

# FCC Radio Test Report

# FCC ID: KA2CS8526LHB1

Report No. Equipment Model Name Brand Name Applicant Address	<ul> <li>BTL-FCCP-2-2404H026</li> <li>2K QHD Pan &amp; Tilt Wi-Fi Camera</li> <li>DCS-8526LH</li> <li>D-Link</li> <li>D-Link Corporation</li> <li>14420 Myford Road Suite 100, Irvine, California 92606, United States</li> </ul>
Radio Function	RLAN 5 GHz (U-NII 1, U-NII 2A, U-NII 2C, U-NII 3)
FCC Rule Part(s) Measurement Procedure(s)	EFCC CFR Title 47, Part 15, Subpart E (15.407) ANSI C63.10-2013
Date of Receipt Date of Test Issued Date	2024/8/06 2024/8/07 ~ 2024/8/27 2024/10/18

The above equipment has been tested and found in compliance with the requirement of the above standards by BTL Inc.

Poken blump

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#### Declaration

**BTL** represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

**BTL**'s reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** assumes no responsibility for the data provided by the Customer, any statements, inferences or generalizations drawn by the customer or others from the reports issued by **BTL**.

This report is the confidential property of the client. As a mutual protection to the clients, the public and ourselves, the test report shall not be reproduced, except in full, without our written approval.

BTL's laboratory quality assurance procedures are in compliance with the ISO/IEC 17025 requirements, and accredited by the conformity assessment authorities listed in this test report.

**BTL** is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

#### Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.



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		REVISION HISTORY		
Report No.	Version	Description	Issued Date	Note
STL-FCCP-2-2404H026	R00	Original Report.	2024/10/18	Valid

#### 1 SUMMARY OF TEST RESULTS

Test procedures according to the technical standards.

Standard(s) Section	Description	Test Result	Judgement	Remark
15.207	AC Power Line Conducted Emissions	APPENDIX A	Pass	
15.205 15.209 15.407(b)	Radiated Emissions	APPENDIX B APPENDIX C APPENDIX D	Pass	
15.407(a) 15.407(e)	Bandwidth	APPENDIX D	Pass	
15.407(a)	Maximum Output Power	APPENDIX E	Pass	
15.407(a)	Power Spectral Density	APPENDIX F	Pass	
15.407(g)	Frequency Stability		PASS	NOTE (5)
15.203	Antenna Requirement		Pass	NOTE (4)
15.407(c)	Automatically Discontinue Transmission		Pass	NOTE (3)

NOTE:

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

(2) The report format version is TP.1.1.1.

(3) During no any information transmission, the EUT can automatically discontinue transmission and become standby mode for power saving. the EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

(4) The device what use replaceable antennas with non-standard interfaces are considered sufficient to com ply with the provisions of 15.203.

(5) The item is declared by the manufacturer.



#### 1.1 TEST FACILITY

The test locations stated below are under the TAF Accreditation Number 0659. The test location(s) used to collect the test data in this report are: (FCC DN: TW0659) No. 64, Ln. 169, Sec.2, Datong Rd., Xizhi Dist., New Taipei City

 $\boxtimes$  C01  $\boxtimes$  CB20  $\boxtimes$  TR01

#### 1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement  $\mathbf{y} \pm \mathbf{U}$ , where expanded uncertainty  $\mathbf{U}$  is based on a standard uncertainty multiplied by a coverage factor of  $\mathbf{k} = 2$ , providing a level of confidence of approximately **95**%. The measurement instrumentation uncertainty considerations contained in CISPR 16-4-2. The BTL measurement uncertainty is less than the CISPR 16-4-2 U<sub>cispr</sub> requirement.

A. AC power line conducted emissions test:

Test Site	Method	Measurement Frequency Range	U (dB)
C06	CISPR	150 kHz ~ 30MHz	2.4498

#### B. Radiated emissions test:

Test Site	Measurement Frequency Range	U,(dB)			
	0.03 GHz ~ 0.2 GHz	4.17			
	0.2 GHz ~ 1 GHz	4.72			
CB21	1 GHz ~ 6 GHz	5.21			
CB21	6 GHz ~ 18 GHz	5.51			
	18 GHz ~ 26 GHz	3.69			
	26 GHz ~ 40 GHz	4.23			

#### C. Conducted test:

Test Item	U,(dB)
Occupied Bandwidth	0.53
Maximum Output Power	0.37
Power Spectral Density	0.66
Conducted Spurious emissions	0.53
Conducted Band edges	0.53
Frequency Stability	0.53

NOTE:

Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

#### 1.3 TEST ENVIRONMENT CONDITIONS

Test Item	Environment Condition	Test Voltage	Tested by
AC Power Line Conducted Emissions	25°C, 45%	AC 120 V	Ken Lu
Radiated emissions below 1 GHz	25°C, 65%	AC 120 V	Barry Tsui
Radiated emissions above 1 GHz	25°C, 65%	AC 120 V	Barry Tsui
Bandwidth	25°C, 79%	AC 120 V	Cai Hu
Maximum Output Power	25°C, 79%	AC 120 V	Cai Hu
Power Spectral Density	25°C, 79%	AC 120 V	Cai Hu

#### 1.4 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

UNII-1				
Test Software Version		putty		
Frequency (MHz)	5180	5200	5240	
IEEE 802.11a	40	40	40	
IEEE 802.11n(HT20)	40	40	40	
IEEE 802.11ac(VHT20)	40	40	35	
Frequency (MHz)	5190	5230		
IEEE 802.11n(HT40)	40	40		
IEEE 802.11ac(VHT40)	40	40		
Frequency (MHz)	5210			
IEEE 802.11ac(VHT80)	40			

UNII-2A				
Test Software Version		putty		
Frequency (MHz)	5260	5300	5320	
IEEE 802.11a	40	40	40	
IEEE 802.11n(HT20)	40	40	40	
IEEE 802.11ac(VHT20)	40	40	40	
Frequency (MHz)	5270	5310		
IEEE 802.11n(HT40)	40	40		
IEEE 802.11ac(VHT40)	40	40		
Frequency (MHz)	5290			
IEEE 802.11ac(VHT80)	40			

UNII-2C				
Test Software Version		putty		
Frequency (MHz)	5500	5580	5700	
IEEE 802.11a	40	40	40	
IEEE 802.11n(HT20)	40	40	40	
IEEE 802.11ac(VHT20)	53	50	40	
Frequency (MHz)	5510	5550	5670	
IEEE 802.11n(HT40)	40	40	40	
IEEE 802.11ac(VHT40)	53	52	50	
Frequency (MHz)	5530	5610		
IEEE 802.11ac(VHT80)	40	40		

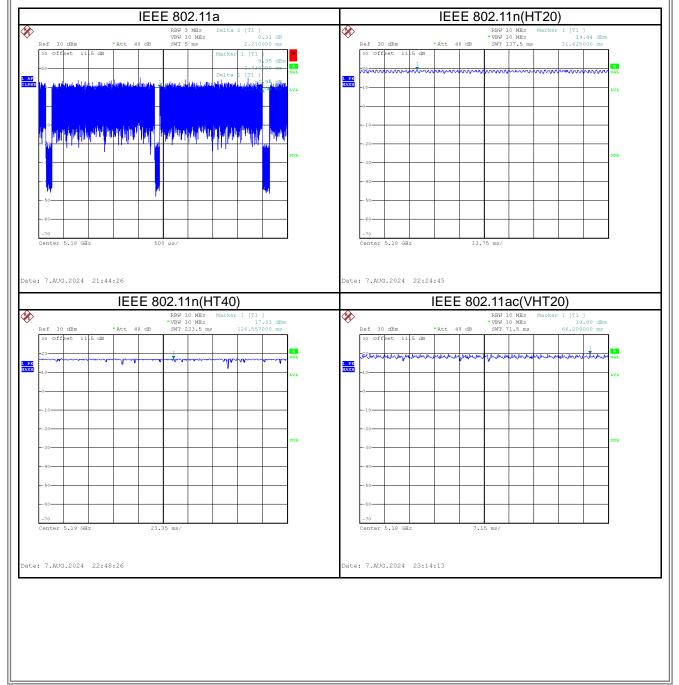
	UNII-3					
Test Software Version		putty				
Frequency (MHz)	5745	5785	5825			
IEEE 802.11a	63	63	63			
IEEE 802.11n(HT20)	63	63	63			
IEEE 802.11ac(VHT20)	63	63	63			
Frequency (MHz)	5755	5795				
IEEE 802.11n(HT40)	63	63				
IEEE 802.11ac(VHT40)	63	63				
Frequency (MHz)	5775					
IEEE 802.11ac(VHT80)	63					



#### 1.5 DUTY CYCLE

#### If duty cycle is $\geq$ 98 %, duty factor is not required. If duty cycle is < 98 %, duty factor shall be considered.

$\frac{11}{10}$ duty by bic 15 < 50 70, dut							
Remark	Delta 1			Delta 2	On Time/Period	10 log(1/Duty Cycle)	
Mode	ON (ms)	Numbers (ON)	On Time (B) (ms)	Period (ON+OFF) (ms)	Duty Cycle (%)	Duty Factor (dB)	
IEEE 802.11a	2.070	1	2.070	2.210	93.67%	0.28	
IEEE 802.11n (HT20)	2.500	1	2.500	2.500	100.00%	0.00	
IEEE 802.11n (HT40)	2.500	1	2.500	2.500	100.00%	0.00	
IEEE 802.11ac (VHT20)	2.500	1	2.500	2.500	100.00%	0.00	
IEEE 802.11ac (VHT40)	2.500	1	2.500	2.500	100.00%	0.00	
IEEE 802.11ac (VHT80)	0.464	1	0.464	0.712	65.17%	1.86	





				IEEE	E 802	2.11a	ac(V	'HT4	-0)						I	IEEE	80	2.11	ac(\	/HT8	0)		
	Ref 3	0 dBm føet 1	1.5 dB	*Att (	40 dB	• VBW 1			r 1 [T1 17 52.864	.55 dBm	1	8	Ref 3	0 dBm føet 1:		•Att 41	0 dB		3 MHz 10 MHz 2 ms		2 [T1 ] -0 712.000	.18 dB	*
PK XH	-20 -10		1 						- - - -		SGL LVL	1 AP CLRWF	-20	- Holjakar 7	halustyte	1	//II 27	utanyah	Alpiniulu	Delta	164.000 1 [T1 ]	55 dBm 900 με 90 dB	A SGL
	10										3DB		10			an far	ner <mark>(111</mark> 1)		fn Wilh	er frontstoleft	1 	(    	3DB
	40												<mark>арароді</mark> 50			Minit Maria	ihtti			an yannılı			
	-70	5.19 (	Ξz		20.	65 ms/					]		-70 Center	5.21 G	Ez		20	0 μs/					

#### 2 GENERAL INFORMATION

#### 2.1 DESCRIPTION OF EUT

Equipment	2K QHD Pan & Tilt Wi-Fi Camera
Brand Name	D-Link
Model Name	DCS-8526LH
Model Difference	N/A
Hardware Version	N/A
Software Version	N/A
Power Source	DC Voltage supplied from AC/DC adapter Brand/Model: KEYU/ KA12C-0502000US
Power Rating	I/P: 100-240V~50/60Hz 0.35A Max O/P: 5V2000mA
Operation Band	UNII-1: 5150 MHz to 5250 MHz UNII-2A: 5250 MHz to 5350 MHz UNII-2C: 5470 MHz to 5725 MHz UNII-3: 5725 MHz to 5850 MHz
Operation Frequency	UNII-1: 5180 MHz to 5250 MHz UNII-2A: 5250 MHz to 5320 MHz UNII-2C: 5500 MHz to 5700 MHz UNII-3: 5745 MHz to 5825 MHz
Modulation Technology	OFDM
Transfer Rate	IEEE 802.11a: 54/48/36/24/18/12/9/6 Mbps IEEE 802.11n: up to 150 Mbps IEEE 802.11ac: up to 433.3 Mbps
Output Power Max. for UNII-1	IEEE 802.11a:14.48 dBm (0.0281 W)
Output Power Max. for UNII-2A	IEEE 802.11a: 14.72 dBm (0.0296 W)
Output Power Max. for UNII-2C	IEEE 802.11a: 15.29 dBm (0.0338 W)
Output Power Max. for UNII-3	IEEE 802.11a: 11.43 dBm (0.0139 W)

NOTE:

(1) The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.

#### (2) Channel List:

**BIL** 

IEEE 802.11a IEEE 802.11n(HT20) IEEE 802.11ac(VHT20)			11n(HT40) 1ac(VHT40)	IEEE 802.11ac(VHT80)			
UNII-1		UN	II-1	UN	II-1		
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)		
36	5180	38	5190	42	5210		
40	5200	46	5230				
44	5220						
48	5240						

IEEE 802.1	IEEE 802.11a IEEE 802.11n(HT20) IEEE 802.11ac(VHT20)		11n(HT40) 1ac(VHT40)	IEEE 802.11ac(VHT80)		
UNII-2A		UNI	I-2A	UNI	I-2A	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	
52	5260	54	5270	58	5290	
56	5280	62	5310			
60	5300					
64	5320					

IEEE 802.11a IEEE 802.11n(HT20) IEEE 802.11ac(VHT20)			11n(HT40) 1ac(VHT40)	IEEE 802.11ac(VHT80)		
UNII	UNII-2C		I-2C	UNI	I-2C	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	
100	5500	102	5510	106	5530	
104	5520	110	5550	122	5610	
108	5540	118	5590			
112	5560	126	5630			
116	5580	134	5670			
120	5600					
124	5620					
128	5640					
132	5660					
136	5680					
140	5700					

IEEE 802.1	IEEE 802.11a IEEE 802.11n(HT20) IEEE 802.11ac(VHT20)		IEEE 802.11n(HT20)			IEEE 802.11ac(VHT80)			
UNI	UNII-3		II-3	UN	II-3				
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)				
149	5745	151	5755	155	5775				
153	5765	159	5795						
157	5785								
161	5805								
165	5825								

#### (3) Table for Filed Antenna:

9.	Tuble I	or Flice Antenna.				
	Ant.	Brand Name	P/N	Туре	Connector	Gain (dBi)
	1		EP07401	PIFA	N/A	-3.59

(4) The above Antenna information are derived from the antenna data sheet provided by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.



