DATE: APRIL 22, 2015

FCC ID: ZNFUS991

		High		Substitution Me ation Services		ent		
				auon dervices	, me.			
Company:		LG						
Project #:		15120405						
Date:		4/9/2015						
Test Engi	neer:	R.Alegre						
Configura	tion:	EUT Only						
Location:		Chamber C						
Mode:			Band 4 Fundame	entals, 1.4MHz Ban	dwidth			
	o <u>ment:</u> :: Horn T119, a on: Horn T59,							
Receiving	: Horn T119, a on: Horn T59,	4ft SMA Cal	ble Warehous	e	EIRP	Limit	Delta	Not
Receiving Substituti	: Horn T119, a	4ft SMA Cal	ble Warehous		EIRP (dBm)	Limit (dBm)	Delta (dB)	Not
Receiving Substituti f	: Horn T119, a on: Horn T59, SG reading	4ft SMA Cal Ant. Pol.	ble Warehous Cable Loss	e Antenna Gain				Not
Receiving Substituti f MHz	: Horn T119, a on: Horn T59, SG reading	4ft SMA Cal Ant. Pol.	ble Warehous Cable Loss	e Antenna Gain				Not
Receiving Substituti f <u>MHz</u> Low Ch 1710.70 1710.70	: Horn T119, a on: Horn T59, SG reading (dBm)	4ft SMA Cal Ant. Pol. (H/V)	ble Warehous Cable Loss (dB)	e Antenna Gain (dBi)	(dBm)	(dBm)	(dB)	Not
Receiving Substituti f MHz Low Ch 1710.70 1710.70 Mid Ch	: Horn T119, a on: Horn T59, SG reading (dBm) 16.54 21.03	4ft SMA Cal Ant. Pol. (H/V) V H	Cable Loss (dB) 0.9 0.9	e Antenna Gain (dBi) 8.2 8.2 8.2	(dBm) 23.81 28.30	(dBm) 30.0 30.0	(dB) -6.2 -1.7	Not
Receiving Substituti f MHz Low Ch 1710.70 1710.70 Mid Ch 1732.50	: Horn T119, a on: Horn T59, SG reading (dBm) 16.54 21.03 16.95	4ft SMA Cal Ant. Pol. (H/V) V H	Cable Loss (dB) 0.9 0.9 0.9	e Antenna Gain (dBi) 8.2 8.2 8.2 8.2	(dBm) 23.81 28.30 24.22	(dBm) 30.0 30.0 30.0	(dB) -6.2 -1.7 -5.8	Not
Receiving Substituti f <u>MHz</u> Low Ch 1710.70 1710.70 Mid Ch 1732.50 1732.50	: Horn T119, a on: Horn T59, SG reading (dBm) 16.54 21.03	4ft SMA Cal Ant. Pol. (H/V) V H	Cable Loss (dB) 0.9 0.9	e Antenna Gain (dBi) 8.2 8.2 8.2	(dBm) 23.81 28.30	(dBm) 30.0 30.0	(dB) -6.2 -1.7	Not
Receiving Substituti f <u>MHz</u> Low Ch 1710.70 1710.70 Mid Ch 1732.50 1732.50 High Ch	: Horn T119, a on: Horn T59, SG reading (dBm) 16.54 21.03 16.95 20.85	4ft SMA Cal Ant. Pol. (H/V) V H V H	Cable Loss (dB) 0.9 0.9 0.9 0.9	e Antenna Gain (dBi) 8.2 8.2 8.2 8.2 8.2	(dBm) 23.81 28.30 24.22 28.12	(dBm) 30.0 30.0 30.0 30.0	(dB) -6.2 -1.7 -5.8 -1.9	Not
Receiving Substituti f <u>MHz</u> Low Ch 1710.70 1710.70 Mid Ch 1732.50 1732.50	: Horn T119, a on: Horn T59, SG reading (dBm) 16.54 21.03 16.95	4ft SMA Cal Ant. Pol. (H/V) V H	Cable Loss (dB) 0.9 0.9 0.9	e Antenna Gain (dBi) 8.2 8.2 8.2 8.2	(dBm) 23.81 28.30 24.22	(dBm) 30.0 30.0 30.0	(dB) -6.2 -1.7 -5.8	Not

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DATE: APRIL 22, 2015

FCC ID: ZNFUS991

		High		Substitution Me ation Services		ent		
Company:		LG			,			
Project #:		15 20405						
Date:		4/9/2015						
Test Engi		R.Alegre						
Configura		EUT Only						
Location:		Chamber C						
Mode:		LTE_QPSK B	and 4 Fundamen	itals, 1.4MHz Band	width			
Test Equ	oment:							
		and Chambe	r C SMA Cabl	es				
Receiving	: Horn T119, a		r C SMA Cabl					
Receiving Substituti	: Horn T119, ; on: Horn T59,	4ft SMA Cal	ole Warehous	e				
Receiving	: Horn T119, a on: Horn T59, SG reading	4ft SMA Cal Ant. Pol.	Cable Loss			Limit	Delta	Not
Receiving Substituti	: Horn T119, ; on: Horn T59,	4ft SMA Cal	ole Warehous	e	EIRP (dBm)	Limit (dBm)	Delta (dB)	Not
Receiving Substituti f	: Horn T119, a on: Horn T59, SG reading	4ft SMA Cal Ant. Pol. (H/V)	Cable Loss	e Antenna Gain	(dBm)			Not
Receiving Substituti f MHz	: Horn T119, a on: Horn T59, SG reading	4ft SMA Cal Ant. Pol.	Cable Loss	e Antenna Gain				Not
Receiving Substituti f MHz Low Ch 1710.70 1710.70	: Horn T119, a on: Horn T59, SG reading (dBm)	4ft SMA Cal Ant. Pol. (H/V)	Cable Loss (dB)	e Antenna Gain (dBi)	(dBm)	(dBm)	(dB)	Not
Receiving Substituti f MHz Low Ch 1710.70 1710.70 Mid Ch	: Horn T119, a on: Horn T59, SG reading (dBm) 17.51 21.78	4ft SMA Cal Ant. Pol. (H/V) V H	Cable Loss (dB) 0.9 0.9	e Antenna Gain (dBi) 8.2 8.2 8.2	(dBm) 24.78 29.05	(dBm) 30.0 30.0	(dB) -5.2 -0.9	Not
Receiving Substituti f MHz Low Ch 1710.70 1710.70 Mid Ch 1732.50	: Horn T119, a on: Horn T59, SG reading (dBm) 17.51 21.78 17.93	4ft SMA Cal Ant. Pol. (H/V) V H	Cable Loss (dB) 0.9 0.9 0.9	e Antenna Gain (dBi) 8.2 8.2 8.2 8.2	(dBm) 24.78 29.05 25.20	(dBm) 30.0 30.0 30.0	(dB) -5.2 -0.9 4.8	Not
Receiving Substituti f MHz Low Ch 1710.70 1710.70 Mid Ch 1732.50 1732.50	: Horn T119, a on: Horn T59, SG reading (dBm) 17.51 21.78	4ft SMA Cal Ant. Pol. (H/V) V H	Cable Loss (dB) 0.9 0.9	e Antenna Gain (dBi) 8.2 8.2 8.2	(dBm) 24.78 29.05	(dBm) 30.0 30.0	(dB) -5.2 -0.9	Not
Receiving Substituti f MHz Low Ch 1710.70 1710.70 Mid Ch 1732.50 High Ch	: Horn T119, ; on: Horn T59, SG reading (dBm) 17.51 21.78 17.93 21.62	4ft SMA Cal Ant. Pol. (H/V) V H V H	Cable Loss (dB) 0.9 0.9 0.9 0.9	e Antenna Gain (dBi) 8.2 8.2 8.2 8.2 8.2 8.2	(dBm) 24.78 29.05 25.20 28.89	(dBm) 30.0 30.0 30.0 30.0	(dB) -5.2 -0.9 -4.8 -1.1	Not
Receiving Substituti f MHz Low Ch 1710.70 1710.70 Mid Ch 1732.50 1732.50	: Horn T119, a on: Horn T59, SG reading (dBm) 17.51 21.78 17.93	4ft SMA Cal Ant. Pol. (H/V) V H	Cable Loss (dB) 0.9 0.9 0.9	e Antenna Gain (dBi) 8.2 8.2 8.2 8.2	(dBm) 24.78 29.05 25.20	(dBm) 30.0 30.0 30.0	(dB) -5.2 -0.9 4.8	Not

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REPORT NO: 15I20405 – E1 MODEL NUMER: LG-US991, US991, LGUS991 DATE: APRIL 22, 2015 FCC ID: ZNFUS991

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<u>GSM</u>

		_		Substitution Me Services, Inc. C				
Compar	IV:	LG						
Project	-	15 20405						
Dat		4/4/215						
Test Enginee	er:	Charles Vergo	nio					
Configuratio		EUT Only						
Locatio		Chamber C						
		EGPRS 1900						
Substitution:	ent: orn T119 and Ch Horn T59 Subst	amber C SM itution, 4ft S	MA Cable Wa					
<u>Test Equipme</u> Receiving: He	<u>ent:</u> orn T119 and Ch	amber C SM itution, 4ft S	MA Cable Wa	rehouse Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Test Equipme Receiving: Ho Substitution: f <u>MHz</u> Low Ch	ent: orn T119 and Ch Horn T59 Subst SG reading (dBm)	iamber C SM itution, 4ft S Ant. Pol. (H/V)	MA Cable Wa Cable Loss (dB)	Antenna Gain (dBi)	(dBm)	(dBm)	(dB)	Notes
Test Equipme Receiving: Ho Substitution: f MHz Low Ch 1850.20	ent: orn T119 and Ch Horn T59 Subst SG reading (dBm) 5.96	iamber C SM itution, 4ft S Ant. Pol. (H/V) V	MA Cable Wa Cable Loss (dB) 0.9	Antenna Gain (dBi) 8.0	(dBm) 13.07	(dBm) 33.0	(dB) -19.9	Notes
Test Equipme Receiving: Ho Substitution: f MHz Low Ch 1850.20 1850.20	ent: orn T119 and Ch Horn T59 Subst SG reading (dBm)	iamber C SM itution, 4ft S Ant. Pol. (H/V)	MA Cable Wa Cable Loss (dB)	Antenna Gain (dBi)	(dBm)	(dBm)	(dB)	Notes
Test Equipme Receiving: He Substitution: f MHz Low Ch 1850.20 1850.20 Mid Ch	ent: orn T119 and CH Horn T59 Subst SG reading (dBm) 5.96 19.81	iamber C SM itution, 4ft S Ant. Pol. (H/V) V H	MA Cable Wa Cable Loss (dB) 0.9 0.9	Antenna Gain (dBi) 8.0 8.0	(dBm) 13.07 26.92	(dBm) 33.0 33.0	(dB) -19.9 -6.1	Notes
Test Equipme Receiving: He Substitution: f MHz Low Ch 1850.20 1850.20 Mid Ch 1880.00	ent: orn T119 and CH Horn T59 Subst SG reading (dBm) 5.96 19.81 6.91	iamber C SM itution, 4ft S Ant. Pol. (H/V) V H	MA Cable Wa Cable Loss (dB) 0.9 0.9	Antenna Gain (dBi) 8.0 8.0 8.0	(dBm) 13.07 26.92 14.02	(dBm) 33.0 33.0 33.0	(dB) -19.9 -6.1 -19.0	Notes
Test Equipme Receiving: He Substitution: f MHz Low Ch 1850.20 1850.20 Mid Ch 1880.00 1880.00	ent: orn T119 and CH Horn T59 Subst SG reading (dBm) 5.96 19.81	iamber C SM itution, 4ft S Ant. Pol. (H/V) V H	MA Cable Wa Cable Loss (dB) 0.9 0.9	Antenna Gain (dBi) 8.0 8.0	(dBm) 13.07 26.92	(dBm) 33.0 33.0	(dB) -19.9 -6.1	Notes
Test Equipme Receiving: He Substitution: f MHz Low Ch 1850.20 1850.20 Mid Ch 1880.00	ent: orn T119 and CH Horn T59 Subst SG reading (dBm) 5.96 19.81 6.91	iamber C SM itution, 4ft S Ant. Pol. (H/V) V H	MA Cable Wa Cable Loss (dB) 0.9 0.9	Antenna Gain (dBi) 8.0 8.0 8.0	(dBm) 13.07 26.92 14.02	(dBm) 33.0 33.0 33.0	(dB) -19.9 -6.1 -19.0	Notes

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MODEL NUMER: LG-US991, US991, LGUS991

DATE: APRIL 22, 2015

FCC ID: ZNFUS991

		_		Substitution Me Services, Inc. C				
Company	:	LG						
Project #	:	15 20405						
Date	:	4/4/215						
Test Engineer:	:	Charles Vergo	nio					
Configuration		EUT Only						
Location		Chamber C						
Mode		GPRS 1900						
-	rn T119 and Ch orn T59 Substi SG reading	itution, 4ft S	iMA Cable Wa	rehouse Antenna Gain	EIRP	Limit	Margin	Notes
Substitution: H f MHz	orn T59 Subst	itution, 4ft S	iMA Cable Wa		EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Substitution: H f MHz Low Ch	orn T59 Substi SG reading (dBm)	itution, 4ft S Ant. Pol. (H/V)	MA Cable Wa Cable Loss (dB)	Antenna Gain (dBi)	(dBm)	(dBm)	(dB)	Notes
f MHz Low Ch 1850.20	orn T59 Substi SG reading (dBm) 9.14	itution, 4ft S Ant. Pol. (H/V) V	MA Cable Wa Cable Loss (dB) 0.9	Antenna Gain (dBi) 8.0	(dBm) 16.25	(dBm) 33.0	(dB) -16.8	Notes
f MHz Low Ch 1850.20 1850.20	orn T59 Substi SG reading (dBm)	itution, 4ft S Ant. Pol. (H/V)	MA Cable Wa Cable Loss (dB)	Antenna Gain (dBi)	(dBm)	(dBm)	(dB)	Notes
f MHz Low Ch 1850.20	orn T59 Substi SG reading (dBm) 9.14	itution, 4ft S Ant. Pol. (H/V) V	MA Cable Wa Cable Loss (dB) 0.9	Antenna Gain (dBi) 8.0	(dBm) 16.25	(dBm) 33.0	(dB) -16.8	Notes
f MHz Low Ch 1850.20 1850.20 Mid Ch 1880.00 1880.00	orn T59 Substi SG reading (dBm) 9.14 23.92	itution, 4ft S Ant. Pol. (H/V) V H	MA Cable Wa Cable Loss (dB) 0.9 0.9	Antenna Gain (dBi) 8.0 8.0	(dBm) 16.25 31.03	(dBm) 33.0 33.0	(dB) -16.8 -2.0	Notes
f MHz Low Ch 1850.20 1850.20 Mid Ch 1880.00	orn T59 Substi SG reading (dBm) 9.14 23.92 8.91	itution, 4ft S Ant. Pol. (H/V) V H	MA Cable Wa Cable Loss (dB) 0.9 0.9	Antenna Gain (dBi) 8.0 8.0 8.0	(dBm) 16.25 31.03 16.02	(dBm) 33.0 33.0 33.0	(dB) -16.8 -2.0 -17.0	Notes

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MODEL NUMER: LG-US991, US991, LGUS991

