

# 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-1707-11747-FCC	
Prepared by: <u>Juvia</u> ViVi Huang/Assistant O	<u>ECMG</u> Company Name
Reviewed by: Jawen Yin/Senior Engineer	<u>ECMG</u>
QC Manager: Swall Zhang Swall Zhang/QC Manager	<u>ECMG</u> Company Name
Test Report Released by: Swall Zhang	July 11 <sup>th</sup> , 2017 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

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# 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

: Microwave Oven
: SMW 900 B1
: SMW 900 B1
: Lidl, SILVERCREST
: July 6 <sup>th</sup> , 2017
: July 8 <sup>th</sup> , 2017
: Lidl US Trading, LLC
3500 S. Clark Street,Arlington,VA 22202, United States.
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## **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	2М219Ј
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

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EUT -Uncovered View 2



EUT - Uncovered View 3

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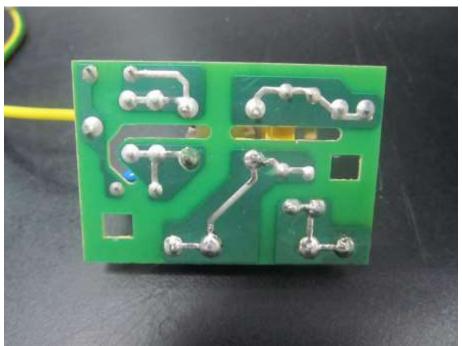
High-valtage Transformer view



Magnetron Front View

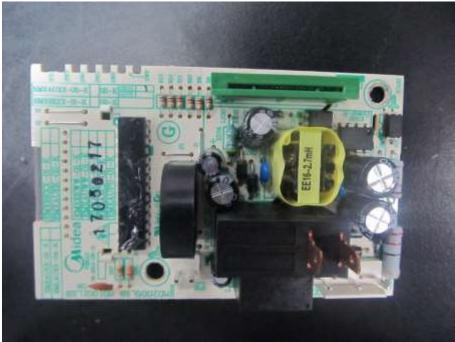


Power Filter Board Top View

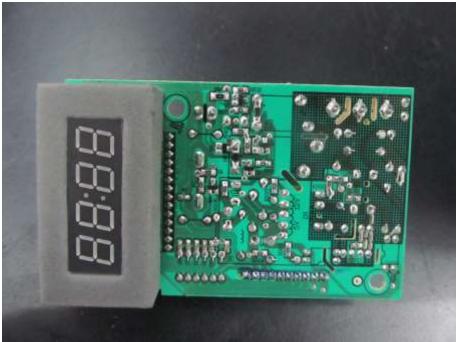


Power Filter Board Bottom View

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Mother board - Top View



Mother board - Bottom View

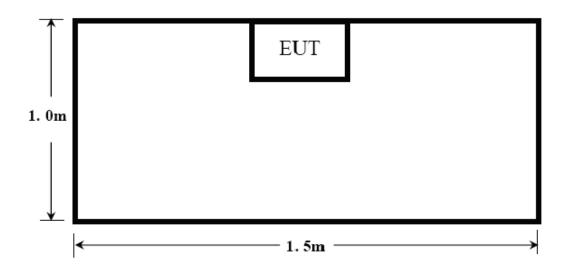
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# **Test System Details**

EUT						
Model Number:	SMV	V 900 B1				
Model Tested:	SMV	V 900 B1				
Description:	Micr	rowave Oven				
Input:	AC	120V/60Hz				
Manufacturer:	Lidl	US Trading, LL	С			
Support Equipment						
Description	٨	Model Number Serial Number Manufacturer				
			N/A			
		Cable	Description			
Description	on From To Length Shielded Ferrite (Meters) (Y/N) (Y/N)					
Power Cable	EUT	Plug	1.2	1	V	Ν
Note:The "EUT" means "Microwave Oven".						

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.



# 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	MP-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/cm <sup>2</sup> observed at any point 5cm or more from the external surface of the oven. A maximum of 1.0 mW/cm <sup>2</sup> 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:

TESTED BY:

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

REVIEWED BY:

ENGINEER

SENIOR ENGINEER

Radiation Hazard Test Set up:



# 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°C	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

**REVIEWED BY:** SENIOR ENGINEER

TESTED BY:

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℃				

#### Test Result:

Initial Temp	Final Temp	Measured Times	Measured out put
(℃)	(で)	(s)	Power(W)
20.0	40.6	1205	721.0

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

#### 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

ENGINEER

# RF Output power Test Set up:



FCC Test Report #: GUA-1707-11747-FCC Prepared for Lidl US Trading, LLC Prepared by ECMG Electronic Technical Testing Corp (Shenzhen).

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# 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:	<b>22</b> ℃	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:	<ul> <li>The EUT was set up according to the FCC MP-5 and FCC Part 18 for Operating Frequency Measurement.</li> <li>1) The variation of frequency with time. The operating frequency was measured using a spectrum analyzer. Starting with the EUT at room temperature, a 1000ml water load in a beaker was located in the center of the oven. Set a spectrum analyzer with antenna at 3 meters distance form the oven and the oven was operated at maximum output power. The fundamental operating frequency was monitored until the water load was reduced to 20 percent of the original load.</li> <li>2) The variation of frequency with Line Voltage. The operating frequency was measured using a spectrum analyzer. The EUT was operated/warmed by at least 10 minutes of use with a 1000ml water load at room temperature at the beginning of the test. Then the operating frequency was monitored as the input voltage was varied between 80 and 125 percent of the nominal rating.</li> </ul>					
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	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).