#### 2.2 TEST MODES

Test Items	Test mode	Channel	Note	
AC power line conducted emissions	Normal/Idle	-	-	
Transmitter Radiated Emissions (below 1GHz)	TX Mode_IEEE 802.11a	100	-	
	TX Mode_IEEE 802.11a	36/48, 52/64		
	TX Mode_IEEE 802.11n (HT20)	100/140, 149/165	Bandedge	
	TX Mode_IEEE 802.11n (HT40)	38/46, 54/62, 102/134, 151/159	Danueuge	
	TX Mode_IEEE 802.11ac (VHT80)	42, 58, 106, 122, 155		
Transmitter Radiated Emissions (above 1GHz)	TX Mode_IEEE 802.11a	36/40/48, 52/60/64, 100/116/140, 149/157/165		
	TX Mode_IEEE 802.11n (HT20)	36/40/48, 52/60/64, 100/116/140/144, 149/157/165	Harmonic	
	TX Mode_IEEE 802.11n (HT40)	38/46, 54/62, 102/110/134/142, 151/159	Tiarmonic	
	TX Mode_IEEE 802.11ac (VHT80)	42, 58, 106/122/138, 155		
	TX Mode_IEEE 802.11a	36/40/48, 52/60/64, 100/116/140, 149/157/165		
	TX Mode_IEEE 802.11n (HT20) TX Mode_IEEE 802.11ac (VHT20)	36/40/48, 52/60/64, 100/116/140, 149/157/165		
Bandwidth	TX Mode_IEEE 802.11n (HT40) TX Mode_IEEE 802.11ac (VHT40)	38/46, 54/62, 102/110/134 151/159	-	
	TX Mode_IEEE 802.11ac (VHT80)	42, 58, 106/122/138, 155		
	TX Mode_IEEE 802.11a	36/40/48, 52/60/64, 100/116/140, 149/157/165		
Dower Spectral Depoits	TX Mode_IEEE 802.11n (HT20) TX Mode_IEEE 802.11ac (VHT20)	36/40/48, 52/60/64, 100/116/140/144, 149/157/165		
Power Spectral Density	TX Mode_IEEE 802.11n (HT40) TX Mode_IEEE 802.11ac (VHT40)	38/46, 54/62, 102/110/134/142 151/159	-	
	TX Mode_IEEE 802.11ac (VHT80)	42, 58 106/122/138, 155		
	TX Mode_IEEE 802.11a	36/40/48, 52/60/64, 100/116/140, 149/157/165	-	
Output Power	TX Mode_IEEE 802.11n (HT20) TX Mode_IEEE 802.11ac (VHT20)	36/40/48, 52/60/64, 100/116/140/144, 149/157/165	-	
Ouipui rowei	TX Mode_IEEE 802.11n (HT40) TX Mode_IEEE 802.11ac (VHT40)	38/46, 54/62, 102/110/134/142 151/159	-	
	TX Mode_IEEE 802.11ac (VHT80)	42, 58 106/122/138, 155	-	





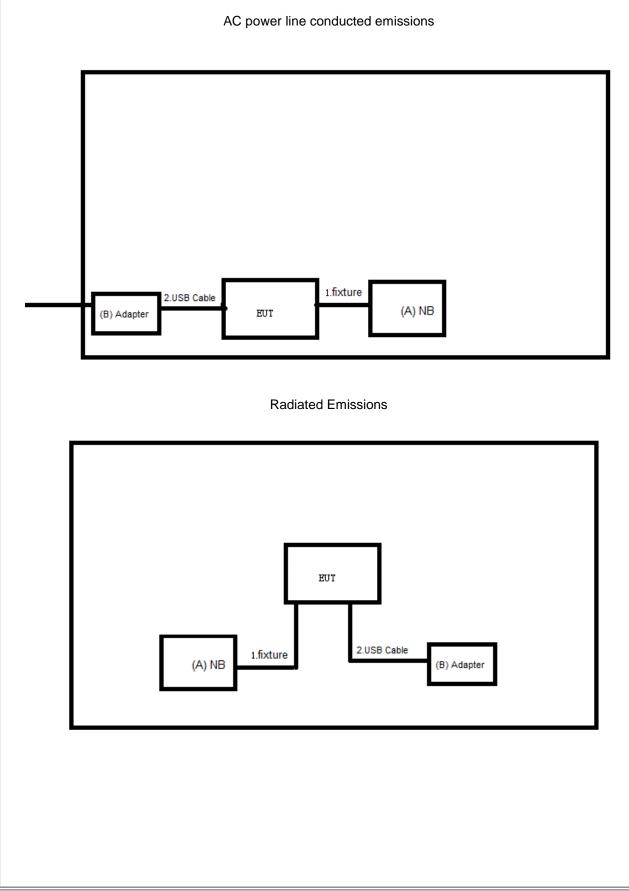
NOTE:

- (1) For radiated emission band edge test, both Vertical and Horizontal are evaluated, but only the worst case (Horizontal) is recorded.
- (2) For radiated emission below 1 GHz test, the IEEE 802.11a Mode Channel 100 is found to be the worst case and recorded.
- (3) For radiated emission Harmonic 18-40GHz test, only tested the worst case and recorded.
- (4) The measurements for Output Power are tested, the worst case are IEEE 802.11a mode, IEEE 802.11n(HT20) mode, IEEE 802.11n(HT40) mode, IEEE 802.11ac (VHT20) mode, IEEE 802.11ac (VHT40) mode and IEEE 802.11ac (VHT80) mode only the worst cases are documented for other test items.



#### 2.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Equipment letters and Cable numbers refer to item numbers described in the tables of clause 2.4.



#### 2.4 SUPPORT UNITS

			ower nine conducted	61113310113	
Item	Equipment	Brand	Model No.	Series No.	Remarks
А	Notebook	Lenovo	ThinkBook 14 G4 IAP	MP28KHAH	Furnished by test lab.
В	Adapter	N/A	N/A	N/A	Supplied by test requester.
Item	Shielded	Ferrite Core	Length	Cable Type	Remarks
1	fixture	N	Ν	0.3m	Furnished by test lab.
2	USB Cable	Ν	Ν	2 m	Supplied by test requester.

#### AC power line conducted emissions

Radiated E	Emissions
------------	-----------

lt	em	Equipment	Brand	Model No.	Series No.	Remarks
	A	Notebook	Lenovo	ThinkBook 14 G4 IAP	MP28KHAH	Furnished by test lab.
	В	Adapter	N/A	N/A	N/A	Supplied by test requester.

Item	Shielded	Ferrite Core	Length	Cable Type	Remarks
1	fixture	Ν	Ν	0.3m	Furnished by test lab.
2	USB Cable	Ν	Ν	2 m	Supplied by test requester.



#### 3 AC POWER LINE CONDUCTED EMISSIONS TEST

#### 3.1 LIMIT

Frequency	Limit (dBµV)		
(MHz)	Quasi-peak	Average	
0.15 - 0.5	66 - 56 *	56 - 46 *	
0.50 - 5.0	56	46	
5.0 - 30.0	60	50	

#### NOTE:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " \* " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.
- (3) The test result calculated as following: Measurement Value = Reading Level + Correct Factor
  - Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor (if use)
  - Margin Level = Measurement Value Limit Value

Calculation example:

Reading Level (dBµV)		Correct Factor (dB)		Measurement Value (dBµV)
38.22	+	3.45	I	41.67

Measurement Value		Limit Value		Margin Level
(dBµV)		(dBµV)		(dB)
41.67	-	60	=	-18.33

The following table is the setting of the receiver.

Receiver Parameter	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 KHz

#### 3.2 TEST PROCEDURE

a. The EUT was placed 0.8 m above the horizontal ground plane with the EUT being connected to the power mains through a line impedance stabilization network (LISN).
 All other support equipment were powered from an additional LISN(s).

The LISN provides 50 Ohm/50uH of impedance for the measuring instrument.

- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle to keep the cable above 40 cm.
- c. Excess I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable will be terminated, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. The LISN is spaced at least 80 cm from the nearest part of the EUT chassis.
- e. For the actual test configuration, please refer to the related Item EUT TEST PHOTO.

#### NOTE:

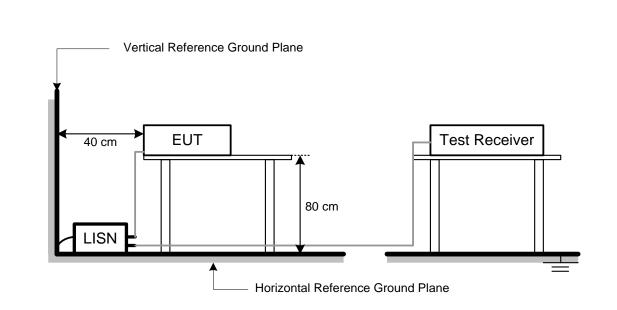
- In the results, each reading is marked as Peak, QP or AVG per the detector used. BW=9 kHz (6 dB Bandwidth)
- (2) All readings are Peak unless otherwise stated QP or AVG in column of Note. Both the QP and the AVG readings must be less than the limit for compliance.

#### 3.3 DEVIATION FROM TEST STANDARD

No deviation.

# **B**TL

#### 3.4 TEST SETUP



#### 3.5 TEST RESULT

Please refer to the APPENDIX A.



#### 4 **RADIATED EMISSIONS TEST**

#### 4.1 LIMIT

In case the emission fall within the restricted band specified on 15.205, then the 15.209 limit in the table below has to be followed.

#### LIMITS OF RADIATED EMISSIONS MEASUREMENT (9 kHz to 1000 MHz)

Frequency	Field Strength	Measurement Distance
(MHz)	(microvolts/meter)	(meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
960~1000	500	3

#### LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

Frequency (MHz)	EIRP Limit (dBm)	Equivalent Field Strength at 3m (dBµV/m)
5150-5250	-27	68.3
5250-5350	-27	68.3
5470-5725	-27	68.3
	-27 (NOTE 2)	68.3
5725-5850	10 (NOTE 2)	105.3
5725-5850	15.6 (NOTE 2)	110.9
	27 (NOTE 2)	122.3

NOTE:

(1) The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:  $E = \frac{1000000\sqrt{30P}}{100000}$ 

3

 $\mu$ V/m, where P is the eirp (Watts)

(2) According to FCC 16-24.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 25 MHz 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 27 dBm/MHz at the band edge.

(3) The test result calculated as following: Measurement Value = Reading Level + Correct Factor Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use) Margin Level = Measurement Value - Limit Value Calculation example:

Reading Level (dBµV)		Correct Factor (dB/m)		Measurement Value (dBµV/m)
36.23	+	-11.97	=	24.26

Measurement Value (dBµV/m)		Limit Value (dBµV/m)		Margin Level (dB)
24.26	-	40	Ш	-15.74



Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RBW / VBW	1MHz / 3MHz for Peak,
(Emission in restricted band)	1MHz / 1/T for Average

Spectrum Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9KHz~90KHz for PK/AVG detector
Start ~ Stop Frequency	90KHz~110KHz for QP detector
Start ~ Stop Frequency	110KHz~490KHz for PK/AVG detector
Start ~ Stop Frequency	490KHz~30MHz for QP detector
Start ~ Stop Frequency	30MHz~1000MHz for QP detector

#### 4.2 TEST PROCEDURE

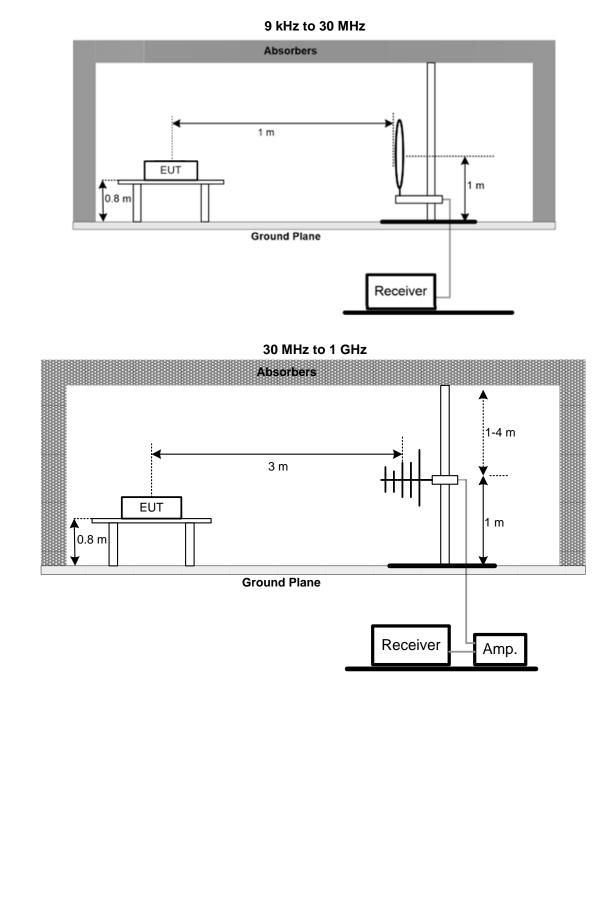
- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- c. The height of the equipment or of the substitution antenna shall be 0.8 m or 1.5 m, the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1GHz.
- f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1GHz)
- All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1GHz)
- i. For the actual test configuration, please refer to the related Item EUT TEST PHOTO.

#### 4.3 DEVIATION FROM TEST STANDARD

No deviation.

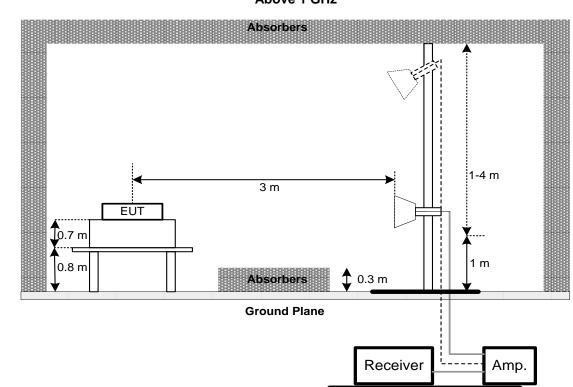


#### 4.4 TEST SETUP









#### 4.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

#### 4.6 TEST RESULT - BELOW 30 MHZ

Please refer to the APPENDIX B.

#### 4.7 TEST RESULT – 30 MHZ TO 1 GHZ

Please refer to the APPENDIX B.

#### 4.8 TEST RESULT – ABOVE 1 GHZ

Please refer to the APPENDIX C.

NOTE:

(1) No limit: This is fundamental signal, the judgment is not applicable. For fundamental signal judgment was referred to Peak output test.



#### 5 BANDWIDTH TEST

#### 5.1 LIMIT

Section	Test Item	Frequency Range (MHz)
	26 dB Bandwidth	5150-5250 5250-5350
15.407(a)		5470-5725
	Minimum 500 kHz 6 dB Bandwidth	5725-5850

#### 5.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting:

Spectrum Parameter	Setting
Span Frequency	> 26 dB Bandwidth
RBW	Approximately1% of the emission bandwidth
VBW	> RBW

#### 5.3 DEVIATION FROM TEST STANDARD

No deviation.

#### 5.4 TEST SETUP



#### 5.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

#### 5.6 TEST RESULT

Please refer to the APPENDIX D.



#### 6 MAXIMUM OUTPUT POWER TEST

#### 6.1 LIMIT

Section	Test Item	Limit	Frequency Range (MHz)				
45 407(-)	Maximum O. taut David	AP device: 1 Watt (30 dBm) Client device: 250 mW (23.98 dBm)	5150-5250				
15.407(a)	Maximum Output Power	250 mW (23.98 dBm)	5250-5350				
		250 mW (23.98 dBm)	5470-5725				
		1 Watt (30dBm)	5725-5850				
Note: The maximum e.i.r.p at any elevation angle above 30 degrees as measured from the horizon must not							

Note: The maximum e.i.r.p at any elevation angle above 30 degrees as measured from the horizon must no exceed 125 mW(21 dBm).

#### 6.2 TEST PROCEDURE

- a. The EUT was directly connected to the Peak Power Analyzer and antenna output port as show in the block diagram below.
- b. The maximum peak conducted output power was performed in accordance with method of clause E. 3. a) FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
  - a)Method PM (Measurement using an RF average power meter):

(i) Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the following conditions are satisfied

The EUT is configured to transmit continuously or to transmit with a constant duty cycle.

At all times when the EUT is transmitting, it must be transmitting at its maximum power control level.

The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.

(ii) If the transmitter does not transmit continuously, measure the duty cycle, x, of the transmitter output signal as described in II.B.

(iii) Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.

(iv) Adjust the measurement in dBm by adding 10 log (1/x) where x is the duty cycle (e.g., 10 log (1/0.25) if the duty cycle is 25%).

#### 6.3 DEVIATION FROM TEST STANDARD

No deviation.

#### 6.4 TEST SETUP



#### 6.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

#### 6.6 TEST RESULT

Please refer to the APPENDIX E.



#### 7 POWER SPECTRAL DENSITY

#### 7.1 LIMIT

Section	Test Item Limit		Frequency Range (MHz)				
		AP device: 17 dBm/MHz Client device: 11 dBm/MHz	5150-5250				
15.407(a)	Maximum Output Power	11 dBm/MHz	5250-5350				
		11 dBm/MHz	5470-5725				
		30 dBm/500 kHz	5725-5850				
Note: The maximum e.i.r.p at any elevation angle above 30 degrees as measured from the horizon must not							
exceed 125 mW(21 dBm).							

#### 7.2 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.

#### b. Spectrum Setting:

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	= 1 MHz
VBW	≥ 3 MHz
Detector	RMS
Trace	Max Hold
Sweep Time	Auto

#### 7.3 DEVIATION FROM TEST STANDARD

No deviation.

#### 7.4 TEST SETUP



#### 7.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

#### 7.6 TEST RESULT

Please refer to the APPENDIX F.

