

# EMI TEST REPORT

On Model Name: Microwave Oven

Model Numbers: SMW 900 B1

Brand Name: Lidl, SILVERCREST

FCC ID: 2AJ9O-SMW900B1

Prepared for Lidl US Trading, LLC

According to

\* FCC Part 18(2017)

Industrial, Scientific and Medical Equipment

\* FCC/OST MP-5(1986)

FCC methods of measurements of radio noise emission from industrial, scientific and medical equipment



Test Report #:	GUA-	707-1	1747-FCC	
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Prepared by: <u>FCMG</u>
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aar. Swall Zhang ECMC

Swall Zhang/QC Manager Company Name

Swall Zhang, Qc manager Company Name

Test Report Released by: Swall Zhang

July 11th, 2017

Swall Zhang

Date

#### **Test Location**

Tests performed in a Certified ANSI Semi-Anechoic Chamber and Shielded Room.

Test Site Location : GD WITOL VACUUM ELECTRONIC

EMC TEST LABORATORY

BeiJiao, ShunDe, FoShan, GuangDong,

528311, China

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## **Test Facility**

The test facility was recognized, certified, or accredited by the following organizations:

FCC - Registration No.: 910385

GD WITOL VACUUM ELECTRONIC EMC TEST LABORATORY has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC was maintained in our files

# Table of Contents

GOVERNMENT DISCLAIMER NOTICE	2
REPRODUCTION CLAUSE	2
OPINIONS AND INTERPRETATIONS	2
STATEMENT OF MEASUREMENT UNCERTAINTY	2
ADMINISTRATIVE DATA	3
EUT DESCRIPTION	4
EUT MODEL DERIVED	4
TEST SUMMARY	5
LOAD FOR MICROWAVE OVEN	6
EUT EXERCISE SOFTWARE	6
EQUIPMENT MODIFICATION	6
EUT SAMPLE PHOTOS FOR MODEL SMW900B1	7
TEST SYSTEM DETAILS	13
CONFIGURATION OF TESTED SYSTEM	14
ATTACHMENT 1 -RADIATION HAZARD TEST	1 5
ATTACHMENT 2 - INPUT POWER MEASUREMENT	17
ATTACHMENT 3 - RF OUTPUT POWER MEASUREMENT	19
ATTACHMENT 4 - OPERATING FREQUENCY MEASUREMENT	21
ATTACHMENT 5 - CONDUCTED EMISSION TEST RESULTS	24
ATTACHMENT 6 - RADIATED EMISSION TEST RESULTS	20

# **List Attached Files**

Exhibit Type	File Description	File Name
Test Report	Test Report	2AJ9O-SMW900B1 _Test Report.pdf
Operation Description	Technical Description	2AJ9O-SMW900B1 _Operation Description.pdf
External Photos	External Photos	2AJ9O-SMW900B1 _External Photos.pdf
Internal Photos	Internal Photos	2AJ9O-SMW900B1 _Internal Photos.pdf
Block Diagram	Block Diagram	2AJ9O-SMW900B1 _Block Diagram.pdf
Schematics	Circuit Diagram	2AJ9O-SMW900B1 _Schematics.pdf
ID Label/Location	Label and Location	2AJ9O-SMW900B1 _Label & Location.pdf
User Manual	User Manual	2AJ9O-SMW900B1 _User's Manual.pdf
Test set-up photos	Test set-up photos	2AJ9O-SMW900B1 _Test Set-up Photos

#### **Government Disclaimer Notice**

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#### **Opinions and Interpretations**

This test report relates to the abovementioned equipment under test (EUT). Without the permission of ECMG Electronic Technical Testing Corp (Shenzhen) Test Lab this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark on this or similar products. The manufacturer has sole responsibility of continued compliance of the device.

#### Statement of Measurement Uncertainty

The data and results referenced in the document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities that can account for a nominal measurement error. Furthermore, component and process variability of devices similar to that tested may result in additional deviation.

