

# **TEST REPORT**

### **CERTIFICATION OF COMPLIANCE**

Date of Issue: July 18, 2024 Test Report No: CW011252-2

Test Report No: CW011252-240617001\_01 Test Site: LG Electronics H&A EMC Standard Lab.

Applicant:	LG Electronics USA, Inc.		
	111 Sylvan Avenue, North Building		
	Englewood Cliffs, NJ 07632		
Product Type:	Household Electric Oven		
Brand Name(s):	LG, SIGNATURE KITCHEN SUITE		
Model Name :	WCEK6429S (See 2.1 for Series model names)		
Equipment Class:	Industrial, Scientific and Medical equipment		
Regulation:	FCC Part 18 – ISM Consumer Device		
Test Procedure:	FCC/OET MP-5: 1986		
Date of Receipt:	July. 02. 2024		
Date of Test	July. 02. 2024 ~ July. 11. 2024		
FCC ID:	BEJD1724NAGTA		

This device has been verified to comply with the applicable requirements in the FCC Part 18 and was tested in accordance with the measurement procedures specified in MP-5: 1986. I assure full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

Note 1: This report apply only to the specific sample(s) tested under stated test conditions. Note2: This report is the confidential property of the client. As a mutual protection to our clients, the public and ourselves, extracts from the test report shall not be reproduced except in full without our written approval.

Tested by:

Sung Gun, Cho / Test Engineer H&A EMC Standard Lab., LG Electronics Inc.

Reviewed by:

HEyoh.

Tae Yul, Kim / Technical Manager H&A EMC Standard Lab., LG Electronics Inc.

## LG Electronics H&A EMC Standard Lab.

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#### **1. General Information**

#### **1.1 Client Information**

The EUT has been tested by request of:

Applicant: Address	LG Electronics USA, Inc. 111 Sylvan Avenue, North Building Englewood Cliffs, NJ 07632
Manufacturer: Address	LG Electronics Inc 170, Seongsanpaechong-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do, 51533, Republic of KOREA
Name of contact: Telephone:	Young June, Park +82-55-717-1233

#### 1.2 Test facility

We are the accredited EMC laboratory by RRA(KOREA).

We certify that the above products had performed test on our laboratory and it was

confirmed to comply with FCC requirement.

The site are constructed in conformance with the requirements of CISPR publication

#### 16/ANSI C63.4

The test was performed accordance to the procedures from FCC/OET MP-5.

Name and Address:	LG Electronics H&A EMC Standard Lab. 170, Seongsanpaechong-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do, 51533, Republic of KOREA
RRA Registration No.	KR0152
Telephone:	+82-55-260-3966
E-mail	sunggun.cho@lge.com



#### 2. Product Information

#### 2.1 Description of EUT.

EUT is the LG Electronics Inc. Household Electric Oven as followings:

Equipment:	Household Electric Oven
Model:	WCEK6429S (Buyer model No.: SKSCV3012MT)
Series Model Name	WCEK6429*, SKSCV3012**
Brand name:	LG, SIGNATURE KITCHEN SUITE
Serial number:	N/A
Magnetron:	2M246 by LG
RF Frequency:	2,450 ± 50 MHz
RF Power Output:	950 W
Power Consumption	1650 W (Microwave Mode)
Rated Input Voltage:	120 V~, 60 Hz
	(From 3WIRE-1P 120/240 V or 120/208 V, 60 Hz)
Rated Input Current	14.0 A (Microwave Mode)
Cavity Volume:	Upper MWO 1.7 cu.ft , Lower Oven 4.7cu.ft
Oven Type:	Over the range / Household
Mode Stirrer:	Turntable
Power Cord:	Unshielded (1630 mm)
Outer Dimensions (inch)	29-3/4 x 43 7/8 x 24 7/15 (W x H x D)

Model WCEK6429S which was tested as a representative model is identical to the exterior excluding the series models mentioned below.

#### series model : WCEK6429\*

Variable	Rang of variable	Contents
1st '*'	A to Z or blank	Exterior enclosure Color

#### series model : SKSCV3012\*\*

Variable	Rang of variable	Contents	
1st '*'	A to Z or blank		
2nd '*'	A to Z or blank	Exterior enclosure Color	
Model SKSCV3012MT is sales model name of WCEK6429S.			