DATE: APRIL 22, 2015

FCC ID: ZNFUS991

				Substitution M Services, Inc. C				
Company:		LG						
Project #:		15 20405						
Date:		04/04/15						
Test Engi	neer:	Charels Vergo	nio					
Configura		EUT Only Z P	osition					
Mode:		EGPRS850						
Substituti	on: Dipole T2	73, 4ft SMA (ouse.	ERP	Limit	Margin	Notes
Substituti f	on: Dipole T2	73, 4ft SMA (Ant. Pol.	Cable Wareho	use. Antenna Gain		Limit	Margin	Notes
Substituti f MHz	on: Dipole T2	73, 4ft SMA (Cable Wareho	ouse.	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
Substituti f	on: Dipole T2 SG reading	73, 4ft SMA (Ant. Pol.	Cable Wareho	use. Antenna Gain				Notes
Substituti f MHz Low Ch	on: Dipole T2 SG reading (dBm)	73, 4ft SMA (Ant. Pol. (H/V)	Cable Wareho Cable Loss (dB)	use. Antenna Gain (dBd)	(dBm)	(dBm)	(dB)	Notes
Substituti f MHz Low Ch 824.20 824.20 Mid Ch	on: Dipole T2 SG reading (dBm) 27.25 14.51	73, 4ft SMA (Ant. Pol. (H/V) V H	Cable Wareho Cable Loss (dB) 0.9 0.9	Antenna Gain (dBd) 0.0 0.0	(dBm) 26.35 13.61	(dBm) 38.5 38.5	(dB) -12.1 -24.8	Notes
Substituti f MHz Low Ch 824.20 824.20 Mid Ch 836.60	on: Dipole T2 SG reading (dBm) 27.25 14.51 27.76	73, 4ft SMA (Ant. Pol. (H/V) V H V	Cable Wareho Cable Loss (dB) 0.9 0.9 0.9	Antenna Gain (dBd) 0.0 0.0 0.0	(dBm) 26.35 13.61 26.86	(dBm) 38.5 38.5 38.5	(dB) -12.1 -24.8 -11.6	Notes
Substituti f MHz Low Ch 824.20 824.20 Mid Ch 836.60 836.60	on: Dipole T2 SG reading (dBm) 27.25 14.51	73, 4ft SMA (Ant. Pol. (H/V) V H	Cable Wareho Cable Loss (dB) 0.9 0.9	Antenna Gain (dBd) 0.0 0.0	(dBm) 26.35 13.61	(dBm) 38.5 38.5	(dB) -12.1 -24.8	Note
Substituti f MHz Low Ch 824.20 824.20 Mid Ch 836.60	on: Dipole T2 SG reading (dBm) 27.25 14.51 27.76	73, 4ft SMA (Ant. Pol. (H/V) V H V	Cable Wareho Cable Loss (dB) 0.9 0.9 0.9	Antenna Gain (dBd) 0.0 0.0 0.0	(dBm) 26.35 13.61 26.86	(dBm) 38.5 38.5 38.5	(dB) -12.1 -24.8 -11.6	Notes

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MODEL NUMER: LG-US991, US991, LGUS991

DATE: APRIL 22, 2015

FCC ID: ZNFUS991

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		UL	Vernication	Services, Inc. C	namper			
Company:		LG						
Project #:		15 20405						
Date:		04/04/15						
Test Engi	neer:	Charels Vergo	nio					
Configura	tion:	EUT Only Z P	osition					
Mode:		GPRS850						
Substituti f	: Sunol T185, on: Dipole T2 SG reading	73, 4ft SMA (Ant. Pol.	Cable Wareho	ouse. Antenna Gain		Limit	Margin	Notes
Receiving Substituti f	on: Dipole T2 SG reading	73, 4ft SMA (Ant. Pol.	Cable Wareho	ouse. Antenna Gain				Notes
Receiving Substituti f MHz	on: Dipole T2	73, 4ft SMA (Cable Wareho	ouse.	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
Receiving Substituti f	on: Dipole T2 SG reading	73, 4ft SMA (Ant. Pol.	Cable Wareho	ouse. Antenna Gain				Notes
Receiving Substituti f MHz Low Ch 824.20 824.20	on: Dipole T2 SG reading (dBm)	73, 4ft SMA (Ant. Pol. (H/V)	Cable Wareho Cable Loss (dB)	ouse. Antenna Gain (dBd)	(dBm)	(dBm)	(dB)	Notes
Receiving Substituti f MHz Low Ch 824.20 824.20 Mid Ch	on: Dipole T2 SG reading (dBm) 32.66 20.26	73, 4ft SMA (Ant. Pol. (H/V) V H	Cable Wareho Cable Loss (dB) 0.9 0.9	ouse. Antenna Gain (dBd) 0.0 0.0	(dBm) 31.76 19.36	(dBm) 38.5 38.5	(dB) -6.7 -19.1	Notes
Receiving Substituti f MHz Low Ch 824.20 824.20 Mid Ch 836.60	on: Dipole T2 SG reading (dBm) 32.66 20.26 32.78	73, 4ft SMA (Ant. Pol. (H/V) V H	Cable Wareho Cable Loss (dB) 0.9 0.9 0.9	Antenna Gain (dBd) 0.0 0.0 0.0	(dBm) 31.76 19.36 31.88	(dBm) 38.5 38.5 38.5	(dB) -6.7 -19.1 -6.6	Notes
Receiving Substituti f MHz Low Ch 824.20 824.20 Mid Ch 836.60 836.60	on: Dipole T2 SG reading (dBm) 32.66 20.26	73, 4ft SMA (Ant. Pol. (H/V) V H	Cable Wareho Cable Loss (dB) 0.9 0.9	ouse. Antenna Gain (dBd) 0.0 0.0	(dBm) 31.76 19.36	(dBm) 38.5 38.5	(dB) -6.7 -19.1	Notes
Receiving Substituti f MHz Low Ch 824.20 824.20 Mid Ch 836.60	on: Dipole T2 SG reading (dBm) 32.66 20.26 32.78	73, 4ft SMA (Ant. Pol. (H/V) V H	Cable Wareho Cable Loss (dB) 0.9 0.9 0.9	Antenna Gain (dBd) 0.0 0.0 0.0	(dBm) 31.76 19.36 31.88	(dBm) 38.5 38.5 38.5	(dB) -6.7 -19.1 -6.6	Notes

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<u>WCDMA</u>

			UL	Verification	Services, Inc. C	hamber	C		
	Company:	LG							
	Project #:	15 20405							
	Date	: 4/4/2015							
est	Engineer:	Charles Vergoni	0						
	iguration:	-							
	-	HSDPA B2							
Rec	stitution:	orn T119, and C Horn T59 Subs	titution, 4ft	SMA Cable W				· •• • • •	
Rec	eiving: Ho stitution: I f	orn T119, and C Horn T59 Subs SG reading	Ant. Pol.	SMA Cable W Cable Loss	Antenna Gain	EIRP	Limit	Margin	Notes
Rec Sub	eiving: Ho stitution: I f MHz	orn T119, and C Horn T59 Subs	titution, 4ft	SMA Cable W		EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Rec Sub	eiving: Ho stitution: I f <u>MHz</u> Low Ch	orn T119, and C Horn T59 Subs SG reading (dBm)	Ant. Pol. (H/V)	SMA Cable W Cable Loss (dB)	Antenna Gain (dBi)	(dBm)	(dBm)	(dB)	Notes
Rec Sub	eiving: Ho stitution: f MHz Low Ch 1852.40	orn T119, and C Horn T59 Subs SG reading (dBm) 6.17	atitution, 4ft Ant. Pol. (H/V) V	SMA Cable W Cable Loss (dB) 0.9	Antenna Gain (dBi) 8.0	(dBm) 13.28	(dBm) 33.0	(dB) -19.7	Notes
Rec Sub	eiving: Ho stitution: I f <u>MHz</u> Low Ch	orn T119, and C Horn T59 Subs SG reading (dBm)	Ant. Pol. (H/V)	SMA Cable W Cable Loss (dB)	Antenna Gain (dBi)	(dBm)	(dBm)	(dB)	Notes
Rec	eiving: Ho stitution: I f MHz Low Ch 1852.40 1852.40	orn T119, and C Horn T59 Subs SG reading (dBm) 6.17	atitution, 4ft Ant. Pol. (H/V) V	SMA Cable W Cable Loss (dB) 0.9	Antenna Gain (dBi) 8.0	(dBm) 13.28	(dBm) 33.0	(dB) -19.7	Notes
Rec	eiving: Ho stitution: I f MHz Low Ch 1852.40 1852.40 Mid Ch	orn T119, and C Horn T59 Subs SG reading (dBm) 6.17 18.25	titution, 4ft Ant. Pol. (H/V) V H	SMA Cable W Cable Loss (dB) 0.9 0.9	Antenna Gain (dBi) 8.0 8.0	(dBm) 13.28 25.36	(dBm) 33.0 33.0	(dB) -19.7 -7.6	Notes
Rec	eiving: Ho stitution: f MHz Low Ch 1852.40 1852.40 Mid Ch 1880.00 1880.00 High Ch	orn T119, and C Horn T59 Subs SG reading (dBm) 6.17 18.25 6.32 17.92	titution, 4ft Ant. Pol. (H/V) V H V H	SMA Cable W Cable Loss (dB) 0.9 0.9 0.9 0.9	Antenna Gain (dBi) 8.0 8.0 8.0 8.0 8.0	(dBm) 13.28 25.36 13.43 25.03	(dBm) 33.0 33.0 33.0 33.0 33.0	(dB) -19.7 -7.6 -19.6 -8.0	Notes
Rec Sub	eiving: Ho stitution: f MHz Low Ch 1852.40 1852.40 Mid Ch 1880.00 1880.00	orn T119, and C Horn T59 Subs SG reading (dBm) 6.17 18.25 6.32	titution, 4ft Ant. Pol. (H/V) V H	SMA Cable W Cable Loss (dB) 0.9 0.9	Antenna Gain (dBi) 8.0 8.0 8.0	(dBm) 13.28 25.36 13.43	(dBm) 33.0 33.0 33.0	(dB) -19.7 -7.6 -19.6	Notes

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MODEL NUMER: LG-US991, US991, LGUS991

DATE: APRIL 22, 2015

FCC ID: ZNFUS991

		-		Substitution Me				
		UL	Verification 8	Services, Inc. C	hamber	C		
Company	r: LG							
-	: 15120405							
	e: 4/4/2015							
est Enginee	: Charles Vergoni	0						
Configuration	: EUT Only							
Mode	: Rel99 B2							
T	ent:							
lest Equipm								
<u>Test Equipm</u> Receiving: H		hamber C S	SMA Cables					
Receiving: H	orn T119, and C			arehouse				
Receiving: H				arehouse				
Receiving: H Substitution:	orn T119, and C Horn T59 Subs	titution, 4ft	SMA Cable W		EIRP	Limit	Margin	Notes
Receiving: H	orn T119, and C Horn T59 Subs	Ant. Pol.	SMA Cable W	Antenna Gain	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Receiving: H Substitution: f	orn T119, and C Horn T59 Subs	titution, 4ft	SMA Cable W		EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Receiving: H Substitution: f MHz	orn T119, and C Horn T59 Subs	Ant. Pol.	SMA Cable W	Antenna Gain			-	Notes
Receiving: H Substitution: f <u>MHz</u> Low Ch	orn T119, and C Horn T59 Subs SG reading (dBm)	titution, 4ft Ant. Pol. (H/V)	SMA Cable W Cable Loss (dB)	Antenna Gain (dBi)	(dBm)	(dBm)	(dB)	Notes
Receiving: H Substitution: f <u>MHz</u> Low Ch 1852.40	orn T119, and C Horn T59 Subs SG reading (dBm) 6.17	titution, 4ft Ant. Pol. (H/V) V	SMA Cable W Cable Loss (dB) 0.9	Antenna Gain (dBi) 8.0	(dBm) 13.28	(dBm) 33.0	(dB) -19.7	Notes
Receiving: H Substitution: f MHz Low Ch 1852.40 1852.40	orn T119, and C Horn T59 Subs SG reading (dBm) 6.17	titution, 4ft Ant. Pol. (H/V) V H	SMA Cable W Cable Loss (dB) 0.9 0.9 0.9	Antenna Gain (dBi) 8.0	(dBm) 13.28	(dBm) 33.0 33.0 33.0	(dB) -19.7 -7.5 -19.5	Notes
Receiving: H Substitution: f MHz Low Ch 1852.40 1852.40 Mid Ch 1880.00 1880.00	orn T119, and C Horn T59 Subs SG reading (dBm) 6.17 18.36	titution, 4ft Ant. Pol. (H/V) V H	SMA Cable W Cable Loss (dB) 0.9 0.9	Antenna Gain (dBi) 8.0 8.0	(dBm) 13.28 25.47	(dBm) 33.0 33.0	(dB) -19.7 -7.5	Notes
Receiving: H Substitution: f MHz Low Ch 1852.40 1852.40 Mid Ch 1880.00 1880.00 High Ch	orn T119, and C Horn T59 Subs SG reading (dBm) 6.17 18.36 6.44 18.17	titution, 4ft Ant. Pol. (H/V) V H V H	SMA Cable W Cable Loss (dB) 0.9 0.9 0.9 0.9	Antenna Gain (dBi) 8.0 8.0 8.0 8.0 8.0	(dBm) 13.28 25.47 13.55 25.28	(dBm) 33.0 33.0 33.0 33.0 33.0	(dB) -19.7 -7.5 -19.5 -7.7	Notes
Receiving: H Substitution: f MHz Low Ch 1852.40 1852.40 Mid Ch 1880.00 1880.00	orn T119, and C Horn T59 Subs SG reading (dBm) 6.17 18.36 6.44	titution, 4ft Ant. Pol. (H/V) V H	SMA Cable W Cable Loss (dB) 0.9 0.9 0.9	Antenna Gain (dBi) 8.0 8.0 8.0	(dBm) 13.28 25.47 13.55	(dBm) 33.0 33.0 33.0	(dB) -19.7 -7.5 -19.5	Notes

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MODEL NUMER: LG-US991, US991, LGUS991

DATE: APRIL 22, 2015

FCC ID: ZNFUS991

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		_		Substitution Me Services, Inc. C				
Company:		LG						
Project #:		15 20405						
Date:		04/04/15						
Test Engi	neer:	Charles Vergo	nio					
Configura		EUT Only Z P						
Mode:		HSDPA B5 FL						
Substituti	on: Dipole T2	73, 4ft SMA (ouse.	FRP	l imit	Margin	Notes
Receiving		73, 4ft SMA (Cable Wareho		ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
Receiving Substituti f <u>MHz</u> Low Ch	on: Dipole T2 SG reading (dBm)	73, 4ft SMA (Ant. Pol. (H/V)	Cable Wareho Cable Loss (dB)	ouse. Antenna Gain (dBd)	(dBm)	(dBm)	(dB)	Notes
Receiving Substituti f <u>MHz</u> Low Ch 826.40	on: Dipole T2 SG reading (dBm) 22.24	73, 4ft SMA (Ant. Pol. (H/V) V	Cable Wareho Cable Loss (dB) 0.9	ouse. Antenna Gain (dBd) 0.0	(dBm) 21.34	(dBm) 38.5	(dB) -17.1	Notes
Receiving Substituti f MHz Low Ch 826.40 826.40	on: Dipole T2 SG reading (dBm)	73, 4ft SMA (Ant. Pol. (H/V)	Cable Wareho Cable Loss (dB)	ouse. Antenna Gain (dBd)	(dBm)	(dBm)	(dB)	Notes
Receiving Substituti f MHz Low Ch 826.40 826.40 Mid Ch	on: Dipole T2 SG reading (dBm) 22.24 9.59	73, 4ft SMA (Ant. Pol. (H/V) V H	Cable Wareho Cable Loss (dB) 0.9 0.9	ouse. Antenna Gain (dBd) 0.0 0.0	(dBm) 21.34 8.69	(dBm) 38.5 38.5	(dB) -17.1 -29.8	Notes
Receiving Substituti f MHz Low Ch 826.40 826.40 Mid Ch 836.60	on: Dipole T2 SG reading (dBm) 22.24 9.59 22.53	73, 4ft SMA (Ant. Pol. (H/V) V H V	Cable Wareho Cable Loss (dB) 0.9 0.9 0.9	Antenna Gain (dBd) 0.0 0.0 0.0	(dBm) 21.34 8.69 21.63	(dBm) 38.5 38.5 38.5	(dB) -17.1 -29.8 -16.8	Notes
Receiving Substituti f <u>MHz</u> Low Ch 826.40 826.40 Mid Ch 836.60 836.60	on: Dipole T2 SG reading (dBm) 22.24 9.59	73, 4ft SMA (Ant. Pol. (H/V) V H	Cable Wareho Cable Loss (dB) 0.9 0.9	ouse. Antenna Gain (dBd) 0.0 0.0	(dBm) 21.34 8.69	(dBm) 38.5 38.5	(dB) -17.1 -29.8	Notes
Receiving Substituti f MHz Low Ch 826.40 826.40 Mid Ch 836.60	on: Dipole T2 SG reading (dBm) 22.24 9.59 22.53	73, 4ft SMA (Ant. Pol. (H/V) V H V	Cable Wareho Cable Loss (dB) 0.9 0.9 0.9	Antenna Gain (dBd) 0.0 0.0 0.0	(dBm) 21.34 8.69 21.63	(dBm) 38.5 38.5 38.5	(dB) -17.1 -29.8 -16.8	Notes