### 8 LIST OF MEASURING EQUIPMENTS

	AC Power Line Conducted Emissions										
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until					
1	Two-Line V-Network	R&S	ENV216	101051	2024/6/26	2025/6/25					
2	Test Cable	EMCI	EMCRG58-BM-B M-9000	210501	2023/12/11	2024/12/10					
3	EMC Receiver	Keysight	N9038A	MY54130009	2024/6/27	2025/6/26					
4	Measurement Software	Farad	EZ_EMC (Ver. NB-03A1-01)	N/A	N/A	N/A					

		Radia	ted Emissions_Bel	ow 1GHz		
Item	Kind of Equipment Manufacturer		Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Loop Ant.	Electro-Metrics	EMCI-LPA600	274	2024/7/5	2025/7/4
2	EMC Receiver	Keysight	N9038A	MY54130009	2024/6/27	2025/6/26
3	Pre-Amplifler	EMCI	EMC001340	980555	2023/12/1	2024/11/30
4	Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	01207	2023/12/18	2024/12/17
5	EMC Receiver	Keysight	N9038A	MY54130009	2024/6/27	2025/6/26
6	Pre-Amplifier	EMCI	EMC001330-2020 1222	980807	2023/12/11	2024/12/10
7	Test Cable	EMCI	EMC-8D-NM-NM- 5000	150106	2023/12/11	2024/12/10
8	Test Cable	EMCI	EMC-CFD-400-N M-NM-8000	200348	2023/12/11	2024/12/10
9	Measurement Software Farad		EZ_EMC (Ver. NB-03A1-01)	N/A	N/A	N/A

Radiated Emissions_Above 1 GHz									
Item	Kind of Equipment	Manufacturer	ufacturer Type No.		Calibrated Date	Calibrated Until			
1	Broad-Band Horn Antenna	RFSPIN	DRH18-E	210109A18E	2024/1/10	2025/1/9			
2	Pre-Amplifier	EMCI	EMC051845SE	980779	2023/12/11	2024/12/10			
3	Test Cable	EMCI	EMC105-SM-SM- 1000	210119	2023/12/11	2024/12/10			
4	Test Cable	EMCI	EMC105-SM-SM- 3000	210118	2023/12/11	2024/12/10			
5	Test Cable	EMCI	EMC105-SM-SM- 7000	210117	2023/12/11	2024/12/10			
6	EXA Spectrum Analyzer	keysight	N9010A	MY56480554	2023/9/12	2024/9/11			
7	Pre-Amplifier	EMCI	EMC184045SE	980512	2023/12/11	2024/12/10			
8	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	340	2024/6/27	2025/6/26			
9	Test Cable	EMCI	EMC102-KM-KM- 1000	220328	2023/12/11	2024/12/10			
10	Test Cable	EMCI	EMC101G-KM-KM -3000	220330	2023/12/11	2024/12/10			
11	Measurement Software	Farad	EZ_EMC (Ver. NB-03A1-01)	N/A	N/A	N/A			



	Bandwidth									
Item	em Kind of Manufacturer Type No.		Serial No.	Calibrated Date	Calibrated Until					
1	Spectrum Analyzer	R&S	FSP 30	100854	2024/6/27	2025/6/26				
2	10dbAttenuator	INMET	AHC-10dB	1	N/A	N/A				
3 BTL-ConducredT est		N/A	1247788684	N/A	N/A	N/A				
	Maximum Output Power									

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until		
1	Spectrum	R&S	FSP 30	100854	2024/6/27	2025/6/26		
2	Analyzer 10dbAttenuator	INMET	AHC-10dB	1	N/A	N/A		
3	BTL-ConducredT est	N/A	1247788684	N/A	N/A	N/A		

	Power Spectral Density           Kind of         Table 1								
Item	Kind of Equipment	Manufacturer	Type No.	Type No. Serial No.		Calibrated Until			
1	Spectrum Analyzer	R&S	FSP 30	100854	2024/6/27	2025/6/26			
2	10dbAttenuator	INMET	AHC-10dB	1	N/A	N/A			
3	BTL-ConducredT est	N/A	1247788684	N/A	N/A	N/A			

Remark: "N/A" denotes no model name, no serial no. or no calibration specified. All calibration period of equipment list is one year.



## 9 EUT TEST PHOTO

Please refer to document Appendix No.: TP-2404H026-1 (APPENDIX-TEST PHOTOS).

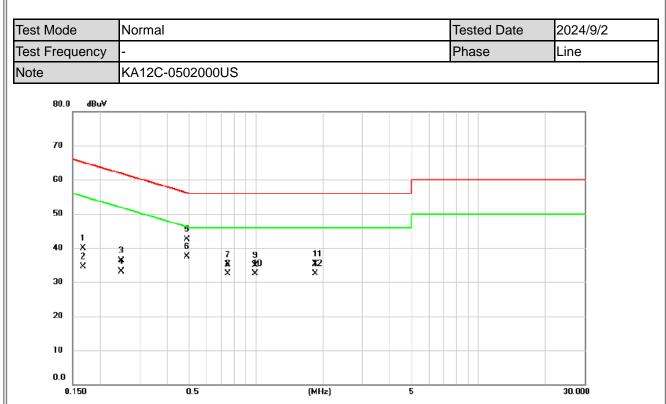
#### 10 EUT PHOTOS

Please refer to document Appendix No.: EP-2404H026-1 (APPENDIX-EUT PHOTOS).



# APPENDIX A AC POWER LINE CONDUCTED EMISSIONS



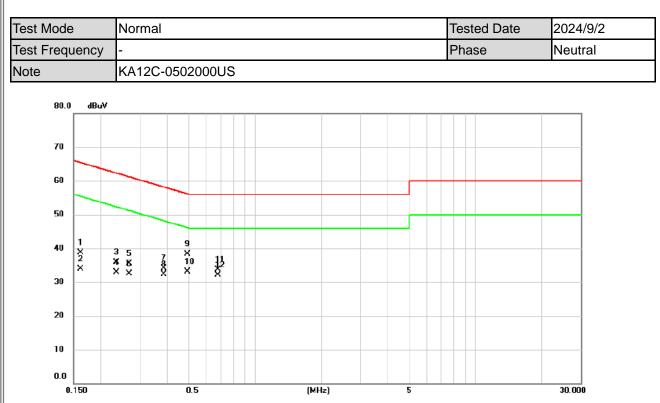


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1678	30.21	9.65	39.86	65.07	-25.21	QP	
2		0.1678	24.84	9.65	34.49	55.07	-20.58	AVG	
3		0.2483	26.63	9.64	36.27	61.81	-25.54	QP	
4		0.2483	23.40	9.64	33.04	51.81	-18.77	AVG	
5		0.4910	32.81	9.66	42.47	56.15	-13.68	QP	
6	*	0.4910	27.84	9.66	37.50	46.15	-8.65	AVG	
7		0.7475	25.38	9.68	35.06	56.00	-20.94	QP	
8		0.7475	22.80	9.68	32.48	46.00	-13.52	AVG	
9		0.9905	25.21	9.70	34.91	56.00	-21.09	QP	
10		0.9905	22.75	9.70	32.45	46.00	-13.55	AVG	
11		1.8545	25.58	9.78	35.36	56.00	-20.64	QP	
12		1.8545	22.81	9.78	32.59	46.00	-13.41	AVG	

#### **REMARKS**:

Measurement Value = Reading Level + Correct Factor.
 Margin Level = Measurement Value - Limit Value.





No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1615	29.02	9.63	38.65	65.39	-26.74	QP	
2		0.1615	24.24	9.63	33.87	55.39	-21.52	AVG	
3		0.2350	26.18	9.63	35.81	62.27	-26.46	QP	
4		0.2350	23.25	9.63	32.88	52.27	-19.39	AVG	
5		0.2680	25.96	9.63	35.59	61.18	-25.59	QP	
6		0.2680	22.93	9.63	32.56	51.18	-18.62	AVG	
7		0.3860	24.49	9.63	34.12	58.15	-24.03	QP	
8		0.3860	22.58	9.63	32.21	48.15	-15.94	AVG	
9		0.4934	28.70	9.64	38.34	56.11	-17.77	QP	
10	*	0.4934	23.49	9.64	33.13	46.11	-12.98	AVG	
11		0.6800	24.11	9.65	33.76	56.00	-22.24	QP	
12		0.6800	22.37	9.65	32.02	46.00	-13.98	AVG	

#### **REMARKS**:

(1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value - Limit Value.



# APPENDIX B RADIATED EMISSIONS - 30 MHZ TO 1 GHZ



est Mo	de	IEEE 802.11a							Tested Date		2024/8/23	
est Fre	equency	CH100: 5500 MHz							Phase		Vertical	
12	0.0 dBu∀/m											
11	0											
10												
90	- 11											
80												
70												
60												
50												
40				4 ×								
30		1 X	ZX	X X		5 X		6				
20			×			X		^				
10												
0.0												
	0.009 3.0		9.01	12.01	15.0	0 18.0			24.00 Table	30.	00 MHz	
lo. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Degree			
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	t	
1	3.0081	36.63	-5.03	31.60	69.54	-37.94	peak					
2	6.5770	31.68	-3.93	27.75	69.54	-41.79	peak					
3	9.9960	38.98	-4.13	34.85	69.54	-34.69	peak					
4 *	10.9857	46.35	-4.21	42.14	69.54		peak					
5	16.8340	32.16	-4.66	27.50		-42.04	peak					
6	21.8424	33.98	-5.65	28.33	69.54	-41.21	peak					

#### **REMARKS**:

- (1) Measurement Value = Reading Level + Correct Factor.
  (2) Margin Level = Measurement Value Limit Value.



est Mode IEEE 802.11a										sted Dat	te 2	2024/8/23 Horizontal	
est Frequency			CH100: 5500 MHz							Phase			
	120.0	) dBuV/m	I										
	110												
	100												
	90	<u>\</u>											
	80												
	70												
	60												
	50		1	я Х									
	40		× z ×		*								
	30					5 X	6 X						
	20											_	
	10											_	
	0.0 0.	0 <b>09</b> 3.0	)1 6.01	9.01	12.01	15.0	0 18.	00 21	1.00	24.00	30.0	IO MHz	
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment		
1		3.0081	44.51	-5.03	39.48	69.54	-30.06	peak					
2		6.0071	38.45	-4.15	34.30	69.54	-35.24	peak					
	*	7.9866		-3.79	46.36	69.54	-23.18	peak					
4		10.9857		-4.21	38.19		-31.35	peak					
5		13.9848		-4.58	27.65		-41.89	peak					
6		17.0440	32.27	-4.64	27.63	69.54	-41.91	peak					

#### **REMARKS**:

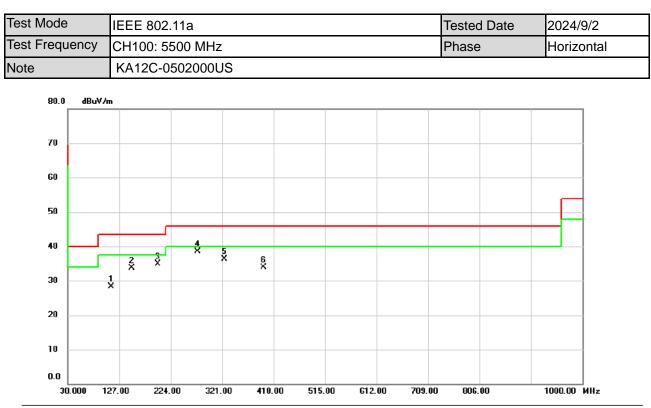
Measurement Value = Reading Level + Correct Factor.
 Margin Level = Measurement Value - Limit Value.



est Moo	de	IEEE 802	.11a					Tested Date	2024/9/2
est Free	quency	CH100: 5	500 MHz					Phase	Vertical
ote		KA12C-0	502000U	S					
80.	.0 dBuV/m	1							
70									
60									
50									
					<u>6</u>				
40		2 <sup>3</sup>		4					
30	*	2 X X		4 5 X					
20									
10									
0.0									
	30.000 12	7.00 224.0	00 321.00	418.00	515.00	612.00	709.0	0 806.00	1000.00 MHz
No. N	Mk. Fre	Readin q. Level	g Correct Factor		- Limit	Margin			
	MH:		dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	30.000			30.39	40.00	-9.61	peak		
2	159.980			30.59	43.50	-12.91	peak		
3	199.750			33.60	43.50	-9.90	peak		
4	359.800			33.54	46.00	-12.46	peak		
5	399.570			31.57	46.00	-14.43	peak		
6 '	* 500.450	0 47.66	-5.23	42.43	46.00	-3.57	peak		

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



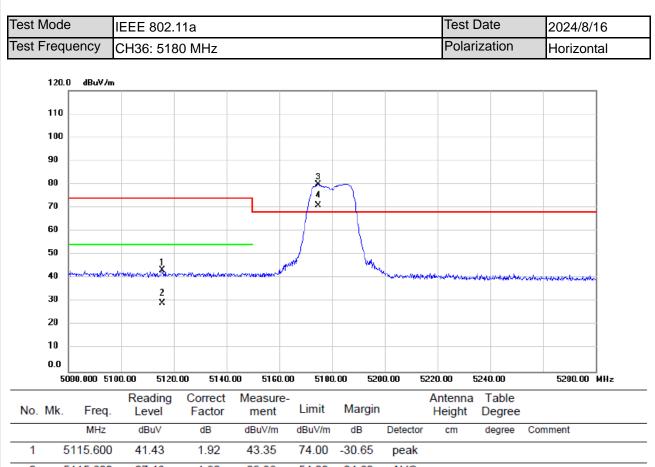


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		112.4500	42.92	-14.61	28.31	43.50	-15.19	peak	
2		150.2800	44.92	-11.12	33.80	43.50	-9.70	peak	
3		199.7500	49.08	-14.22	34.86	43.50	-8.64	peak	
4	*	275.4100	49.43	-11.00	38.43	46.00	-7.57	peak	
5		324.8800	45.92	-9.59	36.33	46.00	-9.67	peak	
6		399.5700	41.35	-7.49	33.86	46.00	-12.14	peak	

(1) Measurement Value = Reading Level + Correct Factor.



# APPENDIX C RADIATED EMISSIONS - ABOVE 1 GHZ



1		5115.600	41.43	1.92	43.35	74.00	-30.65	peak			
2		5115.600	27.46	1.92	29.38	54.00	-24.62	AVG			
3	*	5174.800	78.16	1.93	80.09	68.20	11.89	peak		No Limit	
4	Х	5174.800	69.09	1.93	71.02	68.20	2.82	AVG		No Limit	

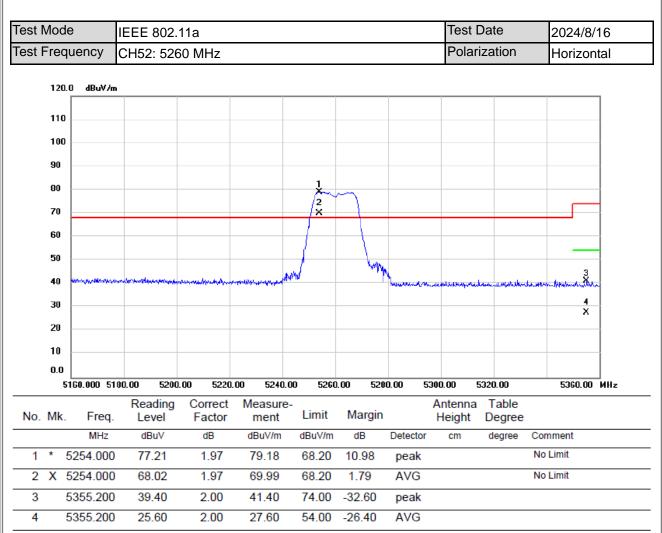
### **REMARKS**:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



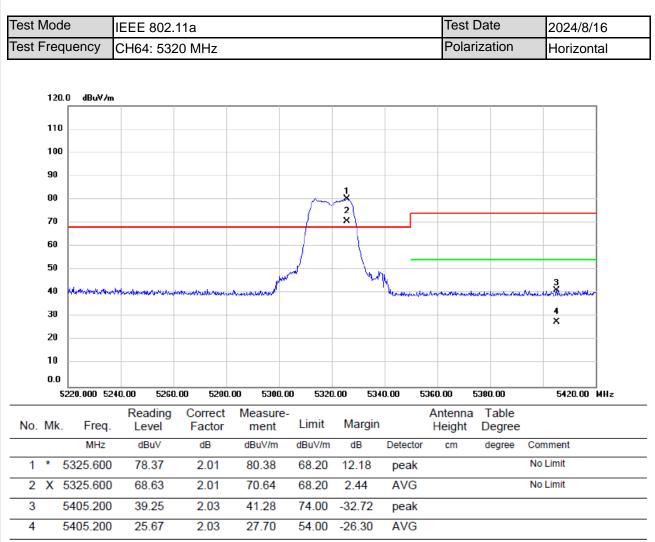
st M	ode	!	IEEE 802.	.11a					Test	Date	2024/8/	16
est Fr	requ	iency	CH48: 524	40 MHz					Polar	ization	Horizon	tal
	120.0	dBuV/π										
	110											
	100											
!	90											
1	80					$\sim$	3					
	70						× )					
I	60						-					
!	50	1	managenter			pund	hum					
	- 1		an seine der meinen seine seine	hormetar a talak a sedera ya se	abdysensameda <sup>nd</sup>				have been and the	multiplementation	r Hanselmert per telle son and as the	
	30 20	2 X										
	20 10											ĺ
	0.0											1
	51	40.000 51	60.00 5180	). 00 5200.	.00 5220.	.00 5240	.00 526	0.00 52	80.0D 9	5300.00	5340.00	MHz
No. N	٨k.	Freq.	Reading Level	Correct Factor	Measure ment	e- Limit	Margin		Antenna Height			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	
1	5	142.800	41.59	1.93	43.52	74.00	-30.48	peak				
2	5	142.800	27.14	1.93	29.07	54.00	-24.93	AVG				
3'		243.200		1.97	80.53	68.20	12.33	peak			No Limit	
		243.200	69.17	1.97	71.14	68.20	2.94	AVG			No Limit	





(1) Measurement Value = Reading Level + Correct Factor.