EMI suppression device(s) installed in production: See schematics (Appendix. EUT photos)

EMI suppression device(s) added and/or modified during test: None

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#### 3. Description of tests

#### 3.1 Test Condition.

The EUT was installed, arranged and operated in a manner that is most representative of equipment as typically used.

The measurements were carried out while varying operating modes and cable positions within typically arrangement to determine maximum emission level.

The representative and worst test mode(s) were noted in the test report.

- Test Voltage / Frequency: AC 120 V, 60 Hz
- Operating condition during the test(s) : Below configurations with AC Power operating.

MWO mode : The EUT is tested in the configurations of Maximum RF Power Output \*At that time, Wifi-BT combo module is also activating.

#### 3.2 Auxiliary Equipment / Cable List

#### 3.2.1 Auxiliary Equipment

Description	Manufacturer	Model Name	S/N & FCC ID.
Wifi-BT module	LG Electronics Inc.	LAIWB4	S/N: - FCC ID.: BEJ-LAIWB4

#### 3.2.2 System Configuration

Description	Manufacturer	Model Name	S/N & FCC ID.

#### 3.2.3 Cable List

Start		End		Cable	Spec.
Name	I/O Port	Name	I/O Port	Length	Shield
EUT	AC IN	AC Power Source	-	1630 (mm)	Unshielded



#### 3.3 Test System Layout



#### 4. Summary of Test Results

Applied Standards	Test Item	Result
FCC/OET MP-5 (4.3)	RF Power Output	Complied
FCC Part 18 §18.301	Frequency measurements	Complied
FCC/OET MP-5 (3.1)	Power Density Safety Check	Complied
FCC Part 18 §18.307	Conducted Emission	Complied
FCC Part 18 §18.305	Radiated Emission	Complied



#### 5. Input Power

#### 5.1 Operating Environment

Temperature	:	<b>23.5</b> ℃
Relative Humidity	:	42.3 % R.H.
Air Pressure	:	99.0 kPa

#### 5.2 Test Set-up

The input power was measured using Wattmeter. A 275 ml water load in a polypropylene beaker is placed in the center of the oven. The 275 ml water was chosen for its compatibility with UL procedure to determine input ratings. The oven was operated at the rated input and full output power for 6 minutes.

#### 5.3 Test Equipment

Description	Model Name	Manufacturer	Serial Number	Due to Calibration
AC Power supply	AFC-1010	AFC Korea	140051-1 <b>Φ</b>	Feb. 19, 2025
Digital Power Meter	WT110	Yokogawa	12VB14689-L	Feb. 08, 2025

#### 5.4 Test data for Input Power

- -. Test Date : July. 09, 2024
- -. Test Condition : Maximum output power mode

#### 1) Magnetron type: 2M246 by LG

Mode	Input Voltage	Current [A]	Power Con- sumption [W]	Manufacturer Rating [A]
Microwave	120 Vac, 60 Hz	14.81	1634	14.0



#### 6. RF Power Output Measurement according to MP-5.

#### 6.1 Operating Environment

Temperature	:	23.5 °C
Relative Humidity	:	42.3 % R.H.
Air Pressure	:	99.0 kPa

#### 6.2 Test Set-up

The Calorimetric Method was used to determine maximum output power. A 1,000 ml water load was placed in the center of the oven. A mercury thermometer was used to measure temperature rise. The test method was described in MP-5.

#### 6.3 Test Equipment

Description	Model Name	Manufacturer	Serial Number	Due to Calibration
AC Power supply	AFC-1010	AFC Korea	140051-1 <b>Φ</b>	Feb. 19, 2025

#### 6.4 Test data for RF Power Output Measurement

Test Date	: July. 09, 2024
Test Condition	: Maximum output power mode

#### 1) Magnetron type: 2M246 by LG

Power [W] =	(4.187 Joules/Cal) * (Volume in ml) * (Temperature Rise)
	Time in Seconds

Quantity of Wa	<u>ater</u>	Starting Tempera- ture	- Final Temperature	Elapsed Time
1,000 ml		23.9 °C	43.4 °C	120 Sec
Power [W] = _	<u>4.187 * 1,000 * 19.5</u> 120			
Power [W] =	6	80.38 Watts		