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FCC ID: ZNFUS991

		UL	Verification §	Services, Inc. C	hamber	C		
Company	:	LG						
Project #:		15 20405						
Date:		04/04/15						
Test Engi	neer:	Charles Vergo	onio					
Configura		EUT Only Z P						
Mode:		REL99 B5 FU						
Receiving Substitut	g: Sunol T185, ion: Dipole T2 SG reading	73, 4ft SMA	Cable Wareho	use. Antenna Gain		Limit	Margin	Notes
Receiving Substituti f MHz	g: Sunol T185, on: Dipole T2	73, 4ft SMA (Cable Wareho	ouse.	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
Receiving Substitut f <u>MHz</u> Low Ch	g: Sunol T185, ion: Dipole T2 SG reading (dBm)	73, 4ft SMA Ant. Pol. (H/V)	Cable Wareho Cable Loss (dB)	ouse. Antenna Gain (dBd)	(dBm)	(dBm)	(dB)	Notes
Receiving Substituti f MHz Low Ch 826.40	g: Sunol T185, ion: Dipole T2 SG reading (dBm) 22.28	73, 4ft SMA (Ant. Pol. (H/V) V	Cable Wareho	ouse. Antenna Gain (dBd) 0.0	(dBm) 21.38	(dBm) 38.5	(dB) -17.1	Notes
Receiving Substitut f <u>MHz</u> Low Ch	g: Sunol T185, ion: Dipole T2 SG reading (dBm)	73, 4ft SMA Ant. Pol. (H/V)	Cable Wareho Cable Loss (dB) 0.9	ouse. Antenna Gain (dBd)	(dBm)	(dBm)	(dB)	Notes
Receiving Substituti f MHz Low Ch 826.40 826.40 Mid Ch 836.60	2: Sunol T185, ion: Dipole T2: SG reading (dBm) 22.28 9.74 22.62	73, 4ft SMA (Ant. Pol. (H/V) V H	Cable Wareho Cable Loss (dB) 0.9 0.9 0.9	Antenna Gain (dBd) 0.0 0.0 0.0	(dBm) 21.38 8.84 21.72	(dBm) 38.5 38.5 38.5	(dB) -17.1 -29.6 -16.7	Notes
Substitut f MHz Low Ch 826.40 826.40 Mid Ch 836.60 836.60	2: Sunol T185, ion: Dipole T2 SG reading (dBm) 22.28 9.74	73, 4ft SMA (Ant. Pol. (H/V) V H	Cable Wareho Cable Loss (dB) 0.9 0.9	ouse. Antenna Gain (dBd) 0.0 0.0	(dBm) 21.38 8.84	(dBm) 38.5 38.5	(dB) -17.1 -29.6	Notes
Receiving Substituti f MHz Low Ch 826.40 826.40 Mid Ch 836.60	2: Sunol T185, ion: Dipole T2: SG reading (dBm) 22.28 9.74 22.62	73, 4ft SMA (Ant. Pol. (H/V) V H	Cable Wareho Cable Loss (dB) 0.9 0.9 0.9	Antenna Gain (dBd) 0.0 0.0 0.0	(dBm) 21.38 8.84 21.72	(dBm) 38.5 38.5 38.5	(dB) -17.1 -29.6 -16.7	Notes

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CDMA

		_		Substitution Me Services, Inc. C				
Company	r:	LG						
Project #		15 20405						
Date		4/11/215						
Test Engineer	-	Charles Vergo	nio					
Configuration		EUT Only						
Location		Chamber B						
Mode		CDMA BC1 E	VDO					
Test Equipmer Receiving: Hor Substitution: H	n <u>t:</u> rn T345 and Ch Iorn T59 Subst	amber B SN itution, 4ft S	/IA Cables iMA Cable Wa		FIRP	Limit	Margin	Note
Test Equipmer Receiving: Hor	<u>nt:</u> rn T345 and Ch	amber B SN itution, 4ft S	/IA Cables iMA Cable Wa	rehouse Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Note
Test Equipmer Receiving: Hor Substitution: H f MHz Low Ch	n <u>t:</u> rn T345 and Ch Iorn T59 Subst SG reading (dBm)	iamber B SM itution, 4ft S Ant. Pol. (H/V)	/A Cables MA Cable Wa Cable Loss (dB)	Antenna Gain (dBi)	(dBm)	(dBm)	(dB)	Notes
Test Equipmer Receiving: Hor Substitution: H f MHz Low Ch 1851.25	n <u>t:</u> rn T345 and Ch Iorn T59 Subst SG reading (dBm) 6.21	amber B SM itution, 4ft S Ant. Pol. (H/V) V	A Cables MA Cable Wa Cable Loss (dB) 0.9	Antenna Gain (dBi) 8.0	(dBm) 13.32	(dBm) 33.0	(dB) -19.7	Notes
Test Equipmer Receiving: Hor Substitution: H f <u>MHz</u> Low Ch 1851.25 1851.25	n <u>t:</u> rn T345 and Ch Iorn T59 Subst SG reading (dBm)	iamber B SM itution, 4ft S Ant. Pol. (H/V)	/A Cables MA Cable Wa Cable Loss (dB)	Antenna Gain (dBi)	(dBm)	(dBm)	(dB)	Note
Test Equipmer Receiving: Hor Substitution: H f MHz Low Ch 1851.25 1851.25 Mid Ch	nt: rn T345 and Ch Iorn T59 Subst SG reading (dBm) 6.21 18.90	amber B SM itution, 4ft S Ant. Pol. (H/V) V H	A Cables MA Cable Wa Cable Loss (dB) 0.9 0.9	Antenna Gain (dBi) 8.0 8.0	(dBm) 13.32 26.01	(dBm) 33.0 33.0	(dB) -19.7 -7.0	Notes
Test Equipmer Receiving: Hor Substitution: H f MHz Low Ch 1851.25 1851.25 Mid Ch 1880.00	nt: rn T345 and Ch lorn T59 Subst SG reading (dBm) 6.21 18.90 6.71	amber B SM itution, 4ft S Ant. Pol. (H/V) V H	A Cables MA Cable Wa Cable Loss (dB) 0.9 0.9	Antenna Gain (dBi) 8.0 8.0 8.0	(dBm) 13.32 26.01 13.82	(dBm) 33.0 33.0 33.0	(dB) -19.7 -7.0 -19.2	Note
Test Equipmer Receiving: Hor Substitution: H f MHz Low Ch 1851.25 1851.25 Mid Ch 1880.00 1880.00	nt: rn T345 and Ch Iorn T59 Subst SG reading (dBm) 6.21 18.90	amber B SM itution, 4ft S Ant. Pol. (H/V) V H	A Cables MA Cable Wa Cable Loss (dB) 0.9 0.9	Antenna Gain (dBi) 8.0 8.0	(dBm) 13.32 26.01	(dBm) 33.0 33.0	(dB) -19.7 -7.0	Notes
Test Equipmer Receiving: Hor Substitution: H f MHz Low Ch 1851.25 1851.25 Mid Ch 1880.00	nt: rn T345 and Ch lorn T59 Subst SG reading (dBm) 6.21 18.90 6.71	amber B SM itution, 4ft S Ant. Pol. (H/V) V H	A Cables MA Cable Wa Cable Loss (dB) 0.9 0.9	Antenna Gain (dBi) 8.0 8.0 8.0	(dBm) 13.32 26.01 13.82	(dBm) 33.0 33.0 33.0	(dB) -19.7 -7.0 -19.2	Note

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MODEL NUMER: LG-US991, US991, LGUS991

DATE: APRIL 22, 2015

FCC ID: ZNFUS991

				Substitution Me Services, Inc. C				
Company	<i>y</i> :	LG						
Project #	#:	15 20405						
Date	e:	4/11/215						
Test Engineer	r:	Charles Vergo	nio					
Configuration		EUT Only						
Location		Chamber B						
Mode		CDMA BC1 R	Π					
Substitution: H	rn T345 and Ch Iorn T59 Substi SG reading	tution, 4ft S Ant. Pol.	MA Cable Wa Cable Loss	Antenna Gain		Limit	Margin	Notes
Receiving: Ho Substitution: H f MHz	rn T345 and Ch Iorn T59 Substi	tution, 4ft S	MA Cable Wa		EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Receiving: Ho Substitution: H f <u>MHz</u> Low Ch	rn T345 and Ch Iorn T59 Substi SG reading (dBm)	tution, 4ft S Ant. Pol. (H/V)	MA Cable Wa Cable Loss (dB)	Antenna Gain (dBi)	(dBm)	(dBm)	(dB)	Notes
Receiving: Ho Substitution: H f MHz	rn T345 and Ch Iorn T59 Substi SG reading	tution, 4ft S Ant. Pol.	MA Cable Wa Cable Loss	Antenna Gain				Notes
Receiving: Ho Substitution: H f MHz Low Ch 1851.25	rn T345 and Ch Iorn T59 Substi SG reading (dBm) 6.32 18.91	Ant. Pol. (H/V) V H	MA Cable Wa Cable Loss (dB) 0.9	Antenna Gain (dBi) 8.0 8.0	(dBm) 13.43 26.02	(dBm) 33.0 33.0	(dB) -19.6 -7.0	Notes
Receiving: Ho Substitution: H f MHz Low Ch 1851.25 1851.25 Mid Ch 1880.00	rn T345 and Ch Iorn T59 Substi SG reading (dBm) 6.32 18.91 6.81	tution, 4ft S Ant. Pol. (H/V) V H	MA Cable Wa Cable Loss (dB) 0.9 0.9	Antenna Gain (dBi) 8.0 8.0 8.0	(dBm) 13.43 26.02 13.92	(dBm) 33.0 33.0 33.0	(dB) -19.6 -7.0 -19.1	Notes
Receiving: Ho Substitution: H f MHz Low Ch 1851.25 1851.25 Mid Ch 1880.00 1880.00	rn T345 and Ch Iorn T59 Substi SG reading (dBm) 6.32 18.91	Ant. Pol. (H/V) V H	MA Cable Wa Cable Loss (dB) 0.9 0.9	Antenna Gain (dBi) 8.0 8.0	(dBm) 13.43 26.02	(dBm) 33.0 33.0	(dB) -19.6 -7.0	Notes
Receiving: Ho Substitution: H f MHz Low Ch 1851.25 1851.25 Mid Ch 1880.00	rn T345 and Ch Iorn T59 Substi SG reading (dBm) 6.32 18.91 6.81	tution, 4ft S Ant. Pol. (H/V) V H	MA Cable Wa Cable Loss (dB) 0.9 0.9	Antenna Gain (dBi) 8.0 8.0 8.0	(dBm) 13.43 26.02 13.92	(dBm) 33.0 33.0 33.0	(dB) -19.6 -7.0 -19.1	Note:

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MODEL NUMER: LG-US991, US991, LGUS991

DATE: APRIL 22, 2015

FCC ID: ZNFUS991

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Company		LG						
Project #:		15 20405						
Date:		04/11/15						
Test Engi	neer:	Charles Vergo	nio					
Configura		EUT Only Z P						
Mode:		CDMA BC0 E						
	g: Sunol T243, ion: Dipole T2							
Substituti				use.				
f	SG reading			Antenna Gain	ERP	Limit	Margin	Notes
					ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
f MHz Low Ch	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss	Antenna Gain	(dBm)	(dBm)	(dB)	Notes
f MHz Low Ch 824.70	SG reading (dBm) 23.47	Ant. Pol. (H/V) V	Cable Loss (dB)	Antenna Gain (dBd) 0.0	(dBm) 22.57	(dBm) 38.5	(dB) -15.9	Notes
f MHz Low Ch 824.70 824.70	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	(dBm)	(dBm)	(dB)	Notes
f MHz Low Ch 824.70 824.70 Mid Ch	SG reading (dBm) 23.47 11.23	Ant. Pol. (H/V) V	Cable Loss (dB) 0.9 0.9	Antenna Gain (dBd) 0.0 0.0	(dBm) 22.57 10.33	(dBm) 38.5 38.5	(dB) -15.9 -28.1	Notes
f MHz Low Ch 824.70 824.70 Mid Ch 836.52	SG reading (dBm) 23.47 11.23 23.68	Ant. Pol. (H/V) V H	Cable Loss (dB) 0.9 0.9 0.9	Antenna Gain (dBd) 0.0 0.0 0.0	(dBm) 22.57 10.33 22.78	(dBm) 38.5 38.5 38.5	(dB) -15.9 -28.1 -15.7	Notes
f MHz Low Ch 824.70 824.70 Mid Ch 836.52 836.52	SG reading (dBm) 23.47 11.23	Ant. Pol. (H/V) V	Cable Loss (dB) 0.9 0.9	Antenna Gain (dBd) 0.0 0.0	(dBm) 22.57 10.33	(dBm) 38.5 38.5	(dB) -15.9 -28.1	Notes
f MHz Low Ch 824.70 824.70 Mid Ch 836.52	SG reading (dBm) 23.47 11.23 23.68	Ant. Pol. (H/V) V H	Cable Loss (dB) 0.9 0.9 0.9	Antenna Gain (dBd) 0.0 0.0 0.0	(dBm) 22.57 10.33 22.78	(dBm) 38.5 38.5 38.5	(dB) -15.9 -28.1 -15.7	Notes

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DATE: APRIL 22, 2015

FCC ID: ZNFUS991

		UL	Verification \$	Services, Inc. C	hamber	В		
Company	:	LG						
Project #		15120405						
Date:		04/11/15						
Test Eng	neer:	Charles Vergo	onio					
Configura		EUT Only Z P	osition					
Mode:		CDMA BC0 R						
Substitut f	g: Sunol T243, on: Dipole T2 SG reading	73, 4ft SMA Ant. Pol.	Cable Wareho	ouse. Antenna Gain		Limit	Margin	Notes
Receiving Substitut f MHz	g: Sunol T243, on: Dipole T2	73, 4ft SMA (Cable Wareho	ouse.	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
Receiving Substitut f <u>MHz</u> Low Ch	g: Sunol T243, on: Dipole T2 SG reading (dBm)	73, 4ft SMA Ant. Pol. (H/V)	Cable Wareho Cable Loss (dB)	ouse. Antenna Gain (dBd)	(dBm)	(dBm)	(dB)	Notes
Receiving Substitut f MHz Low Ch 824.70	g: Sunol T243, on: Dipole T2 SG reading	73, 4ft SMA Ant. Pol.	Cable Wareho	ouse. Antenna Gain	(dBm) 22.64			Notes
Receiving Substitut f <u>MHz</u> Low Ch	g: Sunol T243, ion: Dipole T2 SG reading (dBm) 23.54	73, 4ft SMA Ant. Pol. (H/V) V	Cable Wareho Cable Loss (dB) 0.9	ouse. Antenna Gain (dBd) 0.0	(dBm)	(dBm) 38.5	(dB) -15.8	Note
Receiving Substitut f MHz Low Ch 824.70 824.70 824.70 Mid Ch 836.52	g: Sunol T243, ion: Dipole T2 SG reading (dBm) 23.54 11.43 23.66	73, 4ft SMA (Ant. Pol. (H/V) V H	Cable Wareho Cable Loss (dB) 0.9 0.9 0.9	ouse. Antenna Gain (dBd) 0.0 0.0 0.0	(dBm) 22.64 10.53 22.76	(dBm) 38.5 38.5 38.5	(dB) -15.8 -27.9 -15.7	Notes
Receiving Substitut f <u>MHz</u> Low Ch 824.70 824.70 824.70 Mid Ch 836.52 836.52	g: Sunol T243, ion: Dipole T2 SG reading (dBm) 23.54 11.43	73, 4ft SMA Ant. Pol. (H/V) V H	Cable Wareho Cable Loss (dB) 0.9 0.9	ouse. Antenna Gain (dBd) 0.0 0.0	(dBm) 22.64 10.53	(dBm) 38.5 38.5	(dB) -15.8 -27.9	Notes
Receiving Substitut f MHz Low Ch 824.70 824.70 Mid Ch 836.52	g: Sunol T243, ion: Dipole T2 SG reading (dBm) 23.54 11.43 23.66	73, 4ft SMA (Ant. Pol. (H/V) V H	Cable Wareho Cable Loss (dB) 0.9 0.9 0.9	ouse. Antenna Gain (dBd) 0.0 0.0 0.0	(dBm) 22.64 10.53 22.76	(dBm) 38.5 38.5 38.5	(dB) -15.8 -27.9 -15.7	Notes

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REPORT NO: 15I20405 - E1

DATE: APRIL 22, 2015 FCC ID: ZNFUS991

MODEL NUMER: LG-US991, US991, LGUS991 12.1.3.1. LTE (MID CHANNEL ONLY)