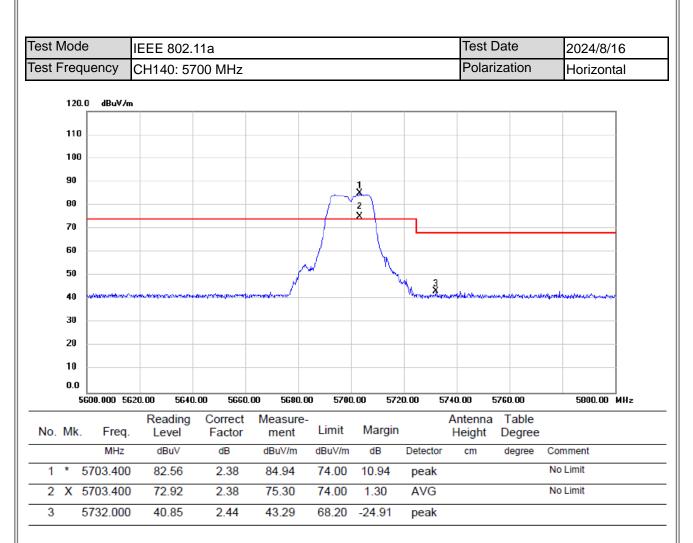


(1) Measurement Value = Reading Level + Correct Factor.



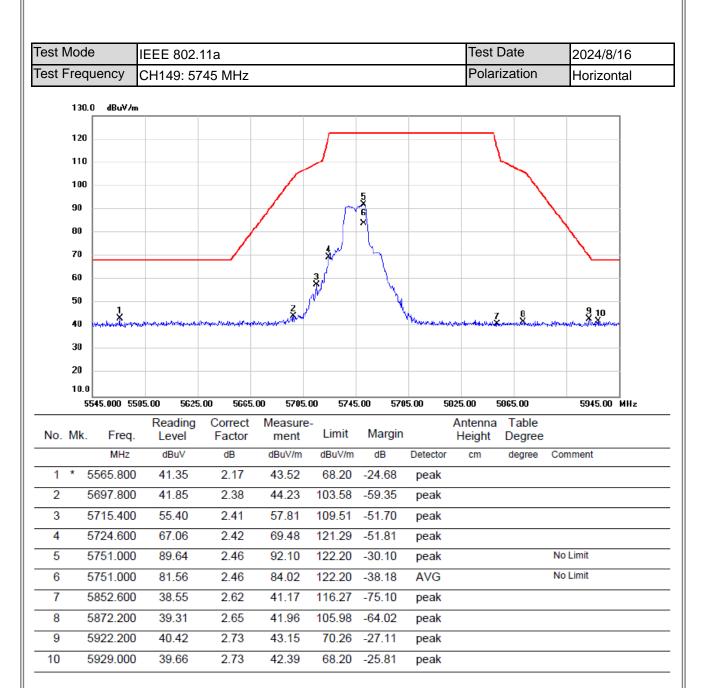
est Mo	de	IEEE 802.	11a					Test	Date	2024/8	/16
est Fre	quency	CH100: 55	500 MHz					Pola	rization	Horizor	ntal
12	0.0 dBuV/n	n									7
11	0										
10	o										
90											
80					$\sim$	5					{
70						*					1
60						-f					1
50		1		3	duri	Ŵ	N.				
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	5400.000 54	20.00 5440	.00 5460.	00 5480.	00 5500	.00 552			5560.00	5600.00	MHz
No. M	. Freq.	Reading Level	Correct Factor	Measure ment	- Limit	Margin		Antenna Height			
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	
1	5440.200	39.91	2.04	41.95	74.00	-32.05	peak				
2	5440.200	25.89	2.04	27.93	54.00	-26.07	AVG				
3	5468.200	39.84	2.05	41.89	68.20	-26.31	peak				
4 *	5506.800	80.60	2.08	82.68	74.00	8.68	peak			No Limit	
5	5506.800	71.33	2.08	73.41	74.00	-0.59	AVG			No Limit	





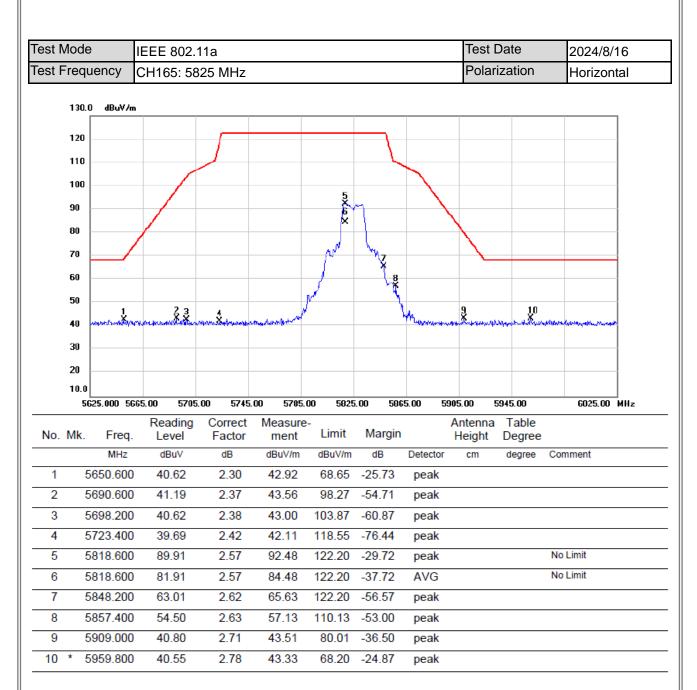
- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.





(1) Measurement Value = Reading Level + Correct Factor.

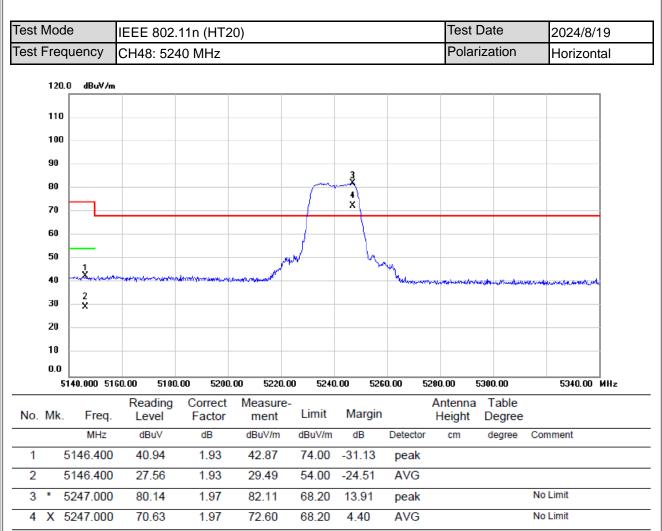




(1) Measurement Value = Reading Level + Correct Factor.

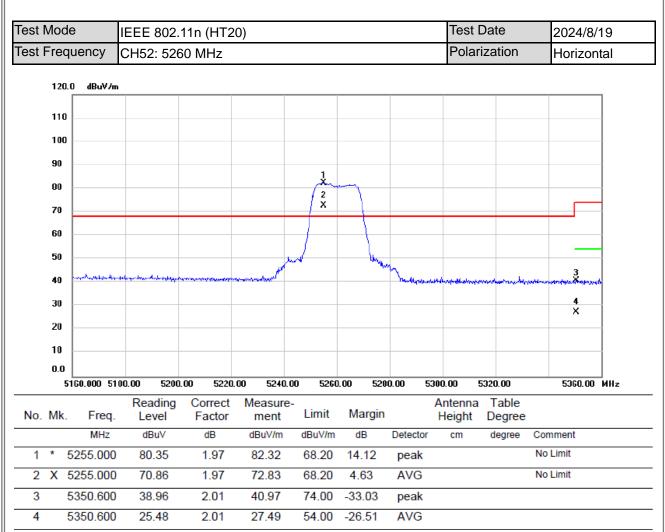
est N	Nod	е	IEEE 802.	11n (HT2	0)				Test [	Date	2024/8/1	9
est F	req	uency	CH36: 518	30 MHz					Polari	ization	Horizont	al
	120.	0 dBu∀/m							-			
	110											
	100											
	90											
	80					$\sim$	3 					
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	10											
	0.0 5	080.000 510	0.00 5120	.00 5140.	00 5160.0	0 5180	.00 520	0.00 52	20.00 5	240.00	5290.00	MHz
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	
1	;	5129.800	41.88	1.93	43.81	74.00	-30.19	peak				
2		5129.800	27.48	1.93	29.41	54.00	-24.59	AVG				
3	*	5186.800	80.45	1.95	82.40	68.20	14.20	peak			No Limit	
		5186.800	71.08	1.95	73.03	68.20	4.83	AVG			No Limit	

## REMARKS:



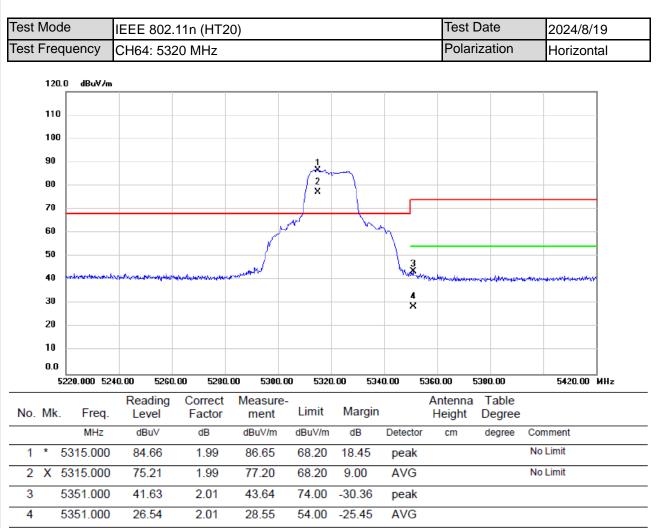
### **REMARKS**:

(1) Measurement Value = Reading Level + Correct Factor.



### **REMARKS**:

(1) Measurement Value = Reading Level + Correct Factor.

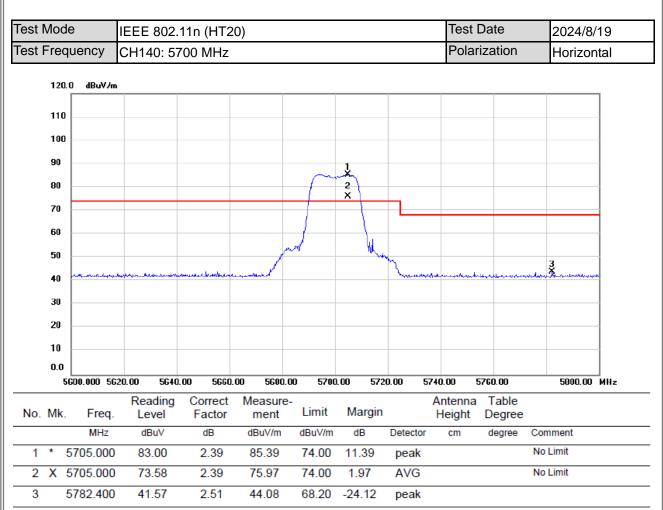


### **REMARKS**:

(1) Measurement Value = Reading Level + Correct Factor.

est	Mod	е	IEEE 802.	11n (HT2	0)				Test	Date	2024/8	8/19
est	Freq	luency	CH100: 55	500 MHz					Polar	ization	Horizo	ntal
	120.	0 dBuV/m	1									_
	110											
	100											
	90											
	80					$\sim$	5					
	70						x					-
	60	ļ										_
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	20			^								_
	10											_
	0.0											
	5	400.000 54					.00 552	0.00 5		5560.00	5600.00	) MHz
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure ment	- Limit	Margin		Antenna Height	Table Degree		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	
1	!	5453.200	40.47	2.05	42.52	74.00	-31.48	peak				
2	!	5453.200	26.11	2.05	28.16	54.00	-25.84	AVG				
3		5467.400		2.05	42.09		-26.11	peak				
4		5507.000		2.08	85.50	74.00	11.50	peak			No Limit	
5	X	5507.000	74.04	2.08	76.12	74.00	2.12	AVG			No Limit	

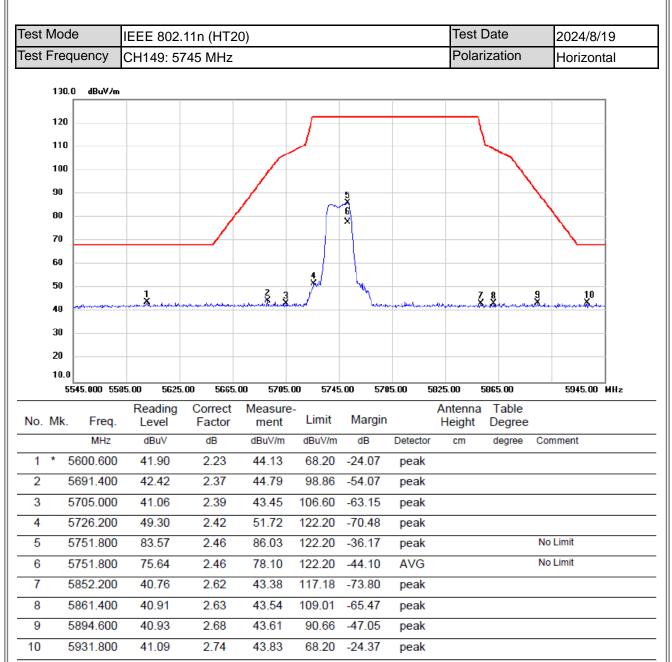
**REMARKS**:



### **REMARKS**:

(1) Measurement Value = Reading Level + Correct Factor.





