAX Signal Analyzer	KEYSIGHT	N9000B	MY57100339	2020/12/25	2021/12/24
Attenuator	KEYSIGHT	8491B	MY39250703	2021/04/09	2022/04/08
TEMP & HUMIDITY CHAMBER	T-MACHINE	TMJ-9712	T-12-040111	2020/08/25	2021/08/24
Power Meter	Anritsu	ML2495A	1224005	2021/04/14	2022/04/13
Power Sensor	Anritsu	MA2411B	1207295	2021/04/14	2022/04/13



Test Item	AC Power Line Conducted Emission				
Test Site	CON01-NK				
<b>Instrument</b>	<b>Manufacturer</b>	<b>Model No</b>	<b>Serial No</b>	<b>Calibration Date</b>	<b>Valid Date</b>
EMI Receiver	ROHDE & SCHWARZ	ESCI	100821	2020/09/11	2021/09/10
Line Impedance Stabilization Network	Schwarzbeck	NSLK 8127	8127-516	2020/09/26	2021/09/25
Pulse Limiter	ROHDE & SCHWARZ	ESH3-Z2	101933	2020/09/17	2021/09/16
Cable-6m(9k~300M)	NA	EMC5D-BM-BM-6	130605	2020/09/18	2021/09/17
E3	AUDIX	v8.2014-8-6	RK-000531	NA	NA



## 4. Antenna Requirements

### 4.1. Standard Applicable

For intentional device, according to FCC 47 CFR 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.

And according to FCC 47 CFR Section 15.407 (a), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

### 4.2. Antenna Construction and Directional Gain

Antenna Type	Internal Antenna
Antenna Gain	5150-5250MHz: ANT A: 5.00dBi 5250-5350MHz: ANT A: 5.00dBi 5470-5725MHz: ANT A: 5.00dBi 5725-5850MHz: ANT A: 5.00dBi

For Power directional gain=  $G_{ant}= 5.00$  dBi

For PSD directional gain =  $G_{ant}= 5.00$  dBi



## 5. Test of AC Power Line Conducted Emission

### 5.1. Test Limit

Conducted Emissions were measured from 150 kHz to 30 MHz with a bandwidth of 9 KHz, according to the methods defined in ANSI C63.4-2014. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meters above the ground plane. The interface cables and equipment positioning were varied within limits of reasonable applications to determine the position produced maximum conducted emissions.

Frequency (MHz)	Quasi Peak (dB $\mu$ V)	Average (dB $\mu$ V)
0.15 – 0.5	66-56*	56-46*
0.5 – 5.0	56	46
5.0 – 30.0	60	50

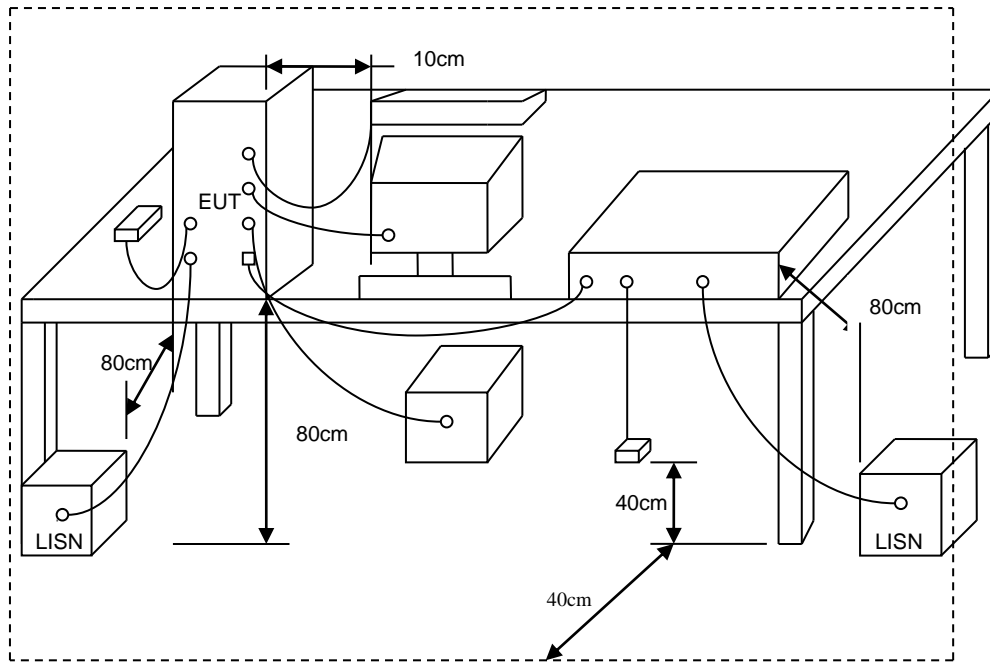
\*Decreases with the logarithm of the frequency.

### 5.2. Test Procedures

- The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- Connect EUT to the power mains through a line impedance stabilization network (LISN).
- All the support units are connecting to the other LISN.
- The LISN provides 50 ohm coupling impedance for the measuring instrument.
- The FCC states that a 50 ohm, 50 micro-Henry LISN should be used.
- Both sides of AC line were checked for maximum conducted interference.
- The frequency range from 150 kHz to 30 MHz was searched.
- Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.



### 5.3. Typical Test Setup

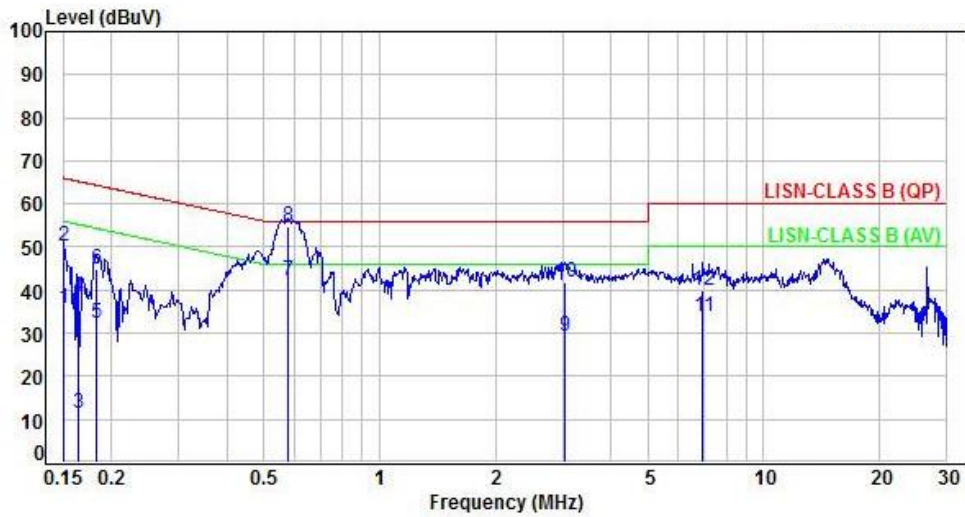






5.4. Test Result and Data

Power	: From POE DC48V	Pol/Phase	: LINE
Test Mode	: Mode 4		:

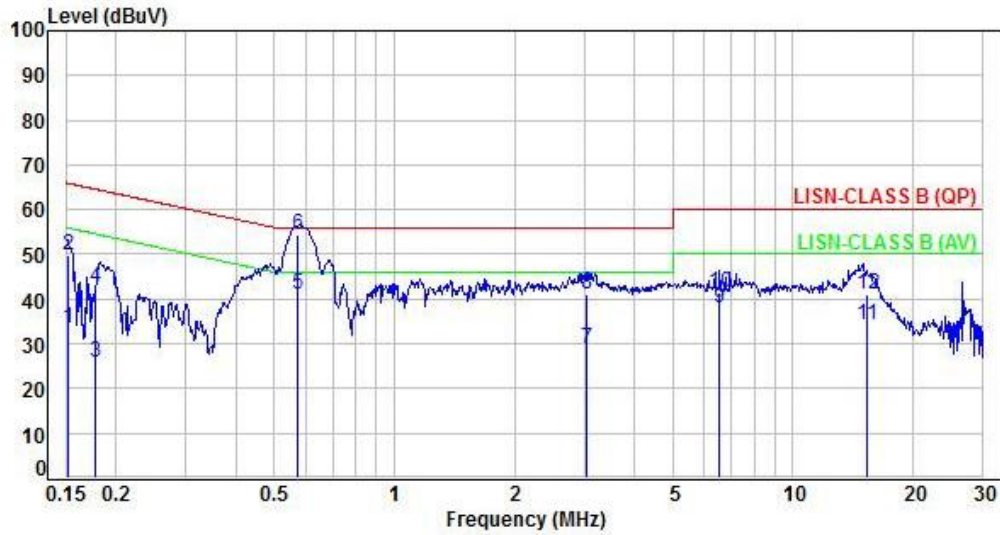


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.15	9.96	25.67	35.63	55.99	-20.36	Average	P
2	0.15	9.96	40.11	50.07	65.99	-15.92	QP	P
3	0.16	9.96	1.56	11.52	55.21	-43.69	Average	P
4	0.16	9.96	28.60	38.56	65.21	-26.65	QP	P
5	0.18	9.96	22.38	32.34	54.37	-22.03	Average	P
6	0.18	9.96	34.87	44.83	64.37	-19.54	QP	P
7	0.58	9.99	32.06	42.05	46.00	-3.95	Average	P
8	0.58	9.99	44.69	54.68	56.00	-1.32	QP	P
9	3.03	10.18	19.27	29.45	46.00	-16.55	Average	P
10	3.03	10.18	31.49	41.67	56.00	-14.33	QP	P
11	6.95	10.44	23.54	33.98	50.00	-16.02	Average	P
12	6.95	10.44	29.57	40.01	60.00	-19.99	QP	P

Note: Level=Reading+Factor  
Margin=Level-Limit  
Factor=(LISN or ISN or Current Probe)Factor + Cable Loss



Power	: From POE DC48V	Pol/Phase	: NEUTRAL
Test Mode	: Mode4		



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.15	9.97	23.39	33.36	55.93	-22.57	Average	P
2	0.15	9.97	39.73	49.70	65.93	-16.23	QP	P
3	0.18	9.97	15.76	25.73	54.59	-28.86	Average	P
4	0.18	9.97	32.56	42.53	64.59	-22.06	QP	P
5	0.57	10.00	31.09	41.09	46.00	-4.91	Average	P
6	0.57	10.00	44.39	54.39	56.00	-1.61	QP	P
7	3.05	10.14	18.86	29.00	46.00	-17.00	Average	P
8	3.05	10.14	31.02	41.16	56.00	-14.84	QP	P
9	6.54	10.34	27.62	37.96	50.00	-12.04	Average	P
10	6.54	10.34	31.29	41.63	60.00	-18.37	QP	P
11	15.31	10.85	23.30	34.15	50.00	-15.85	Average	P
12	15.31	10.85	30.22	41.07	60.00	-18.93	QP	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=(LISN or ISN or Current Probe)Factor + Cable Loss



## 6. Test of Spurious Emission (Radiated)

### 6.1. Test Limit

Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band:  
All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27dBm/MHz at the band edge.
- (5) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.
- (6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.
- (7) The provisions of §15.205 apply to intentional radiators operating under this section.
- (8) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits.



## 6.2. Test Procedures

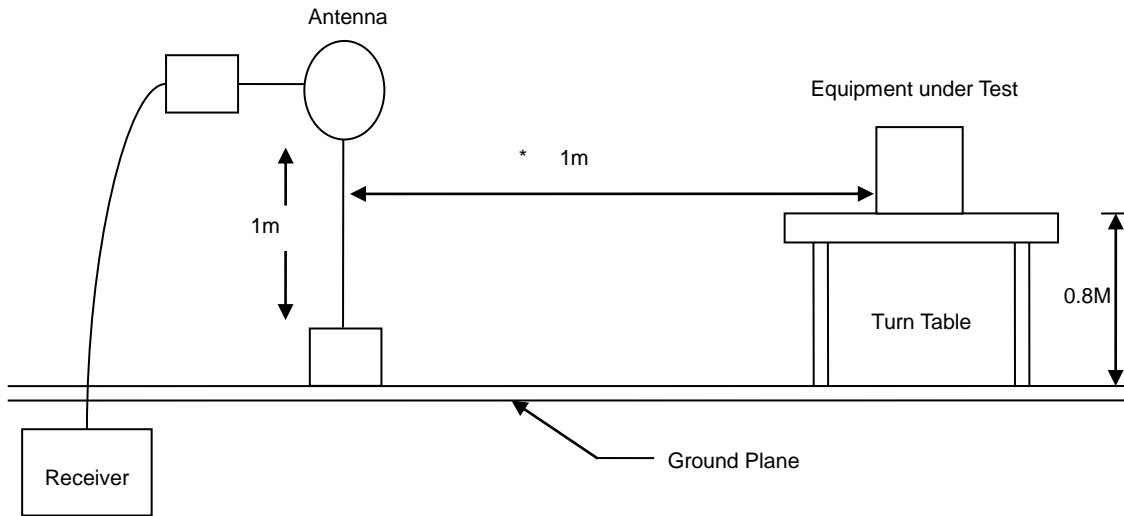
- a. The EUT was placed on a rotatable table top 0.8 meter above ground.
- b. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
- c. The table was rotated 360 degrees to determine the position of the highest radiation.
- d. The antenna is a broadband antenna and its height is varied between one meter and four meters above ground to find the maximum value of the field strength both horizontal polarization and vertical polarization of the antenna are set to make the measurement.
- e. For each suspected emission the EUT was arranged to its worst case and then tune the antenna tower (from 1 M to 4 M) and turn table (from 0 degree to 360 degrees) to find the maximum reading.
- f. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function and specified bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method and reported.
- h. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- i. "Cone of radiation" has been considered to be 3dB bandwidth of the measurement antenna.

Note: The supporting fixture shall permit orientation of the EUT in each of three orthogonal axis positions such that emissions from the EUT are maximized. (Y-AXIS is the worst.)

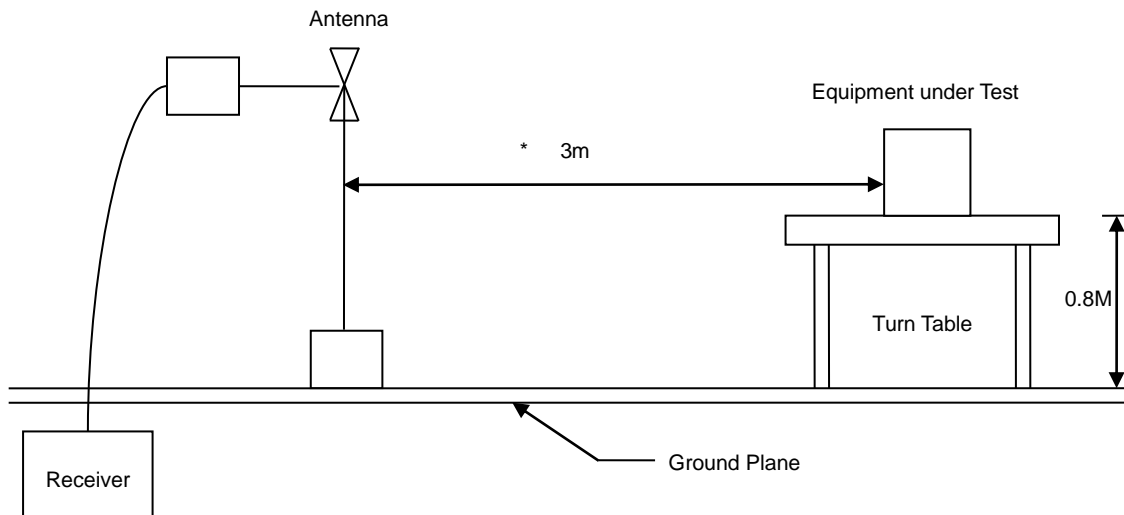


### 6.3. Typical Test Setup

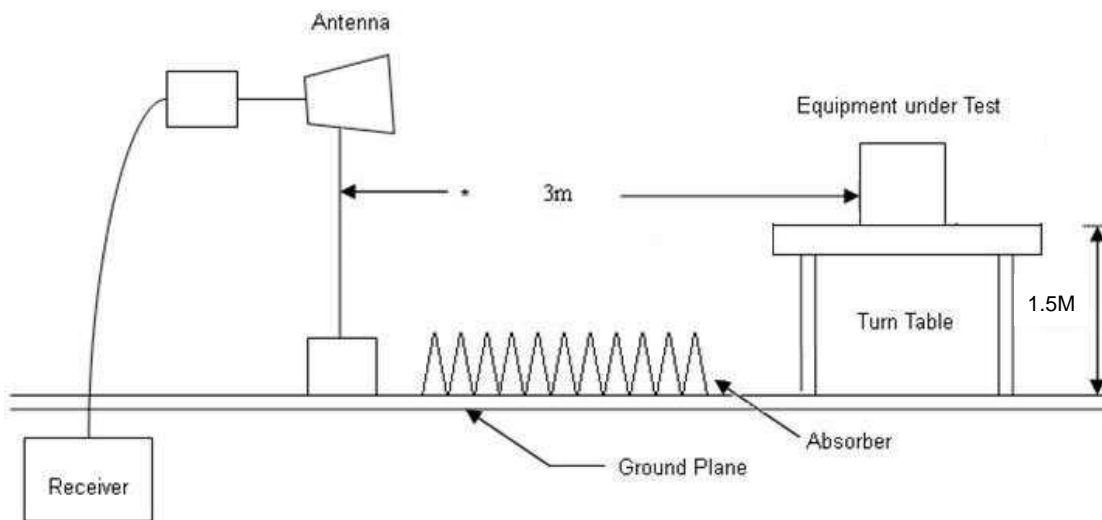
Below 30MHz test setup



30MHz- 1GHz Test Setup



Above 1GHz Test Setup



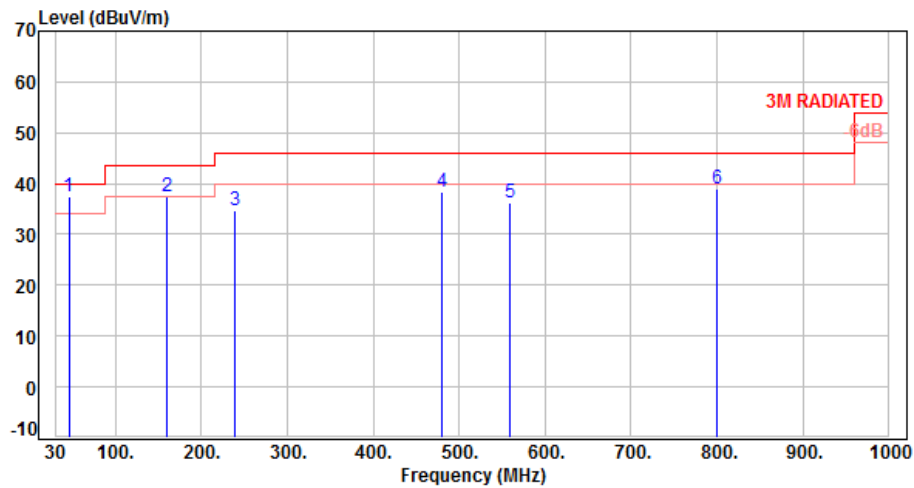


### 6.4. Test Result and Data (9kHz ~ 30MHz)

The 9kHz - 30MHz spurious emission is under limit 20dB more.