				Substitution Me Services, Inc. C				
Company		LG		-				
Project #		15 20405						
Date:		4/13/2015						
Test Eng	ineer:	Jude Semana						
Configura			Cover + Dock (S					
Mode:		LTE_QPSK B	and 13 Fundame	entals, 10MHz Band	dwidth			
f	ion: Horn T273 SG reading		Cable Loss	Antenna Gain	ERP	Limit	Margin	No
			Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	No
f	SG reading	Ant. Pol.				1		No
f MHz Mid Ch	SG reading	Ant. Pol.				1		No
f MHz Mid Ch 782.00	SG reading (dBm) 19.03	Ant. Pol. (H/V) V	(dB)	(dBd)	(dBm) 18.13	(dBm) 34.8	(dB) -16.6	No
f MHz Mid Ch	SG reading (dBm)	Ant. Pol. (H/V)	(dB)	(dBd)	(dBm)	(dBm)	(dB)	No
f MHz Mid Ch 782.00	SG reading (dBm) 19.03	Ant. Pol. (H/V) V	(dB)	(dBd)	(dBm) 18.13	(dBm) 34.8	(dB) -16.6	No

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MODEL NUMER: LG-US991, US991, LGUS991

DATE: APRIL 22, 2015

FCC ID: ZNFUS991

		nigii		Substitution Me ation Services		ent		
Company:		LG						
Project #:		15 20405						
Date:		4/13/2015						
Test Engi	neer:	Jude Semana						
Configura		FUT + Smart	Cover + Dock (S	pot Check)				
_ocation:		Chamber G		por oncony				
Mode:			and 12 Fundame	ntals, 3MHz Bandv	vidth			
Substituti	: Horn T899, a on: Horn T273	3, Xft SMA Ca	able (SN # SE	RIALNUMBER)			Delta	Not
Receiving Substituti f	: Horn T899, a on: Horn T273 SG reading	3, Xft SMA Ca Ant. Pol.	able (SN # SE Cable Loss	RIALNUMBER) Antenna Gain	ERP	Limit	Delta (dB)	Not
Receiving Substituti f MHz	: Horn T899, a on: Horn T273	3, Xft SMA Ca	able (SN # SE	RIALNUMBER)			Delta (dB)	Not
Receiving Substituti f	: Horn T899, a on: Horn T273 SG reading	3, Xft SMA Ca Ant. Pol.	able (SN # SE Cable Loss	RIALNUMBER) Antenna Gain	ERP	Limit		No
Receiving Substituti f <u>MHz</u> Low Ch	y: Horn T899, a on: Horn T273 SG reading (dBm)	8, Xft SMA C: Ant. Pol. (H/V)	able (SN # SE Cable Loss (dB)	RIALNUMBER) Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	(dB)	No
Receiving Substituti f MHz Low Ch 700.50 700.50 Mid Ch	y: Horn T899, a on: Horn T273 SG reading (dBm) 0.00 0.00	8, Xft SMA Ca Ant. Pol. (H/V) V H	able (SN # SE Cable Loss (dB) 0.9 0.9	RIALNUMBER) Antenna Gain (dBd) 0.0 0.0	ERP (dBm) 0.00 0.00	Limit (dBm) 38.5 38.5	(dB) 0.0 0.0	No
Receiving Substituti f MHz Low Ch 700.50 700.50 Mid Ch 707.50	y: Horn T899, a on: Horn T273 SG reading (dBm) 0.00 0.00 15.90	8, Xft SMA Ca Ant. Pol. (H/V) V H	able (SN # SE Cable Loss (dB) 0.9 0.9 0.9	RIALNUMBER) Antenna Gain (dBd) 0.0 0.0 0.0	ERP (dBm) 0.00 0.00 15.00	Limit (dBm) 38.5 38.5 38.5	(dB) 0.0 0.0 -23.5	No
Receiving Substituti f MHz Low Ch 700.50 700.50 Mid Ch 707.50 707.50	y: Horn T899, a on: Horn T273 SG reading (dBm) 0.00 0.00	8, Xft SMA Ca Ant. Pol. (H/V) V H	able (SN # SE Cable Loss (dB) 0.9 0.9	RIALNUMBER) Antenna Gain (dBd) 0.0 0.0	ERP (dBm) 0.00 0.00	Limit (dBm) 38.5 38.5	(dB) 0.0 0.0	Not
Receiving Substituti f MHz Low Ch 700.50 700.50 Mid Ch 707.50	y: Horn T899, a on: Horn T273 SG reading (dBm) 0.00 0.00 15.90	8, Xft SMA Ca Ant. Pol. (H/V) V H	able (SN # SE Cable Loss (dB) 0.9 0.9 0.9	RIALNUMBER) Antenna Gain (dBd) 0.0 0.0 0.0	ERP (dBm) 0.00 0.00 15.00	Limit (dBm) 38.5 38.5 38.5	(dB) 0.0 0.0 -23.5	No

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MODEL NUMER: LG-US991, US991, LGUS991

DATE: APRIL 22, 2015

FCC ID: ZNFUS991

		High		Substitution Me ation Services		ent		
Company:		LG						
Project #:		15 20405						
Date:		4/13/2015						
Test Engi		Jude Semana						
Configura								
-			Cover + Dock (S	pot Check)				
Location:		Chamber G						
Mode:		LIE_QPSK B	and 5 Fundamen	tals, 1.4MHz Band	width			
Substituti	: Horn T899, a on: Horn T273	3, Xft SMA Ca	able (SN # SE	RIALNUMBER)				
Receiving Substituti f	: Horn T899, a on: Horn T273 SG reading	3, Xft SMA Ca Ant. Pol.	able (SN # SE Cable Loss	RIALNUMBER)	ERP	Limit	Delta	Not
Receiving Substituti	: Horn T899, a on: Horn T273	3, Xft SMA Ca	able (SN # SE	RIALNUMBER)			Delta (dB)	Not
Receiving Substituti f <u>MHz</u> Low Ch	: Horn T899, a on: Horn T273 SG reading (dBm)	8, Xft SMA C: Ant. Pol. (H/V)	able (SN # SE Cable Loss (dB)	RIALNUMBER) Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	(dB)	Not
Receiving Substituti f MHz Low Ch 824.70	: Horn T899, a on: Horn T273 SG reading (dBm) 0.00	8, Xft SMA Ca Ant. Pol. (H/V) V	able (SN # SE Cable Loss (dB) 0.9	RIALNUMBER) Antenna Gain (dBd) 0.0	ERP (dBm)	Limit (dBm) 38.5	(dB) 0.0	No
Receiving Substituti f MHz Low Ch 824.70 824.70	: Horn T899, a on: Horn T273 SG reading (dBm)	8, Xft SMA C: Ant. Pol. (H/V)	able (SN # SE Cable Loss (dB)	RIALNUMBER) Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	(dB)	Not
Receiving Substituti f MHz Low Ch 824.70 824.70 Mid Ch	: Horn T899, a on: Horn T273 SG reading (dBm) 0.00 0.00	8, Xft SMA Ca Ant. Pol. (H/V) V H	able (SN # SE Cable Loss (dB) 0.9 0.9	RIALNUMBER) Antenna Gain (dBd) 0.0 0.0	ERP (dBm) 0.00 0.00	Limit (dBm) 38.5 38.5	(dB) 0.0 0.0	Not
Receiving Substituti f MHz Low Ch 824.70 824.70 Mid Ch 836.50	: Horn T899, a on: Horn T273 SG reading (dBm) 0.00 0.00 18.90	8, Xft SMA Ca Ant. Pol. (H/V) V	able (SN # SE Cable Loss (dB) 0.9 0.9 0.9	RIALNUMBER) Antenna Gain (dBd) 0.0 0.0 0.0	ERP (dBm) 0.00 0.00 18.00	Limit (dBm) 38.5 38.5 38.5	(dB) 0.0 0.0 -20.5	Not
Receiving Substituti f MHz Low Ch 824.70 824.70 Mid Ch	: Horn T899, a on: Horn T273 SG reading (dBm) 0.00 0.00	8, Xft SMA Ca Ant. Pol. (H/V) V H	able (SN # SE Cable Loss (dB) 0.9 0.9	RIALNUMBER) Antenna Gain (dBd) 0.0 0.0	ERP (dBm) 0.00 0.00	Limit (dBm) 38.5 38.5	(dB) 0.0 0.0	Not
Receiving Substituti f MHz Low Ch 824.70 824.70 Mid Ch 836.50 836.50	: Horn T899, a on: Horn T273 SG reading (dBm) 0.00 0.00 18.90	8, Xft SMA Ca Ant. Pol. (H/V) V H	able (SN # SE Cable Loss (dB) 0.9 0.9 0.9	RIALNUMBER) Antenna Gain (dBd) 0.0 0.0 0.0	ERP (dBm) 0.00 0.00 18.00	Limit (dBm) 38.5 38.5 38.5	(dB) 0.0 0.0 -20.5	Not

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MODEL NUMER: LG-US991, US991, LGUS991

DATE: APRIL 22, 2015

FCC ID: ZNFUS991

		High		Substitution Me ation Services		ent		
Company:		LG						
Company: Project #:		15 20405						
Date:		4/13/2015						
Test Engi	noor	Jude Semana						
-			Owner i Daala (O					
Configura	tion:		Cover + Dock (S	pot Check)				
Location:		Chamber G						
Mode:		LIE_QPSK B	and 4 Fundamen	tals, 20MHz Bandw	viath			
Substituti	: Horn T711, ; on: Horn T60,	Xft SMA Cal	ble (SN # SER	IALNUMBER) W				
Receiving Substituti f	: Horn T711, a on: Horn T60, SG reading	Xft SMA Cal Ant. Pol.	ole (SN # SER Cable Loss	IALNUMBER) W Antenna Gain	EIRP	Limit	Delta	Not
Receiving Substituti	: Horn T711, ; on: Horn T60,	Xft SMA Cal	ble (SN # SER	IALNUMBER) W			Delta (dB)	Not
Receiving Substituti f <u>MHz</u> Low Ch	: Horn T711, a on: Horn T60, SG reading (dBm)	Xft SMA Cal Ant. Pol. (H/V)	ole (SN # SER Cable Loss (dB)	IALNUMBER) W Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	(dB)	Not
Receiving Substituti f MHz Low Ch 1720.00	: Horn T711, a on: Horn T60, SG reading (dBm) 0.00	Xft SMA Cal Ant. Pol. (H/V) V	Cable Loss (dB)	IALNUMBER) W Antenna Gain (dBi) 8.2	EIRP (dBm)	Limit (dBm) 30.0	(dB) 0.0	No
Receiving Substituti f MHz Low Ch 1720.00 1720.00	: Horn T711, a on: Horn T60, SG reading (dBm)	Xft SMA Cal Ant. Pol. (H/V)	ole (SN # SER Cable Loss (dB)	IALNUMBER) W Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	(dB)	No
Receiving Substituti f MHz Low Ch 1720.00 1720.00 Mid Ch	: Horn T711, a on: Horn T60, SG reading (dBm) 0.00 0.00	Xft SMA Cal Ant. Pol. (H/V) V H	ole (SN # SER Cable Loss (dB) 0.9 0.9	IALNUMBER) W Antenna Gain (dBi) 8.2 8.2 8.2	EIRP (dBm) 0.00 0.00	Limit (dBm) 30.0 30.0	(dB) 0.0 0.0	No
Receiving Substituti f MHz Low Ch 1720.00 1720.00 Mid Ch 1732.50	: Horn T711, a on: Horn T60, SG reading (dBm) 0.00 0.00 17.10	Xft SMA Cal Ant. Pol. (H/V) V H	Cable Loss (dB) 0.9 0.9 0.9	IALNUMBER) W Antenna Gain (dBi) 8.2 8.2 8.2 8.2	EIRP (dBm) 0.00 0.00 24.37	Limit (dBm) 30.0 30.0 30.0	(dB) 0.0 0.0 -5.6	No
Receiving Substituti f MHz Low Ch 1720.00 1720.00 Mid Ch 1732.50 1732.50	: Horn T711, a on: Horn T60, SG reading (dBm) 0.00 0.00	Xft SMA Cal Ant. Pol. (H/V) V H	ole (SN # SER Cable Loss (dB) 0.9 0.9	IALNUMBER) W Antenna Gain (dBi) 8.2 8.2 8.2	EIRP (dBm) 0.00 0.00	Limit (dBm) 30.0 30.0	(dB) 0.0 0.0	No
Receiving Substituti f MHz Low Ch 1720.00 1720.00 Mid Ch 1732.50	: Horn T711, a on: Horn T60, SG reading (dBm) 0.00 0.00 17.10	Xft SMA Cal Ant. Pol. (H/V) V H	Cable Loss (dB) 0.9 0.9 0.9	IALNUMBER) W Antenna Gain (dBi) 8.2 8.2 8.2 8.2	EIRP (dBm) 0.00 0.00 24.37	Limit (dBm) 30.0 30.0 30.0	(dB) 0.0 0.0 -5.6	Not

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MODEL NUMER: LG-US991, US991, LGUS991

DATE: APRIL 22, 2015

FCC ID: ZNFUS991

		High		Substitution Me ation Services		ent		
Company:		LG						
Project #:		15 20405						
Date:		4/13/2015						
Test Engi	neer:	Jude Semana						
Configura			Cover + Dock (S	oot Check)				
Location:		Chamber G		or oncony				
Mode:			and 25 Eundame	ntals, 5MHz Bandv	vidth			
Receiving	: Horn T711, a				(_		
	: Horn T711, a			es IALNUMBER) W	/arehouse	e		
Receiving	: Horn T711, a	Xft SMA Cal	ble (SN # SER			e Limit	Delta	Not
Receiving Substituti	: Horn T711, a on: Horn T60,	Xft SMA Cal	ble (SN # SER	IALNUMBER) W			Delta (dB)	Not
Receiving Substituti f <u>MHz</u> Low Ch	p: Horn T711, a on: Horn T60, SG reading (dBm)	Xft SMA Cal Ant. Pol. (H/V)	ole (SN # SER Cable Loss (dB)	IALNUMBER) W Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	(dB)	Not
Receiving Substituti f MHz Low Ch 1852.50	: Horn T711, a on: Horn T60, SG reading (dBm) 0.00	Xft SMA Cal Ant. Pol. (H/V) V	Cable Loss (dB)	IALNUMBER) W Antenna Gain (dBi) 8.0	EIRP (dBm)	Limit (dBm) 33.0	(dB) 0.0	No
Receiving Substituti f MHz Low Ch 1852.50 1852.50	p: Horn T711, a on: Horn T60, SG reading (dBm)	Xft SMA Cal Ant. Pol. (H/V)	ole (SN # SER Cable Loss (dB)	IALNUMBER) W Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	(dB)	No
Receiving Substituti f MHz Low Ch 1852.50 1852.50 Mid Ch	: Horn T711, a on: Horn T60, SG reading (dBm) 0.00 0.00	Xft SMA Cal Ant. Pol. (H/V) V H	ole (SN # SER Cable Loss (dB) 0.9 0.9	IALNUMBER) W Antenna Gain (dBi) 8.0 8.0	EIRP (dBm) 0.00 0.00	Limit (dBm) 33.0 33.0	(dB) 0.0 0.0	Not
Receiving Substituti f MHz Low Ch 1852.50 1852.50 Mid Ch 1882.50	: Horn T711, a on: Horn T60, SG reading (dBm) 0.00 0.00 13.88	Xft SMA Cal Ant. Pol. (H/V) V H	Cable Loss (dB) 0.9 0.9 0.9	IALNUMBER) W Antenna Gain (dBi) 8.0 8.0 8.0	EIRP (dBm) 0.00 0.00 20.99	Limit (dBm) 33.0 33.0 33.0	(dB) 0.0 0.0 -12.0	No
Receiving Substituti f MHz Low Ch 1852.50 1852.50 Mid Ch 1882.50 1882.50	: Horn T711, a on: Horn T60, SG reading (dBm) 0.00 0.00	Xft SMA Cal Ant. Pol. (H/V) V H	ole (SN # SER Cable Loss (dB) 0.9 0.9	IALNUMBER) W Antenna Gain (dBi) 8.0 8.0	EIRP (dBm) 0.00 0.00	Limit (dBm) 33.0 33.0	(dB) 0.0 0.0	Not
Receiving Substituti f MHz Low Ch 1852.50 1852.50 Mid Ch 1882.50	: Horn T711, a on: Horn T60, SG reading (dBm) 0.00 0.00 13.88	Xft SMA Cal Ant. Pol. (H/V) V H	Cable Loss (dB) 0.9 0.9 0.9	IALNUMBER) W Antenna Gain (dBi) 8.0 8.0 8.0	EIRP (dBm) 0.00 0.00 20.99	Limit (dBm) 33.0 33.0 33.0	(dB) 0.0 0.0 -12.0	Not