#### **Administrative Data**

Test Sample : Microwave Oven

Model Numbers : SMW 900 B1

Model Tested : SMW 900 B1

Brand Name : Lidl, SILVERCREST

Receipt Date : July 6<sup>th</sup>, 2017

Date Tested : July  $8^{th}$ , 2017

Applicant : Lidl US Trading, LLC

Address 3500 S. Clark Street, Arlington, VA 22202,

United States.

Telephone :(703) 819-0435

Fax :(703) 819-0435

Manufacturer : Lidl US Trading, LLC

Address 3500 S. Clark Street, Arlington, VA 22202,

United States.

Telephone : (703) 819-0435

Fax : (703) 819-0435

Factory : Lidl US Trading, LLC

Address 3500 S. Clark Street, Arlington, VA 22202,

United States.

Telephone : (703) 819-0435

Fax : (703) 819-0435

## **EUT Description**

Lidl US Trading, LLC model tested SMW 900 B1 (referred to as the EUT in this report) is a Microwave Oven. The technical specifications of EUT are as below:

Power Supply	120V AC/60Hz
Rated Input Power (Microwave)	1350W
Rated Output Power (Microwave)	900W
Frequency	2450 MHz(Class B/Group 2)
Magnetron Model	2M219J
Magnetron Manufacturer	WITOL

For more detailed information or features please refer to user's manual of EUT.

#### **EUT Model Derived**

N/A

#### **Test Summary**

The electromagnetic compatibility requirements on model SMW 900 B1 for this test are stated below. all results listed in this report relate exclusively to this above-mentioned model as the equipment under test. this report confers no approval or endorsement upon any other component, host or subsystem used in the test set-up.

Emission Tests						
Specifications	Description	Test Results	Test Point	Remark		
FCC Part 18:2017 FCC/OST MP-5:1986 ANSI C63.4-2014	Radiation Hazard Measurement	Passed	Enclosure	Attachment 1		
FCC Part 18:2017 FCC/OST MP-5:1986 ANSI C63.4-2014	Input Power Measurement	Passed	AC Input Port	Attachment 2		
FCC Part 18:2017 FCC/OST MP-5:1986 ANSI C63.4-2014	RF Output power Measurement	Passed	EUT	Attachment 3		
FCC Part 18:2017 FCC/OST MP-5:1986 ANSI C63.4-2014	Operating Frequency Measurement	Passed	EUT	Attachment 4		
FCC Part 18:2017 FCC/OST MP-5:1986 ANSI C63.4-2014	Conducted Emission	Passed	AC Input Port	Attachment 5		
FCC Part 18:2017 FCC/OST MP-5:1986 ANSI C63.4-2014	Radiated Emission	Passed	Enclosure	Attachment 6		

#### Load for Microwave Oven

For all measurements the energy developed by the oven was absorbed by a dummy load consisting of a quantity of tag water in a beaker. If the oven was provided with a shelf or other utensil support, this support was in its initial normal position. For ovens rated at 1000watts or less power output, the beaker contained quantities of water as listed in the following subparagraphs. For ovens rated at more than 1000watts output, each quantity was increased by 50% for each 500watts or fraction thereof in excess of 1000 watts. Additional beakers were used if necessary.

- -Load for power output measurement: 1000 milliliters of water in the beaker located in the center of the oven.
- -Load for frequency measurement: 1000 milliliters of water in the beaker located in the center of the oven.
- -Load for measurement of radiation on second and third harmonic: Two loads, one of 700 and the other of 300 milliliters, of water are used. Each load is tested both with the beaker located in the center of the oven and with it in the right front corner.
- -Load for all other measurements: 700 milliliters of water, with the beaker located in the center of the oven.

#### **EUT Exercise Software**

No Test sofware support this test.

#### **Equipment Modification**

Any modifications installed previous to testing by Lidl US Trading, LLC, will be incorporated in each production model sold or leased in United States.

There were no modifications installed by ECMG Electronic Technical Testing Corp (Shenzhen) test personnel.