### 6.5. Test Result and Data (30MHz ~ 1GHz)

Power	:	From POE DC48V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4		:	

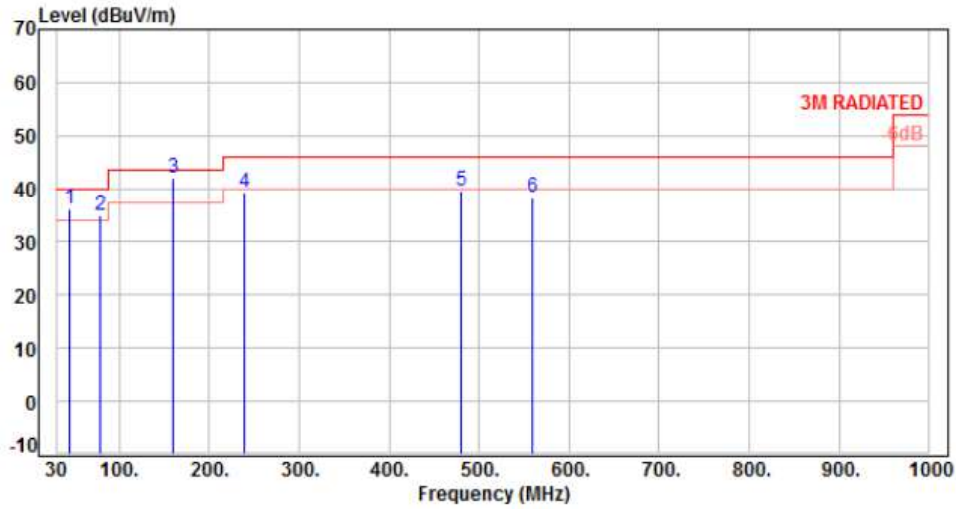


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	45.68	-10.67	48.10	37.43	40.00	-2.57	QP	100	302	P
2	159.98	-10.69	48.26	37.57	43.50	-5.93	Peak	100	360	P
3	239.45	-11.95	46.68	34.73	46.00	-11.27	Peak	100	360	P
4	480.14	-5.26	43.75	38.49	46.00	-7.51	Peak	100	360	P
5	559.58	-3.65	39.99	36.34	46.00	-9.66	Peak	100	360	P
6	800.26	0.62	38.22	38.84	46.00	-7.16	Peak	100	360	P

Note: Level=Reading+Factor  
Margin=Level-Limit  
Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From POE DC48V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4		:	



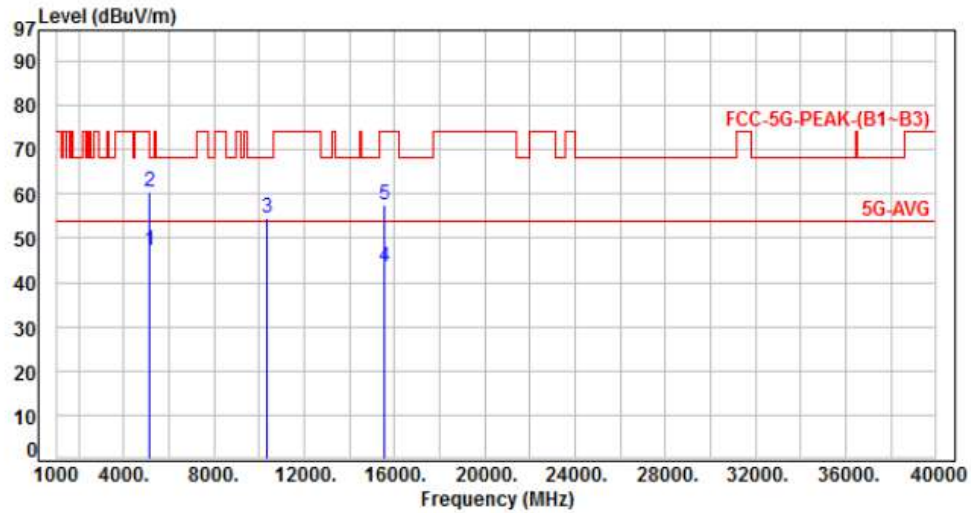
No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	45.46	-10.67	47.02	36.35	40.00	-3.65	Peak	400	360	P
2	78.59	-14.42	49.32	34.90	40.00	-5.10	Peak	400	360	P
3	159.98	-10.69	52.57	41.88	43.50	-1.62	QP	100	239	P
4	239.45	-11.95	51.36	39.41	46.00	-6.59	Peak	400	360	P
5	480.18	-5.26	44.84	39.58	46.00	-6.42	Peak	400	360	P
6	559.68	-3.65	41.93	38.28	46.00	-7.72	Peak	400	360	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



6.6. Test Result and Data (1GHz ~ 40GHz)

Power	: From POE DC48V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, Band 1, CH36		:



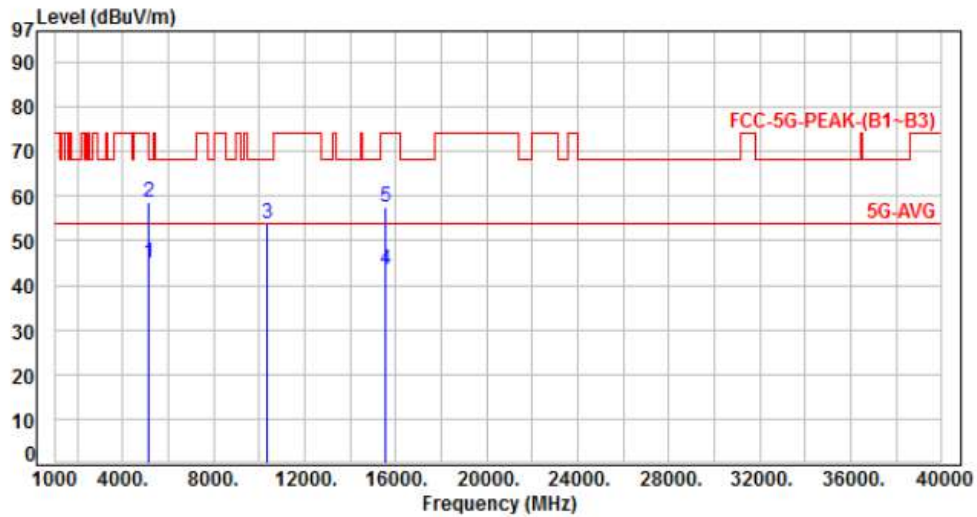
No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.61	41.69	47.30	54.00	-6.70	Average	219	58	P
2	5150.00	5.61	54.70	60.31	74.00	-13.69	Peak	219	58	P
3	10360.00	12.71	41.75	54.46	68.20	-13.74	Peak	100	209	P
4	15540.00	15.11	28.46	43.57	54.00	-10.43	Average	100	78	P
5	15540.00	15.11	42.32	57.43	74.00	-16.57	Peak	100	78	P

Note: Level=Reading+Factor  
Margin=Level-Limit  
Factor=Antenna Factor + cable loss - Amplifier Factor





Power	: From POE DC48V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, Band 1, CH36		:

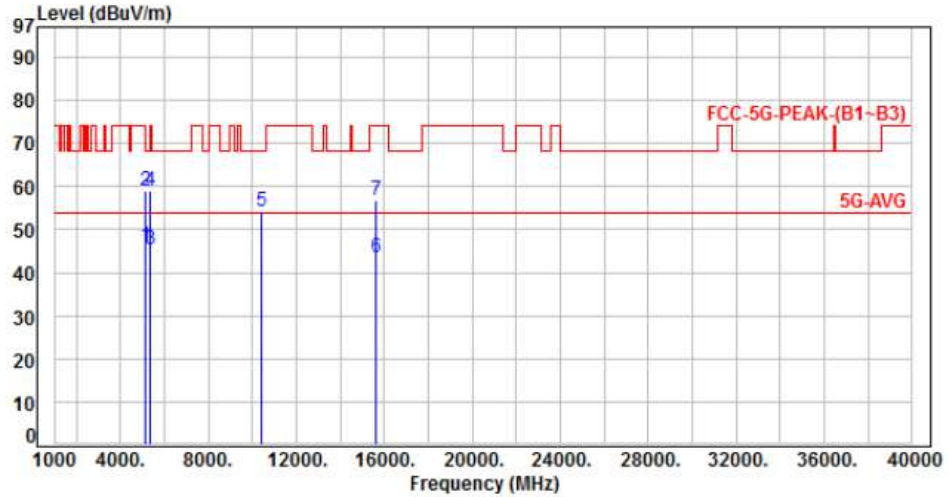


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.61	39.26	44.87	54.00	-9.13	Average	100	26	P
2	5150.00	5.61	53.10	58.71	74.00	-15.29	Peak	100	26	P
3	10360.00	12.71	41.12	53.83	68.20	-14.37	Peak	100	46	P
4	15540.00	15.11	28.38	43.49	54.00	-10.51	Average	100	68	P
5	15540.00	15.11	42.40	57.51	74.00	-16.49	Peak	100	68	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, Band 1, CH40		:

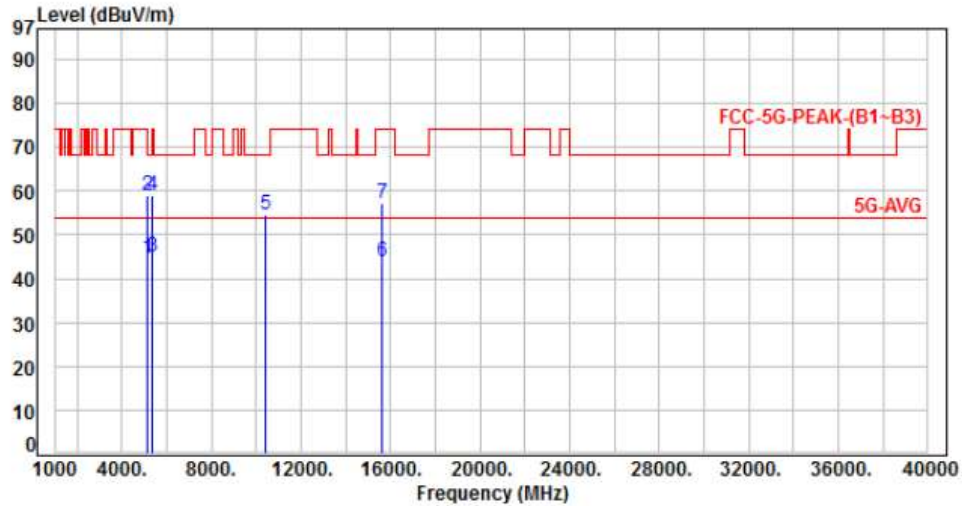


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.61	40.33	45.94	54.00	-8.06	Average	297	288	P
2	5150.00	5.61	53.40	59.01	74.00	-14.99	Peak	297	288	P
3	5350.00	5.99	39.19	45.18	54.00	-8.82	Average	297	288	P
4	5350.00	5.99	53.13	59.12	74.00	-14.88	Peak	297	288	P
5	10400.00	12.76	41.54	54.30	68.20	-13.90	Peak	100	187	P
6	15600.00	14.71	28.64	43.35	54.00	-10.65	Average	304	297	P
7	15600.00	14.71	42.13	56.84	74.00	-17.16	Peak	304	297	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, Band 1, CH40		:

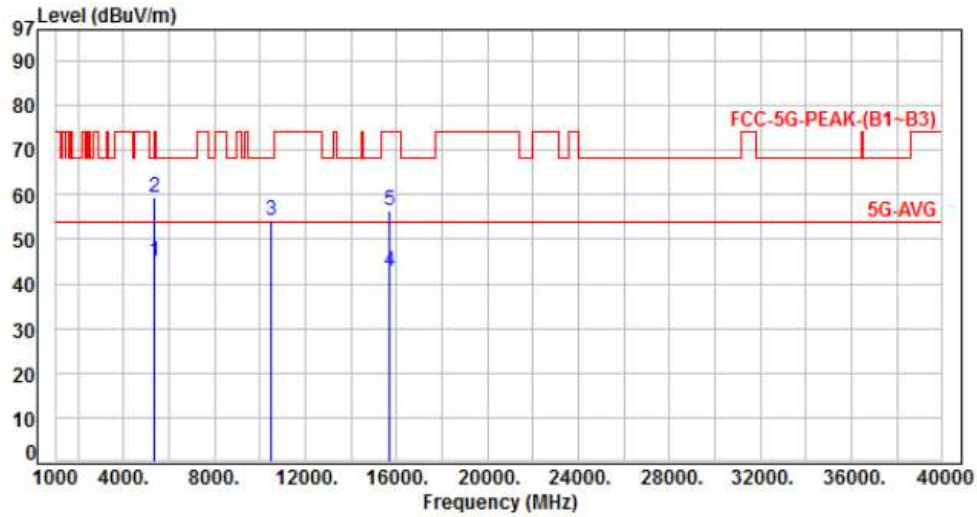


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.61	39.19	44.80	54.00	-9.20	Average	100	124	P
2	5150.00	5.61	53.42	59.03	74.00	-14.97	Peak	100	124	P
3	5350.00	5.99	39.07	45.06	54.00	-8.94	Average	100	124	P
4	5350.00	5.99	53.16	59.15	74.00	-14.85	Peak	100	124	P
5	10400.00	12.76	41.91	54.67	68.20	-13.53	Peak	100	143	P
6	15600.00	14.71	29.09	43.80	54.00	-10.20	Average	100	110	P
7	15600.00	14.71	42.59	57.30	74.00	-16.70	Peak	100	110	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, Band 1, CH48		:

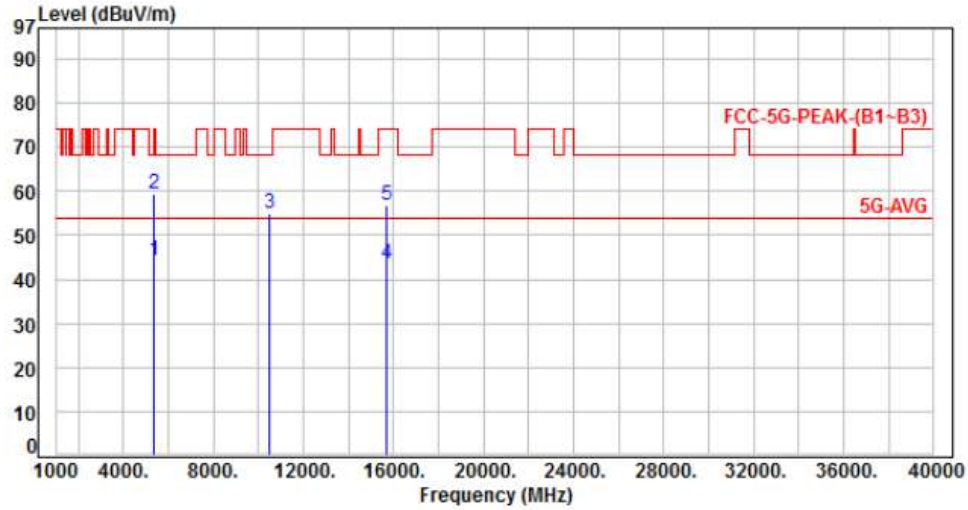


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	5.99	39.03	45.02	54.00	-8.98	Average	240	298	P
2	5350.00	5.99	53.24	59.23	74.00	-14.77	Peak	240	298	P
3	10480.00	12.88	41.36	54.24	68.20	-13.96	Peak	111	129	P
4	15720.00	14.37	28.42	42.79	54.00	-11.21	Average	213	316	P
5	15720.00	14.37	42.02	56.39	74.00	-17.61	Peak	213	316	P

Note: Level=Reading+Factor  
Margin=Level-Limit  
Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, Band 1, CH48		:

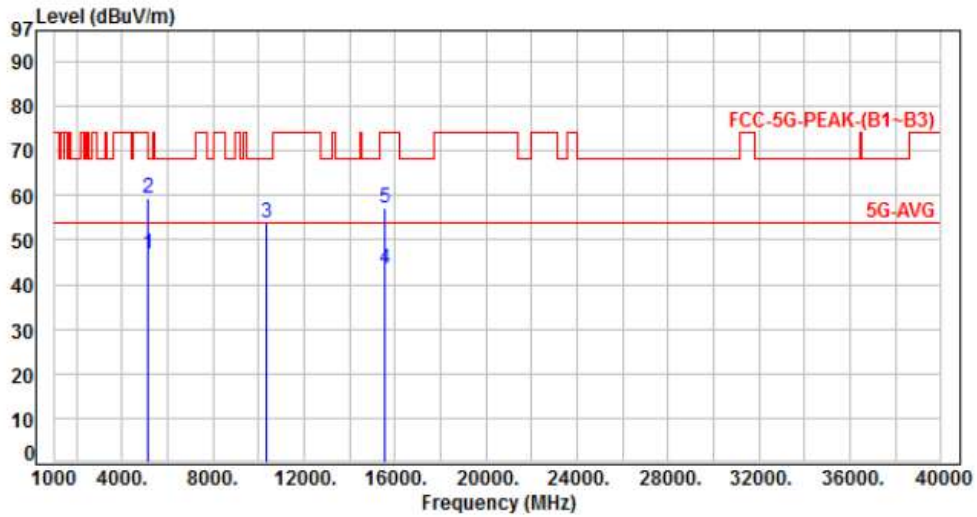


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	5.99	38.32	44.31	54.00	-9.69	Average	127	244	P
2	5350.00	5.99	53.32	59.31	74.00	-14.69	Peak	127	244	P
3	10480.00	12.88	42.13	55.01	68.20	-13.19	Peak	100	202	P
4	15720.00	14.37	29.01	43.38	54.00	-10.62	Average	119	267	P
5	15720.00	14.37	42.43	56.80	74.00	-17.20	Peak	119	267	P

Note: Level=Reading+Factor  
Margin=Level-Limit  
Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, Band 1, CH36		:

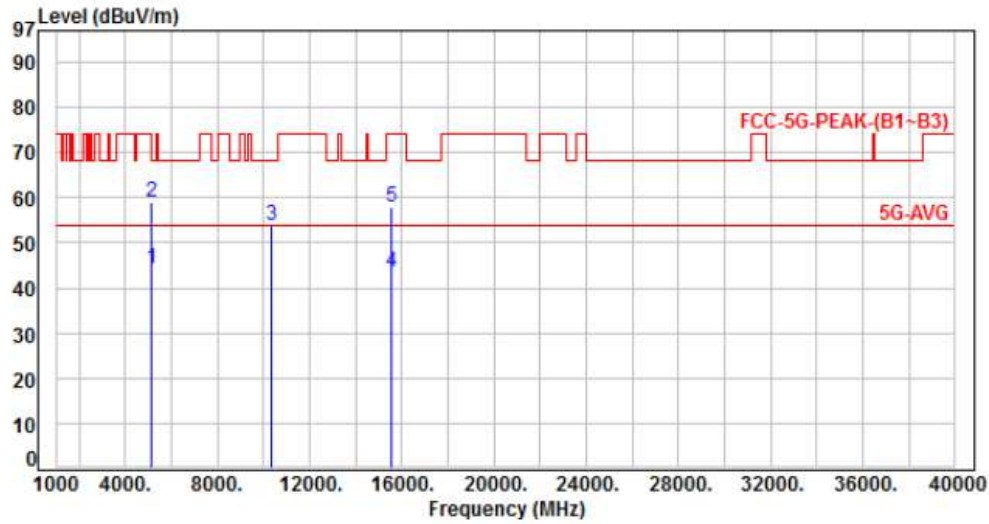


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.61	41.36	46.97	54.00	-7.03	Average	137	283	P
2	5150.00	5.61	53.85	59.46	74.00	-14.54	Peak	137	283	P
3	10360.00	12.71	41.20	53.91	68.20	-14.29	Peak	322	194	P
4	15540.00	15.11	28.37	43.48	54.00	-10.52	Average	119	267	P
5	15540.00	15.11	42.19	57.30	74.00	-16.70	Peak	119	267	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From POE DC48V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 1, CH36		:	