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REPORT NO: 15I20405 - E1

DATE: APRIL 22, 2015 FCC ID: ZNFUS991

MODEL NUMER: LG-US991, US991, LGUS991

12.1.3.2. GSM (MID CHANNEL ONLY)

		_		Substitution Me				
		UL	Verification §	ervices, Inc. C	hamber	C		
Company	:	LG						
Project #		15120405						
Date		4/13/2015						
Test Engineer		Jude Semana						
Configuration			Cover + Dock (S	oot Check)				
Location		Chamber G		int onioony				
Mode	-	GPRS1900						
Test Fourmen	t -							
Test Equpmen			MA Cablas					
Receiving: Hor	rn T711, and Cl							
Receiving: Hor	rn T711, and Cl			IMBER) Wareho	ouse			
Receiving: Hor Substitution: H	n T711, and Cl orn T60, Xft SI	MA Cable (S	N # SERIALNU					
Receiving: Hor Substitution: H	n T711, and Cl orn T60, Xft Sl SG reading	MA Cable (S	N # SERIALNU	Antenna Gain	EIRP	Limit	Margin	
Receiving: Hor Substitution: H f MHz	n T711, and Cl orn T60, Xft SI	MA Cable (S	N # SERIALNU			Limit (dBm)	Margin (dB)	_
Receiving: Hor Substitution: H f <u>MHz</u> Low Ch	n T711, and Cl orn T60, Xft Sl SG reading	MA Cable (S Ant. Pol. (H/V)	N # SERIALNI Cable Loss (dB)	Antenna Gain (dBi)	EIRP	(dBm)		_
Receiving: Hor Substitution: H f MHz Low Ch 1850.20	n T711, and Cl orn T60, Xft Sl SG reading	MA Cable (S Ant. Pol. (H/V) V	N # SERIALNU Cable Loss (dB) 0.9	Antenna Gain (dBi) 8.0	EIRP	(dBm) 33.0		
Receiving: Hor Substitution: H f MHz Low Ch 1850.20 1850.20	n T711, and Cl orn T60, Xft Sl SG reading	MA Cable (S Ant. Pol. (H/V)	N # SERIALNI Cable Loss (dB)	Antenna Gain (dBi)	EIRP	(dBm)		
Receiving: Hor Substitution: H f MHz Low Ch 1850.20 1850.20 Mid Ch	n T711, and Cl Iorn T60, Xft Sl SG reading (dBm)	MA Cable (S Ant. Pol. (H/V) V H	N # SERIALNU Cable Loss (dB) 0.9 0.9	Antenna Gain (dBi) 8.0 8.0	EIRP (dBm)	(dBm) 33.0 33.0	(dB)	
Receiving: Hor Substitution: H f MHz Low Ch 1850.20 1850.20 Mid Ch 1880.00	n T711, and Cl orn T60, Xft Sl SG reading (dBm) 19.52	MA Cable (S Ant. Pol. (H/V) V H V	N # SERIALNU Cable Loss (dB) 0.9 0.9 0.9	Antenna Gain (dBi) 8.0 8.0 8.0	EIRP (dBm) 26.63	(dBm) 33.0 33.0 33.0	(dB)	
Receiving: Hor Substitution: H f MHz Low Ch 1850.20 1850.20 Mid Ch 1880.00 1880.00	n T711, and Cl Iorn T60, Xft Sl SG reading (dBm)	MA Cable (S Ant. Pol. (H/V) V H	N # SERIALNU Cable Loss (dB) 0.9 0.9	Antenna Gain (dBi) 8.0 8.0	EIRP (dBm)	(dBm) 33.0 33.0	(dB)	
Receiving: Hor Substitution: H f MHz Low Ch 1850.20 1850.20 Mid Ch 1880.00	n T711, and Cl orn T60, Xft Sl SG reading (dBm) 19.52	MA Cable (S Ant. Pol. (H/V) V H V	N # SERIALNU Cable Loss (dB) 0.9 0.9 0.9	Antenna Gain (dBi) 8.0 8.0 8.0	EIRP (dBm) 26.63	(dBm) 33.0 33.0 33.0	(dB)	

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MODEL NUMER: LG-US991, US991, LGUS991

DATE: APRIL 22, 2015

FCC ID: ZNFUS991

				Substitution M Services, Inc. C				
Company:		LG						
Project #:		15 20405						
Date:		4/13/2015						
Engineer:		Jude Semana						
iguration:			Cover + Dock (S	pot Check)				
Location:		Chamber G		por oncony				
Mode:		GPRS850						
Substitutio	: Horn T899, a on: Horn T273	3, Xft SMA Ca	able (SN # SE	RIALNUMBER)			i i	
Receiving Substitutio f	: Horn T899, a on: Horn T273 SG reading	8, Xft SMA Ca Ant. Pol.	able (SN # SE Cable Loss	RIALNUMBER) Antenna Gain	ERP	Limit	Margin	Note
Receiving Substitutio f MHz	: Horn T899, a on: Horn T273	3, Xft SMA Ca	able (SN # SE	RIALNUMBER)			Margin (dB)	Note
Receiving Substitutio f MHz Low Ch	: Horn T899, a on: Horn T273 SG reading	3, Xft SMA Ca Ant. Pol. (H/V)	able (SN # SE Cable Loss (dB)	RIALNUMBER) Antenna Gain (dBd)	ERP	Limit (dBm)		Note
Receiving Substitutio f MHz Low Ch 824.20	: Horn T899, a on: Horn T273 SG reading	8, Xft SMA Ca Ant. Pol. (H/V) V	able (SN # SE Cable Loss (dB) 0.9	RIALNUMBER) Antenna Gain (dBd) 0.0	ERP	Limit (dBm) 38.5		Not
Receiving Substitutio f MHz Low Ch 824.20 824.20	: Horn T899, a on: Horn T273 SG reading	3, Xft SMA Ca Ant. Pol. (H/V)	able (SN # SE Cable Loss (dB)	RIALNUMBER) Antenna Gain (dBd)	ERP	Limit (dBm)		Note
Receiving Substitutio f MHz Low Ch 824.20 824.20 Mid Ch	: Horn T899, a on: Horn T273 SG reading (dBm)	8, Xft SMA Ca Ant. Pol. (H/V) V H	able (SN # SE Cable Loss (dB) 0.9 0.9	RIALNUMBER) Antenna Gain (dBd) 0.0 0.0	ERP (dBm)	Limit (dBm) 38.5 38.5	(dB)	Note
Receiving Substitutio f MHz Low Ch 824.20 824.20	: Horn T899, a on: Horn T273 SG reading	8, Xft SMA Ca Ant. Pol. (H/V) V	able (SN # SE Cable Loss (dB) 0.9	RIALNUMBER) Antenna Gain (dBd) 0.0	ERP	Limit (dBm) 38.5		Note
Receiving Substitution f MHz Low Ch 824.20 824.20 Mid Ch 836.60	: Horn T899, a on: Horn T273 SG reading (dBm) 31.20	8, Xft SMA Ca Ant. Pol. (H/V) V H	able (SN # SE Cable Loss (dB) 0.9 0.9	RIALNUMBER) Antenna Gain (dBd) 0.0 0.0 0.0	ERP (dBm) 30.30	Limit (dBm) 38.5 38.5 38.5	(dB) -8.1	Note
Receiving Substitutio f MHz Low Ch 824.20 824.20 824.20 Mid Ch 836.60 836.60	: Horn T899, a on: Horn T273 SG reading (dBm) 31.20	8, Xft SMA Ca Ant. Pol. (H/V) V H	able (SN # SE Cable Loss (dB) 0.9 0.9	RIALNUMBER) Antenna Gain (dBd) 0.0 0.0 0.0	ERP (dBm) 30.30	Limit (dBm) 38.5 38.5 38.5	(dB) -8.1	Note

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12.1.3.3. WCDMA (MID CHANNEL ONLY)

		-		Substitution Me Services, Inc. C				
Company		LG						
Project #		15 20405						
Date		4/13/2015						
lest Engineer	-	Jude Semana						
Configuration			Cover + Dock (S	oot Check)				
Mode:		Rel99 B2	oursi i Dock (O	por oneony				
Substitution:	orn T711, and C Horn T60, Xft S	SMA Cable (SN # SERIALN	IUMBER) Wareh		· 1 inst4	Manala	
Receiving: Ho	orn T711, and C	SMA Cable (SN # SERIALN	IUMBER) Wareh Antenna Gain (dBi)		Limit (dBm)	Margin (dB)	
Receiving: Ho Substitution: f <u>MHz</u> Low Ch	orn T711, and C Horn T60, Xft S SG reading	SMA Cable (: Ant. Pol. (H/V)	SN # SERIALN Cable Loss (dB)	Antenna Gain (dBi)	EIRP	(dBm)		
Receiving: Ho Substitution: f MHz Low Ch 1852.40	orn T711, and C Horn T60, Xft S SG reading	SMA Cable (Ant. Pol. (H/V) V	SN # SERIALN Cable Loss (dB) 0.9	Antenna Gain (dBi) 8.0	EIRP	(dBm) 33.0		
Receiving: Ho Substitution: f MHz Low Ch 1852.40 1852.40	orn T711, and C Horn T60, Xft S SG reading	SMA Cable (: Ant. Pol. (H/V)	SN # SERIALN Cable Loss (dB)	Antenna Gain (dBi)	EIRP	(dBm)		
Receiving: Ho Substitution: f MHz Low Ch 1852.40 1852.40 Mid Ch	orn T711, and C Horn T60, Xft S SG reading (dBm)	SMA Cable (S Ant. Pol. (H/V) V H	SN # SERIALN Cable Loss (dB) 0.9 0.9	Antenna Gain (dBi) 8.0 8.0	EIRP (dBm)	(dBm) 33.0 33.0	(dB)	
Receiving: Ho Substitution: f MHz Low Ch 1852.40 1852.40 Mid Ch 1880.00	orn T711, and C Horn T60, Xft S SG reading (dBm) 14.01	SMA Cable (S Ant. Pol. (H/V) V H	SN # SERIALN Cable Loss (dB) 0.9 0.9 0.9	Antenna Gain (dBi) 8.0 8.0 8.0	EIRP (dBm) 21.12	(dBm) 33.0 33.0 33.0	(dB) -11.9	
Receiving: Ho Substitution: f MHz Low Ch 1852.40 1852.40 Mid Ch 1880.00 1880.00	orn T711, and C Horn T60, Xft S SG reading (dBm)	SMA Cable (S Ant. Pol. (H/V) V H	SN # SERIALN Cable Loss (dB) 0.9 0.9	Antenna Gain (dBi) 8.0 8.0	EIRP (dBm)	(dBm) 33.0 33.0	(dB)	
Receiving: Ho Substitution: f MHz Low Ch 1852.40 1852.40 Mid Ch 1880.00	orn T711, and C Horn T60, Xft S SG reading (dBm) 14.01	SMA Cable (S Ant. Pol. (H/V) V H	SN # SERIALN Cable Loss (dB) 0.9 0.9 0.9	Antenna Gain (dBi) 8.0 8.0 8.0	EIRP (dBm) 21.12	(dBm) 33.0 33.0 33.0	(dB) -11.9	

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FCC ID: ZNFUS991

				Substitution Me Services, Inc. C				
Company	:	LG						
Project #		15 20405						
Date:		4/13/2015						
Test Eng	ineer:	Jude Semana						
Configura		EUT + Smart	Cover + Dock (S	pot Check)				
Mode:		REL99 B5 FU		. ,				
Substitut	g: Horn T899, a ion: Horn T273	3, Xft SMA C	able (SN # SE	es RIALNUMBER) \ Antenna Gain			Margin	No
Receivin Substitut f MHz	g: Horn T899, a	3, Xft SMA C	able (SN # SE	RIALNUMBER)		se Limit (dBm)	Margin (dB)	No
Receivin Substitut f MHz Low Ch	g: Horn T899, a ion: Horn T273 SG reading	3, Xft SMA C Ant. Pol. (H/V)	able (SN # SE Cable Loss (dB)	RIALNUMBER) \ Antenna Gain (dBd)	ERP	Limit (dBm)		No
Receivin Substitut f MHz Low Ch 826.40	g: Horn T899, a ion: Horn T273 SG reading	8, Xft SMA C Ant. Pol. (H/V) V	able (SN # SE Cable Loss (dB) 0.9	RIALNUMBER) \ Antenna Gain (dBd) 0.0	ERP	Limit (dBm) 38.5		No
Receivin Substitut f MHz Low Ch	g: Horn T899, a ion: Horn T273 SG reading	3, Xft SMA C Ant. Pol. (H/V)	able (SN # SE Cable Loss (dB)	RIALNUMBER) \ Antenna Gain (dBd)	ERP	Limit (dBm)		No
Receivin Substitut f MHz Low Ch 826.40 826.40 Mid Ch 836.60	g: Horn T899, a ion: Horn T273 SG reading (dBm) 21.17	8, Xft SMA C Ant. Pol. (H/V) V	able (SN # SE Cable Loss (dB) 0.9 0.9	RIALNUMBER) \ Antenna Gain (dBd) 0.0	ERP	Limit (dBm) 38.5 38.5 38.5 38.5	(dB) -18.2	No
Receivin, Substitut f MHz Low Ch 826.40 826.40 Mid Ch 836.60 836.60	g: Horn T899, a ion: Horn T273 SG reading (dBm)	8, Xft SMA C Ant. Pol. (H/V) V H	able (SN # SE Cable Loss (dB) 0.9 0.9	RIALNUMBER) \ Antenna Gain (dBd) 0.0 0.0	ERP (dBm)	Limit (dBm) 38.5 38.5	(dB)	No
Receivin Substitut f MHz Low Ch 826.40 826.40 Mid Ch 836.60	g: Horn T899, a ion: Horn T273 SG reading (dBm) 21.17	8, Xft SMA C Ant. Pol. (H/V) V H	able (SN # SE Cable Loss (dB) 0.9 0.9	RIALNUMBER) \ Antenna Gain (dBd) 0.0 0.0 0.0	ERP (dBm) 20.27	Limit (dBm) 38.5 38.5 38.5 38.5	(dB) -18.2	No

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1

		_		Substitution Me ervices, Inc. C				
Company		LG						
Project #		15 20405						
Date		4/15/2015						
Test Engineer:		Jude Semana						
Configuration		EUT + Smart	Cover + Charging	Dock				
Location		Chamber G						
Mode	-	CDMA BC1 R	п					
Test Equipmen								
Receiving: Hor	n T711, and Cl							
Receiving: Hor	n T711, and Cl			IMBER) Wareho	ouse			
Receiving: Hor	n T711, and Cl orn T60, Xft SI	MA Cable (S	N # SERIALNU			Limit	Margin	
Receiving: Hor Substitution: H	n T711, and Cl	MA Cable (S	N # SERIALNU	IMBER) Wareho Antenna Gain (dBi)		Limit (dBm)	Margin (dB)	
Receiving: Hor Substitution: H f <u>MHz</u> Low Ch	n T711, and Cl orn T60, Xft Sl SG reading	MA Cable (S Ant. Pol. (H/V)	N # SERIALNU Cable Loss	Antenna Gain	EIRP	(dBm)	. – .	
Receiving: Hor Substitution: H f <u>MHz</u> Low Ch 1851.25	n T711, and Cl orn T60, Xft Sl SG reading	MA Cable (S Ant. Pol. (H/V) V	N # SERIALNU Cable Loss (dB) 0.9	Antenna Gain (dBi) 8.0	EIRP	(dBm) 33.0	. – .	
Receiving: Hor Substitution: H f MHz Low Ch 1851.25 1851.25	n T711, and Cl orn T60, Xft Sl SG reading	MA Cable (S Ant. Pol. (H/V)	N # SERIALNI Cable Loss (dB)	Antenna Gain (dBi)	EIRP	(dBm)	. – .	
Receiving: Hor Substitution: H f MHz Low Ch 1851.25 1851.25 Mid Ch	n T711, and Cl orn T60, Xft Sl SG reading (dBm)	MA Cable (S Ant. Pol. (H/V) V H	N # SERIALNU Cable Loss (dB) 0.9 0.9	Antenna Gain (dBi) 8.0 8.0	EIRP (dBm)	(dBm) 33.0 33.0	(dB)	
Receiving: Hor Substitution: H f MHz Low Ch 1851.25 1851.25 Mid Ch 1880.00	n T711, and Cl orn T60, Xft Sl SG reading (dBm) 2.44	MA Cable (S Ant. Pol. (H/V) V H	N # SERIALNU Cable Loss (dB) 0.9 0.9 0.9	Antenna Gain (dBi) 8.0 8.0 8.0	EIRP (dBm) 9.55	(dBm) 33.0 33.0 33.0	(dB) -23.5	
Receiving: Hor Substitution: H f MHz Low Ch 1851.25 1851.25 Mid Ch 1880.00 1880.00	n T711, and Cl orn T60, Xft Sl SG reading (dBm)	MA Cable (S Ant. Pol. (H/V) V H	N # SERIALNU Cable Loss (dB) 0.9 0.9	Antenna Gain (dBi) 8.0 8.0	EIRP (dBm)	(dBm) 33.0 33.0	(dB)	
Receiving: Hor Substitution: H f MHz Low Ch 1851.25 1851.25 Mid Ch 1880.00	n T711, and Cl orn T60, Xft Sl SG reading (dBm) 2.44	MA Cable (S Ant. Pol. (H/V) V H	N # SERIALNU Cable Loss (dB) 0.9 0.9 0.9	Antenna Gain (dBi) 8.0 8.0 8.0	EIRP (dBm) 9.55	(dBm) 33.0 33.0 33.0	(dB) -23.5	