(1) Measurement Value = Reading Level + Correct Factor.



est N	Node		IEEE	802.	11n (HT2	20)				Test	Date	2024/8	/19
Test F	reque	ency	CH16	65: 58	825 MHz					Pola	rization	Horizor	ntal
	130.0	dBuV/m											_
	120												
	110												
	100												
	90						5						
							5 6 X	1					
	80 -	/								$\mathbf{N}$			1
	70									<u> </u>			1
	60 -						- Ministra	M					1
	50	1 X	ž		{ <b>4</b>		1	<b>7</b> 8		3	10 X		
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	10.0 562	5.000 560	5.00	5705.	.00 5745	.00 5785	.00 5825	.00 586	5.00 59	05.00	5945.00	6025.00	 MHz
No.	Mk.	Freq.		ading vel	Correct Factor	Measure	e- Limit	Margin		Antenna Height	a Table Degree		
		MHz		BuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	
1	56	41.800	40	.88	2.29	43.17	68.20	-25.03	peak				
2	56	84.200	41	.10	2.36	43.46	93.54	-50.08	peak				
3		07.800		.00	2.39	43.39	107.39	-64.00	peak				
4		20.600		.93	2.41	42.34	112.17	-69.83	peak				
5		19.800		.45	2.57	90.02	122.20	-32.18	peak			No Limit	
6		19.800		.64	2.57	82.21	122.20	-39.99	AVG			No Limit	
7		51.000 54.600		.65	2.62	44.27 43.23	119.92 111.71	-75.65 -68.48	peak				
8		00.600		.60	2.63	43.23	86.22	-68.48	peak peak				
3	- 59	000.000	40	- <del>4</del> 0	2.09	40.1Z	00.22	-40.10	peak				

est	Mod	е	IEEE 802.	11n(HT40	))				Test	Date	2024/8/	19
[est	Fred	luency	CH38: 519	0 MHz					Polar	ization	Horizon	tal
	120.	0 dBuV/m										_
	110											
	100											
	90											
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	70					4 X					_	1
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	10 0.0											1
		990.000 50	30.00 5070.	.00 5110.	00 5150.0	00 5190	.00 5230	0.00 5	270.00	5310.00	5390.00	MHz
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure ment	- Limit	Margin		Antenna Height	Table Degree		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	
1		5146.800	42.89	1.93	44.82	74.00	-29.18	peak				
2		5146.800 5174.800	28.19	1.93	30.12 79.07	54.00 68.20	-23.88 10.87	AVG peak			No Limit	
		5174.800	67.49	1.93	69.42	68.20	1.22	AVG			No Limit	
5		5362.800	39.50	2.02	41.52	74.00	-32.48	peak				
6		5362.800	26.01	2.02	28.03	54.00	-25.97	AVG				

**REMARKS**:

est N	Лоd	е	IEEE 802.	11n (HT4	-0)				Test	Date	2024/	8/19
est F	rec	luency	CH46: 523	30 MHz					Pola	rization	Horizo	ontal
	120.	0 dBu∀/m										_
	110											
	100											_
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	70					4 ×						-
	60											_
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	0.0	030.000 50	70.00 5110	.00 5150.	.00 5190.	00 5000	00 507	0.00 52	10.00	5350.00	5430.0	
	5	030.000 50	Reading	Correct	Measure		.00 527		Antenna		5430.0	U MHZ
No. I	Mk.	Freq.	Level	Factor	ment	Limit	Margin		Height			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	
1		5042.400	41.74	1.89	43.63	74.00	-30.37	peak				
2		5042.400	27.89	1.89	29.78	54.00	-24.22	AVG			No. Lineit	
Ŭ		5222.800	77.53	1.96	79.49	68.20	11.29	peak			No Limit	
4		5222.800	68.05	1.96	70.01	68.20	1.81	AVG			No Limit	
		5384.000	39.59	2.02	41.61	74.00	-32.39	peak				

**REMARKS**:

est I	Mode		IEEE 802.	11n (HT4	0)				Test I	Date	2024/8	/19
est I	Frequ	iency	CH54: 527	70 MHz					Polar	ization	Horizo	ntal
	120.0	dBuV∕m										
	110											
	100											
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	10											-
	0.0 507	70.000 51	10.00 5150	.00 5190.	00 5230.	00 5270	.00 531	0.00 5	350.00 5	390.00	5470.00	MHz
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure ment	- Limit	Margin		Antenna Height	Table Degree		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	
1		094.000	42.26	1.91	44.17	74.00	-29.83	peak				
2		094.000	27.95	1.91	29.86	54.00	-24.14	AVG			No. Lin-it	
3		281.200 281.200	77.78 65.87	1.99	79.77 67.86	68.20 68.20	11.57 -0.34	peak AVG			No Limit No Limit	
4		425.200	39.73	2.04	41.77	74.00	-0.34	peak			NO LINIK	
6		125.200	26.28	2.04	28.32		-25.68	AVG				
7		468.400	40.45	2.05	42.50		-25.70	peak				

**REMARKS**:

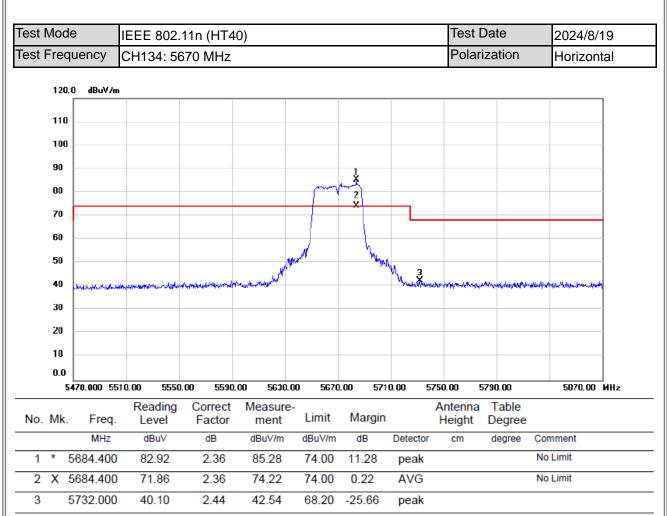
est N	Noc	le	IEEE 802	.11n (HT4	0)				Test	Date	2024/8	′19
Fest F	Free	quency	CH62: 53	10 MHz					Polar	ization	Horizor	ntal
	120	.0 dBuV/r	n									
	110											
	100	ı										
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		5110.000 5	150.00 519	0.00 5230	.00 5270.00	) 5310	.00 539	io. 00	390.00	5430.00	5510.00	_  MHz
No.	Mk	Freq	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	
1		5126.000		1.93	43.55	74.00	-30.45	peak				
2		5126.000		1.93	29.68	54.00	-24.32	AVG				
3		5313.200 5313.200		1.99	79.56	68.20 68.20	11.36	peak AVG			No Limit No Limit	
4	^	5313.200		2.01	43.64	74.00	-30.36	peak				
6		5351.200		2.01	29.99		-24.01	AVG				
7		5463.200	39.84	2.06	41.90	68.20	-26.30	peak				
8		5497.600	) 39.91	2.07	41.98	74 00	-32.02	peak				

### **REMARKS**:

Test Mode		IEEE 802	.11n (HT4	0)				Test Date		2024/8/19		
est Frequency		CH102: 5510 MHz							Polarization		ontal	
	120.0	dBuV/m										
	110											
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	33	10.000 55	Reading		Measure			0.00 3.	Antenna		5710.0	0 MHZ
No. N	Mk.	Freq.	Level	Factor	ment	Limit	Margin		Height	Degree		
4		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	
1		320.400 397.200	39.20 40.22	2.00	41.20 42.25	68.20 74.00	-27.00	peak peak				
2		397.200	26.28	2.03	28.31		-25.69	AVG				
4		469.600	47.48	2.05	49.53		-18.67	peak				
5 '		523.600	80.69	2.11	82.80	74.00	8.80	peak			No Limit	
6	5	523.600	71.15	2.11	73.26	74.00	-0.74	AVG			No Limit	

**REMARKS**:



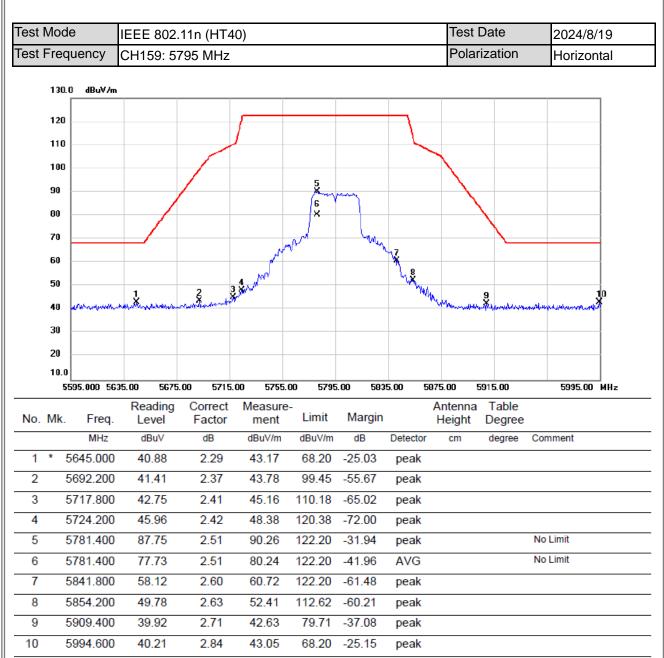


(1) Measurement Value = Reading Level + Correct Factor.



Test Mode			IEEE 80	2.11n (HT4	l0)				Test	Date	2024/8/19	
Test Frequency		ncy	CH151: 5755 MHz							ization	Horizo	ntal
	130.0	dBu∀/m										_
	120											
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	3009.	.000 553	Readin		Measure	;-	.00 573		Antenna		5955. U	J MHZ
No.	Mk.	Freq.	Level	Factor	ment	Limit	Margin		Height	Degree		
4	504	MHz 9.400	dBuV	dB 2.30	dBuV/m 42.41	dBuV/m 68.20	dB -25.79	Detector	cm	degree	Comment	
1		7.800	40.11 54.29	2.30	42.41	103.58	-25.79	peak peak				
3		9.400	66.03	2.41	68.44		-42.19	peak				
4		30.200	69.78	2.44	72.22	122.20	-49.98	peak				
5	575	57.000	88.40	2.47	90.87	122.20	-31.33	peak			No Limit	
6		57.000	78.39	2.47	80.86		-41.34	AVG			No Limit	
7		52.200	39.51	2.62	42.13		-75.05	peak				
8		59.800	39.62	2.62	42.24	109.45	-67.21	peak				
9		9.400	40.15	2.69	42.84	87.10	-44.26	peak				
10	* 594	8.600	39.95	2.78	42.73	68 20	-25.47	peak				





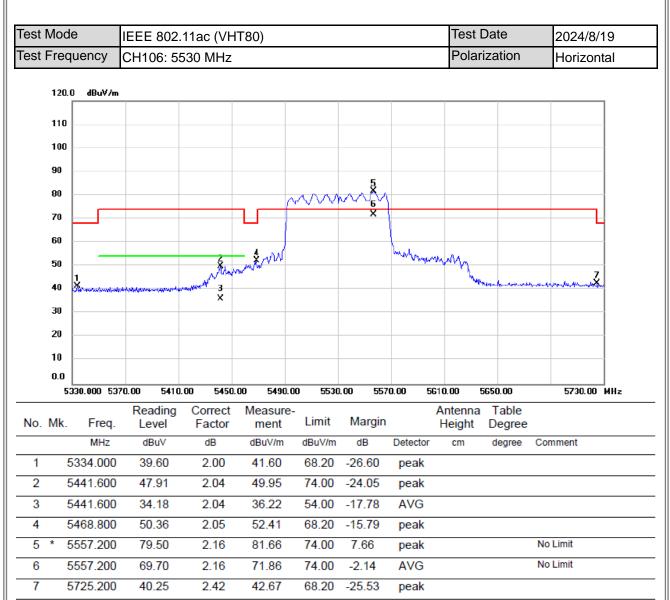
(1) Measurement Value = Reading Level + Correct Factor.

Test Mode		IEEE 802.1	11ac (VH	T80)				Test Date		2024/8/19		
Fest F	est Frequency		CH42: 5210 MHz							rization	Horizontal	
	120.0	) dBuV/m										_
	110											
	100											
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	50	10.000 50		00 5130. Correct	00 5170. Measure		.00 525		90.00 Antenna	5330.00 Table	5410.00	MHz
No.	Mk.	Freq.	Reading Level	Factor	ment	Limit	Margin		Height	Degree		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	
1		119.600	44.42	1.91	46.33	74.00	-27.67	peak				
2		119.600	30.40	1.91	32.31	54.00	-21.69	AVG				
3		236.800	75.91	1.96	77.87	68.20	9.67	peak			No Limit	
	5	236.800	66.19	1.96	68.15	68.20	-0.05	AVG			No Limit	
5	~	353.600	39.97	2.01	41.98	74.00	-32.02	peak				

**REMARKS**:

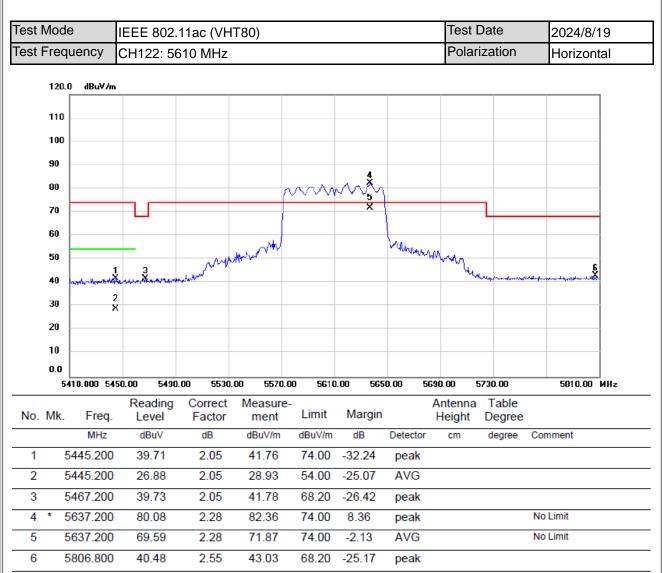
Test Mode Test Frequency			IEEE 802.	.11ac (VH	T80)				Test Date		2024/8/19	
		CH58: 5290 MHz							rization	Horizontal		
	120.0	dBuV/m										
	110											
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	5050		Reading	Correct	Measure				Antenna		3430.00	MHZ
No.	Mk.	Freq.	Level	Factor	ment	Limit	Margin		Height	Degree		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	
1		05.600 05.600	41.35	1.90	43.25	74.00	-30.75	peak				
2		17.200	28.44 76.23	1.90 1.99	30.34 78.22	54.00 68.20	-23.66 10.02	AVG			No Limit	
-	× 53		66.22	1.99	68.21	68.20	0.01	peak AVG			No Limit	
5		61.200	46.08	2.02	48.10	74.00	-25.90	peak				
6		61.200	31.83	2.02	33.85		-20.15	AVG				
7	546	67.200	39.08	2.05	41.13	68.20	-27.07	peak				

### **REMARKS**:



### **REMARKS**:

(1) Measurement Value = Reading Level + Correct Factor.



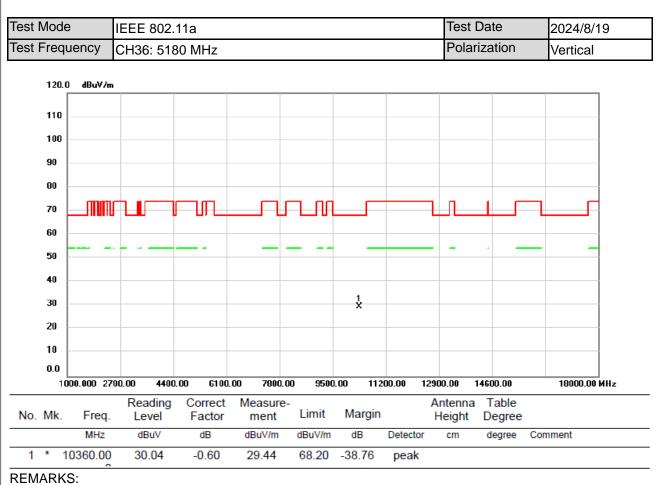
### **REMARKS**:

(1) Measurement Value = Reading Level + Correct Factor.