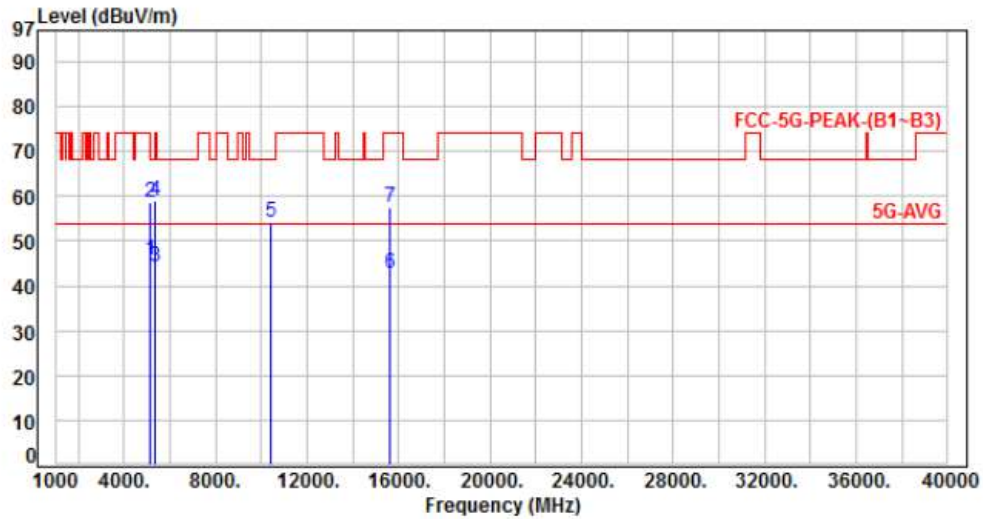


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.61	38.55	44.16	54.00	-9.84	Average	121	251	P
2	5150.00	5.61	53.42	59.03	74.00	-14.97	Peak	121	251	P
3	10360.00	12.71	41.30	54.01	68.20	-14.19	Peak	100	127	P
4	15540.00	15.11	28.40	43.51	54.00	-10.49	Average	113	249	P
5	15540.00	15.11	42.76	57.87	74.00	-16.13	Peak	113	249	P

Note: Level=Reading+Factor  
Margin=Level-Limit  
Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, Band 1, CH40		:



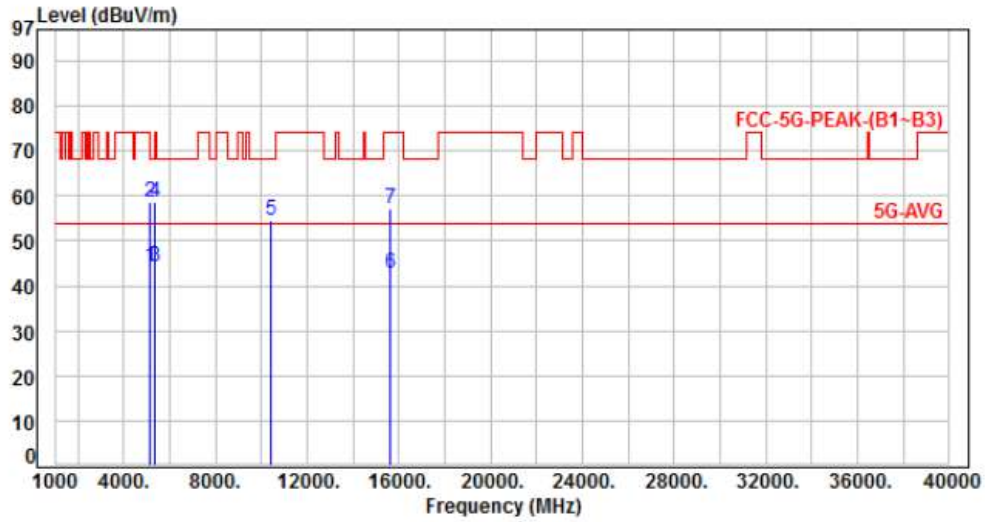
No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.61	40.28	45.89	54.00	-8.11	Average	283	272	P
2	5150.00	5.61	53.17	58.78	74.00	-15.22	Peak	283	272	P
3	5350.00	5.99	38.28	44.27	54.00	-9.73	Average	283	272	P
4	5350.00	5.99	53.06	59.05	74.00	-14.95	Peak	283	272	P
5	10400.00	12.76	41.35	54.11	68.20	-14.09	Peak	323	154	P
6	15600.00	14.71	28.09	42.80	54.00	-11.20	Average	246	289	P
7	15600.00	14.71	42.64	57.35	74.00	-16.65	Peak	246	289	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor





Power	:	From POE DC48V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 1, CH40		:	

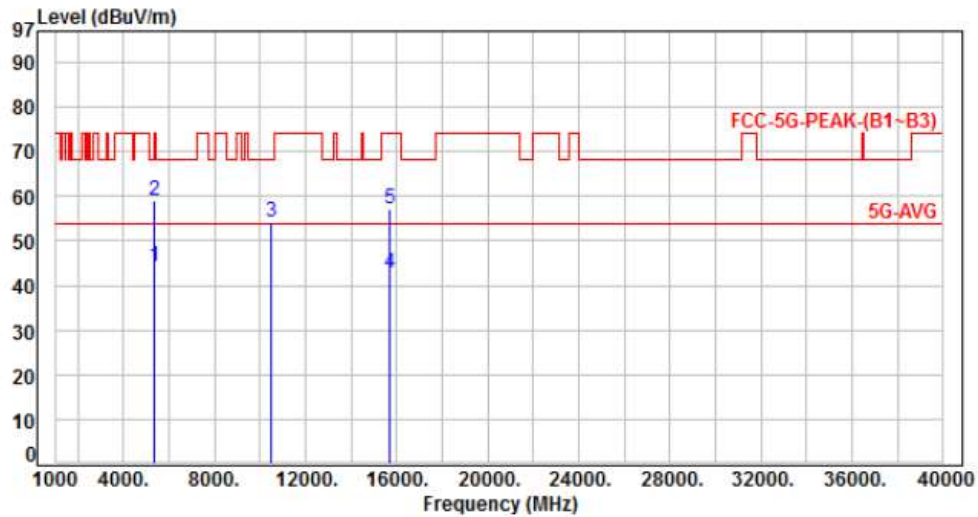


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.61	38.49	44.10	54.00	-9.90	Average	100	247	P
2	5150.00	5.61	53.17	58.78	74.00	-15.22	Peak	100	247	P
3	5350.00	5.99	38.32	44.31	54.00	-9.69	Average	100	247	P
4	5350.00	5.99	52.66	58.65	74.00	-15.35	Peak	100	247	P
5	10400.00	12.76	41.89	54.65	68.20	-13.55	Peak	100	124	P
6	15600.00	14.71	28.16	42.87	54.00	-11.13	Average	100	219	P
7	15600.00	14.71	42.57	57.28	74.00	-16.72	Peak	100	219	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, Band 1, CH48		:

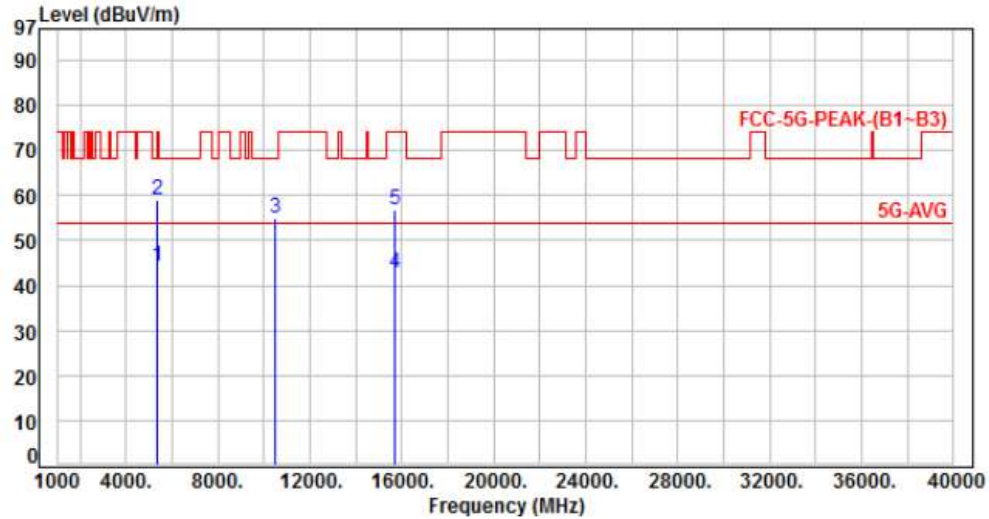


No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	5.99	38.38	44.37	54.00	-9.63	Average	243	290	P
2	5350.00	5.99	52.94	58.93	74.00	-15.07	Peak	243	290	P
3	10480.00	12.88	41.30	54.18	68.20	-14.02	Peak	107	128	P
4	15720.00	14.37	28.34	42.71	54.00	-11.29	Average	231	316	P
5	15720.00	14.37	42.92	57.29	74.00	-16.71	Peak	231	316	P

Note: Level=Reading+Factor  
Margin=Level-Limit  
Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 4, Band 1, CH48		:

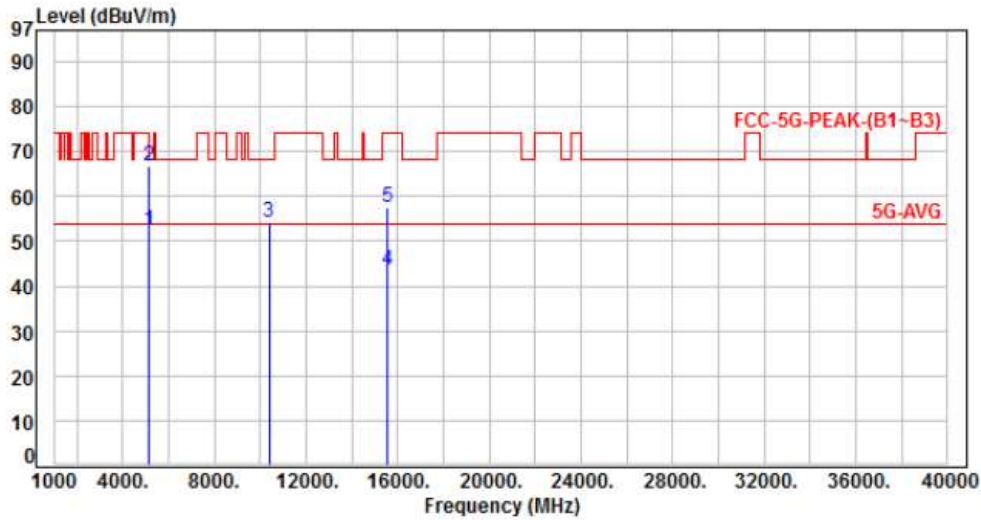


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	5.99	38.29	44.28	54.00	-9.72	Average	108	224	P
2	5350.00	5.99	52.96	58.95	74.00	-15.05	Peak	108	224	P
3	10480.00	12.88	41.95	54.83	68.20	-13.37	Peak	100	203	P
4	15720.00	14.37	28.33	42.70	54.00	-11.30	Average	100	194	P
5	15720.00	14.37	42.52	56.89	74.00	-17.11	Peak	100	194	P

Note: Level=Reading+Factor  
Margin=Level-Limit  
Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: VERTICAL
Test Mode	: Mode 5, Band 1, CH38		:

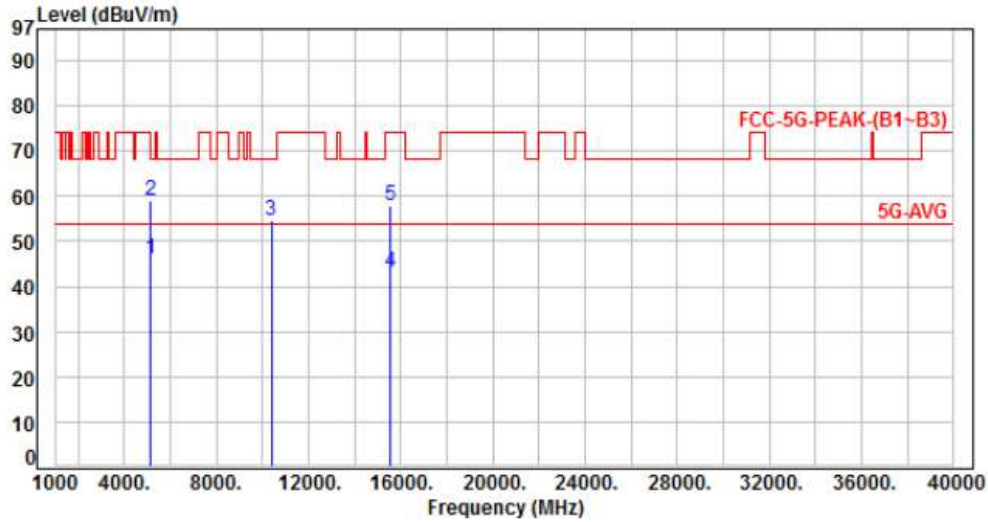


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.61	46.65	52.26	54.00	-1.74	Average	274	291	P
2	5150.00	5.61	61.32	66.93	74.00	-7.07	Peak	274	291	P
3	10380.00	12.73	41.61	54.34	68.20	-13.86	Peak	100	164	P
4	15570.00	14.91	28.44	43.35	54.00	-10.65	Average	259	276	P
5	15570.00	14.91	42.68	57.59	74.00	-16.41	Peak	259	276	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 5, Band 1, CH38		:

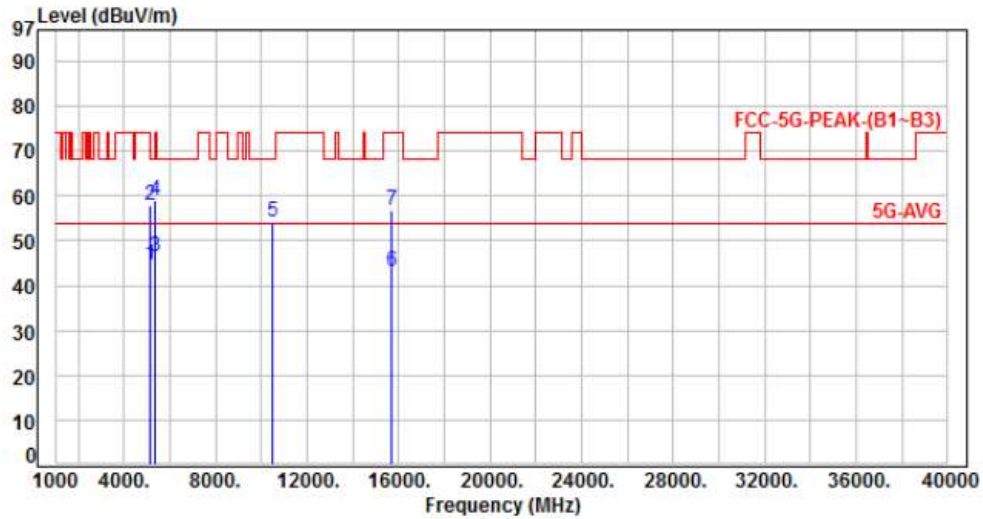


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.61	40.45	46.06	54.00	-7.94	Average	125	247	P
2	5150.00	5.61	53.37	58.98	74.00	-15.02	Peak	125	247	P
3	10380.00	12.73	41.85	54.58	68.20	-13.62	Peak	100	126	P
4	15570.00	14.91	28.42	43.33	54.00	-10.67	Average	116	231	P
5	15570.00	14.91	42.92	57.83	74.00	-16.17	Peak	116	231	P

Note: Level=Reading+Factor  
Margin=Level-Limit  
Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: VERTICAL
Test Mode	: Mode 5, Band 1, CH46		:

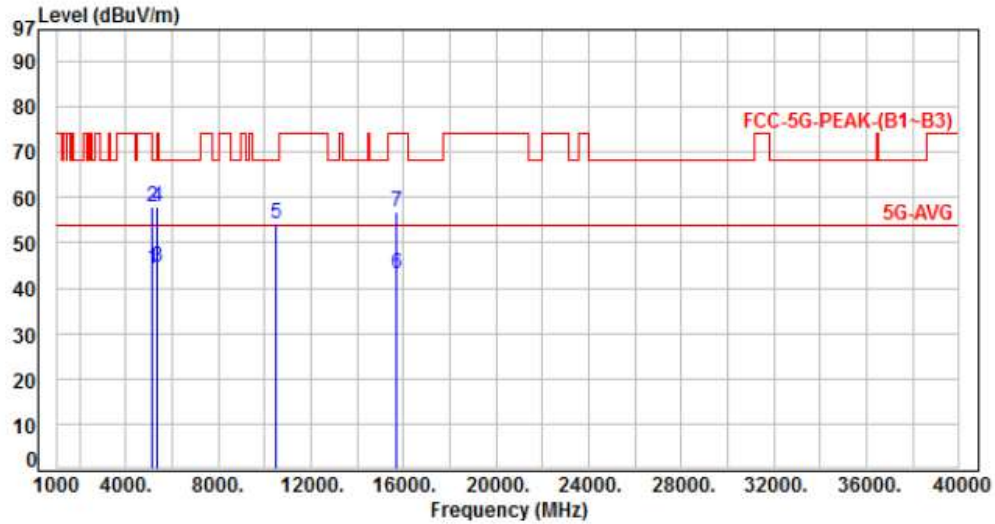


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.61	39.04	44.65	54.00	-9.35	Average	255	299	P
2	5150.00	5.61	52.22	57.83	74.00	-16.17	Peak	255	299	P
3	5350.00	5.99	40.32	46.31	54.00	-7.69	Average	255	299	P
4	5350.00	5.99	53.17	59.16	74.00	-14.84	Peak	255	299	P
5	10460.00	12.85	41.51	54.36	68.20	-13.84	Peak	209	128	P
6	15690.00	14.38	28.61	42.99	54.00	-11.01	Average	224	273	P
7	15690.00	14.38	42.39	56.77	74.00	-17.23	Peak	224	273	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From POE DC48V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 5, Band 1, CH46		:	