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MODEL NUMER: LG-US991, US991, LGUS991

DATE: APRIL 22, 2015

FCC ID: ZNFUS991

		UL	Verification S	Services, Inc. C	hamber	G		
•		1.0						
Company:		LG						
Project #:		15120405						
Date:		4/15/2015						
Engineer:		Jude Semana						
figuration:			Cover + Charging	J Dock				
Location:		Chamber G						
Mode:		CDMA BC0 R	11					
_	: Horn T899, a	, Xft SMA C	Cable Loss	es RIALNUMBER) \ Antenna Gain		se Limit	Margin	N
Receiving Substituti	: Horn T899, a on: Horn T273	, Xft SMA C	able (SN # SE	RIALNUMBER)			Margin (dB)	N
Receiving Substituti f <u>MHz</u> Low Ch	: Horn T899, a on: Horn T273 SG reading	8, Xft SMA C Ant. Pol. (H/V)	able (SN # SE Cable Loss (dB)	RIALNUMBER) \ Antenna Gain (dBd)	ERP	Limit (dBm)		N
Receiving Substituti f MHz Low Ch 824.70	: Horn T899, a on: Horn T273 SG reading	8, Xft SMA C Ant. Pol. (H/V) V	able (SN # SE Cable Loss (dB) 0.9	RIALNUMBER) \ Antenna Gain (dBd) 0.0	ERP	Limit (dBm) 38.5		N
Receiving Substituti f MHz Low Ch 824.70 824.70	: Horn T899, a on: Horn T273 SG reading	8, Xft SMA C Ant. Pol. (H/V)	able (SN # SE Cable Loss (dB)	RIALNUMBER) \ Antenna Gain (dBd)	ERP	Limit (dBm)		N
Receiving Substituti f MHz Low Ch 824.70 824.70 Mid Ch	: Horn T899, a on: Horn T273 SG reading (dBm)	8, Xft SMA C Ant. Pol. (H/V) V H	able (SN # SE Cable Loss (dB) 0.9 0.9	RIALNUMBER) \ Antenna Gain (dBd) 0.0 0.0	ERP (dBm)	Limit (dBm) 38.5 38.5	(dB)	N
Receiving Substituti f MHz Low Ch 824.70 824.70	: Horn T899, a on: Horn T273 SG reading	8, Xft SMA C Ant. Pol. (H/V) V	able (SN # SE Cable Loss (dB) 0.9	RIALNUMBER) \ Antenna Gain (dBd) 0.0	ERP	Limit (dBm) 38.5		N
Receiving Substituti f MHz Low Ch 824.70 824.70 824.70 Mid Ch 836.52	: Horn T899, a on: Horn T273 SG reading (dBm) 23.11	Ant. Pol. (H/V) V H V H	able (SN # SE Cable Loss (dB) 0.9 0.9 0.9 0.9	RIALNUMBER) V Antenna Gain (dBd) 0.0 0.0 0.0 0.0	ERP (dBm) 22.21	Limit (dBm) 38.5 38.5 38.5 38.5	(dB) -16.2	N
Receiving Substituti f MHz Low Ch 824.70 824.70 824.70 Mid Ch 836.52 836.52	: Horn T899, a on: Horn T273 SG reading (dBm) 23.11	8, Xft SMA C Ant. Pol. (H/V) V H	able (SN # SE Cable Loss (dB) 0.9 0.9	RIALNUMBER) \ Antenna Gain (dBd) 0.0 0.0 0.0	ERP (dBm) 22.21	Limit (dBm) 38.5 38.5 38.5 38.5	(dB) -16.2	N

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12.2. FIELD STRENGTH OF SPURIOUS RADIATION

RULE PART(S)

FCC: §2.1053, §22.917, §24.238, §27.53

LIMIT

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P) dB$.

TEST PROCEDURE

For Cellular equipment - Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 100 kHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

For PCS equipment - Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 1 MHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

RESULTS

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12.2.1. SPURIOUS RADIATION PLOTS

LTE Band 25

		Above 10	Hz High F	requency	y Substi	itution N	leasure	ment	
Compar	ıy:	LG Electronics	5						
Project	-	15120405							
Date:		4/2/2015							
Test En	aineer:	Jude Semana							
Configu	-	EUT w/ AC Ch							
-		Chamber G	arger + HS						
Location: Mode:									
woue.		LTE_16QAM E	Janu 25 Ham	ionics, zowi		lutri			
						5100			
f	SG reading		Distance	Preamp	Filter	EIRP		Delta	Note
MHz	(dBm)	(H/V)	<u>(m)</u>	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low Ch,				05.0	4.0	54.0	40.0		
3720.00	-16.9	V	3.0	35.8	1.0	-51.8	-13.0	-38.8	
5580.00	-9.4	V	3.0	35.5	1.0	-43.9	-13.0	-30.9	
7440.00	-11.5	V	3.0	35.7	1.0	-46.2	-13.0	-33.2	
3720.00	-15.9	H	3.0	35.8	1.0	-50.7	-13.0	-37.7	
5580.00	-13.0	H	3.0	35.5	1.0	-47.5	-13.0	-34.5	
7440.00	-11.4	Н	3.0	35.7	1.0	-46.1	-13.0	-33.1	
Mid Ch,		V	2.0	25.0	4.0	-51.3	-13.0	-38.3	
3765.00 5647.50	-16.5 -13.3	V	3.0 3.0	35.8 35.5	1.0 1.0	-31.3	-13.0 -13.0	-36.3 -34.8	
7530.00	-13.3 -12.3	V	3.0	35.5 35.7	1.0	-47.0	-13.0	-34.0 -34.1	
3765.00	-12.3 -17.9	V H	3.0	35.8	1.0	-47.1	-13.0 -13.0	-34.1	
J10J.00	-17.9 -14.5	Н	3.0	35.6 35.5	1.0	-32.7	-13.0 -13.0	-39.7	
	-14.0 -11.1	Н	3.0	35.5 35.7	1.0	-49.0	-13.0	-30.0	
5647.50			. J.V	JJ.1	1.0	-43.0	-13.0	-J2.0	
5647.50 7530.00	Å								
5647.50 7530.00 High Ch,	1905	v	3.0	35.8	10	45.7	-13.0	327	
5647.50 7530.00 High Ch, 3810.00	1905 -10.9	V	3.0 3.0	35.8	1.0	-45.7 _45.9	-13.0 -13.0	-32.7	
5647.50 7530.00 High Ch, 3810.00 5715.00	1905 -10.9 -11.4	V	3.0	35.5	1.0	-45.9	-13.0	-32.9	
5647.50 7530.00 High Ch, 3810.00 5715.00 7620.00	1905 -10.9 -11.4 -12.1	V V	3.0 3.0	35.5 35.8	1.0 1.0	-45.9 -46.8	-13.0 -13.0	-32.9 -33.8	
5647.50 7530.00 High Ch, 3810.00 5715.00 7620.00 3810.00	1905 -10.9 -11.4 -12.1 -9.6	V V H	3.0 3.0 3.0	35.5 35.8 35.8	1.0 1.0 1.0	-45.9 -46.8 -44.4	-13.0 -13.0 -13.0	-32.9 -33.8 -31.4	
5647.50 7530.00 High Ch, 3810.00 5715.00 7620.00	1905 -10.9 -11.4 -12.1	V V	3.0 3.0	35.5 35.8	1.0 1.0	-45.9 -46.8	-13.0 -13.0	-32.9 -33.8	

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FCC ID: ZNFUS991

		Above 1G		erificatior Frequenc			leasure	ement	
Compar	-v.	LG Electronics	-						
Project	-	15/20405	2						
-	#.								
Date:		4/2/2015							
	igineer:	Jude Semana							
Configu		EUT w/ AC Ch	arger + HS						
Locatio	n:	Chamber G							
Mode:		LTE_QPSK Ba	and 25 Harm	onics, 20MH	Iz Bandwi	dth			
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Note
Low Ch,	1860								
3720.00	-16.7	V	3.0	35.8	1.0	-51.6	-13.0	-38.6	
5580.00	-9.8	V	3.0	35.5	1.0	-44.3	-13.0	-31.3	
7440.00	-12.5	V	3.0	35.7	1.0	-47.2	-13.0	-34.2	
7440.00									
3720.00	-15.8	Н	3.0	35.8	1.0	-50.6	-13.0	-37.6	
3720.00 5580.00	-12.4	Н	3.0	35.5	1.0	-46.9	-13.0	-33.9	
3720.00 5580.00 7440.00	-12.4 -10.9						å		
3720.00 5580.00 7440.00 Mid Ch,	-12.4 -10.9 1882.5	H	3.0 3.0	35.5 35.7	1.0 1.0	-46.9 -45.7	-13.0 -13.0	-33.9 -32.7	
3720.00 5580.00 7440.00 Mid Ch, 3765.00	-12.4 -10.9 1882.5 -15.5	H H V	3.0 3.0 3.0	35.5 35.7 35.8	1.0 1.0 1.0	-46.9 -45.7 -50.3	-13.0 -13.0 -13.0	-33.9 -32.7 -37.3	
3720.00 5580.00 7440.00 Mid Ch, 3765.00 5647.50	-12.4 -10.9 1882.5 -15.5 -13.3	H H V V	3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.8 35.5	1.0 1.0 1.0 1.0	-46.9 -45.7 -50.3 -47.8	-13.0 -13.0 -13.0 -13.0	-33.9 -32.7 -37.3 -34.8	
3720.00 5580.00 7440.00 Mid Ch, 3765.00 5647.50 7530.00	-12.4 -10.9 1882.5 -15.5 -13.3 -12.3	H H V V V	3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.8 35.5 35.7	1.0 1.0 1.0 1.0 1.0	-46.9 -45.7 -50.3 -47.8 -47.1	-13.0 -13.0 -13.0 -13.0 -13.0	-33.9 -32.7 -37.3 -34.8 -34.1	
3720.00 5580.00 7440.00 Mid Ch, 3765.00 5647.50 7530.00 3765.00	-12.4 -10.9 1882.5 -15.5 -13.3 -12.3 -17.6	H H V V V H	3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.8 35.5 35.7 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0	-46.9 -45.7 -50.3 -47.8 -47.1 -52.4	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.9 -32.7 -37.3 -34.8 -34.1 -39.4	
3720.00 5580.00 7440.00 Mid Ch, 3765.00 5647.50 7530.00 3765.00 5647.50	-12.4 -10.9 1882.5 -15.5 -13.3 -12.3 -17.6 -13.9	H H V V V H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.8 35.5 35.7 35.8 35.7 35.8 35.5	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.9 45.7 -50.3 47.8 47.1 -52.4 48.4	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.9 -32.7 -37.3 -34.8 -34.1 -39.4 -35.4	
3720.00 5580.00 7440.00 Mid Ch, 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00	-12.4 -10.9 1882.5 -15.5 -13.3 -12.3 -17.6 -13.9 -11.4	H H V V V H	3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.8 35.5 35.7 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0	-46.9 -45.7 -50.3 -47.8 -47.1 -52.4	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.9 -32.7 -37.3 -34.8 -34.1 -39.4	
3720.00 5580.00 7440.00 Mid Ch, 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch,	-12.4 -10.9 1882.5 -15.5 -13.3 -12.3 -17.6 -13.9 -11.4 1905	H H V V V H H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.9 45.7 -50.3 47.8 47.1 -52.4 48.4 46.2	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.9 -32.7 -37.3 -34.8 -34.1 -39.4 -35.4 -33.2	
3720.00 5580.00 7440.00 Mid Ch, 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3810.00	-12.4 -10.9 1882.5 -15.5 -13.3 -12.3 -17.6 -13.9 -11.4 1905 -10.9	H H V V H H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.7 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.9 45.7 -50.3 47.8 47.1 -52.4 48.4 46.2 -45.7	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.9 -32.7 -37.3 -34.8 -34.1 -39.4 -35.4 -35.4 -33.2 -32.7	
3720.00 5580.00 7440.00 Mid Ch, 3765.00 5647.50 7530.00 5647.50 7530.00 High Ch, 3810.00 5715.00	-12.4 -10.9 1882.5 -15.5 -13.3 -12.3 -17.6 -13.9 -11.4 1905 -10.9 -11.2	H H V V V H H H V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.8 35.7 35.8 35.5	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.9 45.7 -50.3 47.8 47.1 -52.4 48.4 46.2 	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.9 -32.7 -37.3 -34.8 -34.1 -39.4 -35.4 -35.4 -33.2 -32.7 -32.7	
3720.00 5580.00 7440.00 Mid Ch, 3765.00 5647.50 7530.00 5647.50 7530.00 High Ch, 3810.00 5715.00 7620.00	-12.4 -10.9 1882.5 -15.5 -13.3 -12.3 -17.6 -13.9 -11.4 1905 -10.9 -11.2 -12.0	H H V V H H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.8 35.7 35.8 35.8 35.5 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.9 45.7 -50.3 47.8 47.1 -52.4 48.4 46.2 - - 45.7 45.7 45.7 46.7	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.9 -32.7 -37.3 -34.8 -34.1 -39.4 -35.4 -35.4 -35.4 -33.2 -32.7 -32.7 -32.7 -33.7	
3720.00 5580.00 7440.00 Mid Ch, 3765.00 5647.50 7530.00 5647.50 7530.00 High Ch, 3810.00 5715.00 7620.00 3810.00	-12.4 -10.9 1882.5 -15.5 -13.3 -12.3 -17.6 -13.9 -11.4 1905 -10.9 -10.9 -11.2 -12.0 -10.5	H H V V H H H V V V H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.8 35.8 35.8 35.8 35.8 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.9 45.7 -50.3 47.8 47.1 -52.4 48.4 46.2 - - 45.7 45.7 46.7 45.3	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.9 -32.7 -37.3 -34.8 -34.1 -39.4 -35.4 -33.2 -32.7 -32.7 -32.7 -33.7 -32.3	
3720.00 5580.00 7440.00 Mid Ch, 3765.00 5647.50 7530.00 5647.50 7530.00 High Ch, 3810.00 5715.00 7620.00	-12.4 -10.9 1882.5 -15.5 -13.3 -12.3 -17.6 -13.9 -11.4 1905 -10.9 -11.2 -12.0	H H V V H H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.8 35.7 35.8 35.8 35.5 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.9 45.7 -50.3 47.8 47.1 -52.4 48.4 46.2 - - 45.7 45.7 45.7 46.7	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.9 -32.7 -37.3 -34.8 -34.1 -39.4 -35.4 -35.4 -35.4 -33.2 -32.7 -32.7 -32.7 -33.7	