#### 7. Frequency measurements

#### 7.1 Operating Environment

Temperature	:	23.5 °C
Relative Humidity	:	42.3 % R.H.
Air Pressure	:	99.0 kPa

#### 7.2 Test Set-up



#### 7.3 Test Equipment

Description	Model Name	Manufacturer	Serial Number	Due to Calibration
Receiver	ESU 26	Rohde & Schwarz	100164	July. 01, 2025
Horn Ant	RGA-60	Electro-metrics	6104	July. 01, 2025
Antenna Master	2070-2	ЕМКО	9903-2231	N/A

#### 7.4 Test data for Frequency measurements



- -. Test Date
- : July. 09, 2024 -. Test Condition : Maximum output power mode

#### 1) Magnetron type: 2M246 by LG

(1) Frequency vs Line Voltage Variation Test

Variation of line	e voltage from 80 % (96 V) to 125 % (150 V)
Load:	1,000 ml
Fundamental F	Frequency: 2,450 MHz
Limit:	2.4 GHz < f < 2.5 GHz

2,461 MHz Maximum Frequency Observed:

Minimum Frequency Observed: 2,443 MHz

**Result:** Pass

\* Test result diagram is included in the APPENDIX A (Spectral Diagrams).

(2) Frequency vs Load Variation Test

Frequency was measured at the rated input voltage (AC 120 V).			
Initial Load:	1,000 ml		
Final Load:	200 ml		
Fundamental	Frequency: 2,450 MHz		
Limit:	2.4 GHz < f < 2.5 GHz		
<u>Maximum Fre</u>	equency Observed:	2,473 MHz	
Minimum Fre	<u>quency Observed:</u>	2,440 MHz	

**Result:** Pass

\* Test result diagram is included in the APPENDIX A (Spectral Diagrams).



#### 8. Power Density Safety Check

#### 8.1 Test Set-up

The power density was check to ensure that the power is not greater than 1.0 mW/cm<sup>2</sup> at any location of the oven. The 1.0 mW/cm<sup>2</sup> is in accordance with CDRH and UL923 standard.

A microwave survey meter was placed on all sides, door and viewing, bottom, top and rear.

The leakage microwave and did not exceed the specified limits.

#### 8.2 Test Equipment

Description	Model Name	Manufacturer	Serial Number	Due to Calibration
Microwave Survey Meter	FJZ005 HA	Holaday Indus- tries Inc.	-	Feb. 13, 2025

#### 8.3 Test data for Frequency measurements

: -

- -. Test Date : July. 11, 2024
- -. Test Condition

#### 1) Magnetron type: 2M246 by LG

Maximum Leakage Microwave Observed 0.16 mW/cm²

**Result:** 

Pass



#### 9. Conducted emissions

#### 9.1 Operating Environment

Temperature	:	24.7 °C
Relative Humidity		43.5 % R.H.
Air Pressure	:	100.1 kPa

#### 9.2 Test Set-up



Conducted emission was measured at a frequency range 150 kHz to 30 MHz. The Power Line disturbance voltage was measured with the equipment under test (EUT) in a shielded room. The EUT was connected to a line impedance stabilization network (LISN) placed on the floor. Tabletop devices shall be placed on a non-conducting platform, raised 80 cm above the reference ground plane. Floor-standing devices shall be insulated, if required, from the ground plane by up to 12 mm of insulating material.

The vertical con-ducting surface was replaced with horizontal ground plane. Length of the power lead in excess of 80 cm horizontally separating the EUT from LISN was folded back-and-forth form at the center of the power cord not exceeding 40 cm in length.

The EUT was operated with a load of 700 ml water initially at 20  $^{\circ}C \pm 5 ^{\circ}C$  placed at the center of the load-carrying surface.

A LISN(Line impedance stabilization network) with characteristics that conform to the requirements of ANSI C63.4-2009 was used for the measurement of conducted power-line radio noise; (50 micro-henries / 50 ohms). Chassis and earth-points for grounding of the LISN were earth-grounded.

The line conducted emission measurement procedure and test configuration is based on MP-5:1986. Amplitude measurements were performed with a quasi-peak detector and, if required, with an average detector.

Below data are the highest levels in Microwave mode. An overview sweep performed with peak detector is included in the APPENDIX A (Spectral Diagrams).



#### 9.3 Measurement Uncertainty

The measurement uncertainty was calculated in accordance with ISO "Guide to the ex pression of uncertainty in measurement."

The measurement uncertainty was given with a confidence of 95 %.