**EUT -Front View** 



EUT- Back View



Door Opend View



EUT -Uncovered View 1



**EUT -Uncovered View 2** 



EUT -Uncovered View 3



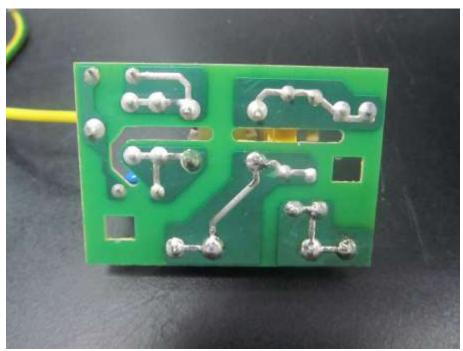
High-valtage Transformer view



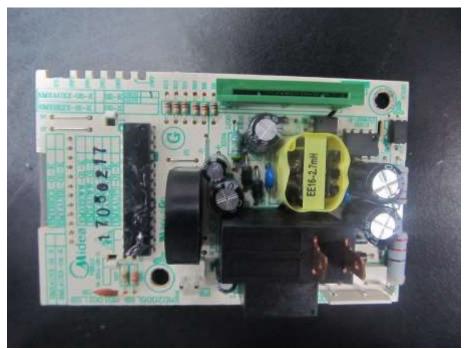
Magnetron Front View



Power Filter Board Top View



Power Filter Board Bottom View



Mother board - Top View



Mother board - Bottom View

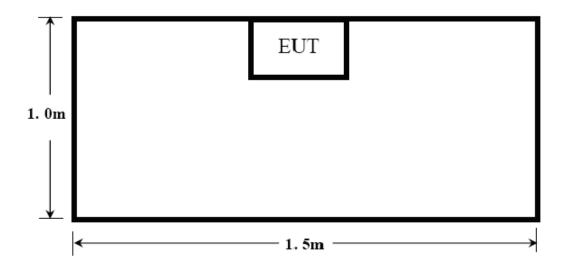
## **Test System Details**

			EUT			
Model Number:	SMW 90	00 B1				
Model Tested:	SMW 90	00 B1				
Description:	Microw	ave Oven				
Input:	AC 120	V/60Hz				
Manufacturer:	Lidl US	Trading, LLC	-			
		Support	t Equipment			
Description	on Model Number Serial Number Manufacturer				nufacturer	
	<u>'</u>		N/A			
		Cable I	Description			
Description	From	То	Length (Meters)		lded /N)	Ferrite (Y/N)
Power Cable	EUT	Plug	1.2	ı	V	N

#### Note:

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

# **Configuration of Tested System**



## ATTACHMENT 1 -RADIATION HAZARD TEST

CLIENT:	Lidl US Trading, LLC	TEST STANDERD:	FCC Part 18		
MODEL NUMBERS:	SMW 900 B1	PRODUCT:	Microwave Oven		
MODEL TESTED:	SMW 900 B1	EUT DESIGNATION:	Home or Office		
TEMPERATURE:	23°C	HUMIDITY:	51%		
ATM PRESSURE:	103kPa	GROUNDING:	Through AC Power Cord		
TESTED BY:	Yang Dongmei	DATE OF TEST:	July 8 <sup>th</sup> ,2017		
TEST REFERENCE:	ANSI C63.4-2014, FCC/OST N	ИР-5:1986			
TEST PROCEDURE:	The EUT was set-up according to the FCC MP-5 and FCC Part 18 for Radiation Hazard Measurement. The measurement was using a microwave leakage meter to measure the Radiation leakage in the as-received condition with the oven door closed. A 700ml water load in a beaker was located in the center of the oven and the Microwave Oven was set to maximum power. While the oven operating, the microwavemeter will check the leakage and then record the maximum leakage.				
TESTED RANGE:	N/A				
TEST VOLTAGE:	AC 120V/60Hz				
RESULTS:	There was no microwave leakage exceeding a power level of 0.16 mW/cm² observed at any point 5cm or more from the external surface of the oven.  A maximum of 1.0 mW/cm² is allowed in accordance with the applicable FCC standards. Hence, microwave leakage in the as-received condition with the oven door closed was below the maximum allowed. The test results relate only to the equipment under test provided by client.				
CHANGES OR MODIFICATIONS:	There were no modifications installed by ECMG Electronic Technical Testing Corp (Shenzhen) test personnel.				
M. UNCERTAINTY:	0.0001 mW/cm <sup>2</sup>				