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FCC ID: ZNFUS991

		Above 10	UL Ve GHz High F	rification requency			leasure	ment	
Compar	w.	LG Electronics							
Project	-	15120405	•						
-	#.								
Date:		4/2/2015							
Test En	-	Jude Semana							
Configu		EUT w/ AC Ch	arger + HS						
Locatio	n:	Chamber G							
Mode:		LTE_16QAM E	Band 25 Harmo	onics, 15MH	z Bandwid	lth			
f	SG reading	:	Distance	Preamp	Filter	EIRP	Limit	Delta	Note
MHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low Ch,									
3715.00	-17.7	V	3.0	35.8	1.0	-52.5	-13.0	-39.5	
5572.50	-10.7	V	3.0	35.5	1.0	-45.2	-13.0	-32.2	
7430.00	-11.8	V	3.0	35.7	1.0	-46.6	-13.0	-33.6	
3715.00	-15.6	H	3.0	35.8	1.0	-50.5	-13.0	-37.5	
5572.50	-13.6	Н	3.0	35.5	1.0	-48.1	-13.0	-35.1	
	-10.5	H	3.0	35.7	1.0	-45.3	-13.0	-32.3	
7430.00	1882.5								
Mid Ch,			3.0	35.8	1.0	-51.9	-13.0	-38.9	
Mid Ch, ' 3765.00	-17.1	V				¢	oo		
Mid Ch, ' 3765.00 5647.50	-17.1 -12.9	V	3.0	35.5	1.0	-47.4	-13.0	-34.4	
Mid Ch, 3765.00 5647.50 7530.00	-17.1 -12.9 -12.4	V V	3.0	35.5 35.7	1.0 1.0	-47.4 -47.1	-13.0 -13.0	-34.1	
Mid Ch, 1 3765.00 5647.50 7530.00 3765.00	-17.1 -12.9 -12.4 -15.3	V V H	3.0 3.0	35.5 35.7 35.8	1.0 1.0 1.0	-47.4 -47.1 -50.2	-13.0 -13.0 -13.0	-34.1 -37.2	
Mid Ch, 3765.00 5647.50 7530.00 3765.00 5647.50	-17.1 -12.9 -12.4 -15.3 -13.1	V V H H	3.0 3.0 3.0	35.5 35.7 35.8 35.5	1.0 1.0 1.0 1.0	-47.4 -47.1 -50.2 -47.6	-13.0 -13.0 -13.0 -13.0	-34.1 -37.2 -34.6	
Mid Ch, 9 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00	-17.1 -12.9 -12.4 -15.3 -13.1 -11.3	V V H	3.0 3.0	35.5 35.7 35.8	1.0 1.0 1.0	-47.4 -47.1 -50.2	-13.0 -13.0 -13.0	-34.1 -37.2	
Mid Ch, 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch,	-17.1 -12.9 -12.4 -15.3 -13.1 -11.3 1907.5	V V H H H	3.0 3.0 3.0 3.0	35.5 35.7 35.8 35.5 35.7	1.0 1.0 1.0 1.0 1.0	-47.4 -47.1 -50.2 -47.6 -46.0	-13.0 -13.0 -13.0 -13.0 -13.0	-34.1 -37.2 -34.6 -33.0	
Mid Ch, 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3815.00	-17.1 -12.9 -12.4 -15.3 -13.1 -11.3 1907.5 -8.4	V V H H H V	3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.8 35.5 35.7 35.7 35.8	1.0 1.0 1.0 1.0 1.0 1.0	47.4 -47.1 -50.2 -47.6 -46.0 -43.1	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-34.1 -37.2 -34.6 -33.0 -30.1	
Mid Ch, 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3815.00 5722.50	-17.1 -12.9 -12.4 -15.3 -13.1 -11.3 1907.5 -8.4 -14.0	V V H H V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.8 35.5 35.7 35.7 35.8 35.8 35.5	1.0 1.0 1.0 1.0 1.0 1.0 1.0	47.4 47.1 -50.2 47.6 46.0 	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-34.1 -37.2 -34.6 -33.0 -30.1 -35.5	
Mid Ch, 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3815.00 5722.50 7630.00	-17.1 -12.9 -12.4 -15.3 -13.1 -11.3 1907.5 	V H H V V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.8 35.5 35.7 35.8 35.8 35.5 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	47.4 47.1 -50.2 47.6 46.0 	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-34.1 -37.2 -34.6 -33.0 -30.1 -35.5 -34.4	
Mid Ch, 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3815.00 5722.50 7630.00 3815.00	-17.1 -12.9 -12.4 -15.3 -13.1 -11.3 1907.5 	V H H V V V V H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.8 35.5 35.7 35.8 35.8 35.5 35.8 35.8 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	47.4 47.1 -50.2 47.6 46.0 -43.1 48.5 47.4 46.0	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-34.1 -37.2 -34.6 -33.0 -30.1 -35.5 -34.4 -33.0	
Mid Ch, ' 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3815.00 5722.50 7630.00	-17.1 -12.9 -12.4 -15.3 -13.1 -11.3 1907.5 	V H H V V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.8 35.5 35.7 35.8 35.8 35.5 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	47.4 47.1 -50.2 47.6 46.0 	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-34.1 -37.2 -34.6 -33.0 -30.1 -35.5 -34.4	

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FCC ID: ZNFUS991

			UL Ve	erification	Servic	es, Inc.			
		Above 10	GHz High F	requency	y Subst	itution I	Measur	ement	
Compan	y:	LG Electronic	s						
Project	-	15120405							
Date:		4/2/2015							
Test En	nineer	Jude Semana							
Configu		EUT w/ AC Ch							
-			arger + HS						
Location	1:	Chamber G							
Mode:		LTE_QPSK B	and 25 Harmo	DNICS, 15IVIH	z Bandwi	dth			
f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Note
MHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	: :	(dB)	note
Low Ch,	· · · ·	(11/4)				(ubiii)	(ubiii)	(ub)	
3715.00	-17.5	V	3.0	35.8	1.0	-52.3	-13.0	-39.3	
5572.50	-10.4	v	3.0	35.5	1.0	-44.9	-13.0	-31.9	
7430.00	-12.1	V	3.0	35.7	1.0	-46.9	-13.0	-33.9	
3715.00	-14.8	H	3.0	35.8	1.0	-49.6	-13.0	-36.6	
5572.50	-13.1	Н	3.0	35.5	1.0	-47.6	-13.0	-34.6	
0012.00		11	3.0	35.7	1.0	-45.6	-13.0	-32.6	
7430.00	-10.9	H	3.0						
	Å	Π	5.0				••••••		
7430.00	882.5 -17.0	v	3.0	35.8	1.0	-51.8	-13.0	-38.8	
7430.00 Mid Ch, 1	882.5 -17.0 -13.2			•	1.0 1.0	-51.8 -47.6		-38.8 -34.6	
7430.00 Mid Ch, 1 3765.00 5647.50 7530.00	882.5 -17.0 -13.2 -12.7	V V V	3.0 3.0 3.0	35.8 35.5 35.7	1.0 1.0	-47.6 -47.4	-13.0 -13.0 -13.0	-38.8 -34.6 -34.4	
7430.00 Mid Ch, 1 3765.00 5647.50 7530.00 3765.00	882.5 -17.0 -13.2 -12.7 -14.6	V V V H	3.0 3.0 3.0 3.0 3.0	35.8 35.5 35.7 35.8	1.0 1.0 1.0	-47.6 -47.4 -49.4	-13.0 -13.0 -13.0 -13.0	-38.8 -34.6 -34.4 -36.4	
7430.00 Mid Ch, 1 3765.00 5647.50 7530.00 3765.00 5647.50	882.5 -17.0 -13.2 -12.7 -14.6 -13.3	V V H H	3.0 3.0 3.0 3.0 3.0 3.0	35.8 35.5 35.7 35.8 35.5	1.0 1.0 1.0 1.0	-47.6 -47.4 -49.4 -47.8	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-38.8 -34.6 -34.4 -36.4 -34.8	
7430.00 Mid Ch, 1 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00	882.5 -17.0 -13.2 -12.7 -14.6 -13.3 -11.6	V V V H	3.0 3.0 3.0 3.0 3.0	35.8 35.5 35.7 35.8	1.0 1.0 1.0	-47.6 -47.4 -49.4	-13.0 -13.0 -13.0 -13.0	-38.8 -34.6 -34.4 -36.4	
7430.00 Mid Ch, 1 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch,	882.5 -17.0 -13.2 -12.7 -14.6 -13.3 -11.6 1907.5	V V H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.8 35.5 35.7 35.8 35.5 35.7	1.0 1.0 1.0 1.0 1.0	47.6 47.4 49.4 47.8 46.4	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-38.8 -34.6 -34.4 -36.4 -34.8 -33.4	
7430.00 Mid Ch, 1 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3815.00	882.5 -17.0 -13.2 -12.7 -14.6 -13.3 -11.6 1907.5 -8.4	V V H H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.8 35.5 35.7 35.8 35.5 35.7 35.7 35.8	1.0 1.0 1.0 1.0 1.0 1.0	47.6 47.4 49.4 47.8 46.4 -43.2	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	38.8 34.6 34.4 36.4 34.8 33.4 33.4 30.2	
7430.00 Mid Ch, 1 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3815.00 5722.50	882.5 -17.0 -13.2 -12.7 -14.6 -13.3 -11.6 1907.5 -8.4 -14.0	V V H H V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.8 35.5 35.7 35.8 35.5 35.7 35.7 35.8 35.8 35.5	1.0 1.0 1.0 1.0 1.0 1.0 1.0	47.6 47.4 49.4 47.8 46.4 43.2 48.5	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-38.8 -34.6 -34.4 -36.4 -34.8 -33.4 -33.4 -30.2 -35.5	
7430.00 Mid Ch, 1 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3815.00 5722.50 7630.00	882.5 -17.0 -13.2 -12.7 -14.6 -13.3 -11.6 1907.5 -8.4 -14.0 -12.9	V V H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.8 35.5 35.7 35.8 35.5 35.7 35.8 35.8 35.5 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	47.6 47.4 49.4 47.8 46.4 43.2 48.5 47.6	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-38.8 -34.6 -34.4 -36.4 -34.8 -33.4 -30.2 -35.5 -34.6	
7430.00 Mid Ch, 1 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3815.00 5722.50 7630.00 3815.00	882.5 -17.0 -13.2 -12.7 -14.6 -13.3 -11.6 1907.5 -8.4 -14.0 -12.9 -9.1	V V H H V V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.8 35.5 35.7 35.8 35.5 35.7 35.8 35.8 35.8 35.8 35.8 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	47.6 47.4 49.4 47.8 46.4 43.2 48.5 47.6 43.9	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-38.8 -34.6 -34.4 -36.4 -34.8 -33.4 -30.2 -35.5 -34.6 -30.9	
7430.00 Mid Ch, 1 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3815.00 5722.50 7630.00	882.5 -17.0 -13.2 -12.7 -14.6 -13.3 -11.6 1907.5 -8.4 -14.0 -12.9	V V H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.8 35.5 35.7 35.8 35.5 35.7 35.8 35.8 35.5 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	47.6 47.4 49.4 47.8 46.4 43.2 48.5 47.6	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-38.8 -34.6 -34.4 -36.4 -34.8 -33.4 -30.2 -35.5 -34.6	

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FCC ID: ZNFUS991

				rification					
		Above 1G	Hz High F	requency	Substi	tution	Measur	ement	
Compar	ıy:	LG Electronics	5						
Project	#:	15120405							
Date:		4/2/2015							
Test En	aineer:	Jude Semana							
Configu	-	EUT w/ AC Ch							
Location		Chamber G	arger + HS						
	1.								
Mode:		LTE_16QAM E	Sand 25 Harn	nonics, 10ivir	HZ Bandw	lidth			
f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Notes
MHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)		(dB)	Note:
Low Ch,		(100)				(ubiii)	(ubiii)		
3710.00	-16.0	v	3.0	35.9	1.0	-50.9	-13.0	-37.9	
					: 1.0	-30.3	-13.0	-31.3	
				å		43.2	13.0	-30.2	
5565.00	-8.8	V	3.0	35.5	1.0	-43.2	-13.0 -13.0	-30.2	
5565.00 7420.00	-8.8 -12.0	V V	3.0 3.0	35.5 35.7	1.0 1.0	-46.7	-13.0	-33.7	
5565.00 7420.00 3710.00	-8.8 -12.0 -14.9	V V H	3.0 3.0 3.0	35.5 35.7 35.9	1.0 1.0 1.0	-46.7 -49.7	-13.0 -13.0	-33.7 -36.7	
5565.00 7420.00 3710.00 5565.00	-8.8 -12.0 -14.9 -12.7	V V H H	3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.9 35.5	1.0 1.0 1.0 1.0	-46.7 -49.7 -47.1	-13.0 -13.0 -13.0	-33.7 -36.7 -34.1	
5565.00 7420.00 3710.00 5565.00 7420.00	-8.8 -12.0 -14.9 -12.7 -11.2	V V H	3.0 3.0 3.0	35.5 35.7 35.9	1.0 1.0 1.0	-46.7 -49.7	-13.0 -13.0	-33.7 -36.7	
5565.00 7420.00 3710.00 5565.00 7420.00 Mid Ch,	-8.8 -12.0 -14.9 -12.7 -11.2 1882.5	V V H H	3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.9 35.5 35.7	1.0 1.0 1.0 1.0	-46.7 -49.7 -47.1 -45.9	-13.0 -13.0 -13.0 -13.0	-33.7 -36.7 -34.1 -32.9	
5565.00 7420.00 3710.00 5565.00 7420.00 Mid Ch, 3765.00	-8.8 -12.0 -14.9 -12.7 -11.2 1882.5 -17.0	V V H H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.9 35.5 35.7 35.7 35.8	1.0 1.0 1.0 1.0 1.0 1.0	-46.7 -49.7 -47.1 -45.9 -51.8	-13.0 -13.0 -13.0 -13.0 -13.0	-33.7 -36.7 -34.1 -32.9 -38.8	
5565.00 7420.00 3710.00 5565.00 7420.00 Mid Ch,	-8.8 -12.0 -14.9 -12.7 -11.2 1882.5 -17.0 -8.8	V V H H H V	3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.9 35.5 35.7	1.0 1.0 1.0 1.0 1.0	46.7 49.7 47.1 45.9 -51.8 43.3	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.7 -36.7 -34.1 -32.9	
5565.00 7420.00 3710.00 5565.00 7420.00 Mid Ch, 4 3765.00 5647.50 7530.00	-8.8 -12.0 -14.9 -12.7 -11.2 882.5 -17.0 -8.8 -12.3	V V H H V V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.9 35.5 35.7 35.8 35.8 35.5 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.7 49.7 47.1 45.9 -51.8 43.3 47.0	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.7 -36.7 -34.1 -32.9 -38.8 -30.3 -34.0	
5565.00 7420.00 3710.00 5565.00 7420.00 Mid Ch, 3765.00 5647.50	-8.8 -12.0 -14.9 -12.7 -11.2 1882.5 -17.0 -8.8	V V H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.9 35.5 35.7 35.7 35.8 35.8 35.5	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.7 49.7 47.1 45.9 -51.8 43.3	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.7 -36.7 -34.1 -32.9 -38.8 -30.3	
5565.00 7420.00 3710.00 5565.00 7420.00 Mid Ch, 7 3765.00 5647.50 7530.00 3765.00	-8.8 -12.0 -14.9 -12.7 -11.2 1882.5 -17.0 -8.8 -12.3 -12.6	V V H H V V V V H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.9 35.5 35.7 35.8 35.8 35.5 35.7 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.7 49.7 47.1 45.9 -51.8 43.3 47.0 47.4	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.7 -36.7 -34.1 -32.9 -38.8 -30.3 -34.0 -34.4	
5565.00 7420.00 3710.00 5565.00 7420.00 Mid Ch, 1 3765.00 5647.50 7530.00 3765.00 5647.50	-8.8 -12.0 -14.9 -12.7 -11.2 1882.5 -17.0 -8.8 -12.3 -12.6 -13.2 -11.3	V V H H V V V V H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.9 35.5 35.7 35.8 35.5 35.7 35.8 35.7 35.8 35.5	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.7 49.7 47.1 45.9 -51.8 43.3 47.0 47.4 47.7	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.7 -36.7 -34.1 -32.9 -38.8 -30.3 -38.8 -30.3 -34.0 -34.4 -34.7	
5565.00 7420.00 3710.00 5565.00 7420.00 Mid Ch, 7 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00	-8.8 -12.0 -14.9 -12.7 -11.2 1882.5 -17.0 -8.8 -12.3 -12.6 -13.2 -11.3	V V H H V V V V H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.9 35.5 35.7 35.8 35.5 35.7 35.8 35.7 35.8 35.5	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.7 49.7 47.1 45.9 -51.8 43.3 47.0 47.4 47.7	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.7 -36.7 -34.1 -32.9 -38.8 -30.3 -38.8 -30.3 -34.0 -34.4 -34.7	
5565.00 7420.00 3710.00 5565.00 7420.00 Mid Ch, 7 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch,	-8.8 -12.0 -14.9 -12.7 -11.2 882.5 -17.0 -8.8 -12.3 -12.6 -13.2 -11.3 1912	V V H H V V V V H H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.9 35.5 35.7 35.8 35.5 35.7 35.8 35.7 35.8 35.5 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.7 49.7 47.1 45.9 -51.8 43.3 47.0 47.4 47.7 46.0	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.7 -36.7 -34.1 -32.9 -38.8 -30.3 -34.0 -34.4 -34.7 -33.0	
5565.00 7420.00 3710.00 5565.00 7420.00 Mid Ch, 4 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3824.00	-8.8 -12.0 -14.9 -12.7 -11.2 882.5 -17.0 -8.8 -12.3 -12.6 -13.2 -11.3 1912 -14.3	V V H H V V V V H H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.9 35.5 35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.7 49.7 47.1 45.9 -51.8 43.3 47.0 47.4 47.7 46.0 -49.1	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.7 -36.7 -34.1 -32.9 -38.8 -30.3 -34.0 -34.4 -34.7 -33.0 -36.1	
5565.00 7420.00 3710.00 5565.00 7420.00 Mid Ch, 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3824.00 5736.00	-8.8 -12.0 -14.9 -12.7 -11.2 882.5 -17.0 -8.8 -12.3 -12.6 -13.2 -13.2 -13.2 -11.3 1912 -14.3 -10.7	V V H H V V V V H H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.9 35.5 35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.8 35.5	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.7 49.7 47.1 45.9 -51.8 43.3 47.0 47.4 47.7 46.0 	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.7 -36.7 -34.1 -32.9 -38.8 -30.3 -34.0 -34.4 -34.7 -33.0 -36.1 -32.2	
5565.00 7420.00 3710.00 5565.00 7420.00 Mid Ch, 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 5647.50 7530.00 High Ch, 3824.00 5736.00 7648.00	-8.8 -12.0 -14.9 -12.7 -11.2 882.5 -17.0 -8.8 -12.3 -12.6 -13.2 -13.2 -11.3 1912 -14.3 -10.7 -12.5	V H H H V V V V H H H H V V V V V V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.9 35.5 35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.8 35.5 35.8 35.5 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.7 49.7 47.1 47.9 -51.8 43.3 47.0 47.4 47.7 46.0 	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.7 -36.7 -34.1 -32.9 -38.8 -30.3 -34.0 -34.4 -34.7 -34.7 -33.0 -36.1 -32.2 -34.2	