Test Items	Uncertainty	Remark
Conducted emission (150 kHz ~ 30 MHz)	2.5 dB	Confidence level of approximately 95 % ( $k = 2$ )

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2.

The listed uncertainties are the worst case uncertainty for the entire range of measure ment. please note that the uncertainty values are provided for informational purposes only are not used in determining the PASS/FAIL results

#### 9.4 Limit

Freq. Range	Quasi-Peak dB(⊮)	Average dB( <i>µ</i> ∛)
0.15 MHz ~ 0.5 MHz	66 ~ 56*	56 ~ 46*
0.5 MHz ~ 5 MHz	56	46
5 MHz ~ 30 MHz	60	50
*Limit	s decreases linearly with the logarit	hm of frequency.

#### 9.5 Test Equipment

Description	Model Name	Manufacturer	Serial Number	Due to Calibration
Receiver	ESR 3	Rohde & Schwarz	101911	Feb. 19, 2025
LISN	ESH2-Z5	Rohde & Schwarz	100452	Feb. 20, 2025
Pulse Limiter	ESH3-Z2	Rohde & Schwarz	102094	Feb. 19, 2025



#### 9.6 Test data for Conducted Emission

- Test Date
- : July. 02, 2024
- -. Resolution Bandwidth : 9 kHz
- -. Frequency Range
- : 0.15 MHz ~ 30 MHz
- -. Line
- : L1: Live1, L2: Live2, N: Neutral : None
- -. Comment

	Qı	1 a s i - P e a k		А	v e r a g e			
Frequency [M H z]	Disturbance Level [dBµV]	Permitted Limit [dBµV]	Margin [dB]	Disturbance Level [dBµV]	Permitted Limit [dBμV]	Margin [dB]	R e su l t	Phase
0.150	47.700	66.000	18.300	32.600	56.000	23.400	PASS	Ν
0.198	51.500	63.694	12.194	24.900	53.694	28.794	PASS	L 1
0.250	17.900	61.757	43.857	17.500	51.757	34.257	PASS	L 2
0.254	44.100	61.625	17.525	34.300	51.625	17.325	PASS	L 1
0.478	36.900	56.374	19.474	16.500	46.374	29.874	PASS	Ν
1.810	38.100	56.000	17.900	16.800	46.000	29.200	PASS	Ν
2.478	42.300	56.000	13.700	42.100	46.000	3.900	PASS	L 1
2.774	43.500	56.000	12.500	42.900	46.000	3.100	PASS	L 1
2.974	31.100	56.000	24.900	31.200	46.000	14.800	PASS	L 2
4.458	42.200	56.000	13.800	41.100	46.000	4.900	PASS	L 1
4.458	34.900	56.000	21.100	34.600	46.000	11.400	PASS	L 2
7.614	31.400	60.000	28.600	26.300	50.000	23.700	PASS	L 2
10.010	38.100	60.000	21.900	33.600	50.000	16.400	PASS	Ν
10.506	37.900	60.000	22.100	33.800	50.000	16.200	PASS	N
14.326	36.200	60.000	23.800	31.800	50.000	18.200	PASS	L 2

Remark: The measured disturbance level includes all related factor. (LISN Insertion loss and Cable loss).



#### 10. Radiated emissions

#### **10.1 Operating Environment**

Temperature	:	<b>23.9</b> ℃
Relative Humidity	:	42.3 % R.H.
Air Pressure	:	100.0 kPa

#### 10.2 Test Set-up



Configurations of Radiated emission test (30 MHz to 1000 GHz)



Configurations of Radiated emission test (1 GHz to 40 GHz)

Tabletop devices shall be placed on a non-conducting platform, raised 80 cm above the reference ground plane. Floor-standing devices shall be insulated, if required, from the ground plane by up to 12 mm of insulating material.

EUT was configured and operated in all modes of operation so as to find the maximum RF energy generated from EUT.

The power was furnished with rated (normal) voltage. The turntable containing the system was rotated and the antenna height was varied 4 m to find the maximum RF energy detected from EUT.

Radiated emission was measured at a frequency range 30 MHz to 25  $GHz(10^{th} harmonic of MWO)$ .

Measurement above 1 GHz and below 1 GHz.

Radiated emission measurement in frequency range 1 GHz to 25 GHz was made inside an anechoic chamber at 3 m to determine to emission characteristics of EUT.