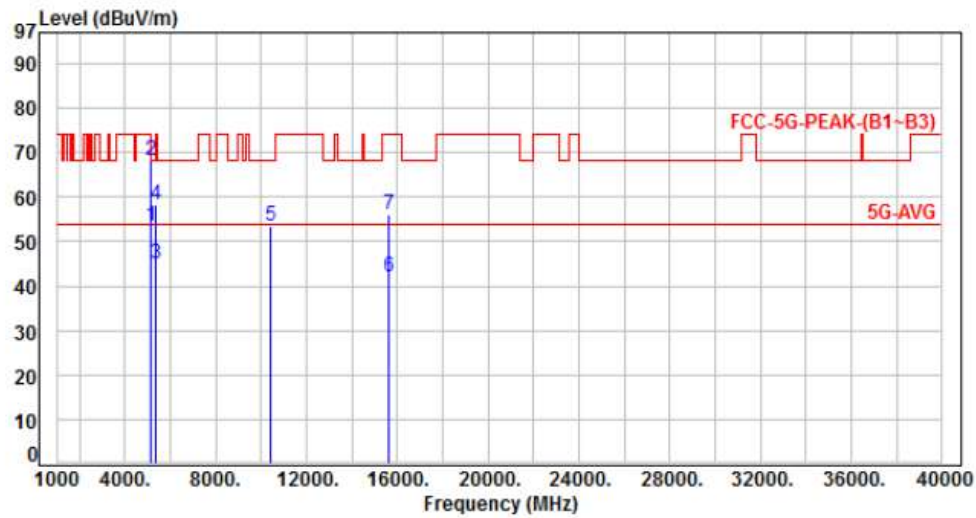


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	5.61	38.58	44.19	54.00	-9.81	Average	100	226	P
2	5150.00	5.61	52.31	57.92	74.00	-16.08	Peak	100	226	P
3	5350.00	5.99	38.46	44.45	54.00	-9.55	Average	100	226	P
4	5350.00	5.99	52.09	58.08	74.00	-15.92	Peak	100	226	P
5	10460.00	12.85	41.42	54.27	68.20	-13.93	Peak	100	202	P
6	15690.00	14.38	28.60	42.98	54.00	-11.02	Average	100	249	P
7	15690.00	14.38	42.52	56.90	74.00	-17.10	Peak	100	249	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: VERTICAL
Test Mode	: Mode 6, Band 1, CH42		:



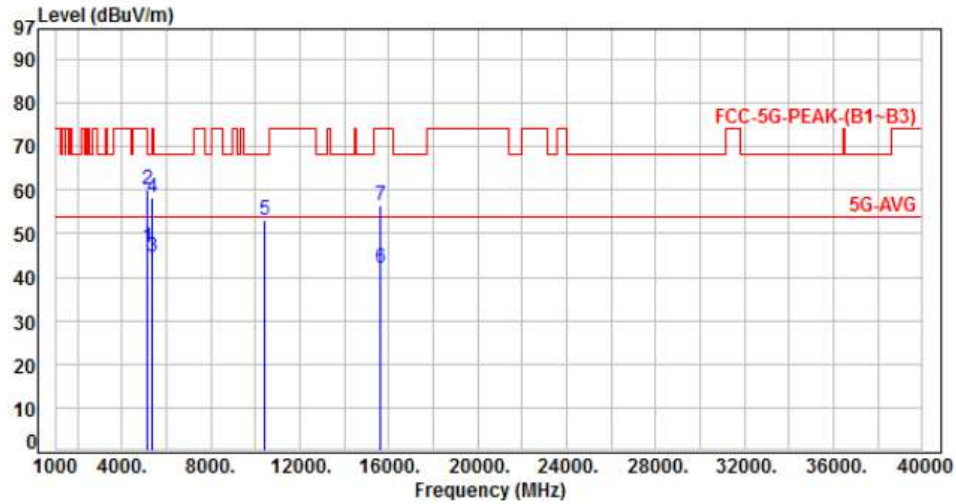
No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.69	48.67	53.36	54.00	-0.64	Average	276	285	P
2	5150.00	4.69	63.55	68.24	74.00	-5.76	Peak	276	285	P
3	5350.00	5.02	39.97	44.99	54.00	-9.01	Average	276	285	P
4	5350.00	5.02	53.11	58.13	74.00	-15.87	Peak	276	285	P
5	10420.00	11.61	41.83	53.44	68.20	-14.76	Peak	295	153	P
6	15630.00	13.34	28.66	42.00	54.00	-12.00	Average	100	263	P
7	15630.00	13.34	42.75	56.09	74.00	-17.91	Peak	100	263	P

Note: Level=Reading+Factor  
Margin=Level-Limit  
Factor=Antenna Factor + cable loss - Amplifier Factor





Power	: From POE DC48V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 6, Band 1, CH42		:

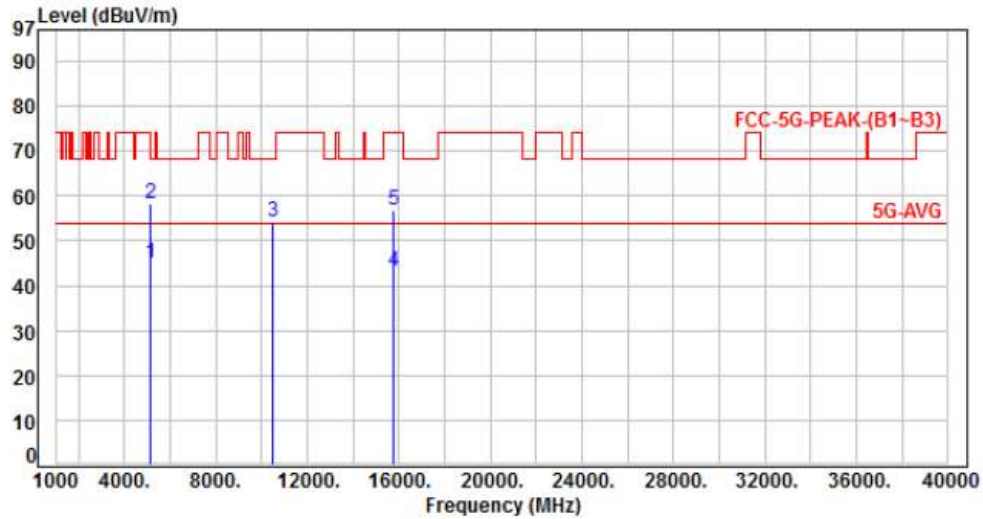


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.69	42.14	46.83	54.00	-7.17	Average	100	190	P
2	5150.00	4.69	55.48	60.17	74.00	-13.83	Peak	100	190	P
3	5350.00	5.02	39.64	44.66	54.00	-9.34	Average	100	190	P
4	5350.00	5.02	53.21	58.23	74.00	-15.77	Peak	100	190	P
5	10420.00	11.61	41.62	53.23	68.20	-14.97	Peak	100	147	P
6	15630.00	13.34	28.73	42.07	54.00	-11.93	Average	100	230	P
7	15630.00	13.34	42.97	56.31	74.00	-17.69	Peak	100	230	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, Band 2, CH52		:

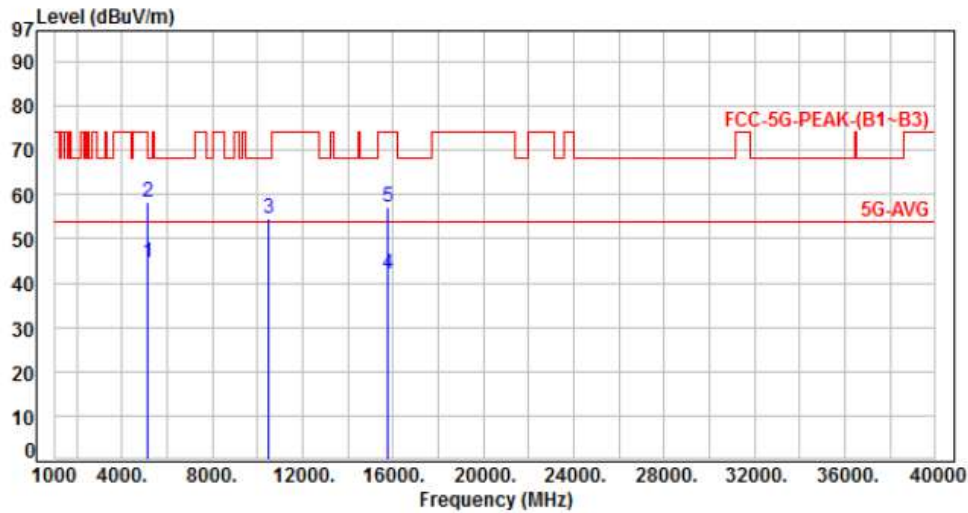


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.69	40.17	44.86	54.00	-9.14	Average	285	278	P
2	5150.00	4.69	53.42	58.11	74.00	-15.89	Peak	285	278	P
3	10520.00	11.79	42.57	54.36	68.20	-13.84	Peak	235	127	P
4	15780.00	13.21	29.99	43.20	54.00	-10.80	Average	100	316	P
5	15780.00	13.21	43.46	56.67	74.00	-17.33	Peak	100	316	P

Note: Level=Reading+Factor  
Margin=Level-Limit  
Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From POE DC48V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 2, CH52		:	

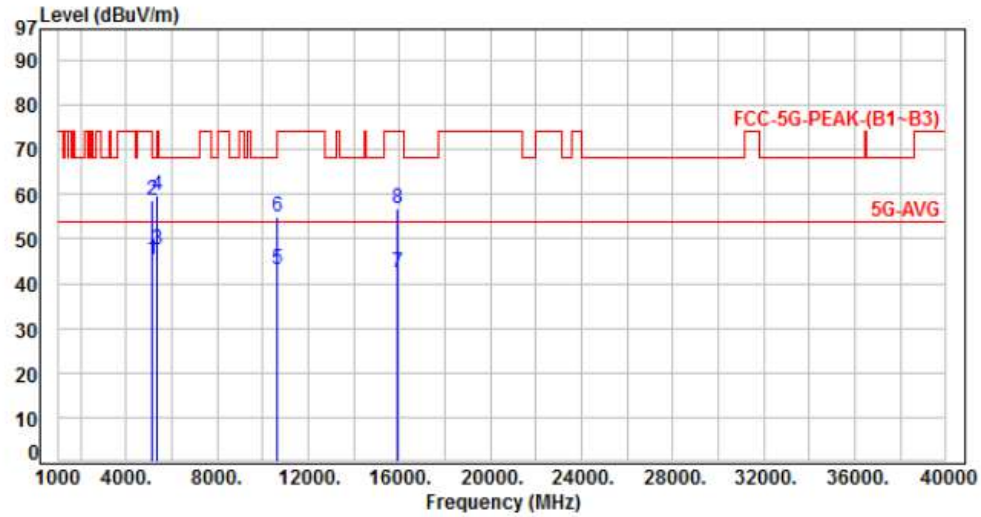


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.69	39.87	44.56	54.00	-9.44	Average	355	224	P
2	5150.00	4.69	53.73	58.42	74.00	-15.58	Peak	355	224	P
3	10520.00	11.79	42.68	54.47	68.20	-13.73	Peak	100	165	P
4	15780.00	13.21	28.93	42.14	54.00	-11.86	Average	100	240	P
5	15780.00	13.21	43.79	57.00	74.00	-17.00	Peak	100	240	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, Band 2, CH60		:

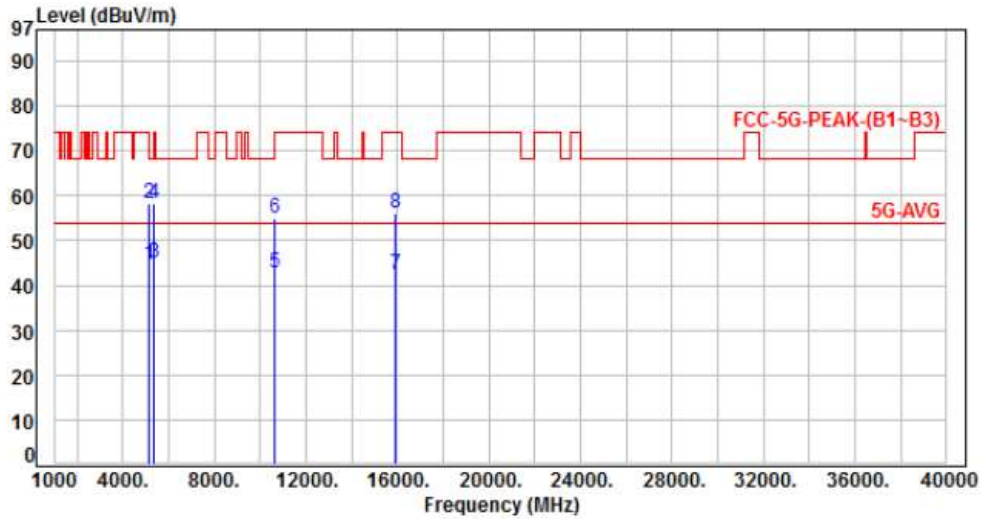


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.69	40.74	45.43	54.00	-8.57	Average	283	291	P
2	5150.00	4.69	53.80	58.49	74.00	-15.51	Peak	283	291	P
3	5350.00	5.02	42.49	47.51	54.00	-6.49	Average	283	291	P
4	5350.00	5.02	54.86	59.88	74.00	-14.12	Peak	283	291	P
5	10600.00	12.03	31.19	43.22	54.00	-10.78	Average	246	130	P
6	10600.00	12.03	42.93	54.96	74.00	-19.04	Peak	246	130	P
7	15900.00	12.98	29.41	42.39	54.00	-11.61	Average	100	327	P
8	15900.00	12.98	43.72	56.70	74.00	-17.30	Peak	100	327	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From POE DC48V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 2, CH60		:	

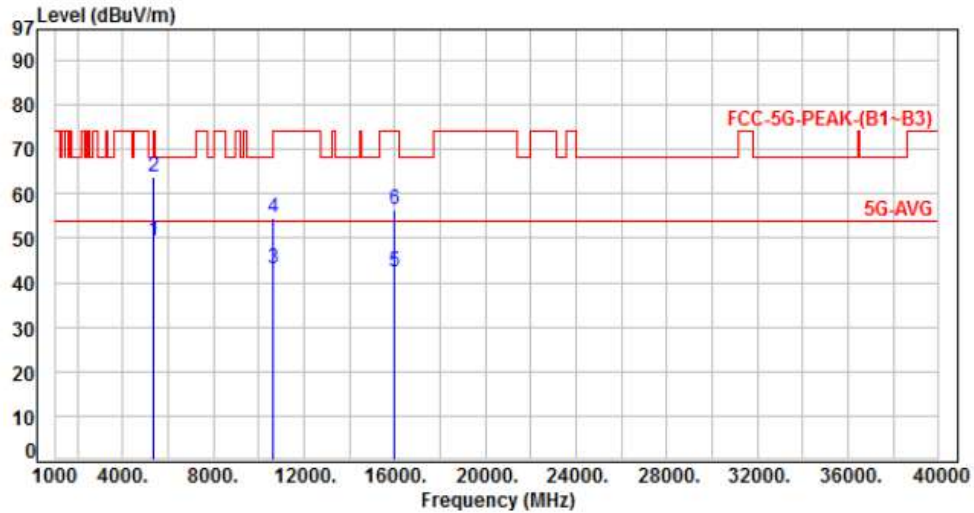


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.69	39.93	44.62	54.00	-9.38	Average	100	35	P
2	5150.00	4.69	53.76	58.45	74.00	-15.55	Peak	100	35	P
3	5350.00	5.02	39.84	44.86	54.00	-9.14	Average	100	35	P
4	5350.00	5.02	53.39	58.41	74.00	-15.59	Peak	100	35	P
5	10600.00	12.03	30.79	42.82	54.00	-11.18	Average	100	163	P
6	10600.00	12.03	42.83	54.86	74.00	-19.14	Peak	100	163	P
7	15900.00	12.98	29.43	42.41	54.00	-11.59	Average	100	82	P
8	15900.00	12.98	43.19	56.17	74.00	-17.83	Peak	100	82	P

Note: Level=Reading+Factor  
Margin=Level-Limit  
Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, Band 2, CH64		:

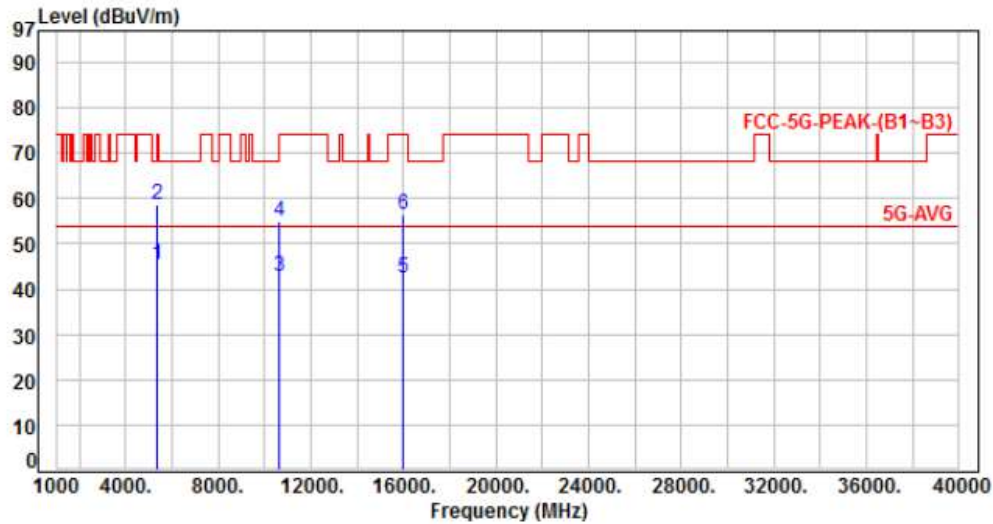


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	5.02	44.37	49.39	54.00	-4.61	Average	279	289	P
2	5350.00	5.02	58.79	63.81	74.00	-10.19	Peak	279	289	P
3	10640.00	12.02	31.22	43.24	54.00	-10.76	Average	238	128	P
4	10640.00	12.02	42.52	54.54	74.00	-19.46	Peak	238	128	P
5	15960.00	12.88	29.64	42.52	54.00	-11.48	Average	100	263	P
6	15960.00	12.88	43.54	56.42	74.00	-17.58	Peak	100	263	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From POE DC48V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 2, CH64		:	