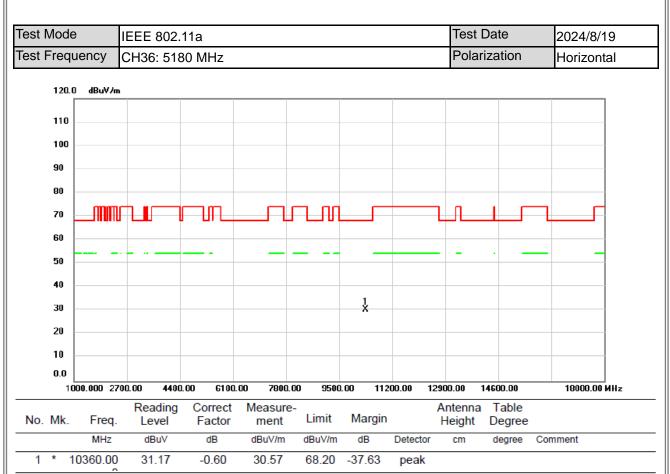
Test Mode Test Frequency		IEEE 802	.11ac (VH	T80)				Test	Date	2024/8/19	
		CH155: 5775 MHz							rization	Horizontal	
	130.0 dBu∀A	n									1
	120										
	110										
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	5575.000 5	Reading	Correct	Measure		.00 381		Antenna		5975.00	MHZ
No.		Level	Factor	ment	Limit	Margin		Height	Degree		
4	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	
1	* 5648.200 5698.600		2.30	51.77 65.64	68.20 104.17	-16.43	peak peak				
3	5718.200		2.33	68.00		-42.30	peak				
4	5723.800		2.42	68.68	119.46	-50.78	peak				
5	5757.000	86.19	2.47	88.66	122.20	-33.54	peak			No Limit	
6	5757.000	) 76.31	2.47	78.78		-43.42	AVG			No Limit	
7	5849.800		2.62	66.33	122.20	-55.87	peak				
8	5856.200		2.63	64.60	110.46	-45.86	peak				
9	5876.600		2.66	57.81 48.13	104.01 68.20	-46.20 -20.07	peak				
10	5927.400		2.73				peak				





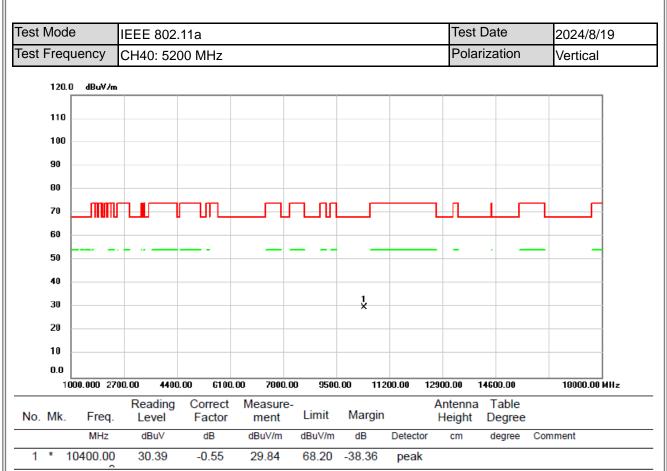
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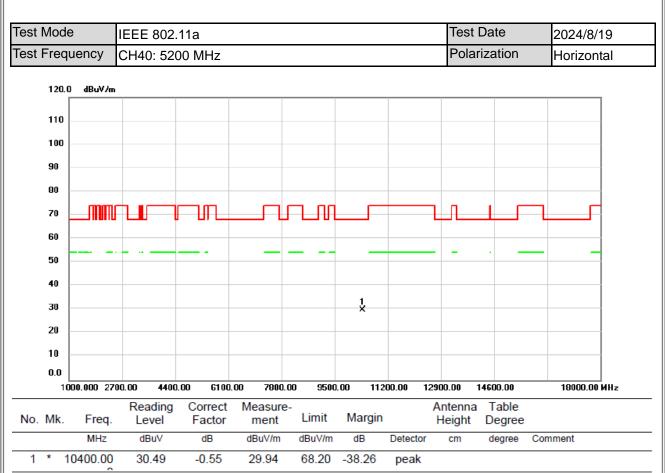
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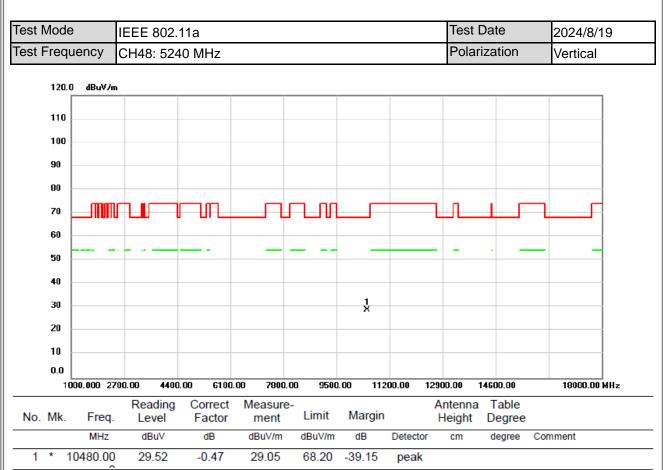
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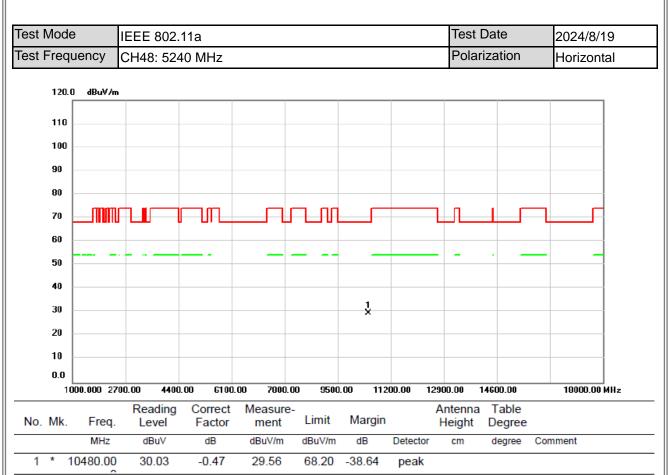
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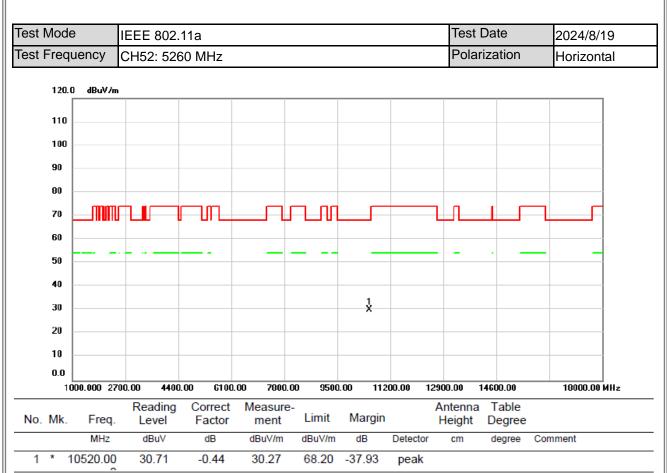
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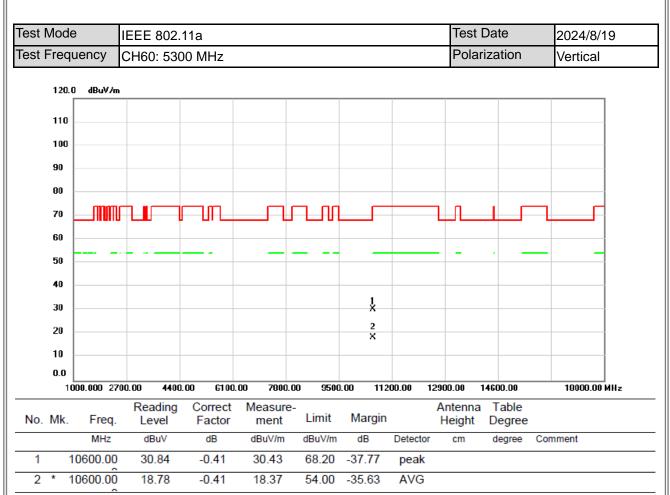
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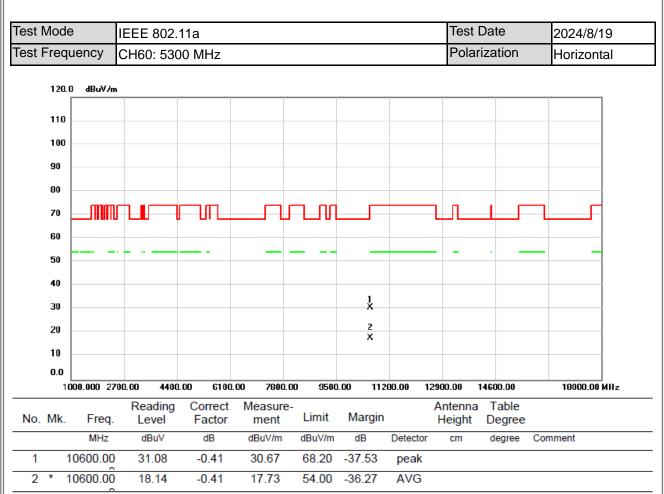
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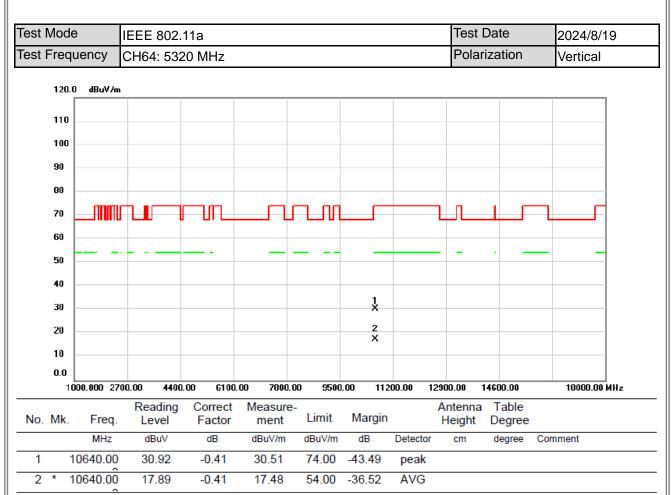
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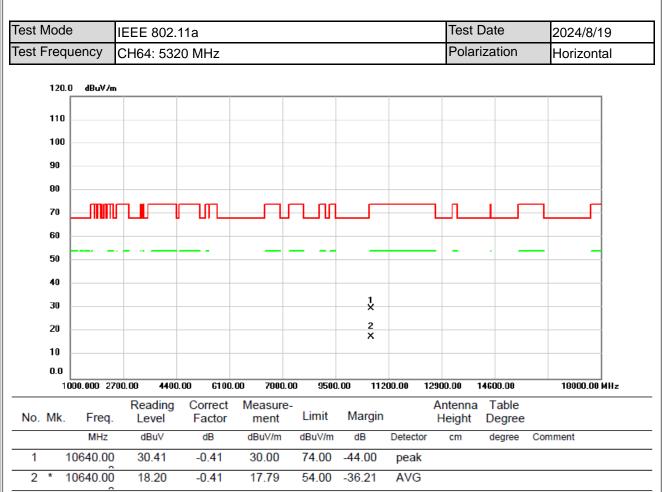
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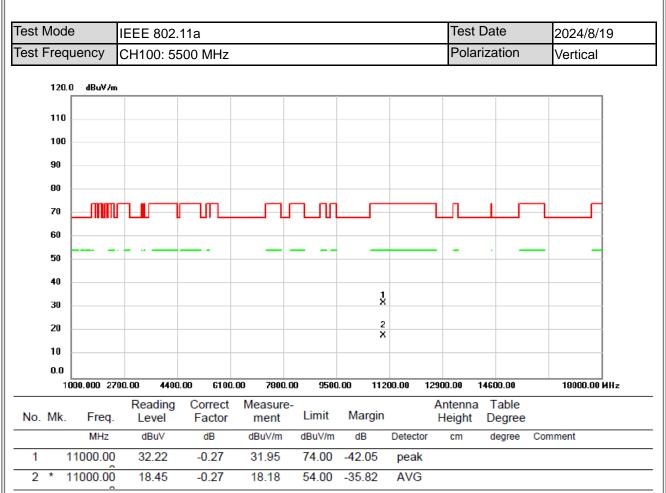
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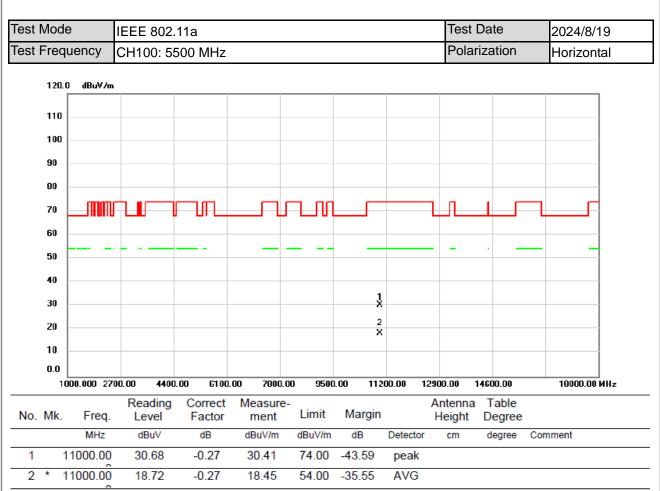
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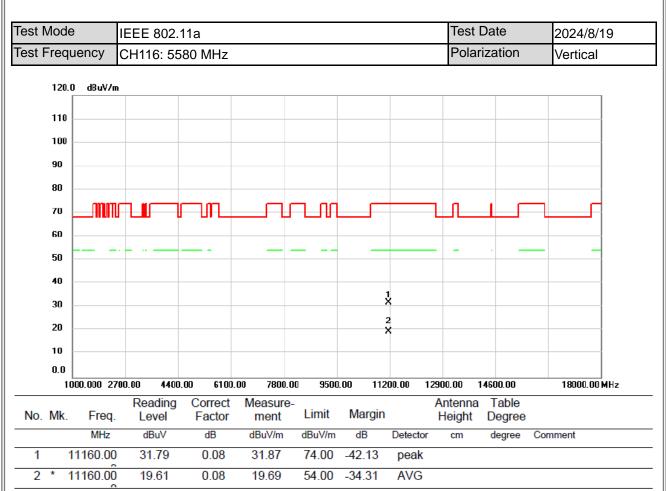
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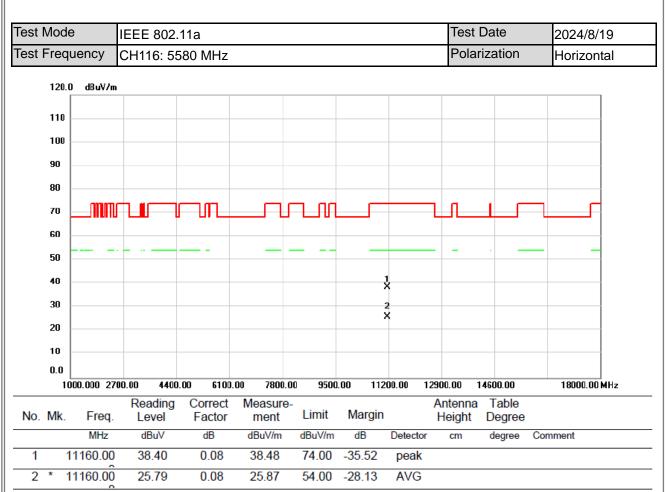
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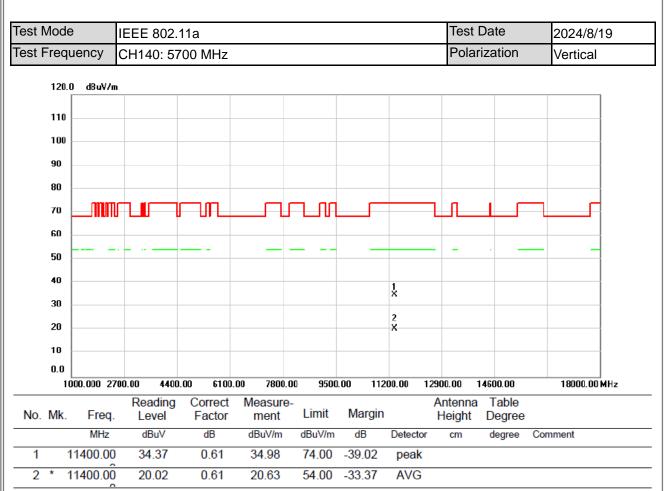
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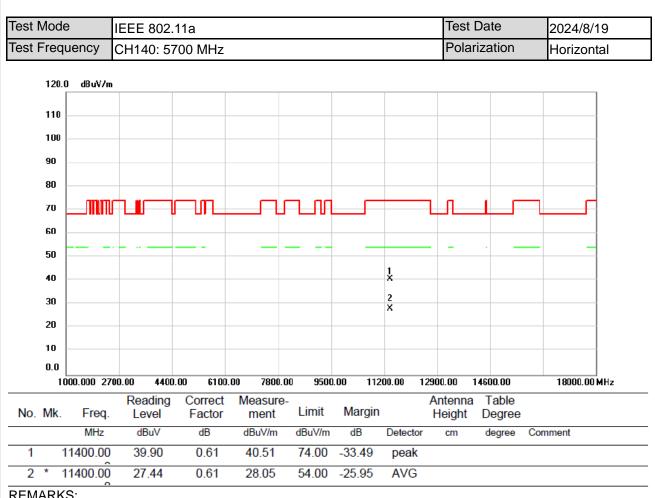
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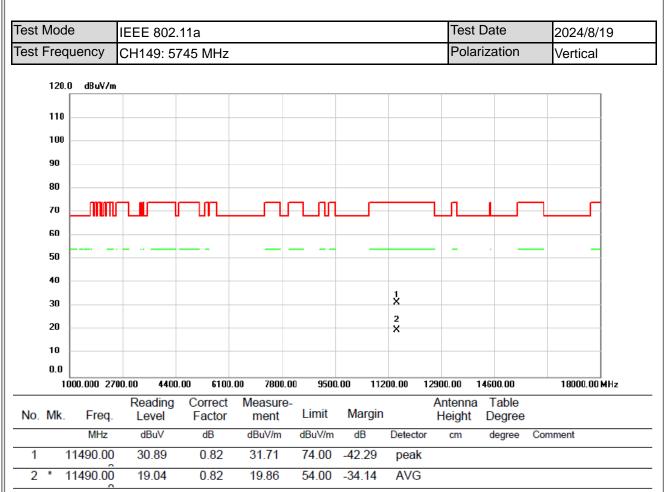
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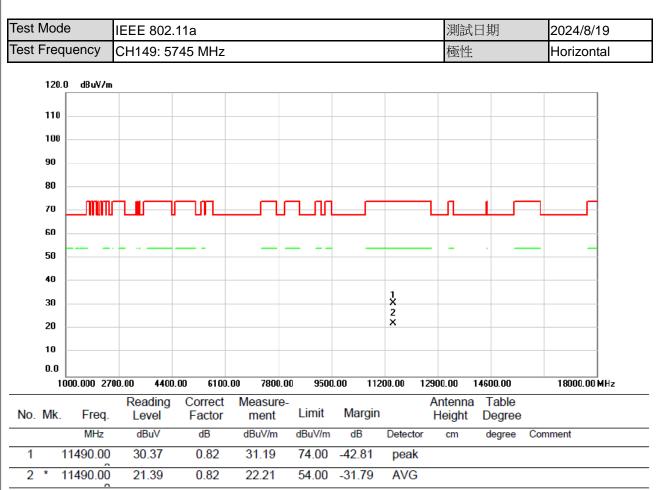
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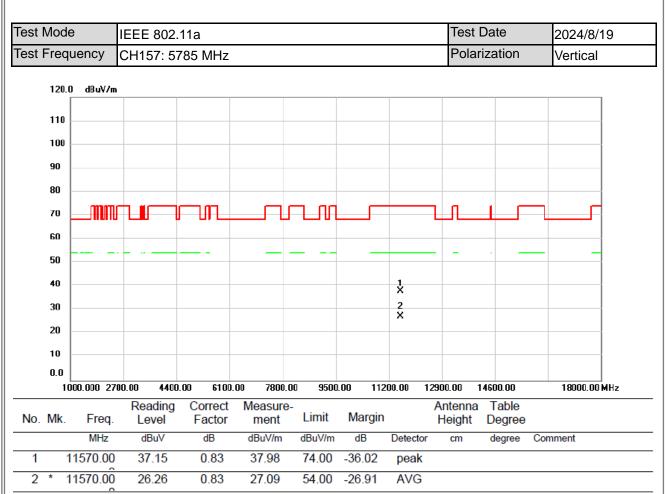
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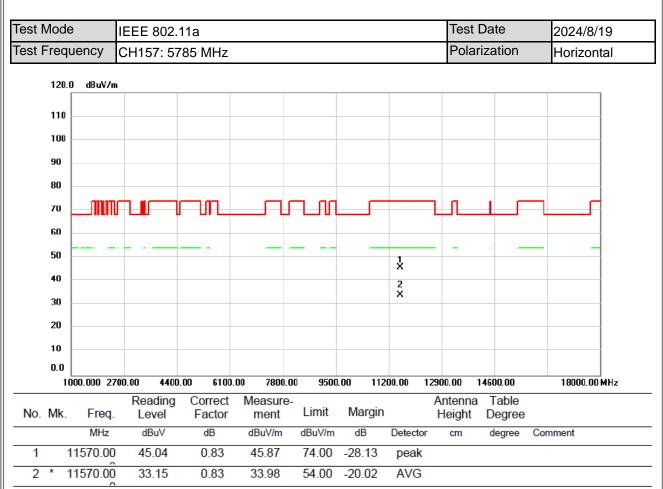
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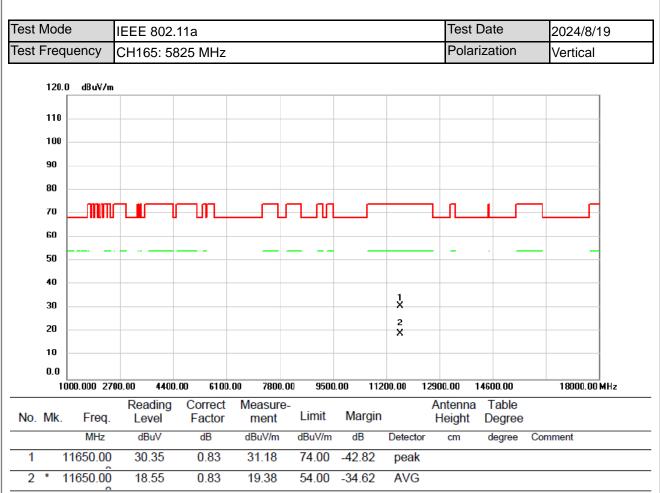
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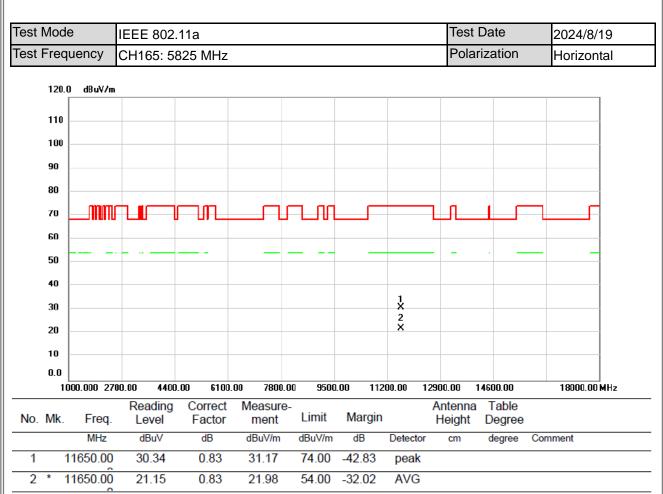
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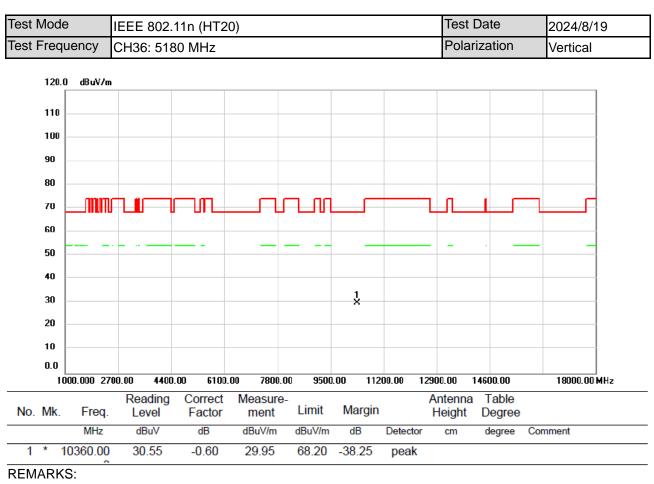
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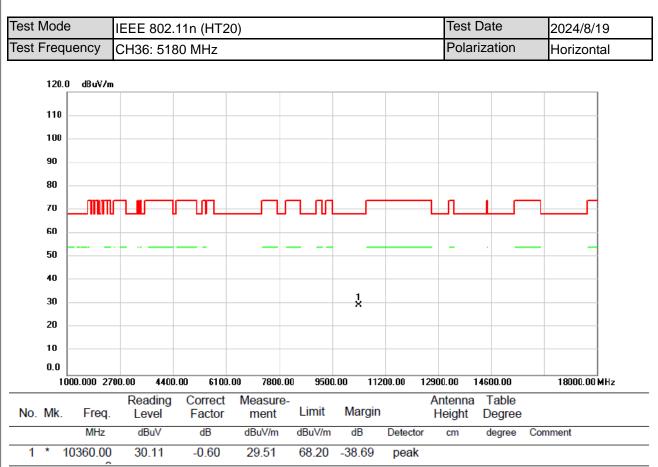
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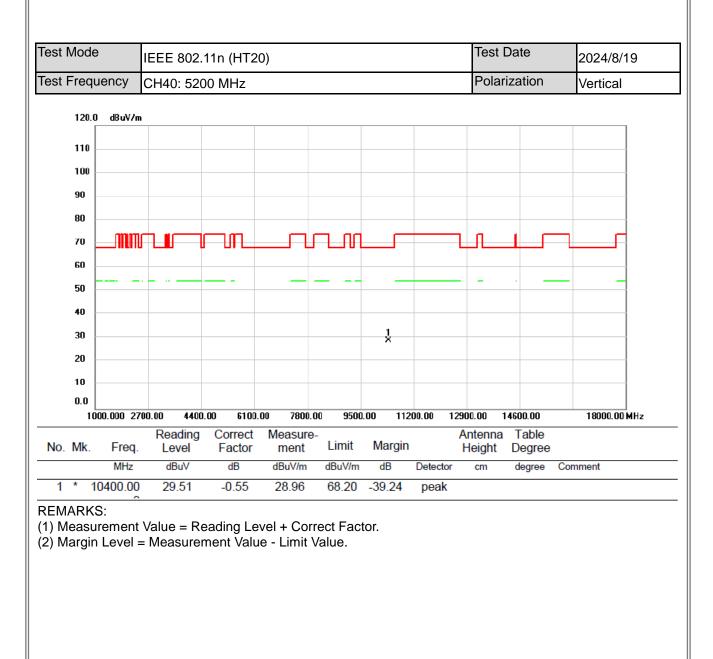
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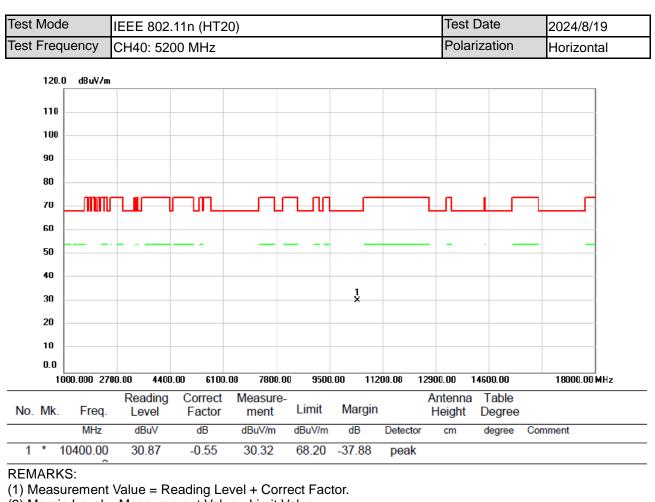