The EUT is configured and operated in a manner, which produces the maximum emission in a typical configuration.

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Detector function selection and bandwidth :

In radiated emissions measurement, field strength meter that has quasi-peak and average detector was used. The bandwidth of the detector of instrument is 120 kHz for frequency range of 30 MHz – 1,000 MHz, and 1 MHz for frequency range of 1 GHz to 26 GHz. Emissions be measured are detected in average mode.

Antennas :

Measurements were made using calibrated biconical antenna in range of 30 MHz to 300 MHz, log-periodic antenna in range of 300 MHz to 1,000 MHz and horn antenna in range of 1 to 24.5 GHz to determine the emission characteristics of the EUT. Measurements were also made for both horizontal and vertical polarization. The horizontal distance between the receiving antenna and the closest periphery of the EUT was 3 meters for horn antenna and 10 meters for biconical and log-periodic antenna.

#### **10.3 Measurement Uncertainty**

The measurement uncertainty was calculated in accordance with ISO "Guide to the ex pression of uncertainty in measurement."

Test Items	Uncertainty	Remark
Radiated emissions (30MHz ~ 1GHz)	4.7 dB	Confidence level of approximately $95 \% (k = 2)$
Radiated emissions (1GHz ~ 4.5GHz)	4.7 dB	Confidence level of approximately $95 \% (k = 2)$
Radiated emissions (4.5GHz ~ 18GHz)	4.7 dB	Confidence level of approximately 95 % ( $k = 2$ )

The measurement uncertainty was given with a confidence of 95 %.

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2.

The listed uncertainties are the worst case uncertainty for the entire range of measure ment. please note that the uncertainty values are provided for informational purposes only are not used in determining the PASS/FAIL results

#### 10.4 Limit

Equipment	Operating frequency	RF Power generated by equipment (watts)	Field strength limit (μV/m)	Distance (meters)
Any type unless otherwise specified (miscellaneous)	Any ISM frequency	Below 500 500 or more	25 25×SQRT(power/500)	300 <sup>1</sup> 300

Note.

1) Field strength may not exceed 10  $\mu$ V/m at 1600 meters. Consumer equipment operating below 1000 MHz is not permitted the increase in field strength otherwise permitted here for power over 500 watts.

#### 10.5 Test Equipment

Description	Model Name	Manufacturer	Serial Number	Due to Calibra- tion
Receiver	ESU 26	Rohde & Schwarz	100164	July. 01, 2025
Horn Ant	RGA-60	Electro-metrics	6104	July. 01, 2025
Horn Ant	3116	ETS-LINDGREN	00051887	May. 22, 2025
Biconical	VHA9103	Schwarzbeck	VHA91031875	July. 26, 2024
Log Periodic	9108-A	Schwarzbeck	0346	July. 26, 2024
Antenna Master	2070-2	ЕМКО	9903-2231	N/A
High pass filter	11SH10- 4500/X1800-010	K & L Microwave	2	June. 28, 2025
Amplifier	310N	Sonoma Instru- ment	360816	Feb. 19, 2025
Amplifier	8449B	Agilent	3008A01821	June. 05, 2025



#### 10.6 Test data for Radiated Emission

- -. Test Date : July. 05, 2024
- -. Mesurement Distance : 3m, 10m : None
- -. Comment
- -. Measurement

Frequency range	30MHz ~ 1GHz @ 10 m	Above 1GHz @ 3m
Detector mode	Average	Average
Resolution Bandwidth	120kHz	1 MHz