Test Equipment List:

Test Equipment	Manufacturer	Model	Serial No.	Cal. Due Date
Microwave Measurement	HOLADAY	HI-1710A	00022150	2018.3.10

TESTED BY:

REVIEWED BY:

SENIOR ENGINEER

REVIEWED BY:



## ATTACHMENT 2 - INPUT POWER MEASUREMENT

CLIENT:	Lidl US Trading, LLC	TEST STANDERD:	FCC Part 18		
MODEL NUMBERS:	SMW 900 B1	PRODUCT:	Microwave Oven		
MODEL TESTED:	SMW 900 B1	EUT DESIGNATION:	Home or Office		
TEMPERATURE:	22℃	HUMIDITY:	59%		
ATM PRESSURE:	103.1kPa	GROUNDING:	Through AC Power Cord		
TESTED BY:	Yang Dongmei	DATE OF TEST:	July 8 <sup>th</sup> ,2017		
TEST REFERENCE:	ANSI C63.4-2014, FCC/OST MP-5:1986				
TEST PROCEDURE:	The EUT was set up according to the FCC MP-5 and FCC Part 18 for input power measurement. The input power and current was measured using a power analyzer. A 700ml water load in a beaker was located in the center of the oven and the Microwave Oven was set to maximum power. While the oven is operating, use a voltmeter and an ampmeter to test the AC input voltage and current.				
TESTED RANGE:	N/A				
TEST VOLTAGE:	120VAC / 60Hz				
RESULTS:	Based on the measured input power, the EUT was found to be operating within the intended specifications. The test results relate only to the equipment under test provided by client.				
CHANGES OR MODIFICATIONS:		There were no modifications installed by ECMG Electronic Technical Testing Corp (Shenzhen) test personnel.			
M. UNCERTAINTY:	± 5W				

## Test Data:

Input voltage	Input Current	Measured Input Power	Rated input Power
(V)	(A)	(W)	(W)
120.5	11.40	1302	1350

## Test Equipments List:

Test Equipment	Manufacturer	Model	Serial No.	Cal. Due Date
Power Meter	Ainuo	AN8726C	058704200	2016.2.6

TESTED BY:

REVIEWED BY:

SENIOR ENGINEER

SENIOR ENGINEER

Input power Test Set up:



## ATTACHMENT 3 - RF OUTPUT POWER MEASUREMENT

CLIENT:	Lidl US Trading, LLC	TEST STANDERD:	FCC Part 18		
MODEL NUMBERS:	SMW 900 B1	PRODUCT:	Microwave Oven		
MODEL TESTED:	SMW 900 B1	EUT DESIGNATION:	Home or Office		
TEMPERATURE:	22°C	HUMIDITY:	60%RH		
ATM PRESSURE:	103kPa	GROUNDING:	Through AC Power Cord		
TESTED BY:	Yang Dongmei	DATE OF TEST:	July 8 <sup>th</sup> ,2017		
TEST REFERENCE:	ANSI C63.4-2014, FCC/OST MP-5:1986				
TEST PROCEDURE:	The EUT was set up according to the FCC MP-5 and FCC Part 18 for RF output power Measurement. The Caloric Method was used to determine maximum RF output power. The initial temperature of the water load was measured. A 1000ml water load in a beaker was located in the center of the oven. The oven was operated at maximum output power for 120 seconds, the temperature of the water was re-measured.  RF Output Power				
	= (4.2joules/calorie)(volume in milliliters)(temperature rise) / (time in seconds) = 4.2 joules/calorie × 1000 × (Final Temp - Initial Temp) / 120				
TESTED RANGE:	N/A				
TEST VOLTAGE:	120VAC / 60Hz				
RESULTS:	RF Output Power =721.0 watts. The test results relate only to the equipment under test provided by client.				
CHANGES OR MODIFICATIONS:	There were no modifications installed by ECMG Electronic Technical Testing Corp (Shenzhen) test personnel.				
M. UNCERTAINTY:	± 0.3°C				