ENGINEER

TESTED BY:

REVIEWED BY:

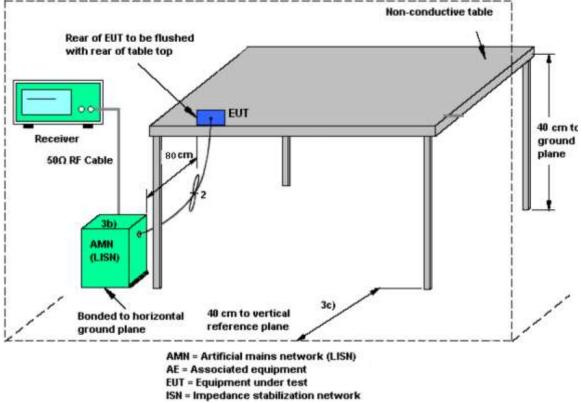
SENIOR ENGINEER

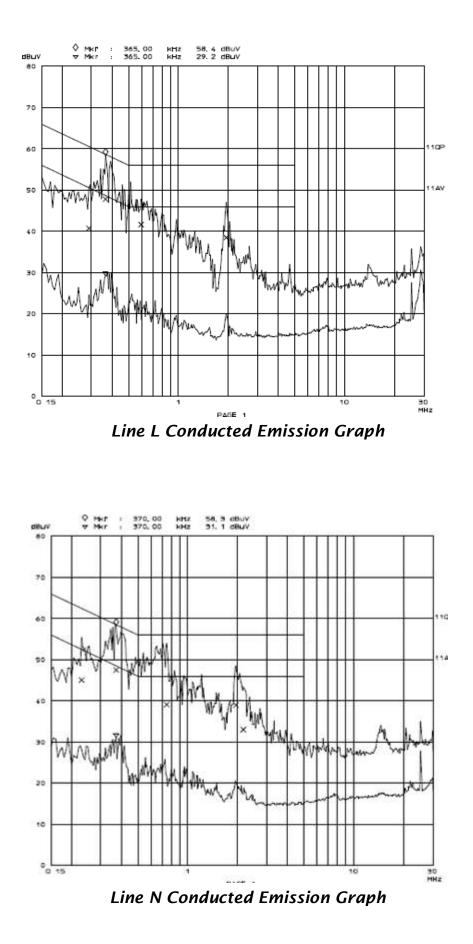


# ATTACHMENT 5 - CONDUCTED EMISSION TEST RESULTS

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:	<b>22</b> °C	HUMIDITY:	60%RH		
ATM PRESSURE:	101.1kPa	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 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 installed by ECMG Electronic Technical Testing Corp (Shenzhen) test personnel.				
M. UNCERTAINTY:	The maximum measurement 150KHz~ 30MHz: 3.0dB	uncertainty is evaluated	as :		







#### 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).

**TESTED BY:** 

ENGINEER

**REVIEWED BY:** 

SENIOR ENGINEER

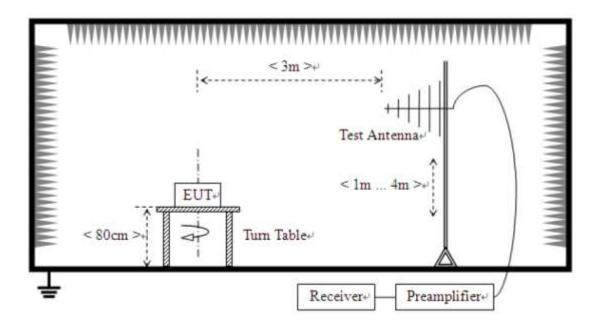
# Conducted Emission Test Set-up:



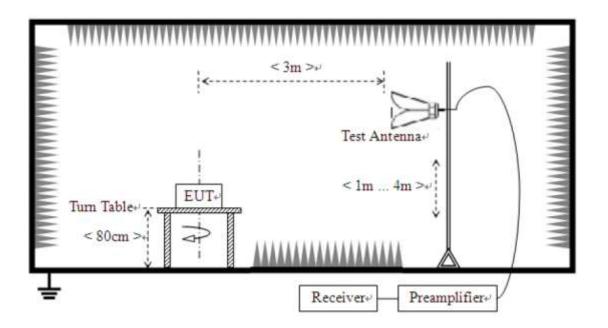
# ATTACHMENT 6 - RADIATED EMISSION TEST RESULTS

	1				
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 accordin 5 for radiated emissions. Mic nonconductive table. The top placed on a flush mounted m made at the frequency meas Signal discrimination was the data was recorded in Quasi-p average detector mode abov The following data lists the si correction factors (including of 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 AG = Amplifier Gain	rowave Oven was placed of the table is 1.0 m abo netal turntable. An EMI req urement range (pre-scan en performed and the sign beak detection mode from e 1GHz. Ignificant emission freque cable and antenna correc ne limits. Explanation of th	I 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 ncies, measured levels, tion factors), and the		
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 30~1000MHz: 4.76dB; 1~25GHz: 4.5dB	uncertainty is evaluated	as :		

For radiated emissions from 30MHz to1GHz



For radiated emissions above 1GHz



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

For RF output power <500W, Limit at 300m = 27.96dBuV/m For 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	ТДК	HLP-3003C	130144	11/21/2017	11/20/2016
Loop Antenna	ETS	ETS-6152	24934	11/21/2017	11/20/2016
Anechoic Chamber	ТДК	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).

**REVIEWED BY:** 

SENIOR ENGINEER

ENGINEER

**TESTED BY:** 



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

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



※※※ End Of Report ※※※

FCC Test Report #: GUA-1707-11747-FCC Prepared for Lidl US Trading, LLC Prepared by ECMG Electronic Technical Testing Corp (Shenzhen).

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