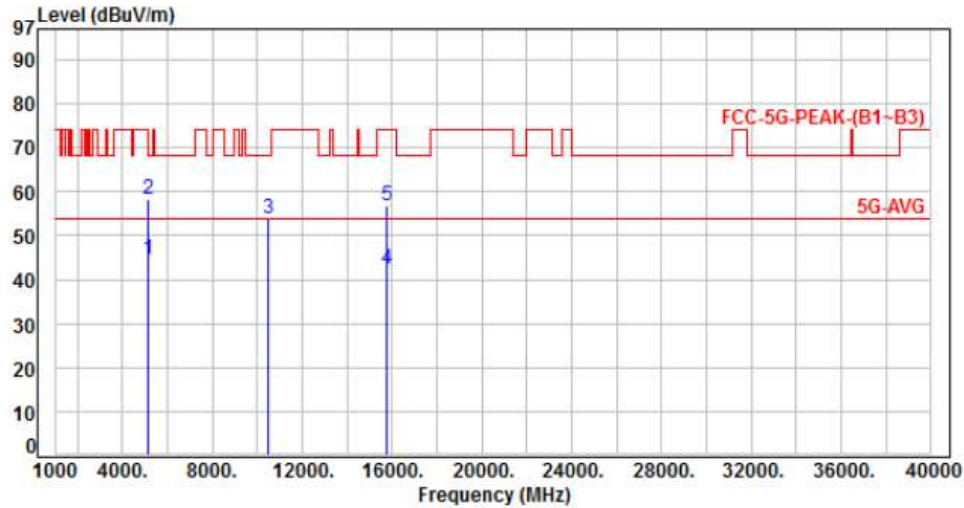


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	5.02	40.21	45.23	54.00	-8.77	Average	100	52	P
2	5350.00	5.02	53.64	58.66	74.00	-15.34	Peak	100	52	P
3	10640.00	12.02	30.65	42.67	54.00	-11.33	Average	100	175	P
4	10640.00	12.02	42.96	54.98	74.00	-19.02	Peak	100	175	P
5	15960.00	12.88	29.58	42.46	54.00	-11.54	Average	100	90	P
6	15960.00	12.88	43.37	56.25	74.00	-17.75	Peak	100	90	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, Band 2, CH52		:



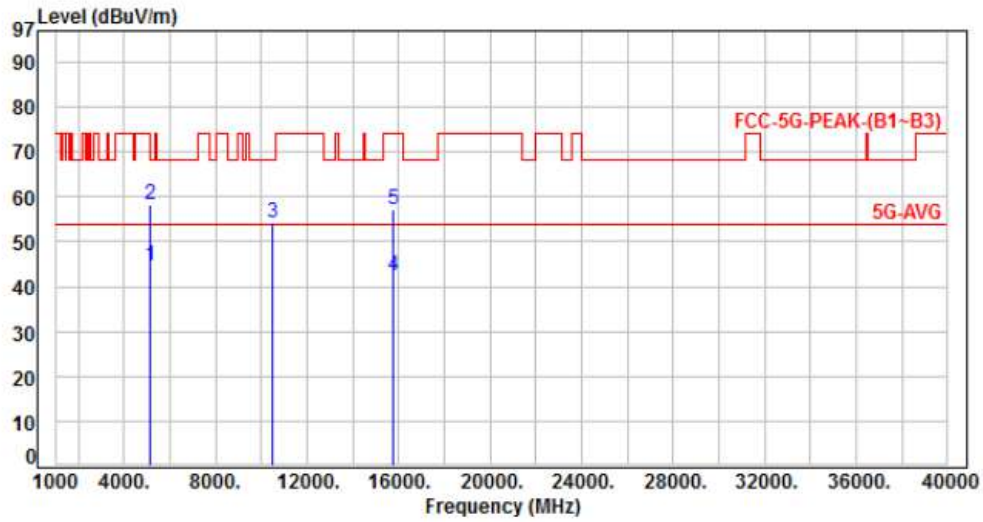
No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.69	40.07	44.76	54.00	-9.24	Average	282	288	P
2	5150.00	4.69	53.48	58.17	74.00	-15.83	Peak	282	288	P
3	10520.00	11.79	42.19	53.98	68.20	-14.22	Peak	242	132	P
4	15780.00	13.21	29.17	42.38	54.00	-11.62	Average	100	307	P
5	15780.00	13.21	43.77	56.98	74.00	-17.02	Peak	100	307	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor





Power	:	From POE DC48V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 2, CH52		:	

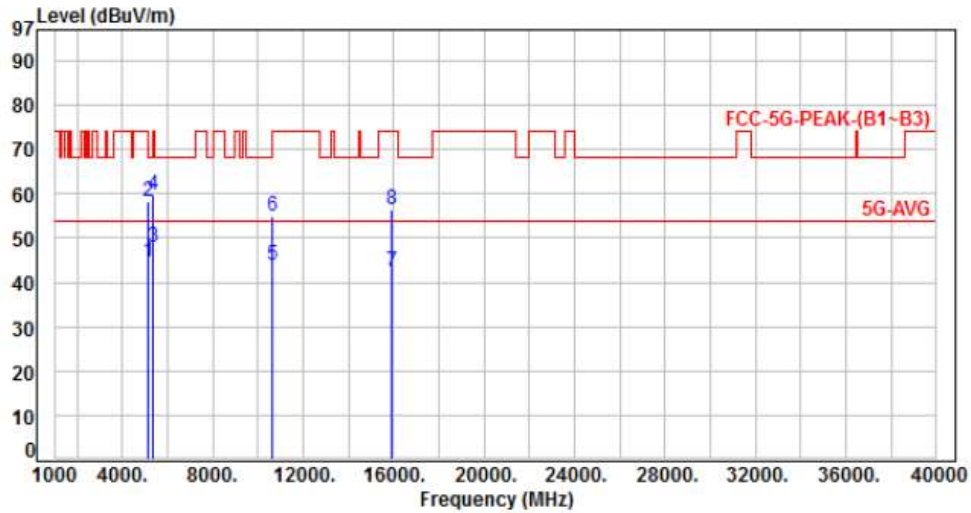


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.69	39.84	44.53	54.00	-9.47	Average	355	40	P
2	5150.00	4.69	53.51	58.20	74.00	-15.80	Peak	355	40	P
3	10520.00	11.79	42.57	54.36	68.20	-13.84	Peak	100	154	P
4	15780.00	13.21	29.04	42.25	54.00	-11.75	Average	100	76	P
5	15780.00	13.21	43.84	57.05	74.00	-16.95	Peak	100	76	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, Band 2, CH60		

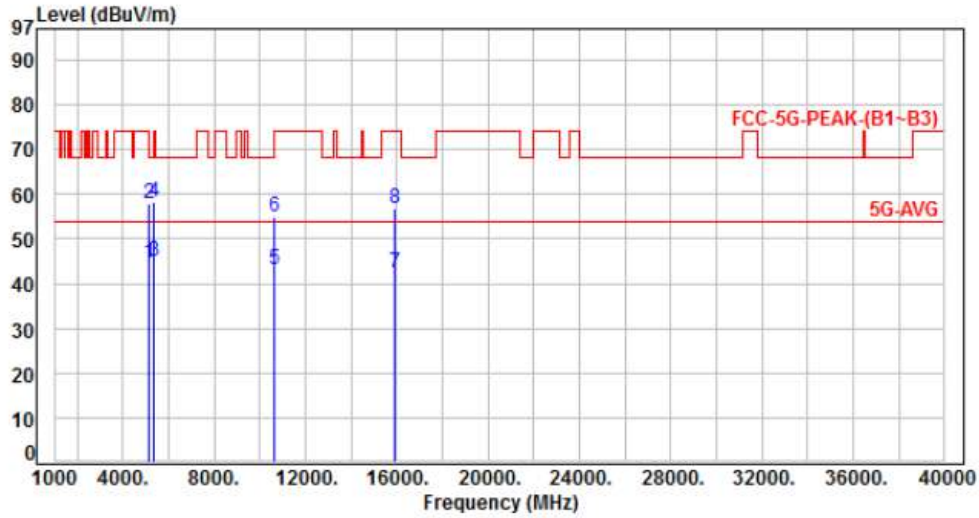


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.69	40.04	44.73	54.00	-9.27	Average	281	290	P
2	5150.00	4.69	53.72	58.41	74.00	-15.59	Peak	281	290	P
3	5350.00	5.02	42.83	47.85	54.00	-6.15	Average	281	290	P
4	5350.00	5.02	54.67	59.69	74.00	-14.31	Peak	281	290	P
5	10600.00	12.03	31.83	43.86	54.00	-10.14	Average	232	130	P
6	10600.00	12.03	42.98	55.01	74.00	-18.99	Peak	232	130	P
7	15900.00	12.98	29.36	42.34	54.00	-11.66	Average	100	260	P
8	15900.00	12.98	43.29	56.27	74.00	-17.73	Peak	100	260	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From POE DC48V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 2, CH60		:	

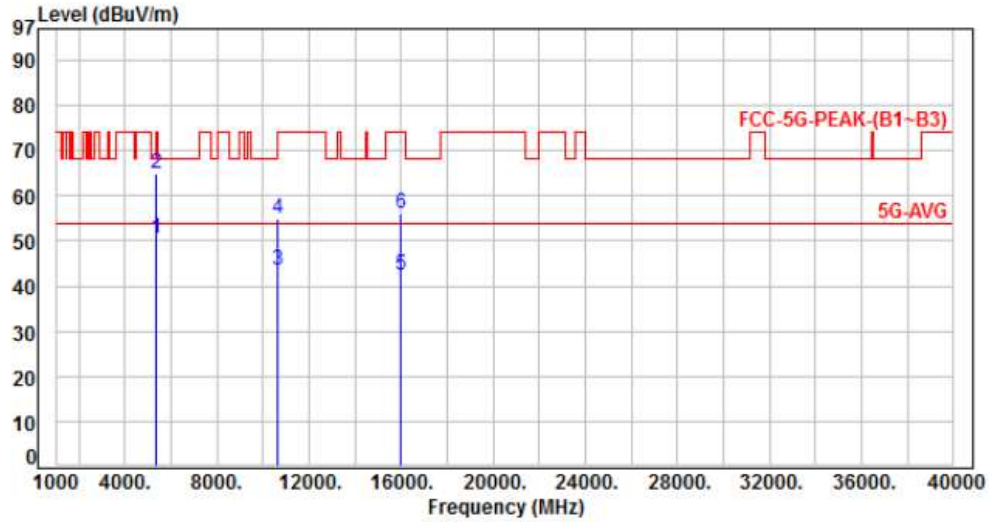


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.69	39.89	44.58	54.00	-9.42	Average	107	52	P
2	5150.00	4.69	53.26	57.95	74.00	-16.05	Peak	107	52	P
3	5350.00	5.02	40.04	45.06	54.00	-8.94	Average	107	52	P
4	5350.00	5.02	53.39	58.41	74.00	-15.59	Peak	107	52	P
5	10600.00	12.03	31.09	43.12	54.00	-10.88	Average	267	173	P
6	10600.00	12.03	42.85	54.88	74.00	-19.12	Peak	267	173	P
7	15900.00	12.98	29.43	42.41	54.00	-11.59	Average	100	68	P
8	15900.00	12.98	43.69	56.67	74.00	-17.33	Peak	100	68	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, Band 2, CH64		:

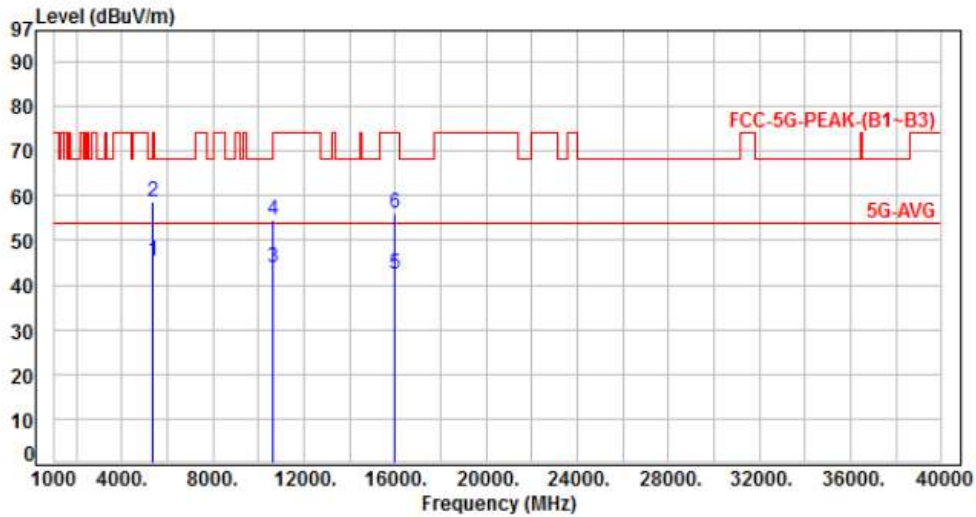


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	5.02	45.53	50.55	54.00	-3.45	Average	247	273	P
2	5350.00	5.02	59.87	64.89	74.00	-9.11	Peak	247	273	P
3	10640.00	12.02	31.61	43.63	54.00	-10.37	Average	238	130	P
4	10640.00	12.02	42.98	55.00	74.00	-19.00	Peak	238	130	P
5	15960.00	12.88	29.66	42.54	54.00	-11.46	Average	100	292	P
6	15960.00	12.88	43.36	56.24	74.00	-17.76	Peak	100	292	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From POE DC48V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 2, CH64		:	

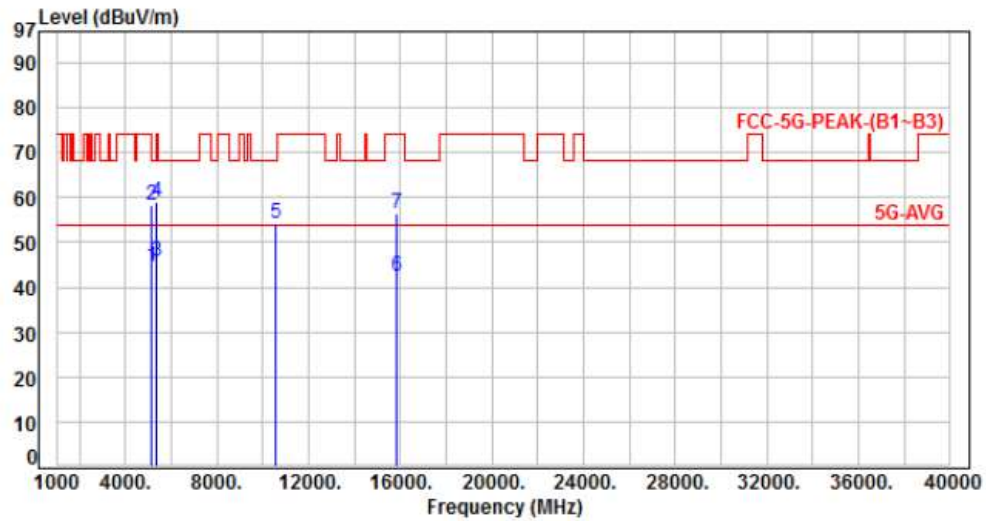


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5350.00	5.02	40.46	45.48	54.00	-8.52	Average	100	52	P
2	5350.00	5.02	53.61	58.63	74.00	-15.37	Peak	100	52	P
3	10640.00	12.02	31.94	43.96	54.00	-10.04	Average	114	151	P
4	10640.00	12.02	42.62	54.64	74.00	-19.36	Peak	114	151	P
5	15960.00	12.88	29.61	42.49	54.00	-11.51	Average	100	21	P
6	15960.00	12.88	43.27	56.15	74.00	-17.85	Peak	100	21	P

Note: Level=Reading+Factor  
Margin=Level-Limit  
Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: VERTICAL
Test Mode	: Mode 5, Band 2, CH54		:

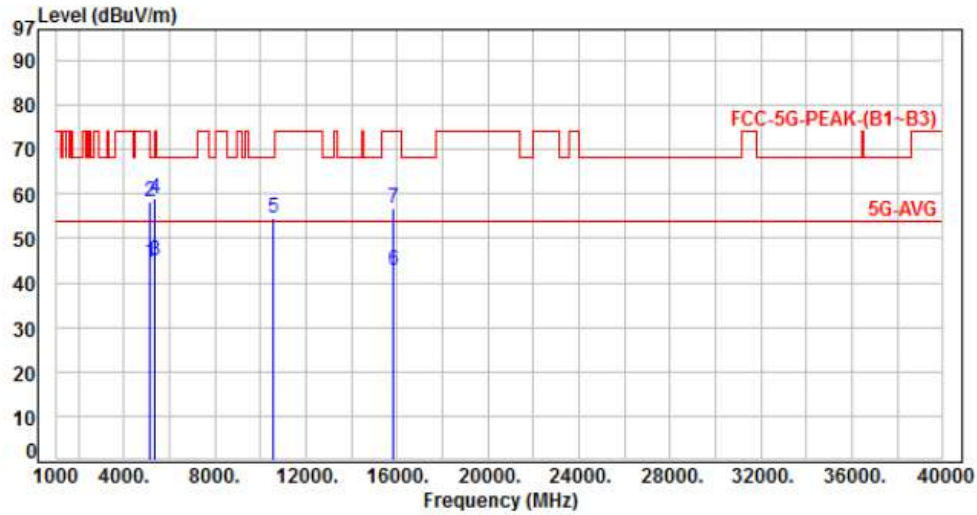


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.69	40.02	44.71	54.00	-9.29	Average	288	289	P
2	5150.00	4.69	53.48	58.17	74.00	-15.83	Peak	288	289	P
3	5350.00	5.02	40.88	45.90	54.00	-8.10	Average	288	289	P
4	5350.00	5.02	53.85	58.87	74.00	-15.13	Peak	288	289	P
5	10540.00	11.85	42.30	54.15	68.20	-14.05	Peak	237	130	P
6	15810.00	13.21	29.34	42.55	54.00	-11.45	Average	100	317	P
7	15810.00	13.21	43.36	56.57	74.00	-17.43	Peak	100	317	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From POE DC48V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 5, Band 2, CH54		:	

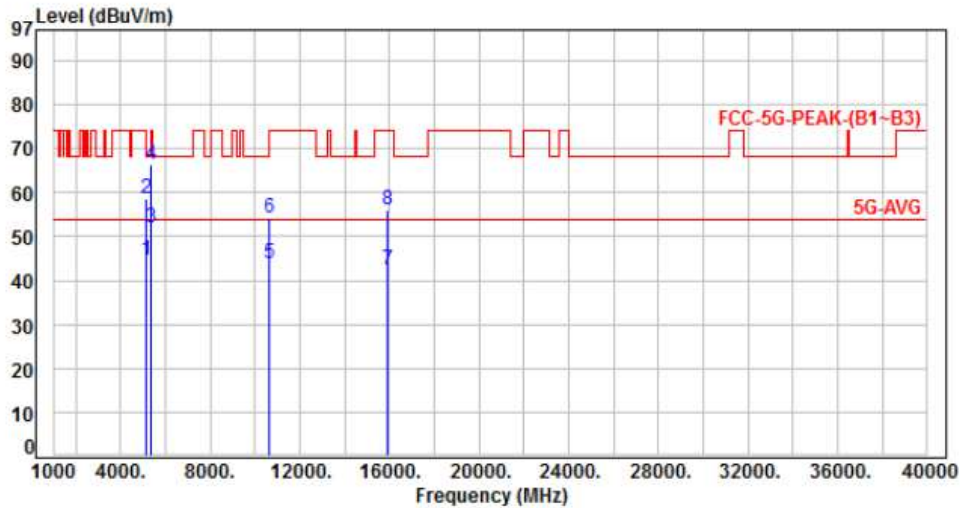


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.69	39.85	44.54	54.00	-9.46	Average	384	223	P
2	5150.00	4.69	53.49	58.18	74.00	-15.82	Peak	384	223	P
3	5350.00	5.02	40.02	45.04	54.00	-8.96	Average	384	223	P
4	5350.00	5.02	53.84	58.86	74.00	-15.14	Peak	384	223	P
5	10540.00	11.85	42.64	54.49	68.20	-13.71	Peak	351	152	P
6	15810.00	13.21	29.41	42.62	54.00	-11.38	Average	100	186	P
7	15810.00	13.21	43.51	56.72	74.00	-17.28	Peak	100	186	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: VERTICAL
Test Mode	: Mode 5, Band 2, CH62		:



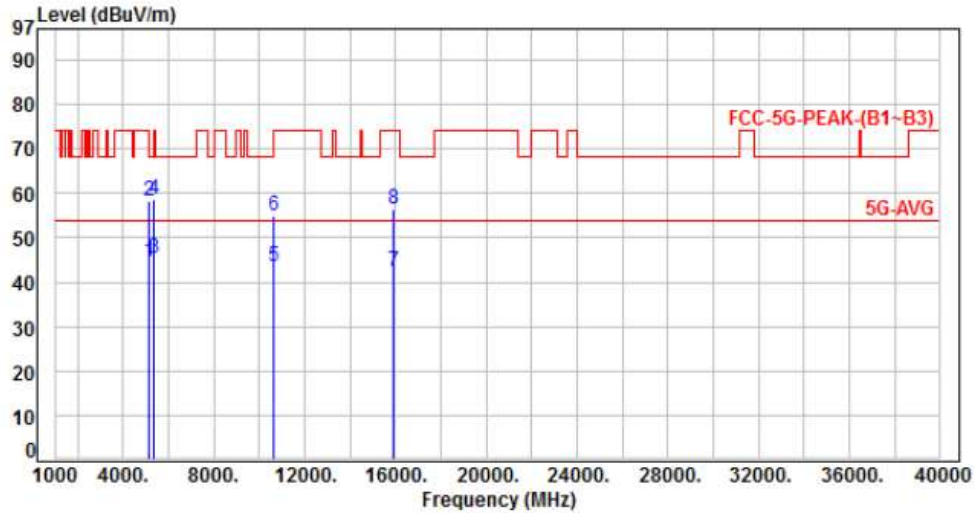
No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.69	39.93	44.62	54.00	-9.38	Average	283	281	P
2	5150.00	4.69	53.79	58.48	74.00	-15.52	Peak	283	281	P
3	5350.00	5.02	47.15	52.17	54.00	-1.83	Average	283	281	P
4	5350.00	5.02	61.43	66.45	74.00	-7.55	Peak	283	281	P
5	10620.00	12.03	31.79	43.82	54.00	-10.18	Average	241	136	P
6	10620.00	12.03	42.32	54.35	74.00	-19.65	Peak	241	136	P
7	15930.00	12.93	29.47	42.40	54.00	-11.60	Average	100	232	P
8	15930.00	12.93	43.23	56.16	74.00	-17.84	Peak	100	232	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor





Power	:	From POE DC48V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 5, Band 2, CH62		:	

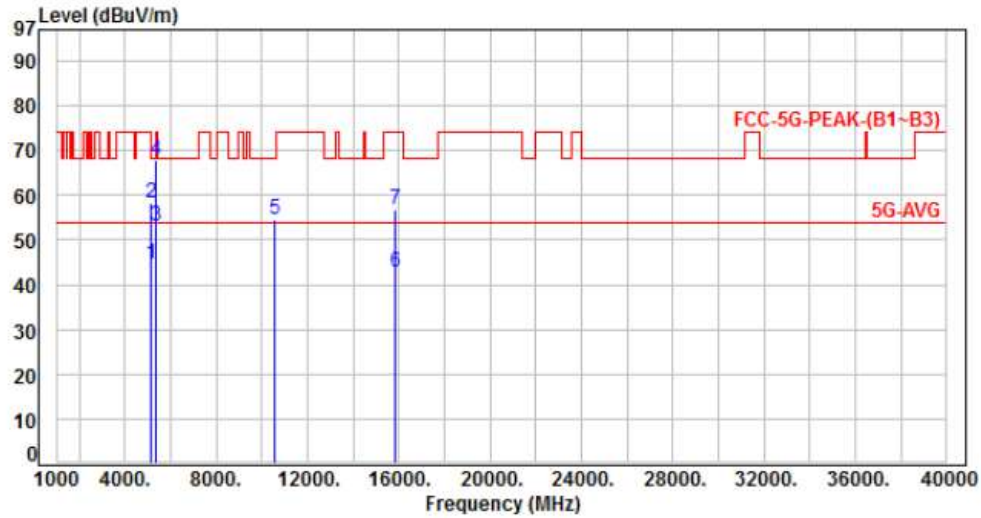


No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.69	39.84	44.53	54.00	-9.47	Average	107	53	P
2	5150.00	4.69	53.53	58.22	74.00	-15.78	Peak	107	53	P
3	5350.00	5.02	40.47	45.49	54.00	-8.51	Average	107	53	P
4	5350.00	5.02	53.44	58.46	74.00	-15.54	Peak	107	53	P
5	10620.00	12.03	31.64	43.67	54.00	-10.33	Average	117	152	P
6	10620.00	12.03	42.79	54.82	74.00	-19.18	Peak	117	152	P
7	15930.00	12.93	29.56	42.49	54.00	-11.51	Average	100	67	P
8	15930.00	12.93	43.67	56.60	74.00	-17.40	Peak	100	67	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: VERTICAL
Test Mode	: Mode 6, Band 2, CH58		:

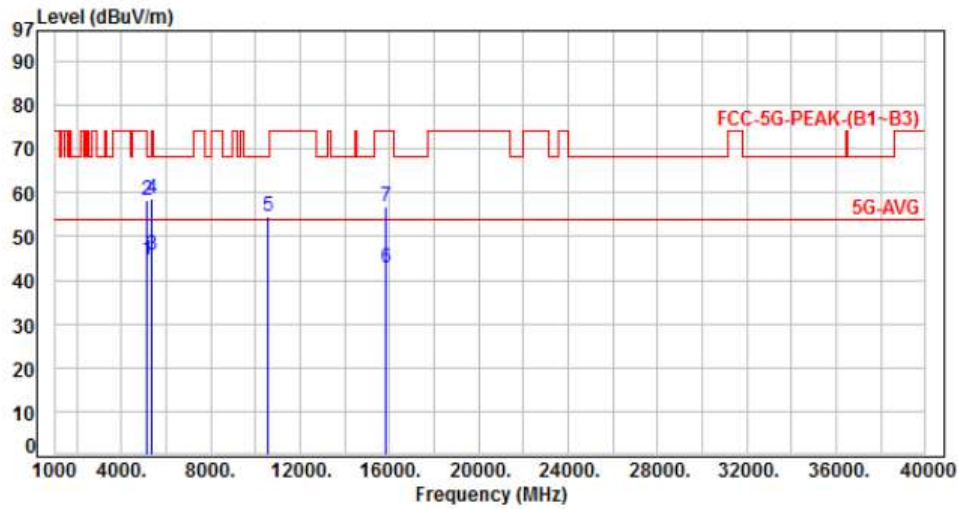


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.69	39.97	44.66	54.00	-9.34	Average	279	288	P
2	5150.00	4.69	53.54	58.23	74.00	-15.77	Peak	279	288	P
3	5350.00	5.02	48.21	53.23	54.00	-0.77	Average	279	288	P
4	5350.00	5.02	62.83	67.85	74.00	-6.15	Peak	279	288	P
5	10580.00	11.97	42.68	54.65	68.20	-13.55	Peak	237	132	P
6	15870.00	13.06	29.88	42.94	54.00	-11.06	Average	100	311	P
7	15870.00	13.06	43.63	56.69	74.00	-17.31	Peak	100	311	P

Note: Level=Reading+Factor  
Margin=Level-Limit  
Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 6, Band 2, CH58		:

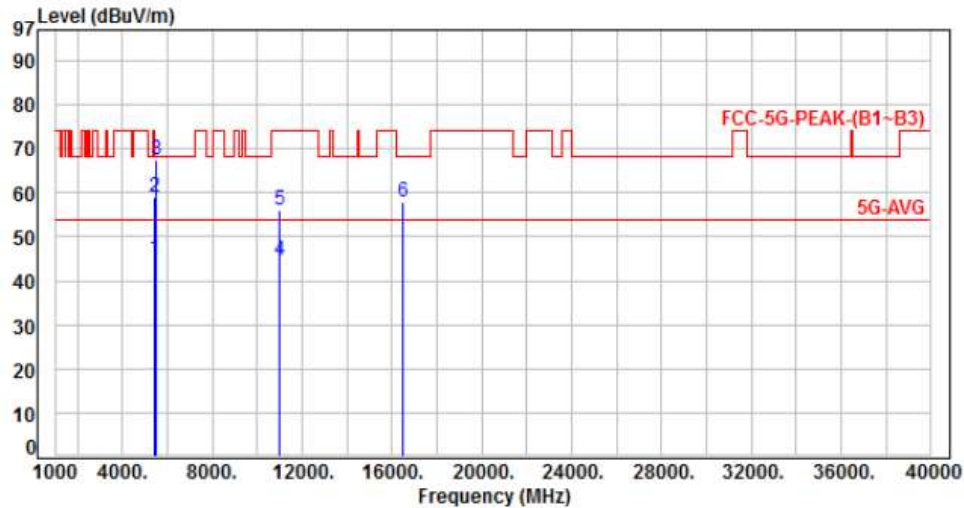


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	4.69	39.92	44.61	54.00	-9.39	Average	108	53	P
2	5150.00	4.69	53.50	58.19	74.00	-15.81	Peak	108	53	P
3	5350.00	5.02	40.77	45.79	54.00	-8.21	Average	108	53	P
4	5350.00	5.02	53.79	58.81	74.00	-15.19	Peak	108	53	P
5	10580.00	11.97	42.74	54.71	68.20	-13.49	Peak	229	130	P
6	15870.00	13.06	29.84	42.90	54.00	-11.10	Average	100	79	P
7	15870.00	13.06	43.56	56.62	74.00	-17.38	Peak	100	79	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, Band 3, CH100		:

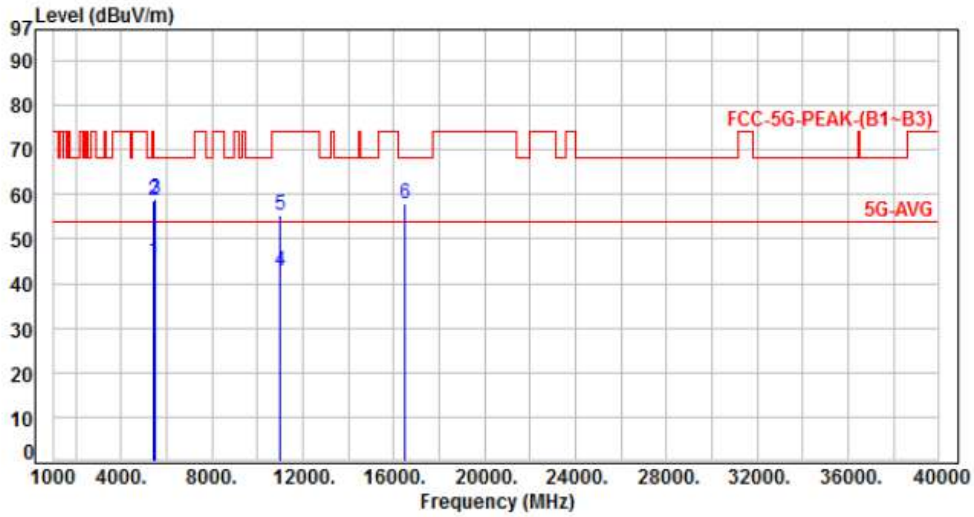


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	5.20	39.94	45.14	54.00	-8.86	Average	270	284	P
2	5460.00	5.20	53.82	59.02	74.00	-14.98	Peak	270	284	P
3	5470.00	5.20	62.23	67.43	68.20	-0.77	Peak	270	284	P
4	11000.00	12.41	32.12	44.53	54.00	-9.47	Average	112	186	P
5	11000.00	12.41	43.67	56.08	74.00	-17.92	Peak	112	186	P
6	16500.00	14.43	43.59	58.02	68.20	-10.18	Peak	100	320	P

Note: Level=Reading+Factor  
Margin=Level-Limit  
Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From POE DC48V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 3, CH100		:	

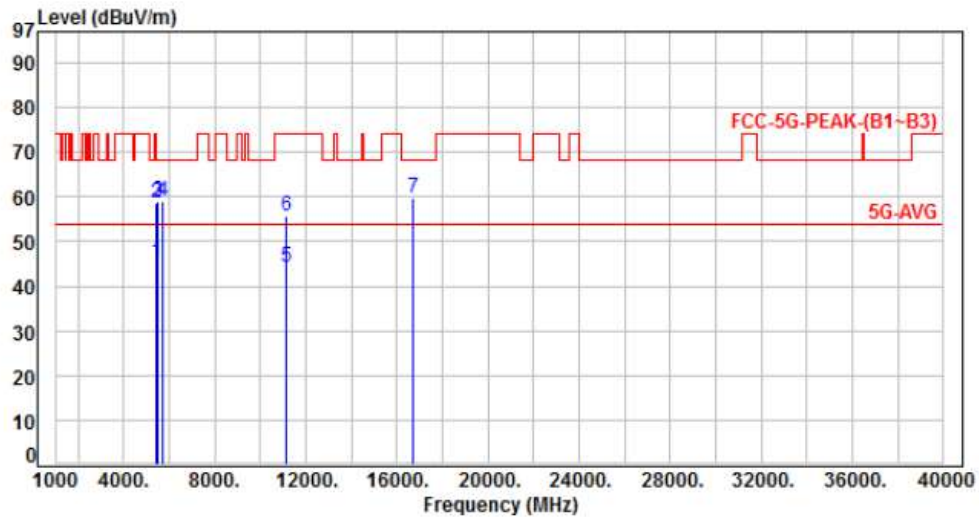


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	5.20	39.77	44.97	54.00	-9.03	Average	102	25	P
2	5460.00	5.20	53.40	58.60	74.00	-15.40	Peak	102	25	P
3	5470.00	5.20	53.89	59.09	68.20	-9.11	Peak	102	25	P
4	11000.00	12.41	30.22	42.63	54.00	-11.37	Average	100	157	P
5	11000.00	12.41	42.94	55.35	74.00	-18.65	Peak	100	157	P
6	16500.00	14.43	43.57	58.00	68.20	-10.20	Peak	100	48	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, Band 3, CH116		:

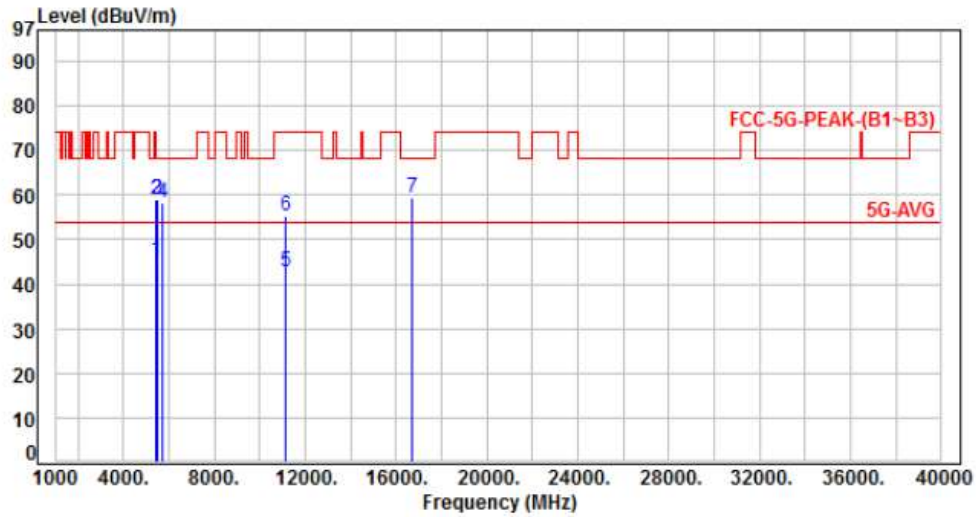


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	5.20	40.21	45.41	54.00	-8.59	Average	257	292	P
2	5460.00	5.20	53.51	58.71	74.00	-15.29	Peak	257	292	P
3	5470.00	5.20	53.69	58.89	68.20	-9.31	Peak	257	292	P
4	5725.00	5.14	53.99	59.13	68.20	-9.07	Peak	257	292	P
5	11160.00	12.66	31.52	44.18	54.00	-9.82	Average	100	180	P
6	11160.00	12.66	43.21	55.87	74.00	-18.13	Peak	100	180	P
7	16740.00	15.96	43.62	59.58	68.20	-8.62	Peak	100	326	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, Band 3, CH116		:

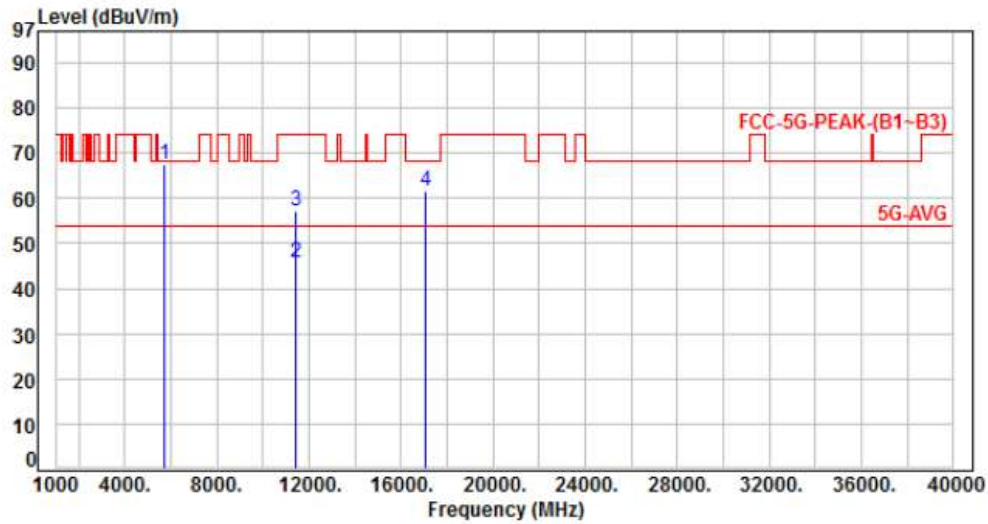


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	5.20	40.01	45.21	54.00	-8.79	Average	400	128	P
2	5460.00	5.20	53.88	59.08	74.00	-14.92	Peak	400	128	P
3	5470.00	5.20	53.71	58.91	68.20	-9.29	Peak	400	128	P
4	5725.00	5.14	53.17	58.31	68.20	-9.89	Peak	400	128	P
5	11160.00	12.66	30.07	42.73	54.00	-11.27	Average	148	110	P
6	11160.00	12.66	42.83	55.49	74.00	-18.51	Peak	148	110	P
7	16740.00	15.96	43.24	59.20	68.20	-9.00	Peak	100	79	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, Band 3, CH140		:



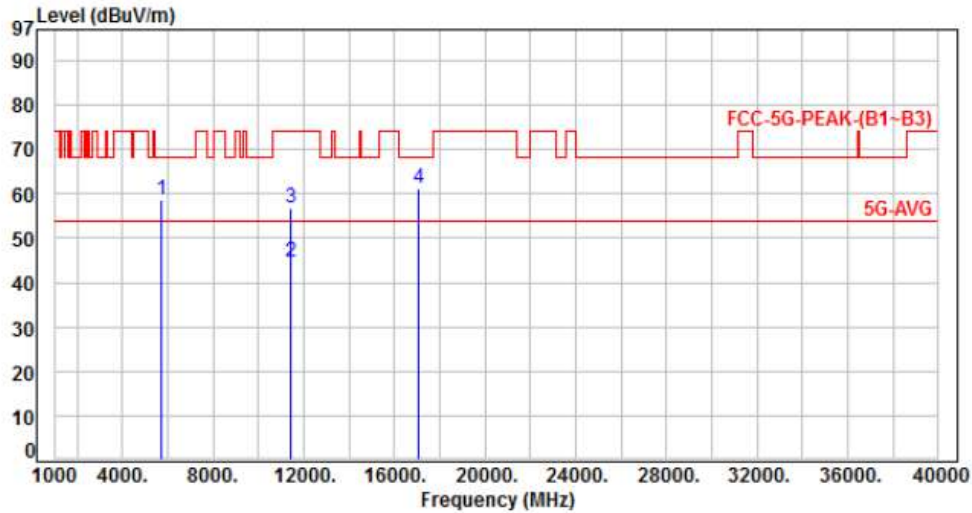
No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5725.00	5.14	62.33	67.47	68.20	-0.73	Peak	136	74	P
2	11400.00	12.94	32.64	45.58	54.00	-8.42	Average	110	199	P
3	11400.00	12.94	44.16	57.10	74.00	-16.90	Peak	110	199	P
4	17100.00	18.03	43.67	61.70	68.20	-6.50	Peak	100	311	P

Note: Level=Reading+Factor  
Margin=Level-Limit  
Factor=Antenna Factor + cable loss - Amplifier Factor





Power	:	From POE DC48V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 3, CH140		:	

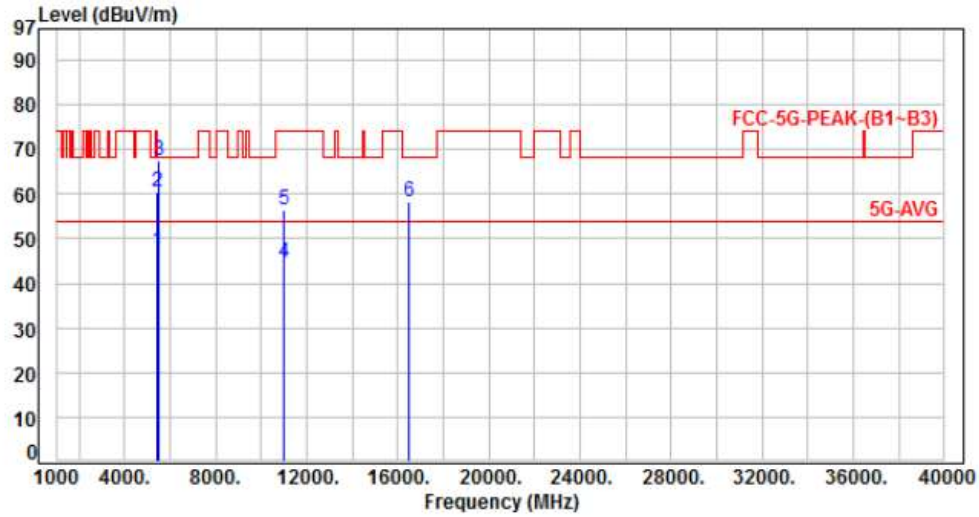


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5725.00	5.14	53.44	58.58	68.20	-9.62	Peak	106	221	P
2	11400.00	12.94	31.64	44.58	54.00	-9.42	Average	100	153	P
3	11400.00	12.94	43.86	56.80	74.00	-17.20	Peak	100	153	P
4	17100.00	18.03	43.24	61.27	68.20	-6.93	Peak	100	68	P

Note: Level=Reading+Factor  
Margin=Level-Limit  
Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, Band 3, CH100		:

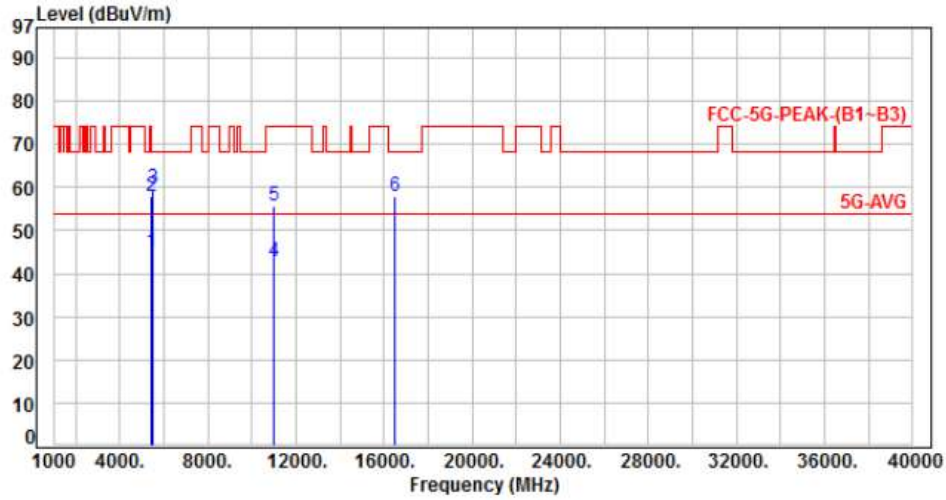


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	5.20	42.17	47.37	54.00	-6.63	Average	243	88	P
2	5460.00	5.20	55.19	60.39	74.00	-13.61	Peak	243	88	P
3	5470.00	5.20	62.36	67.56	68.20	-0.64	Peak	243	88	P
4	11000.00	12.41	32.28	44.69	54.00	-9.31	Average	109	192	P
5	11000.00	12.41	43.85	56.26	74.00	-17.74	Peak	109	192	P
6	16500.00	14.43	43.78	58.21	68.20	-9.99	Peak	100	329	P

Note: Level=Reading+Factor  
Margin=Level-Limit  
Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 4, Band 3, CH100		:

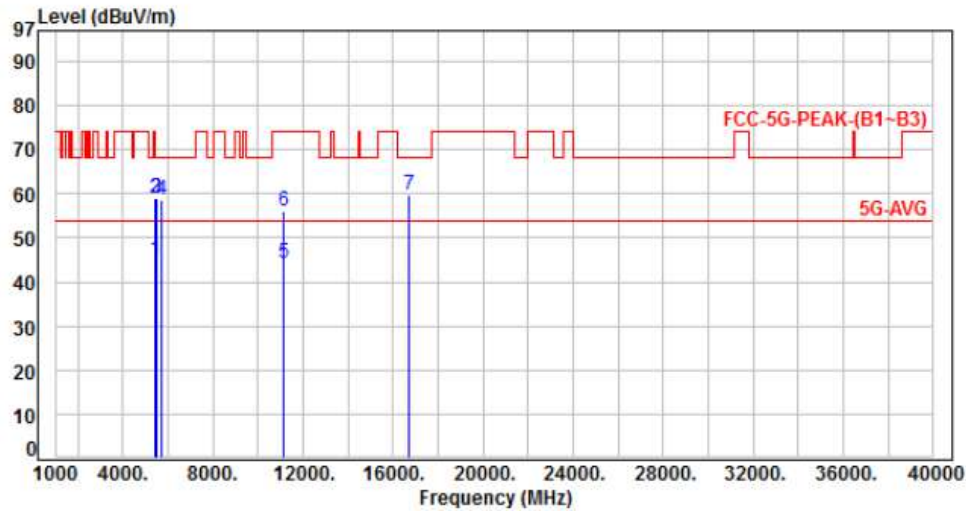


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	5.20	39.63	44.83	54.00	-9.17	Average	380	211	P
2	5460.00	5.20	52.88	58.08	74.00	-15.92	Peak	380	211	P
3	5470.00	5.20	54.58	59.78	68.20	-8.42	Peak	380	211	P
4	11000.00	12.41	30.46	42.87	54.00	-11.13	Average	100	169	P
5	11000.00	12.41	43.11	55.52	74.00	-18.48	Peak	100	169	P
6	16500.00	14.43	43.38	57.81	68.20	-10.39	Peak	100	59	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, Band 3, CH116		:

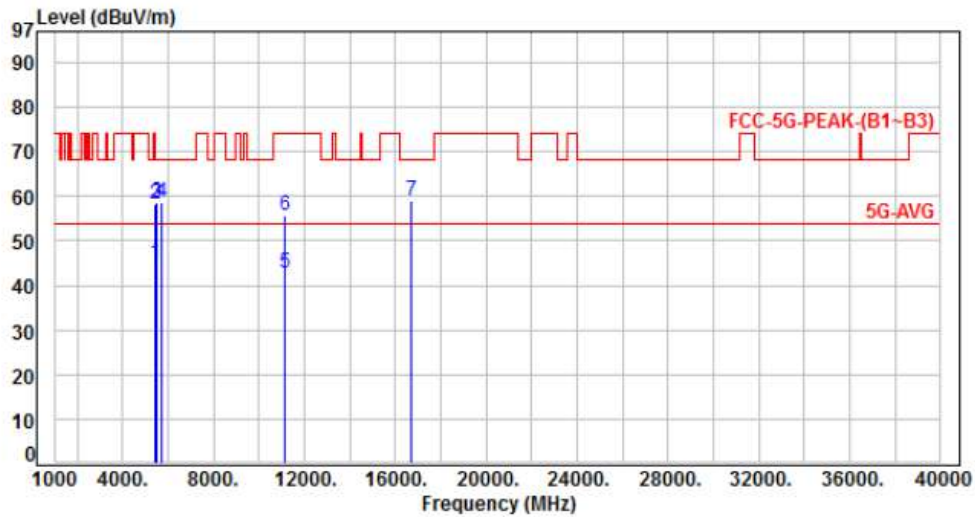


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	5.20	39.91	45.11	54.00	-8.89	Average	120	62	P
2	5460.00	5.20	53.89	59.09	74.00	-14.91	Peak	120	62	P
3	5470.00	5.20	53.71	58.91	68.20	-9.29	Peak	120	62	P
4	5725.00	5.14	53.67	58.81	68.20	-9.39	Peak	120	62	P
5	11160.00	12.66	31.72	44.38	54.00	-9.62	Average	102	186	P
6	11160.00	12.66	43.45	56.11	74.00	-17.89	Peak	102	186	P
7	16740.00	15.96	43.78	59.74	68.20	-8.46	Peak	100	329	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From POE DC48V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 3, CH116		:	

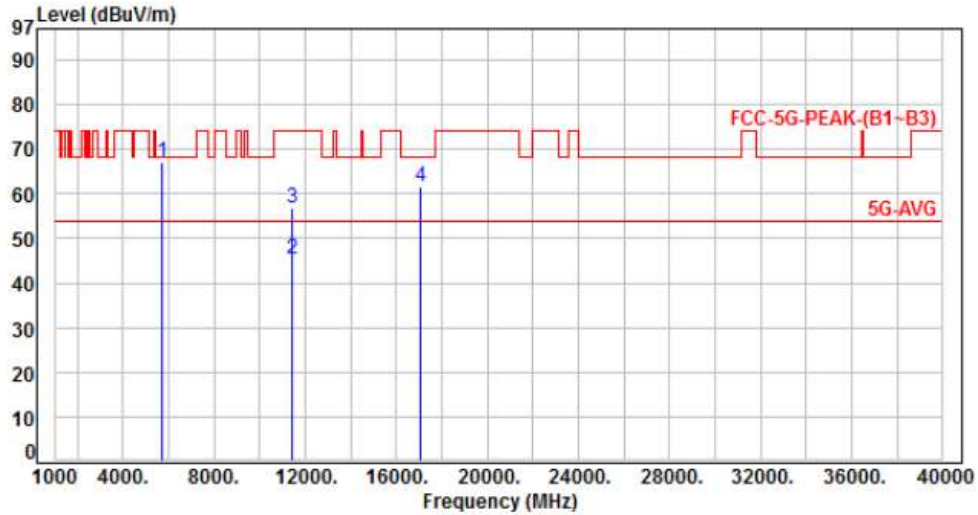


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	5.20	39.64	44.84	54.00	-9.16	Average	286	222	P
2	5460.00	5.20	53.13	58.33	74.00	-15.67	Peak	286	222	P
3	5470.00	5.20	53.52	58.72	68.20	-9.48	Peak	286	222	P
4	5725.00	5.14	53.47	58.61	68.20	-9.59	Peak	286	222	P
5	11160.00	12.66	30.16	42.82	54.00	-11.18	Average	143	116	P
6	11160.00	12.66	43.05	55.71	74.00	-18.29	Peak	143	116	P
7	16740.00	15.96	43.18	59.14	68.20	-9.06	Peak	100	85	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, Band 3, CH140		:

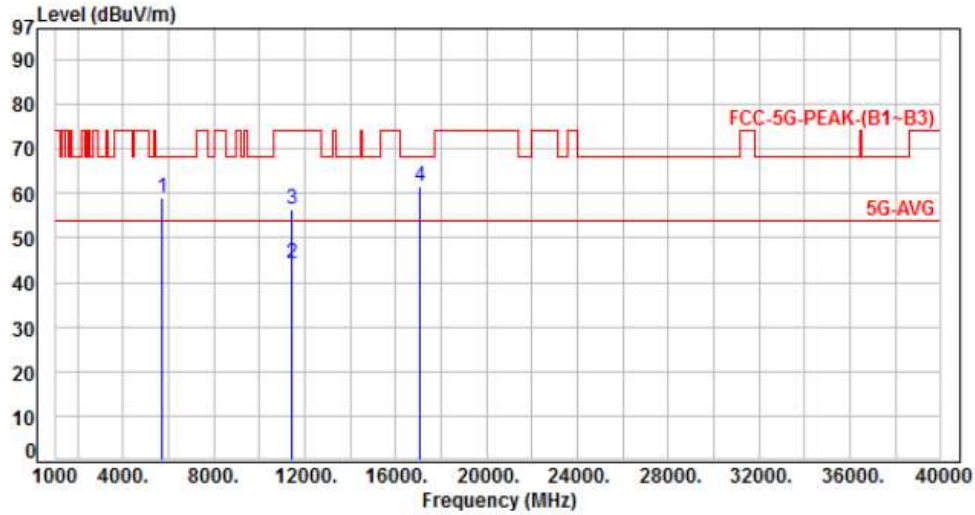


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5725.00	5.14	62.13	67.27	68.20	-0.93	Peak	212	77	P
2	11400.00	12.94	32.51	45.45	54.00	-8.55	Average	114	201	P
3	11400.00	12.94	43.98	56.92	74.00	-17.08	Peak	114	201	P
4	17100.00	18.03	43.55	61.58	68.20	-6.62	Peak	100	307	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From POE DC48V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 3, CH140		:	

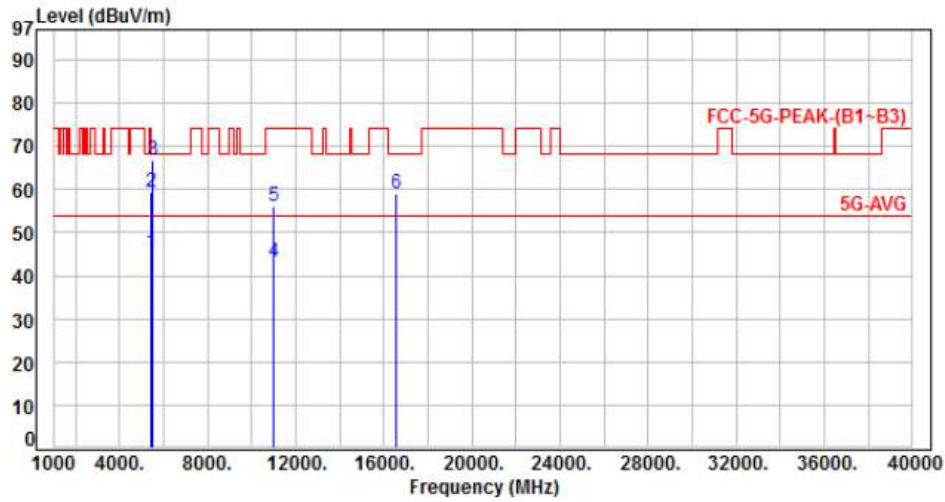


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5725.00	5.14	53.75	58.89	68.20	-9.31	Peak	279	223	P
2	11400.00	12.94	31.49	44.43	54.00	-9.57	Average	100	161	P
3	11400.00	12.94	43.65	56.59	74.00	-17.41	Peak	100	161	P
4	17100.00	18.03	43.38	61.41	68.20	-6.79	Peak	100	62	P

Note: Level=Reading+Factor  
Margin=Level-Limit  
Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: VERTICAL
Test Mode	: Mode 5, Band 3, CH102		:



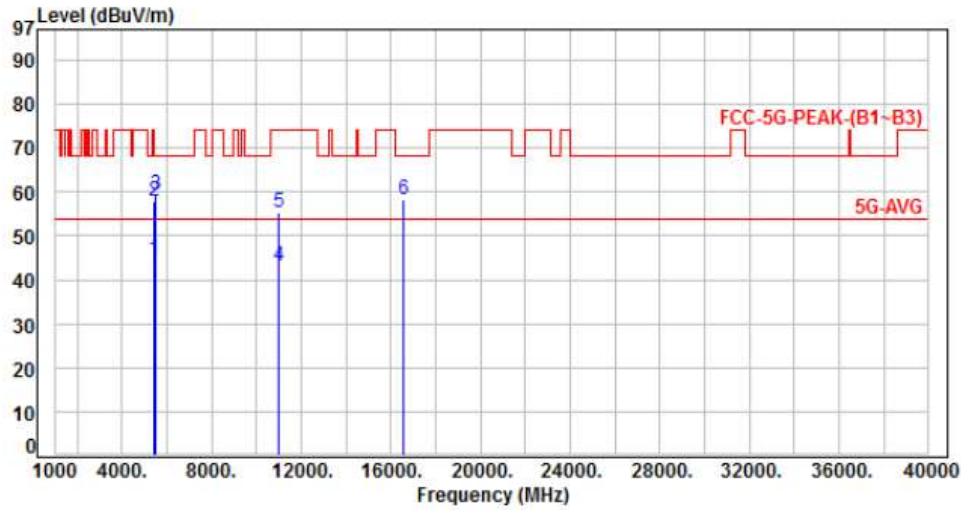
No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	5.20	40.34	45.54	54.00	-8.46	Average	228	76	P
2	5460.00	5.20	54.11	59.31	74.00	-14.69	Peak	228	76	P
3	5470.00	5.20	61.66	66.86	68.20	-1.34	Peak	228	76	P
4	11020.00	12.44	30.83	43.27	54.00	-10.73	Average	100	151	P
5	11020.00	12.44	43.61	56.05	74.00	-17.95	Peak	100	151	P
6	16530.00	14.68	44.28	58.96	68.20	-9.24	Peak	100	327	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor





Power	:	From POE DC48V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 5, Band 3, CH102		:	

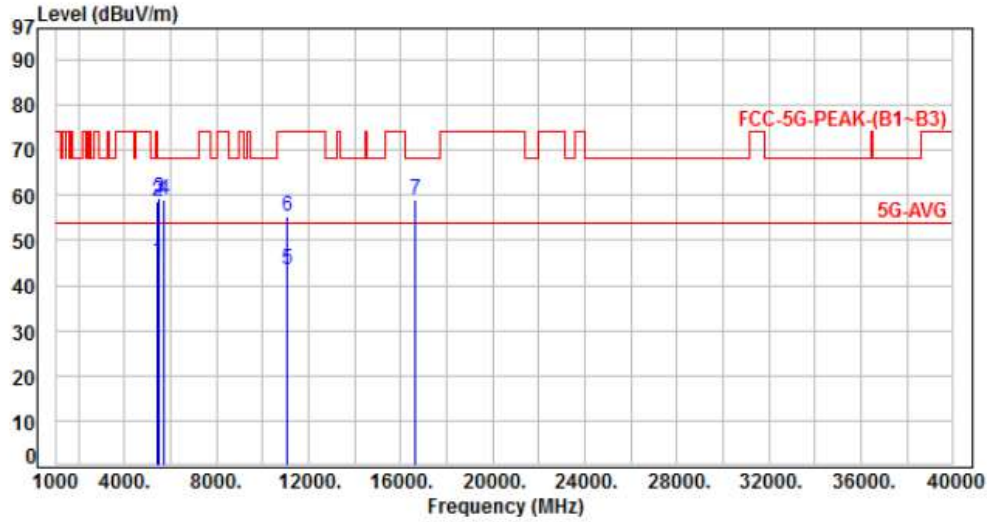


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	5.20	39.25	44.45	54.00	-9.55	Average	291	220	P
2	5460.00	5.20	52.77	57.97	74.00	-16.03	Peak	291	220	P
3	5470.00	5.20	54.03	59.23	68.20	-8.97	Peak	291	220	P
4	11020.00	12.44	30.61	43.05	54.00	-10.95	Average	100	204	P
5	11020.00	12.44	43.03	55.47	74.00	-18.53	Peak	100	204	P
6	16530.00	14.68	43.73	58.41	68.20	-9.79	Peak	100	66	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: VERTICAL
Test Mode	: Mode 5, Band 3, CH110		:

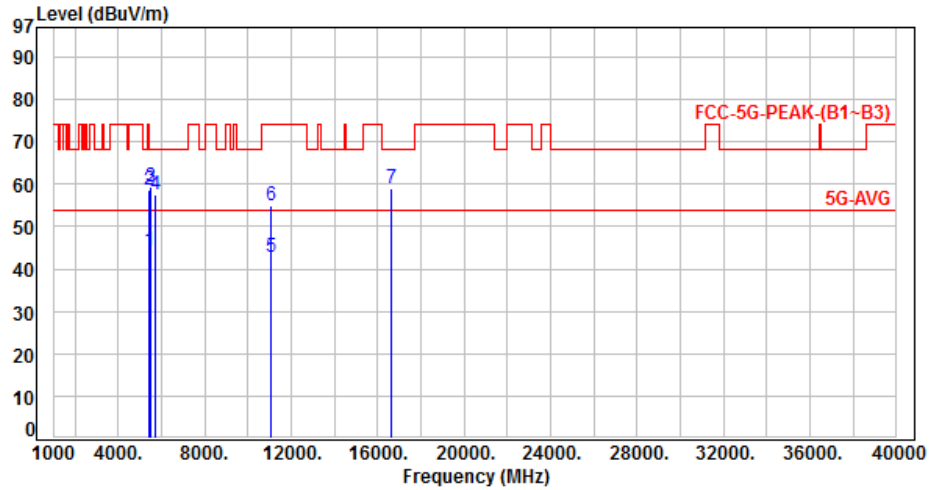


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	5.20	40.11	45.31	54.00	-8.69	Average	238	59	P
2	5460.00	5.20	53.62	58.82	74.00	-15.18	Peak	238	59	P
3	5470.00	5.20	54.35	59.55	68.20	-8.65	Peak	238	59	P
4	5725.00	5.14	53.69	58.83	68.20	-9.37	Peak	238	59	P
5	11100.00	12.57	30.96	43.53	54.00	-10.47	Average	100	206	P
6	11100.00	12.57	42.75	55.32	74.00	-18.68	Peak	100	206	P
7	16650.00	15.40	43.65	59.05	68.20	-9.15	Peak	100	314	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From POE DC48V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 5, Band 3, CH110		:	

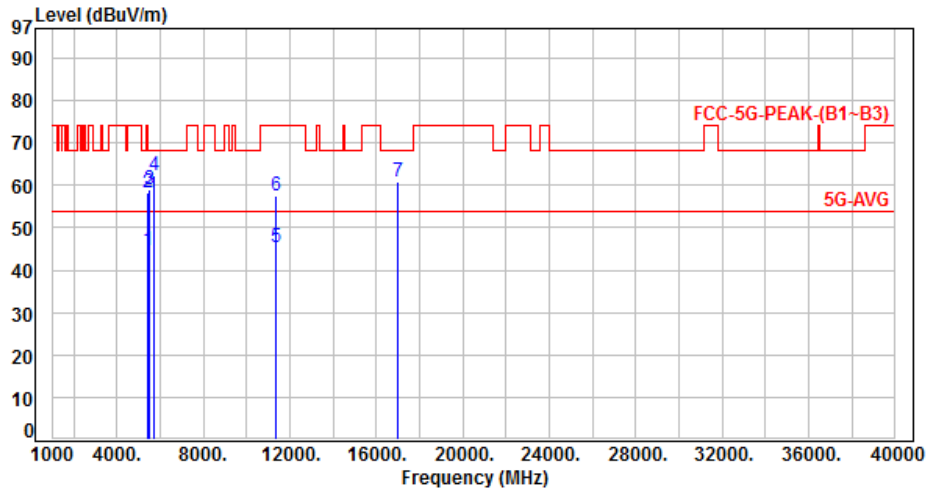


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	5.20	39.23	44.43	54.00	-9.57	Average	290	219	P
2	5460.00	5.20	53.27	58.47	74.00	-15.53	Peak	290	219	P
3	5470.00	5.20	54.27	59.47	68.20	-8.73	Peak	290	219	P
4	5725.00	5.14	52.54	57.68	68.20	-10.52	Peak	290	219	P
5	11100.00	12.57	30.08	42.65	54.00	-11.35	Average	100	160	P
6	11100.00	12.57	42.49	55.06	74.00	-18.94	Peak	100	160	P
7	16650.00	15.40	43.58	58.98	68.20	-9.22	Peak	100	81	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From POE DC48V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 5, Band 3, CH134		:	

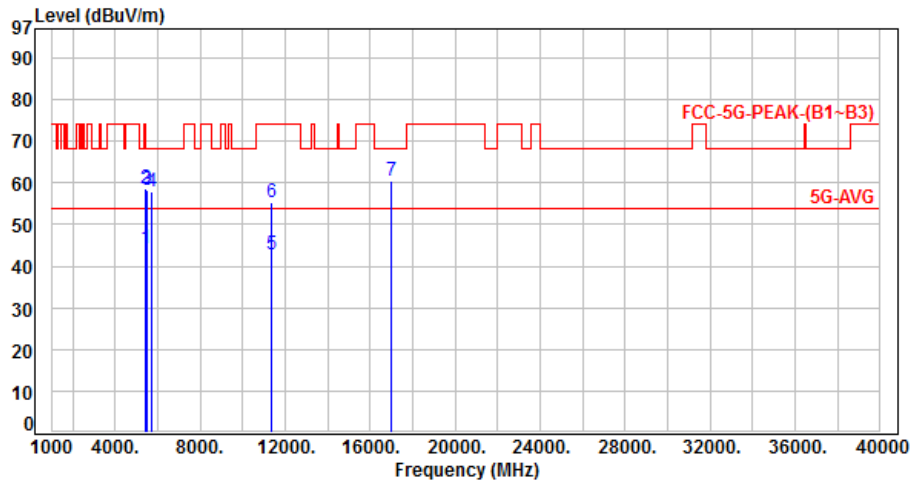


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	5.20	39.26	44.46	54.00	-9.54	Average	212	73	P
2	5460.00	5.20	53.21	58.41	74.00	-15.59	Peak	212	73	P
3	5470.00	5.20	53.71	58.91	68.20	-9.29	Peak	212	73	P
4	5725.00	5.14	57.35	62.49	68.20	-5.71	Peak	212	73	P
5	11340.00	12.85	32.47	45.32	54.00	-8.68	Average	108	199	P
6	11340.00	12.85	44.67	57.52	74.00	-16.48	Peak	108	199	P
7	17010.00	17.72	43.05	60.77	68.20	-7.43	Peak	100	326	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From POE DC48V	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 5, Band 3, CH134		:	

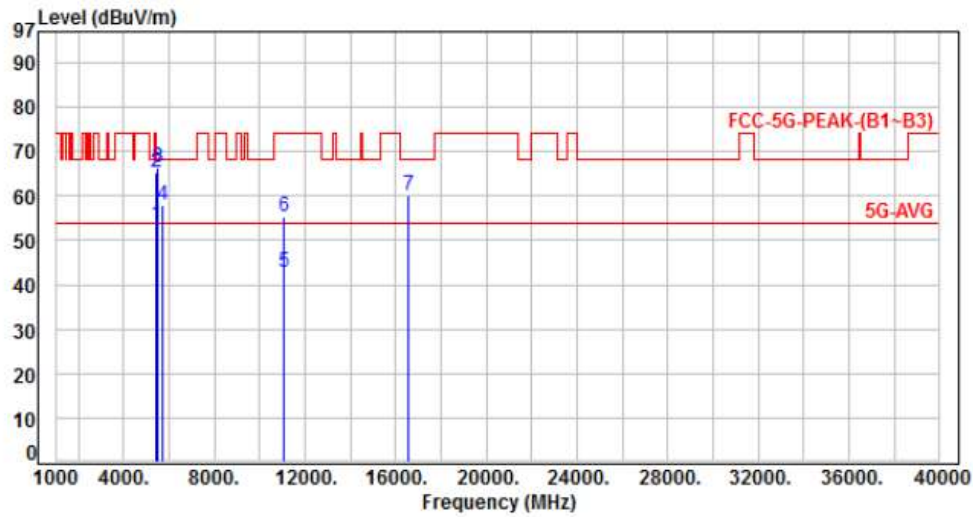


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	5.20	39.18	44.38	54.00	-9.62	Average	275	221	P
2	5460.00	5.20	53.57	58.77	74.00	-15.23	Peak	275	221	P
3	5470.00	5.20	53.12	58.32	68.20	-9.88	Peak	275	221	P
4	5725.00	5.14	52.71	57.85	68.20	-10.35	Peak	275	221	P
5	11340.00	12.85	30.11	42.96	54.00	-11.04	Average	100	148	P
6	11340.00	12.85	42.55	55.40	74.00	-18.60	Peak	100	148	P
7	17010.00	17.72	42.86	60.58	68.20	-7.62	Peak	100	58	P

Note: Level=Reading+Factor  
Margin=Level-Limit  
Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: VERTICAL
Test Mode	: Mode 6, Band 3, CH106		:

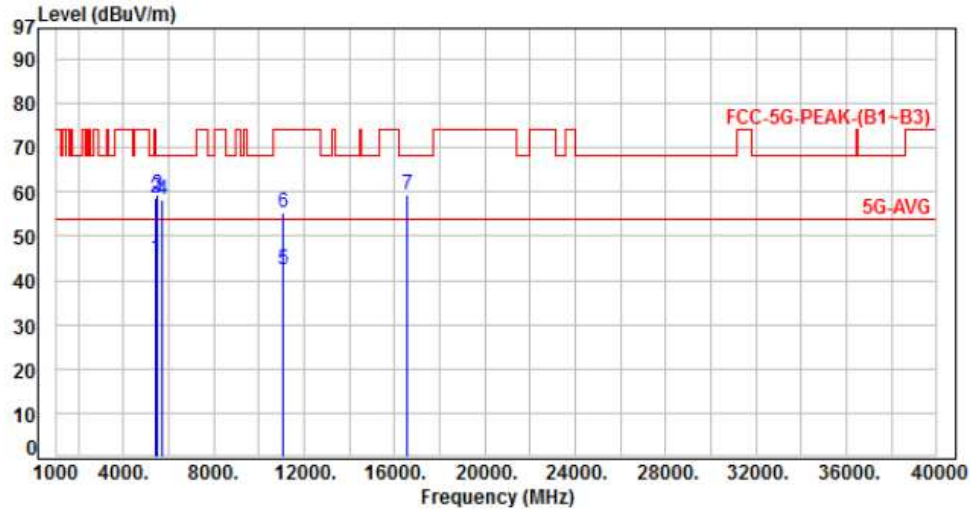


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	5.20	48.14	53.34	54.00	-0.66	Average	228	68	P
2	5460.00	5.20	60.11	65.31	74.00	-8.69	Peak	228	68	P
3	5470.00	5.20	61.34	66.54	68.20	-1.66	Peak	228	68	P
4	5725.00	5.14	52.83	57.97	68.20	-10.23	Peak	228	68	P
5	11060.00	12.51	30.23	42.74	54.00	-11.26	Average	100	207	P
6	11060.00	12.51	42.87	55.38	74.00	-18.62	Peak	100	207	P
7	16590.00	15.16	44.78	59.94	68.20	-8.26	Peak	100	316	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: From POE DC48V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 6, Band 3, CH106		:

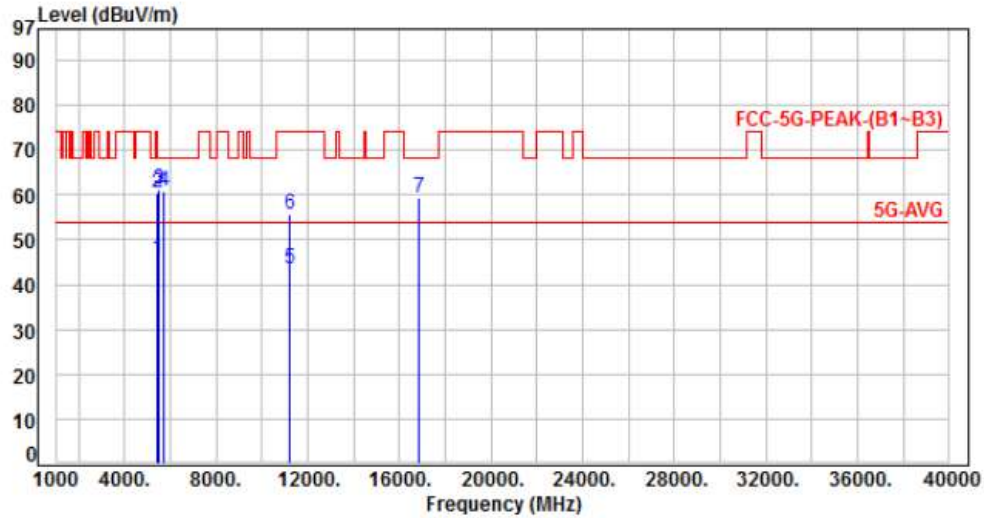


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	5.20	39.97	45.17	54.00	-8.83	Average	292	223	P
2	5460.00	5.20	53.54	58.74	74.00	-15.26	Peak	292	223	P
3	5470.00	5.20	54.18	59.38	68.20	-8.82	Peak	292	223	P
4	5725.00	5.14	53.13	58.27	68.20	-9.93	Peak	292	223	P
5	11060.00	12.51	30.02	42.53	54.00	-11.47	Average	100	172	P
6	11060.00	12.51	42.70	55.21	74.00	-18.79	Peak	100	172	P
7	16590.00	15.16	44.10	59.26	68.20	-8.94	Peak	100	77	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	From POE DC48V	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 6, Band 3, CH122		:	



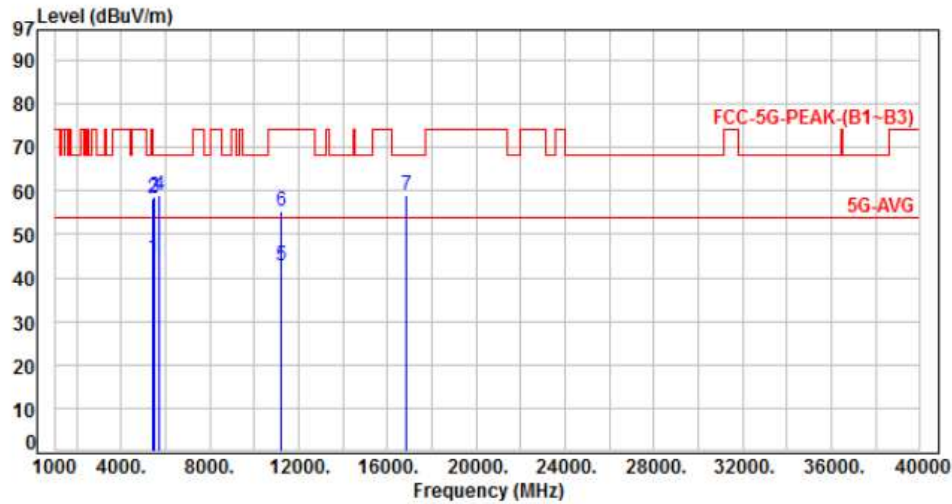
No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	5.20	40.63	45.83	54.00	-8.17	Average	126	65	P
2	5460.00	5.20	55.10	60.30	74.00	-13.70	Peak	126	65	P
3	5470.00	5.20	55.90	61.10	68.20	-7.10	Peak	126	65	P
4	5725.00	5.14	55.55	60.69	68.20	-7.51	Peak	126	65	P
5	11220.00	12.74	30.73	43.47	54.00	-10.53	Average	100	206	P
6	11220.00	12.74	42.91	55.65	74.00	-18.35	Peak	100	206	P
7	16830.00	16.75	42.61	59.36	68.20	-8.84	Peak	100	315	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor





Power	: From POE DC48V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 6, Band 3, CH122		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	5.20	39.52	44.72	54.00	-9.28	Average	279	220	P
2	5460.00	5.20	53.10	58.30	74.00	-15.70	Peak	279	220	P
3	5470.00	5.20	53.28	58.48	68.20	-9.72	Peak	279	220	P
4	5725.00	5.14	53.97	59.11	68.20	-9.09	Peak	279	220	P
5	11220.00	12.74	30.02	42.76	54.00	-11.24	Average	100	148	P
6	11220.00	12.74	42.60	55.34	74.00	-18.66	Peak	100	148	P
7	16830.00	16.75	42.41	59.16	68.20	-9.04	Peak	100	64	P

Note: Level=Reading+Factor  
 Margin=Level-Limit  
 Factor=Antenna Factor + cable loss - Amplifier Factor