## Test Result:

Initial Temp	Final Temp	Measured Times	Measured out put
(°C)	(で)	(s)	Power(W)
20.0	40.6	1205	

RF Output Power (W) =  $4.2 \times 1000 \times (Final\ Temp - Initial\ Temp) / 120 = 721 \text{ watts}$ 

Test Equipments list:

Test Equipment	Manufacturer	Model	Serial No.	Cal. Due Date
Digit Thermometer	Fluke Corporation	Fluke 51 II	15940198	2016.07.17
Stopwatch	CASIO	JS-510	CF-003	2016.10.10

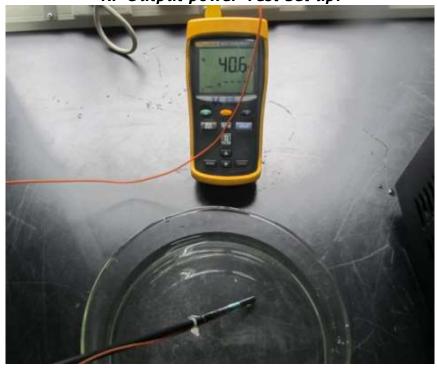
TESTED BY:

REVIEWED BY:

SENIOR ENGINEER

REVIEWED BY:

RF Output power Test Set up:



# ATTACHMENT 4 - OPERATING FREQUENCY MEASUREMENT

CLIENT:	Lidl US Trading, LLC	TEST STANDERD:	FCC Part 18		
MODEL NUMBERS:	SMW 900 B1	PRODUCT:	Microwave Oven		
MODEL TESTED:	SMW 900 B1	EUT DESIGNATION:	Home or Office		
TEMPERATURE:	22°C	HUMIDITY:	60%RH		
ATM PRESSURE:	101.1kPa	GROUNDING:	Through AC Power Cord		
TESTED BY:	Yang Dongmei	DATE OF TEST:	Julu 8 <sup>th</sup> ,2017		
TEST REFERENCE:	ANSI C63.4-2014, FCC/OST	MP-5:1986			
TEST PROCEDURE:	The EUT was set up according Frequency Measurement.  1) The variation of frequency using a spectrum analyzer. So water load in a beaker was lower analyzer with antenna at 3 monoperated at maximum output monitored until the water load.  2) The variation of frequency measured using a spectrum at 10 minutes of use with a 1000 of the test. Then the operating varied between 80 and 125 personners.	with time. The operating tarting with the EUT at recated in the center of the eters distance form the opower. The fundamental was reduced to 20 percuit with Line Voltage. The openalyzer. The EUT was of Dml water load at room tog frequency was monitored.	frequency was measured from temperature, a 1000ml frown. Set a spectrum from and the oven was operating frequency was fent of the original load.  The perating frequency was perated/warmed by at least frequency was from the perature at the beginning frequency was from the perature at the perature was from the perature was		
TESTED RANGE:	2450 ± 50MHz				
TEST VOLTAGE:	120VAC / 60Hz				
RESULTS:	Please refer to following pages for details of the variation in operating frequency with time & line voltage measurement. The test results relate only to the equipment under test provided by client.				
CHANGES OR MODIFICATIONS:	There were no modifications installed by ECMG Electronic Technical Testing Corp (Shenzhen) test personnel.				
M. UNCERTAINTY:	Freq. ±10kHz				

# Variation in Operating Frequency with Time:

Minimum Frequency (MHz)	Maximum Frequency (MHz)			
2450.3	2456.5			

# Variation in Operating Frequency with Line Voltage:

Minimum Frequency (MHz)	Maximum Frequency (MHz)				
2448.2	2451.8				
Note: Line voltage varied from 96Vac to 150Vac.					

## Test Equipments List:

Test Equipment	Manufacturer	Model	Serial No.	Last Cal.	Cal. Due
EMI test receiver	R&S	ESIB-26	100174	11/18/2016	11/17/2017
Horn Antenna	R&S	HF906	100311	11/20/2016	11/21/2017

Note: All testing were performed using internationally recognized standards. All test instruments were calibrated and traceable to the National Institute of Standards and Technology (NIST).