#### 1) Magnetron type: 2M246 by LG

#### Test distance: 3 m ΗPF Field Strength Field Strength FCC Limit Ant. Amp. Cable Meter Field Freq Load Load Factor Factor Loss Reading @ 3 m Strength @ @ 300 m @ 300 m Result Factor Location [GHz] [dB] [dB] [dB] [dB] [ml] [dBuV] [dBuV/m] [uV/m] [uV/m] [uV/m] 2.199 27.8 N/A N/A4.48 700 Center 10.1 42.4 131.8 1.3 34.5 PASS N/A4.75 28.5 44.2 2.501N/A700Center 10.9 $1\ 6\ 2\ .\ 2$ 1.6 34.5 $P \land S S$ 2.704 28.6 N/AN/A 4.97 $7\,0\,0$ Center 11.5 45.1 179.9 1.8 34.5 PASS 33.2 -38.3 6.66 42.3 4.944 1.2 700 Center 39.5 130.3 1.3 34.5 PASS 33.0 1.4 -38.3 6.56 Rt. Front 35.3 58.2 4.879 700 32.7 0.6 34.5 PASS Center 33.0 1.4 -38.3 6.56 45.8 4.877 43.2 195.0 1.9 34.5 PASS 300 -38.3 6.64 4.931 33.1 1.3 300 Rt. Front 36.0 38.7 86.1 0.9 34.5 PASS -38.7 8.21 36.7 1.0 Center 37.3 7.459 700 30.0 73.3 0.7 34.5 PASS 7.379 36.7 0.9 -38.7 8.16 700 Rt. Front 33.0 40.1101.21.034.5 PASS 7.326 36.7 0.8-38.7 8.14 300 $C\;e\,n\,te\,r$ 31.3 38.2 81.3 0.8 34.5 PASS 36.7 0.8 -38.7 8.14 38.2 7.326 300 Rt. Front 31.3 81.3 0.8 34.5 PASS 37.9 -39.3 9.04 9.767 1.3 $7\,0\,0$ Center 28.9 37.8 77.6 34.5 PASS 0.8 12.17 -37.9 45.3 1.1 Center 46.3 17.292 700 25.7206.5 2.1 34.5 PASS

Other frequencies: No detected.

For measurement of other frequencies, refer to APPENDIX A (Spectral Diagrams).

#### **Result: Pass**

- \* Limit (at 300 m) = 25 \* (RF Power/500)  $^{1/2}$  [ $\mu$ V/m]
- \* Field Strength below 1,000 MHz (at 300 m)  $[\mu V/m] = 10^{[(Field strength at 10m(dBuV/m)-29.5)/20]}$

\* Field Strength above 1,000 MHz (at 300 m)  $[\mu V/m] = K * 10$  [Field strength at 3m(dBuV/m)/20]

NOTES:

- 1. Two representative modes (full power and defrost) of operation were investigated.
- 2. A beaker was used as the container and the test was made with a shelf in its initial normal position.
- 3. Load for measurement of radiation on second and third harmonic: Two loads, one of 700 ml and the other of 300 ml, of water were used. Each load was tested both with the beaker located in the center of the oven and with it in the corner.
- 4. Load for all other measurements: 700 ml of water, with the beaker located in the center of the oven
- 5. All other emissions are non-significant.
- 6. The tests were made with average detector for frequency range of 30 MHz to 26 GHz.

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### **APPENDIX A. Spectral Diagrams**

#### ◆ 150 kHz ~ 30 MHz (Magnetron type: 2M246 by LG)

- Operating Mode: Maximum RF Power Output \_
- Detect Mode: Quasi-Peak(+)/Average(x), Scan Mode: Peak

#### <Phase: L1>



PHASE\_L1\_NW 0 Date:2.JUL.2024 15:30:49

<Phase: L2>



<Phase: N>



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#### ◆ 30 MHz ~ 1000 MHz (Magnetron type: 2M246 by LG)

- Operating Mode: Maximum RF Power Output
- Detect Mode: Average, Scan Mode: Peak
- Measurement Distance: 10 meters