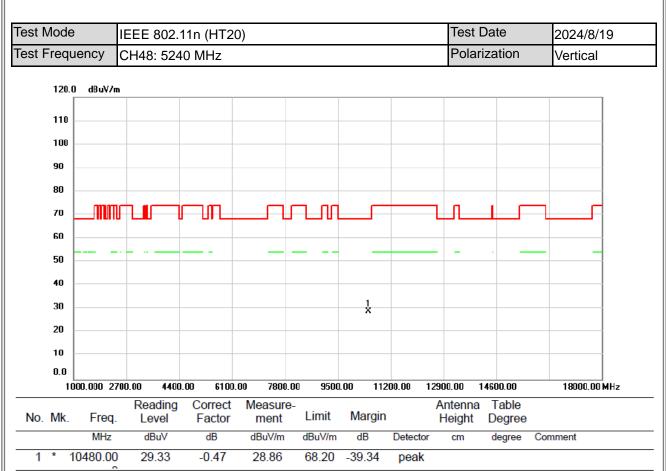
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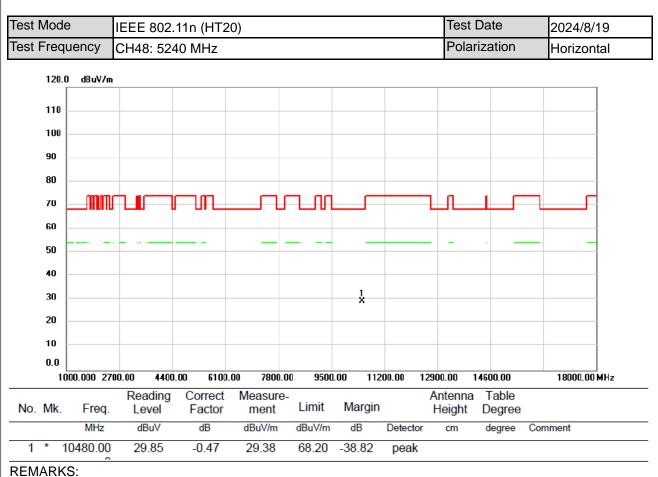