TESTED BY:

ENGINEER

REVIEWED BY:

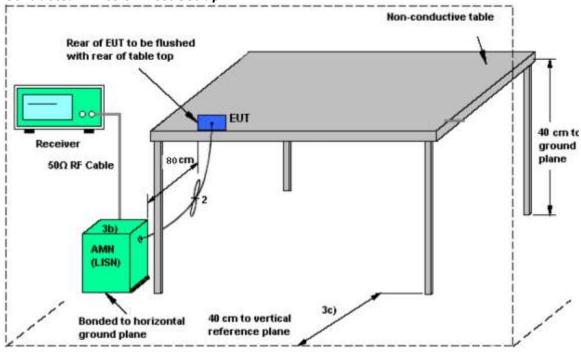
SENIOR ENGINEER

Operating Frequency Test Set-up:

## ATTACHMENT 5 - CONDUCTED EMISSION TEST RESULTS

CLIENT:	Lidl US Trading, LLC	TEST STANDERD:	FCC Part 18			
MODEL NUMBERS:	SMW 900 B1	PRODUCT:	Microwave Oven			
MODEL TESTED:	SMW 900 B1	EUT DESIGNATION:	Home or Office			
TEMPERATURE:	22°C	HUMIDITY:	60%RH			
ATM PRESSURE:	101.1kPa	GROUNDING:	Through AC Power Cord			
TESTED BY:	TESTED BY: Yang Dongmei		July 8 <sup>th</sup> ,2017			
TEST REFERENCE:	ANSI C63.4-2014, FCC/OST	MP-5:1986				
TEST PROCEDURE:	The EUT was set up according to the guideline of ANSI C63.4-2014 & FCC MP-5 for conducted emissions. The measurement was using a AMN on each line and an EMI receiver peak scan was made at the frequency measurement range. The six highest significant peaks were then marked, and these signals were then quasi-peaked and averaged. The frequency range investigated was from 150kHz to 30MHz.					
TESTED RANGE:	150kHz to 30MHz					
TEST VOLTAGE:	120VAC / 60Hz					
RESULTS:	The EUT meets the requirements of test reference for Conducted Emissions.The test results relate only to the equipment under test provided by client.					
CHANGES OR MODIFICATIONS:	There were no modifications (Shenzhen) test personnel.	installed by ECMG Electr	onic Technical Testing Corp			
M. UNCERTAINTY:	The maximum measurement uncertainty is evaluated as: 150KHz~ 30MHz: 3.0dB					

#### Conducted Emission Test Set up:

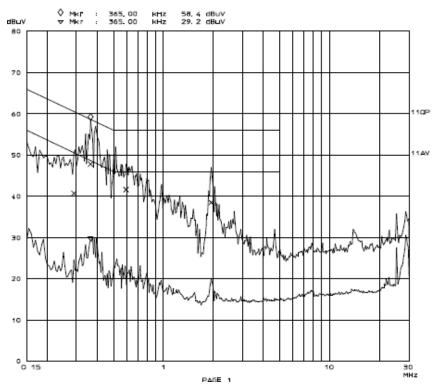


AMN = Artificial mains network (LISN)