#### <Antenna Polarization: Horizontal>

WCEK6429S RE\_HOR\_MWO

Date: 5.JUL.2024 22:01:47



Spectrum							, v
RBW	(QPK) 120 kHz	MT :	100 ms	Stop   IN	RE Below 1 GHz_	_300 MHz	
Scan O1Pk Max	10 UB	Preamp	ON	atep Liv			
				100 MHz	M1[1]		29.50 dBµV/n
		-			0.000 s		77.160000 MH
/0 dBµV/m							
CC RE.LIN							
50 dBµV/m							
40 dBμV/m							
			MI				
30 dBµV/m							
		i 1 .	1				
20 dBµV/m	I.M.					a da a	I I MAMAY
Mar Mursonth		Minila		MAN	LAN MAN	Minder	Mr. Mr. Alman Maria
10 dypv/m-	Mar Mar		N.M	V			
1 aBhA/w							
			TE				
Start 30.0 MHz							Stop 300.0 MHz
EK6429S VER_MWO Hte: 5.JUL.2024	20:32:25				Measuri		
CEK6429S S_VER_MWO Ate: 5.JUL.2024 Spectrum F RBW	20:32:25 Receiver ( (QPK) 120 kHz	X) MT	100 ms		RE Below 1 GHz	_300 MHz to	1 GHz
EEK6429S S_VER_MWO ate: 5.JUL.2024 Spectrum RBW Input 1 DC  Att Scan  DFK Max	20:32:25 Receiver ( (QPK) 120 kHz 10 dB	X) MT	100 ms ON	Step LIN	RE Below 1 GHz	_300 MHz to	1 GHz
SEK6429S S_VER_MWO Spectrum Input 1 DC  Att Scan  IPK Max	20:32:25 Receiver ( (QPK) 120 kHz 10 dB	X) MT Preamp	100 ms ON	step LIN	XE Below 1 GHz	_300 MHz to	1 GHz 24.45 dBμV/π
SEK6429S S_VER_MWO te: 5.JUL.2024 Spectrum F RBW Input 1 DC  Att Scan  IPK Max	20:32:25 Receiver ( (QPK) 120 kHz 10 dB	X) MT Preamp	100 ms ON	Step LIN	Measuri RE Below 1 GHz M1[1] 0.000 s	_300 MHz to	1 GHz 24.45 dBµV/n 967.64000 MH
::EK64295     :_VER_MWO     :_VER_MWO     :_VER_MWO     RBW     RBW     Input 1 DC ● Att     Scan ●1Pk Max  70 dBµV/m	20:32:25 Receiver ( (QPK) 120 kHz 10 dB	X) MT Preamp	100 ms ON	step LIN	Measuri RE Below 1 GHz M1[1] 0.000 s	_300 MHz to	1 GHz 24.45 dBµV/n 967.64000 MH
Sector      Sector	20:32:25 Receiver ( (QPK) 120 kHz 10 dB	X) MT Preamp	100 ms ON	step LIN	Measuri RE Below 1 GHz M1[1] 0.000 s	_300 MHz to	(
Set 6429S           2 VER_MWO           ster         5. JUL.2024           Spectrum         FBW           Input 1 DC ● Att           Scan ● 1Pk Max           70 dBµV/m           Sca dBµV/m           CC RELIN	20:32:25 Receiver ( (QPK) 120 kHz 10 dB	8) MT = Preamp	100 ms ON	step LIN	Measuri RE Below 1 GHz M1[1] 0.000 s	_300 MHz to	( 1 GHz 24.45 dBµV/π 967.64000 MH
ZEK6429S     Z-VER_MMO     tet: 5.JUL.2024     Spectrum	20:32:25 Receiver ( (QPK) 120 kHz 10 dB	X) MT Preamp	100 ms ON	step LIN	KE Below 1 GHz	.300 MHz to	( 1 GHz 24.45 dBµV/r 967.64000 MH
EK6429S     EVER_MMO     Ite: 5.JUL.2024     Spectrum F     RBW     Input 1 C	20:32:25 Receiver ( (QPK) 120 kHz 10 dB	X) MT Preamp	100 ms ON	Step LIN	2E Below 1 GHz.	_300 MHz to	(
EX6429S     EVER_MMO     ite: 5.JUL.2024      Spectrum     F     RBW      Input 1 DC ▲ Att Scan ● 1Pk Max      70 dBµV/m      CC RE.LIN      S0 dBµV/m      40 dBµV/m	20:32:25 Receiver ( (QPK) 120 HHZ 10 dB	X) MT Preamp	100 ms ON	Step LIN	E Below 1 GHz	_300 MHz to	1 GHz 24.45 dBµV/n 967.640000 MH
CC FELIN     CC FELIN     CC FELIN     CO BµV/m	20:32:25 Receiver ( (QPK) 120 kHz 10 dB	8 MT Preamp	100 ms ON	Step LIN	E Below 1 GHz M1[1] 0.000 s	300 MHz to	24.45 dBµV/n 967.64000 MH
CC PELIN     CC PELIN     CC PELIN     CO PELV	20:32:25 Receiver ( (QPK) 120 kHz 10 dB	E MT Preamp	100 ms ON	Step LIN	KE Below 1 GHz	300 MHz to	24.45 dBµV/n 967.64000 MH
	20:32:25 Receiver ( (QPK) 120 kHz 10 dB	X) MT Preamp	100 ms ON	Step LIN	XE Below 1 GHz	300 MHz to	24.45 dBµV/n 967.640000 MH
	20:32:25 Receiver ( (QPK) 120 kHz 10 dB	X) MT Preamp	100 ms ON	Step LIN	2E Below 1 GHz	300 MHz to	24.45 dBµV/n 967.640000 MH
	20:32:25 Receiver ( (QPK) 120 kHz 10 dB	X) MT Preamp	100 ms ON	Step LIN	Measuri RE Below 1 GHz M1[1] 0.000 s	.300 MHz to	1 GHz 24.45 dBµV/r 967.64000 MH
	20:32:25 Receiver ( (QPK) 120 kHz 10 dB	X) MT Preamp	100 ms ON	Step LIN	KE Below 1 GHz	.300 MHz to	( 1 GHz 24.45 dBµV/n 967.64000 MH 967.64000 MH
CC FE.LIN     S0 dBµV/m     dBµV/m     20 dBµV/m     20 dBµV/m     20 dBµV/m	20:32:25 Receiver ( (OPK) 120 KH2 10 dB	E MT Preamp	100 ms ON	Step LIN	E Below 1 GHz.	.300 MHz to	24.45 dBµV/n 967.64000 MH
	20:32:25 Receiver ( (QPK) 120 HH2 10 dB		100 ms ON	Step LIN	E Below 1 GHz	.300 MHz to	24.45 dBµV/n 967.640000 MH
	20:32:25 Receiver ( (QPK) 120 kHz 10 dB		100 ms ON	Step LIN	Measuri           KE Below 1 GHz           M1[1]           0.000 s	.300 MHz to	24.45 dBpV/n 967.64000 MH
Image: Sector with the sector withe sector with the sector with the sector with the sec	20:32:25 Receiver ( (QPK) 120 kHz 10 dB		100 ms ON	Step LIN	Measuri           RE Below 1 GHz           M1[1]           0.000 s	300 MHz to	24.45 dBµV/n 967.64000 MH