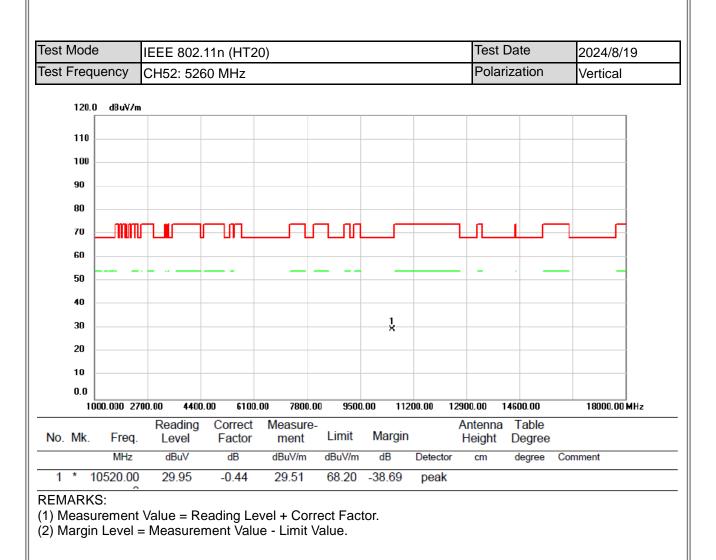




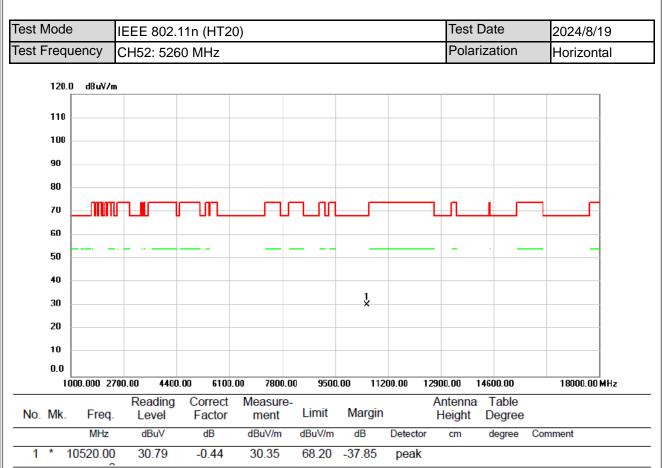
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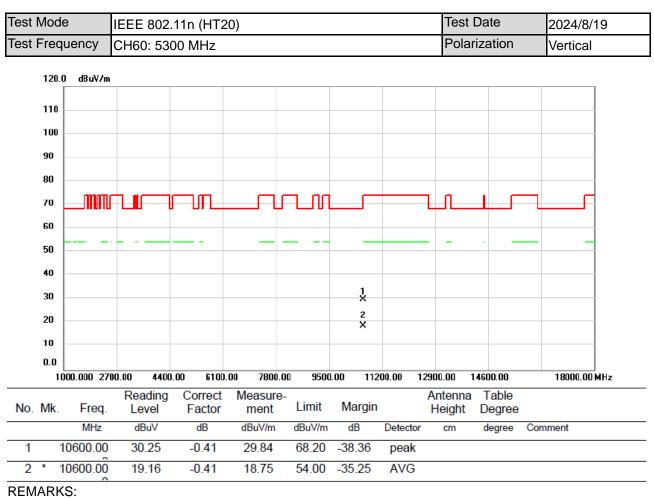
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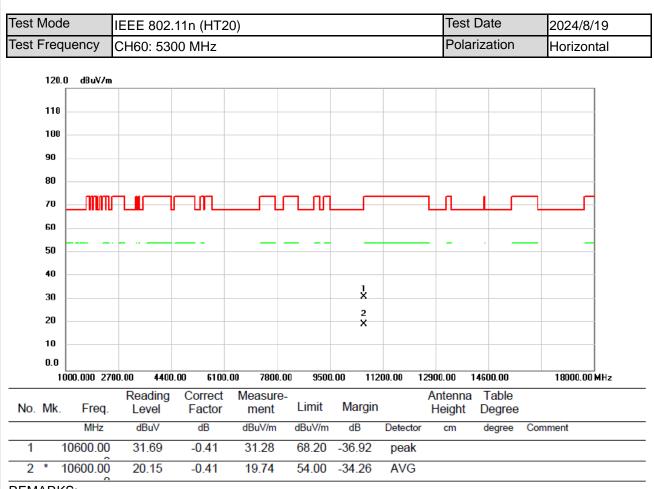


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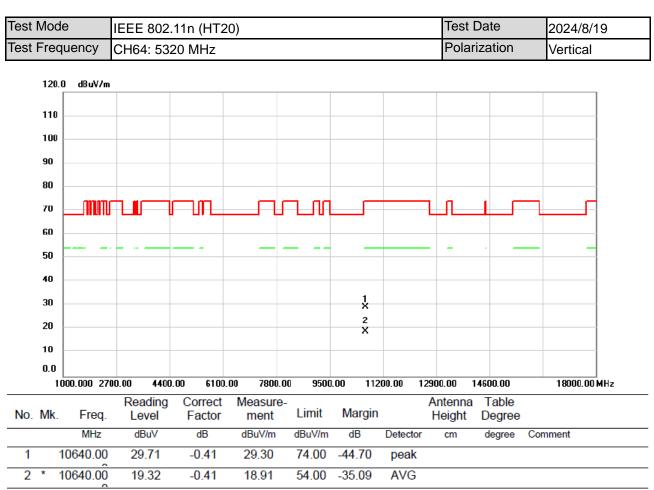
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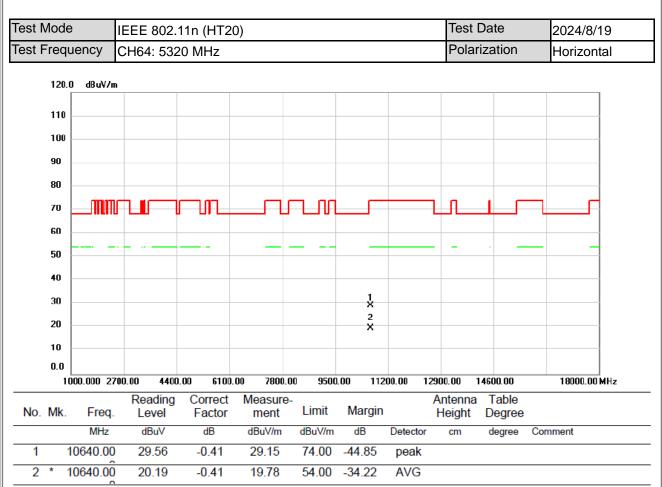
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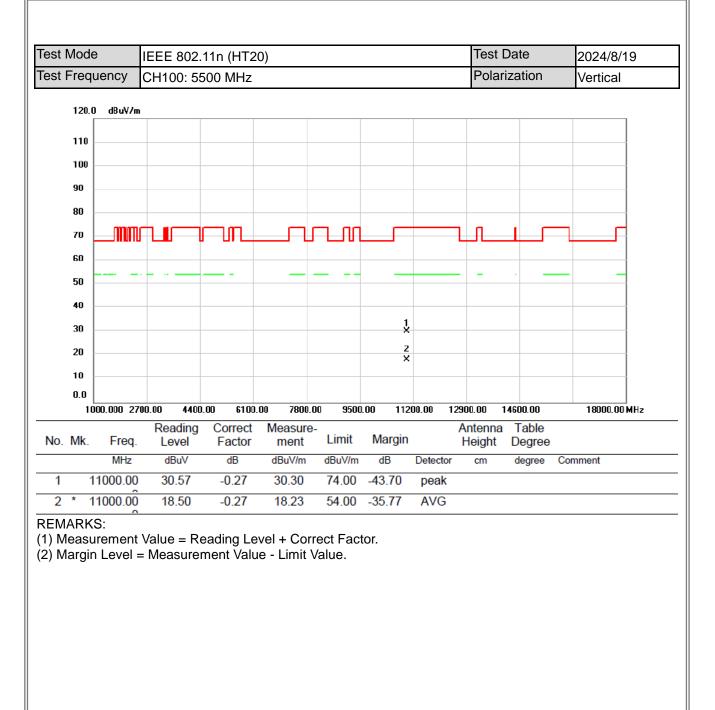


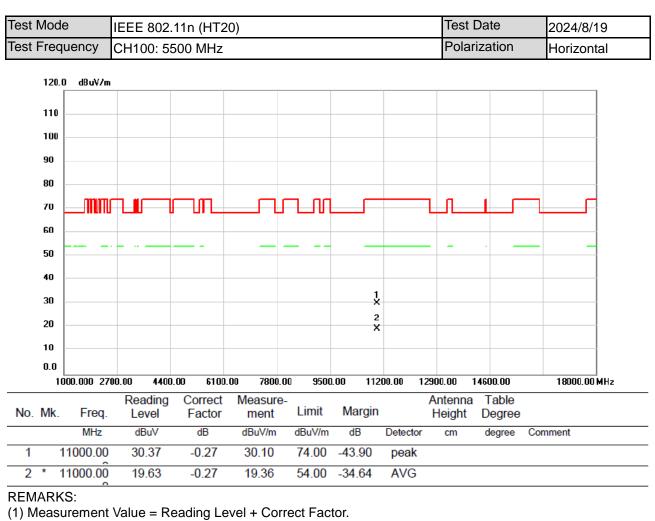
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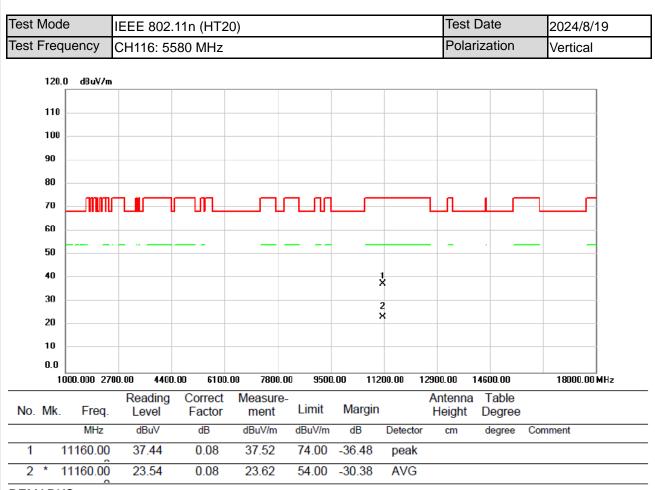




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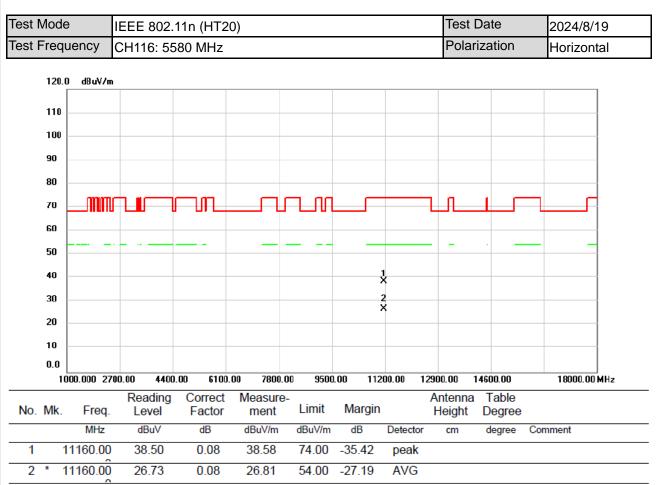




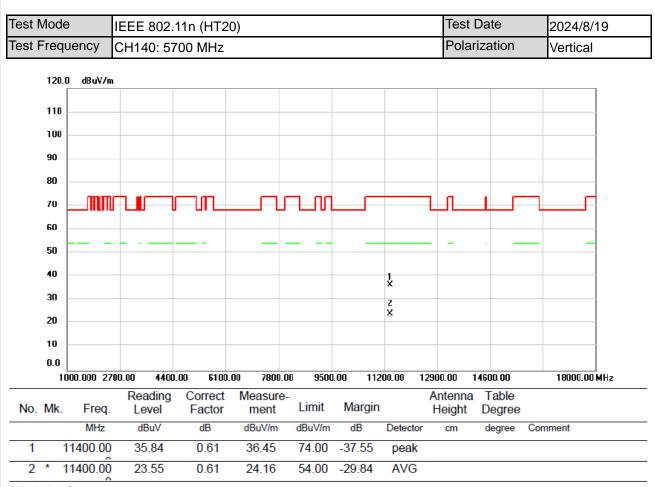
### REMARKS:

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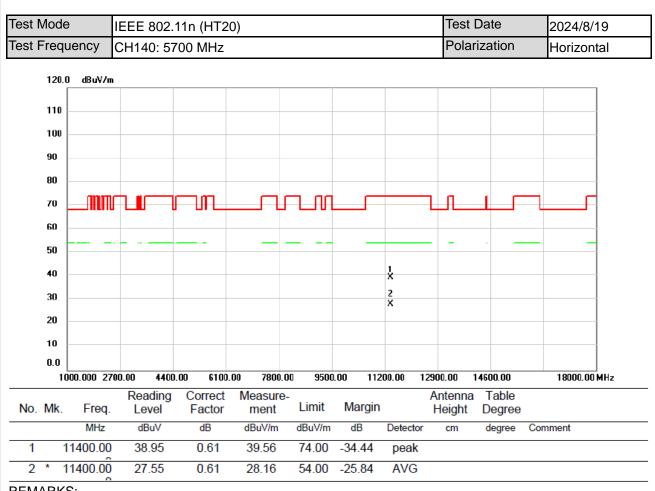


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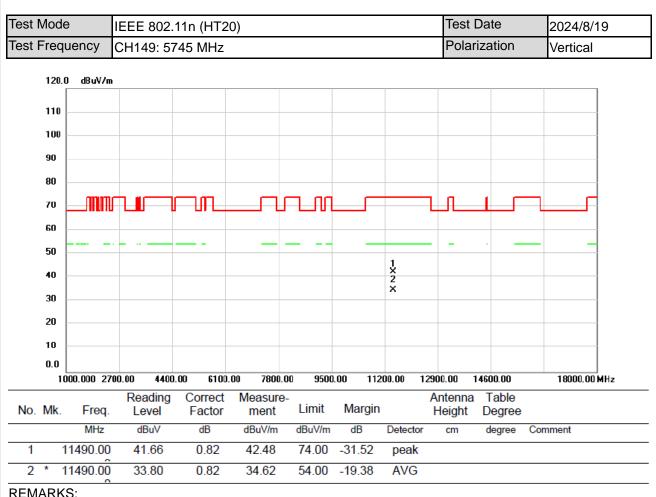
### REMARKS:

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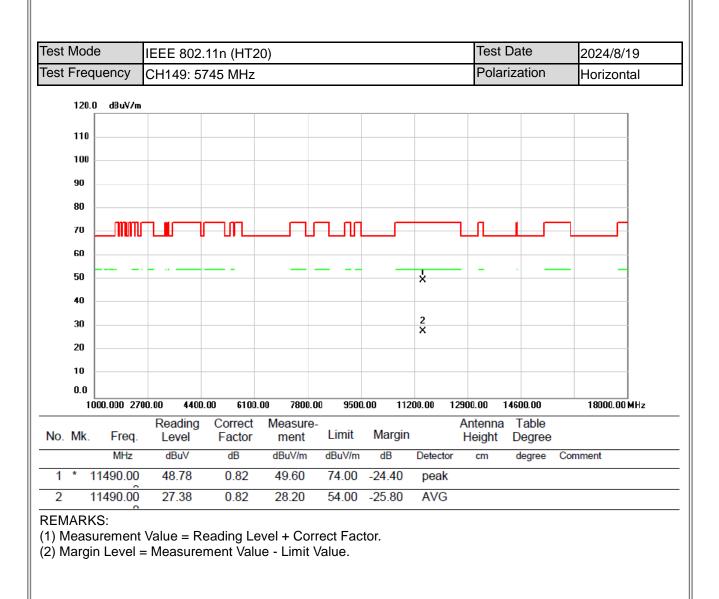


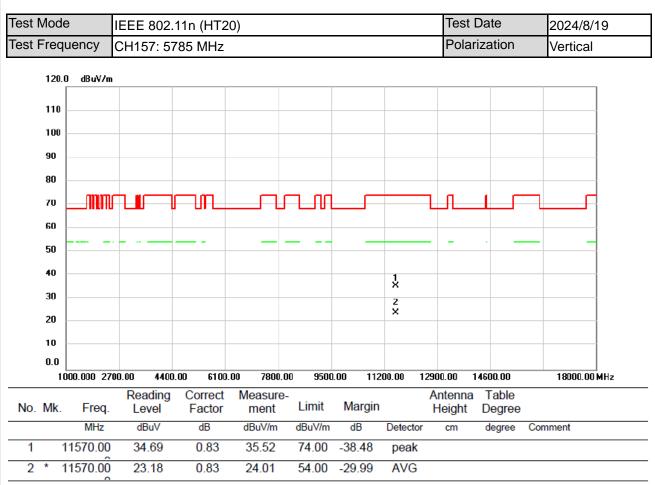
REMARKS:

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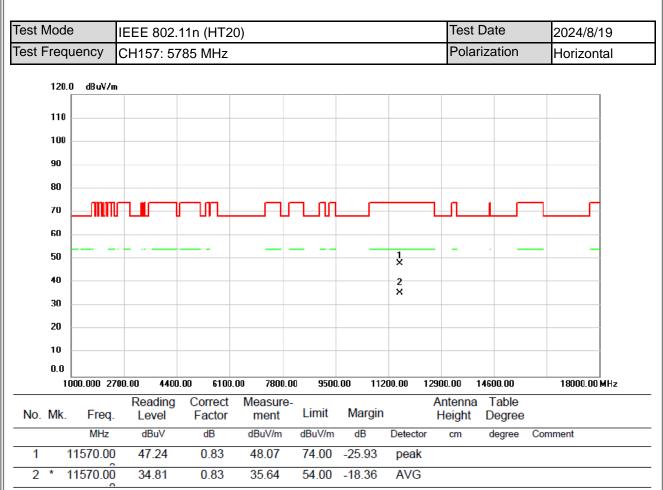




### **REMARKS**:

(1) Measurement Value = Reading Level + Correct Factor.





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