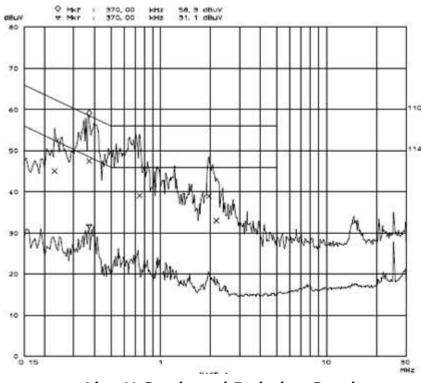
AE = Associated equipment

EUT = Equipment under test

ISN = Impedance stabilization network



Line L Conducted Emission Graph



Line N Conducted Emission Graph

#### Test Data:

Lines (L/N)	Frequency (MHz)	Corrected QP Level (dBuV)	Limits QP (dBuV)	Over Limit QP (dB)	Frequency (MHz)	Corrected AV Level (dBuV)	Limits AV (dBuV)	Over Limit QP (dB)
L	0.365	47.8	58.6	-10.8	0.365	/	48.6	/
L	0.595	41.6	56	-14.4	0.595	/	46	/
L	1.935	38.4	56	-17.6	1.935	/	46	/
N	0.745	39.0	56	-17.0	0.745	/	46	/
N	1.955	38.9	56	-17.1	1.955	/	46	/
N	2.170	32.9	56	-23.1	2.170	/	46	/

#### Note:

- All readings are using a bandwidth of 9 kHz, with a 500 ms sweep time. A video filter was not used.
   "QP" means "Quasi-Peak" values, "AV" means "Average" values.
- 3) The other reading are too low against official limits that are not be recorded.

## **Test Equipments List:**

Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due
EMI test receiver	R&S	ESIB-26	100174	11/19/2016	11/18/2017
LISN	R&S	ESH2-Z5	100091	11/19/2016	11/18/2017
Transient Limiter	Agilent	11947A	3107A03648	11/19/2016	11/18/2017
Shielding Room	TDK	8m×4m×3m	N/A	04/17/2016	04/16/2018

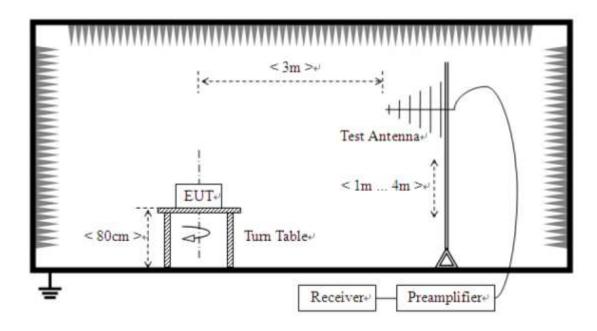
Note: All testing were performed using internationally recognized standards. All test instruments were calibrated and traceable to the National Institute of Standards and Technology (NIST).

# **Conducted Emission Test Set-up:**

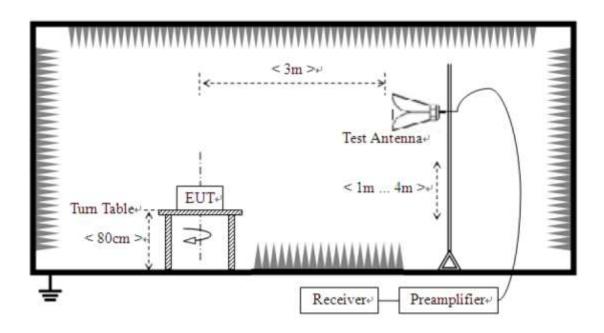


## **ATTACHMENT 6 - RADIATED EMISSION TEST RESULTS**

CLIENT:	Lidl US Trading, LLC	TEST STANDERD:	FCC Part 18		
MODEL NUMBERS:	SMW 900 B1	PRODUCT:	Microwave Oven		
MODEL TESTED:	SMW 900 B1	EUT DESIGNATION:	Home or Office		
TEMPERATURE:	22°C	HUMIDITY:	63%RH		
ATM PRESSURE:	103.0kPa	GROUNDING:	Through AC Power Cord		
TESTED BY:	Yang Dongmei	DATE OF TEST:	July 8 <sup>th</sup> , 2017		
TEST REFERENCE:	ANSI C63.4-2014, FCC/OST	MP-5:1986			
TEST PROCEDURE:	The EUT was set up according 5 for radiated emissions. Mich nonconductive table. The top placed on a flush mounted made at the frequency meas Signal discrimination was the data was recorded in Quasi-paverage detector mode above. The following data lists the signorrection factors (including a corrected readings against the given as follows:  FS= RA + AF + CF - AG  Where: FS = Field Strength  RA = Receiver Amplitude  AF = Antenna Factor  CF = Cable Attenuation Factor	rowave Oven was placed of the table is 1.0 m about a turntable. An EMI requirement range (pre-scanger) performed and the sign performed and the sign peak detection mode from a 1GHz.  gnificant emission frequentable and antenna correct in limits. Explanation of the limits.	on a 1m *1.5m ve the ground. The table is ceiver peak scan was in an Anechoic chamber. hificant peaks marked. All h 30 MHz to 1GHz and encies, measured levels, tion factors), and the		
	AG = Amplifier Gain				
TESTED RANGE:	30MHz to 24.5GHz				
TEST VOLTAGE:	120VAC / 60Hz				
RESULTS:	The EUT meet the requirements of test reference for radiated emissions. The test results relate only to the equipment under test provided by client.				
CHANGES OR MODIFICATIONS:	There were no modifications installed by ECMG Electronic Technical Testing Corp (Shenzhen) test personnel.				
M. UNCERTAINTY:	The maximum measurement uncertainty is evaluated as :				