#### <Antenna Polarization: Vertical>

WCEK6429S RE\_VER\_MWO

Date: 5.JUL.2024 21:32:13



#### ♦ Voltage Variation (Magnetron type: 2M246 by LG)

- Detect Mode: Average, Scan Mode: Peak



WCEK6429S\_RE\_FUND Date: 9.JUL.2024 17:08:03



#### <Minimum Frequency Observed: 2,443 MHz>

WCEK6429S\_FUND\_VER Date: 9.JUL.2024 16:06:08



#### ◆Load Variation (Magnetron type: 2M246 by LG)

- Detect Mode: Average, Scan Mode: Peak



WCEK6429S\_FUND\_VER Date: 9.JUL.2024 14:59:23



#### < Minimum Frequency Observed: 2,440 MHz >

WCEK6429S\_RE\_FUND Date: 9.JUL.2024 18:12:07



#### ◆ 1 GHz ~ 18 GHz (Magnetron type: 2M246 by LG)

- Operating Mode: Maximum RF Power Output
- Detect Mode: Average, Scan Mode: Peak
- Measurement Distance: 3 meters



#### <Antenna Polarization: Horizontal>



WCEK6429S\_RE\_700C Date: 5.JUL.2024 13:37:15





#### <Antenna Polarization: Vertical>

 
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WCEK6429S\_RE\_700C Date: 5.JUL.2024 09:56:12



#### ◆ 18 GHz ~ 25 GHz (Magnetron type: 2M246 by LG)

- Operating Mode: Maximum RF Power Output
- Detect Mode: Average, Scan Mode: Peak
- Measurement Distance: 3 meters



#### <Antenna Polarization: Horizontal>

WCEK6429S\_RE\_HOR Date: 5.JUL.2024 17:55:39



#### <Antenna Polarization: Vertical>

WCEK6429S\_RE\_VER Date: 5.JUL.2024 18:22:30



### **APPENDIX B. Test Photos**

Test photos show the worst case configuration and cable placement with a minimum margin to the specifications.

- Conducted Emission





- Radiated Emission (30 MHz - 1 GHz)





- Radiated Emission (1 GHz - 25 GHz)







### **APPENDIX C. Photographs of EUT**



#### <Front View>



<Rear View>





<Left Side View>



<Right Side View>





<Inside of Cavity>