For radiated emissions above 1GHz



## Field strength limits for out-of-band emissions:

For RF output power <500W, Limit at 300m = 27.96dBuV/mFor RF output power>500W, Limit at 300m = 20log [25\*SQRT(Power/500)]dBuV/m

#### Test Data:

	30MHz - 1GHz										
Frequency [MHz]	Antenna Polarization [V/H]	Corrected Reading [dBµV/m]	Factor (dB)	Field Strength [dBµV/m]	Delta, QP [dB]	3 Meters Limits [dBµV/m]					
723.928	V	12.3	23.0	35.30	-34.7	70.0					
131.082	V	14.2	12.0	26.20	-43.8	70.0					
620.942	V	7.7	21.5	29.20	-40.8	70.0					
702.585	Н	7.6	23.8	31.40	-42.53	70.0					
523.747	Н	8.3	18.1	26.40	-43.85	70.0					
630.661	Н	8.77	22.0	30.77	-42.88	70.0					

Note: 1) All readings are quasi-peak unless stated otherwise, using a bandwidth of 120kHz, with a 60s sweep time. A video filter was not used. 2) Field Strength = Read Level + Factor, Factor = Antenna Factor + Cable Loss - Preamp Factor.

#### 1GHz - 25GHz

Frequency [GHz]	Antenna Polarization [V/H]	Corrected Reading [dBµV/m]	Factor (dB)	Field Strength [dBµV/m]	Delta, AV [dB]	3 Meters Limits [dBµV/m]
14.723	V	16.02	35.34	51.36	-18.64	70.0
9.012	V	15.97	24.67	40.64	-29.36	70.0
17.098	V	13.22	39.71	52.93	-17.07	70.0
14.754	Н	16.09	35.34	51.43	-18.57	70.0
13.491	Н	14.61	33.41	48.02	-21.98	70.0
10.064	Н	14.34	28.07	42.41	-27.59	70.0

Note: 1) All readings are average unless stated otherwise, using a bandwidth of 1MHz, with a 60s sweep time. A video filter was not used. 2) Field Strength = Read Level + Factor, Factor = Antenna Factor + Cable Loss - Preamp Factor.

# Test Equipments List:

Test Equipment	Manufacturer	Model	Serial No.	Last Cal.	Cal. Due
EMI Test Receiver	R&S	ESIB-26	100174	11/19/2017	11/18/2016
Horn Antenna	R&S	HF906	100311	11/21/2017	11/20/2016
Hybrid Log Periodic Antenna	TDK	HLP-3003C	130144	11/21/2017	11/20/2016
Loop Antenna	ETS	ETS-6152	24934	11/21/2017	11/20/2016
Anechoic Chamber	TDK	9m×6 m×5.7m	N/A	04/17/2017	04/16/2017

Note: All testing were performed using internationally recognized standards. All test instruments were calibrated and traceable to the National Institute of Standards and Technology (NIST).

_	FNGINFFR		SENIOR ENGINEER
TESTED BY:	杨冬村	REVIEWED BY:	3 milion

## Radiated Emission Test Set-up (30-1000MHz):



# Radiated Emission Test Set-up (1-25GHz):



\*\*\* End Of Report \*\*\*