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REPORT NO: 15I20405 - E1

MODEL NUMER: LG-US991, US991, LGUS991

DATE: APRIL 22, 2015

FCC ID: ZNFUS991

				ification S					
		Above 1G	Hz High Fr	equency	Substi	tution I	Measur	rement	
Compar	ıy:	LG Electronics	5						
Project	-	15120405							
Date:		4/2/2015							
Test En	aineer:	Jude Semana							
Configu	-	EUT w/ AC Ch							
Locatio		Chamber G	arger + H5						
	n.		1.05.11						
Mode:		LTE_QPSK Ba	and 25 Harmo	nics, TuiviH	z Bandwi	ath			
f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Note
MHz	(dBm)	(H/V)	<u>(m)</u>	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low Ch,									
3710.00	-13.2	V	3.0	35.9	1.0	-48.0	-13.0	-35.0	
5565.00	-11.1	V	3.0	35.5	1.0	-45.6	-13.0	-32.6	
			•••			•••••••••••••••••••••••••••••			
7420.00	-5.7	V	3.0	35.7	1.0	-40.4	-13.0	-27.4	
7420.00 3710.00	-5.7 -14.7	V H	3.0	35.9	1.0 1.0	-49.5	-13.0 -13.0	-27.4 -36.5	
7420.00 3710.00 5565.00	-5.7 -14.7 -12.2	V H H	3.0 3.0	35.9 35.5	1.0 1.0 1.0	-49.5 -46.7	-13.0 -13.0 -13.0	-27.4 -36.5 -33.7	
7420.00 3710.00 5565.00 7420.00	-5.7 -14.7 -12.2 -10.4	V H	3.0	35.9	1.0 1.0	-49.5	-13.0 -13.0	-27.4 -36.5	
7420.00 3710.00 5565.00 7420.00 Mid Ch, ⁴	-5.7 -14.7 -12.2 -10.4 1882.5	V H H H	3.0 3.0 3.0	35.9 35.5 35.7	1.0 1.0 1.0 1.0	-49.5 -46.7 -45.1	-13.0 -13.0 -13.0 -13.0	-27.4 -36.5 -33.7 -32.1	
7420.00 3710.00 5565.00 7420.00 Mid Ch, ' 3765.00	-5.7 -14.7 -12.2 -10.4 1882.5 -13.6	V H H V	3.0 3.0 3.0 3.0	35.9 35.5 35.7 35.8	1.0 1.0 1.0 1.0 1.0	-49.5 -46.7 -45.1 -48.4	-13.0 -13.0 -13.0 -13.0 -13.0	-27.4 -36.5 -33.7 -32.1 -35.4	
7420.00 3710.00 5565.00 7420.00 Mid Ch, 9 3765.00 5647.50	-5.7 -14.7 -12.2 -10.4 1882.5 -13.6 -8.8	V H H V V	3.0 3.0 3.0 3.0 3.0 3.0	35.9 35.5 35.7 35.8 35.8 35.5	1.0 1.0 1.0 1.0 1.0 1.0	49.5 46.7 45.1 -48.4 -43.3	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-27.4 -36.5 -33.7 -32.1 -35.4 -30.3	
7420.00 3710.00 5565.00 7420.00 Mid Ch, ' 3765.00 5647.50 7530.00	-5.7 -14.7 -12.2 -10.4 1882.5 -13.6 -8.8 -13.0	V H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.9 35.5 35.7 35.8 35.8 35.5 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0	49.5 46.7 45.1 48.4 43.3 47.7	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-27.4 -36.5 -33.7 -32.1 -35.4 -30.3 -34.7	
7420.00 3710.00 5565.00 7420.00 Mid Ch, 4 3765.00 5647.50 7530.00 3765.00	-5.7 -14.7 -12.2 -10.4 1882.5 -13.6 -8.8 -13.0 -11.8	V H H V V V H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.9 35.5 35.7 35.8 35.5 35.7 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	49.5 46.7 45.1 48.4 43.3 47.7 46.6	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-27.4 -36.5 -33.7 -32.1 -35.4 -30.3 -34.7 -33.6	
7420.00 3710.00 5565.00 7420.00 Mid Ch, 4 3765.00 5647.50 7530.00 3765.00 5647.50	-5.7 -14.7 -12.2 -10.4 1882.5 -13.6 -8.8 -13.0 -11.8 -13.2	V H H V V V V H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.9 35.5 35.7 35.8 35.5 35.7 35.8 35.7 35.8 35.5	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	49.5 46.7 45.1 48.4 43.3 47.7 46.6 47.7	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-27.4 -36.5 -33.7 -32.1 -35.4 -30.3 -34.7 -33.6 -34.7	
7420.00 3710.00 5565.00 7420.00 Mid Ch, 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00	-5.7 -14.7 -12.2 -10.4 1882.5 -13.6 -8.8 -13.0 -11.8 -13.2 -11.8	V H H V V V H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.9 35.5 35.7 35.8 35.5 35.7 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	49.5 46.7 45.1 48.4 43.3 47.7 46.6	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-27.4 -36.5 -33.7 -32.1 -35.4 -30.3 -34.7 -33.6	
7420.00 3710.00 5565.00 7420.00 Mid Ch, ' 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch,	-5.7 -14.7 -12.2 -10.4 1882.5 -13.6 -8.8 -13.0 -11.8 -13.2 -11.8 1912	V H H V V V V H H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.9 35.5 35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	49.5 46.7 45.1 48.4 43.3 47.7 46.6 47.7 46.6	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-27.4 -36.5 -33.7 -32.1 -35.4 -30.3 -34.7 -33.6 -34.7 -33.6	
7420.00 3710.00 5565.00 7420.00 Mid Ch, 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00	-5.7 -14.7 -12.2 -10.4 1882.5 -13.6 -8.8 -13.0 -11.8 -13.2 -11.8	V H H V V V V H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.9 35.5 35.7 35.8 35.5 35.7 35.8 35.7 35.8 35.5	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	49.5 46.7 45.1 48.4 43.3 47.7 46.6 47.7	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-27.4 -36.5 -33.7 -32.1 -35.4 -30.3 -34.7 -33.6 -34.7	
7420.00 3710.00 5565.00 7420.00 Mid Ch, ' 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch,	-5.7 -14.7 -12.2 -10.4 1882.5 -13.6 -8.8 -13.0 -11.8 -13.2 -11.8 1912	V H H V V V V H H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.9 35.5 35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	49.5 46.7 45.1 48.4 43.3 47.7 46.6 47.7 46.6	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-27.4 -36.5 -33.7 -32.1 -35.4 -30.3 -34.7 -33.6 -34.7 -33.6 -34.7 -33.6 -29.6 -29.6 -32.1	
7420.00 3710.00 5565.00 7420.00 Mid Ch, 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3824.00	-5.7 -14.7 -12.2 -10.4 1882.5 -13.6 -8.8 -13.0 -11.8 -13.2 -11.8 1912 -7.8	V H H V V V H H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.9 35.5 35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	49.5 46.7 45.1 48.4 43.3 47.7 46.6 47.7 46.6 47.7 46.6	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-27.4 -36.5 -33.7 -32.1 -35.4 -30.3 -34.7 -33.6 -34.7 -33.6 -34.7 -33.6 -29.6	
7420.00 3710.00 5565.00 7420.00 Mid Ch, 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3824.00 5736.00	-5.7 -14.7 -12.2 -10.4 1882.5 -13.6 -8.8 -13.0 -11.8 -13.2 -11.8 1912 -7.8 -10.6	V H H V V V H H H V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.9 35.5 35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.8 35.7 35.8 35.7 35.8 35.5	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	49.5 46.7 45.1 48.4 43.3 47.7 46.6 47.7 46.6 47.7 46.6 42.6 45.1	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-27.4 -36.5 -33.7 -32.1 -35.4 -30.3 -34.7 -33.6 -34.7 -33.6 -34.7 -33.6 -29.6 -29.6 -32.1	
7420.00 3710.00 5565.00 7420.00 Mid Ch, ' 3765.00 5647.50 7530.00 5647.50 7530.00 High Ch, 3824.00 5736.00 7648.00	-5.7 -14.7 -12.2 -10.4 1882.5 -13.6 -8.8 -13.0 -11.8 -13.2 -11.8 1912 -7.8 -10.6 -12.6	V H H V V V H H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.9 35.5 35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.8 35.5 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	49.5 46.7 45.1 48.4 43.3 47.7 46.6 47.7 46.6 47.7 46.6 42.6 42.6 45.1 47.3	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-27.4 -36.5 -33.7 -32.1 -35.4 -30.3 -34.7 -33.6 -34.7 -33.6 -34.7 -33.6 -29.6 -29.6 -32.1 -34.3	

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DATE: APRIL 22, 2015

FCC ID: ZNFUS991

		Above 1G		erificatior Frequenc				ement	
		1001010		requeite	y oubs		measur	ement	
Compan	y:	LG Electronic	s						
Project	#:	15120405							
Date:		4/2/2015							
Test En	gineer:	Jude Semana							
Configu	ration:	EUT w/ AC Ch	arger + HS						
Location		Chamber G							
Mode:		LTE 16QAM	Band 25 Har	monics 5M	Hz Bandw	<i>i</i> idth			
f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Note
MHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low Ch,	1852.5								
3705.00	-19.1	V	3.0	35.9	1.0	-53.9	-13.0	-40.9	
5557.50	-14.2	V	3.0	35.5	1.0	-48.7	-13.0	-35.7	
7410.00	-11.8	V	3.0	35.7	1.0	-46.5	-13.0	-33.5	
3705.00	-19.4	Н	3.0	35.9	1.0	-54.2	-13.0	-41.2	
5557.50	-13.5	H	3.0	35.5	1.0	-47.9	-13.0	-34.9	
3331.30			3.0	35.7	1.0	-46.0	-13.0	-33.0	
7410.00	-11.3	H	J. U						
	882.5	•							
7410.00	882.5 -17.6	н V	3.0	35.8	1.0	-52.5	-13.0	-39.5	
7410.00 Mid Ch, 1	882.5 -17.6 -13.5	•		35.8 35.5					
7410.00 Mid Ch, 1 3765.00	882.5 -17.6 -13.5 -12.7	V	3.0	35.8	1.0	-52.5	-13.0	-39.5	
7410.00 Mid Ch, 1 3765.00 5647.50 7530.00 3765.00	882.5 -17.6 -13.5 -12.7 -17.8	V V	3.0 3.0 3.0 3.0 3.0	35.8 35.5	1.0 1.0	-52.5 -48.0 -47.4 -52.6	-13.0 -13.0 -13.0 -13.0	-39.5 -35.0 -34.4 -39.6	
7410.00 Mid Ch, 1 3765.00 5647.50 7530.00	882.5 -17.6 -13.5 -12.7	V V V	3.0 3.0 3.0	35.8 35.5 35.7	1.0 1.0 1.0	-52.5 -48.0 -47.4	-13.0 -13.0 -13.0	-39.5 -35.0 -34.4	
7410.00 Mid Ch, 1 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00	882.5 -17.6 -13.5 -12.7 -17.8 -13.9 -11.6	V V V H	3.0 3.0 3.0 3.0 3.0	35.8 35.5 35.7 35.8	1.0 1.0 1.0 1.0	-52.5 -48.0 -47.4 -52.6	-13.0 -13.0 -13.0 -13.0	-39.5 -35.0 -34.4 -39.6	
7410.00 Mid Ch, 1 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch,	882.5 -17.6 -13.5 -12.7 -17.8 -17.8 -13.9 -11.6 1912.5	V V H H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.8 35.5 35.7 35.8 35.5 35.7	1.0 1.0 1.0 1.0 1.0 1.0	-52.5 -48.0 -47.4 -52.6 -48.4 -46.3	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-39.5 -35.0 -34.4 -39.6 -35.4 -33.3	
7410.00 Mid Ch, 1 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3825.00	882.5 -17.6 -13.5 -12.7 -17.8 -17.8 -13.9 -11.6 1912.5 -17.1	V V H H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.8 35.5 35.7 35.8 35.5 35.7 35.7 35.7 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0	-52.5 -48.0 -47.4 -52.6 -48.4 -46.3 -51.9	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-39.5 -35.0 -34.4 -39.6 -35.4 -33.3 -38.9	
7410.00 Mid Ch, 1 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3825.00 5737.50	882.5 -17.6 -13.5 -12.7 -17.8 -17.8 -13.9 -11.6 1912.5 -17.1 -12.5	V V H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.8 35.5 35.7 35.8 35.5 35.7 35.7 35.8 35.8 35.8 35.5	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	-52.5 -48.0 -47.4 -52.6 -48.4 -46.3 -51.9 -51.9 -47.0	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-39.5 -35.0 -34.4 -39.6 -35.4 -33.3 -38.9 -34.0	
7410.00 Mid Ch, 1 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3825.00 5737.50 7650.00	882.5 -17.6 -13.5 -12.7 -17.8 -13.9 -11.6 1912.5 -17.1 -12.5 -12.1	V V H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.8 35.5 35.7 35.8 35.5 35.7 35.8 35.7 35.8 35.5 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	-52.5 -48.0 -47.4 -52.6 -48.4 -46.3 -51.9 -51.9 -47.0 -46.8	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-39.5 -35.0 -34.4 -39.6 -35.4 -35.4 -33.3 -38.9 -34.0 -33.8	
7410.00 Mid Ch, 1 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3825.00 5737.50 7650.00 3825.00	882.5 -17.6 -13.5 -12.7 -17.8 -13.9 -11.6 1912.5 -17.1 -12.5 -12.1 -12.1 -17.0	V V H H V V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.8 35.5 35.7 35.8 35.5 35.7 35.8 35.7 35.8 35.5 35.8 35.8 35.8 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	-52.5 -48.0 -47.4 -52.6 -48.4 -46.3 -51.9 -47.0 -46.8 -51.8	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-39.5 -35.0 -34.4 -39.6 -35.4 -35.4 -33.3 -38.9 -34.0 -33.8 -38.8	
7410.00 Mid Ch, 1 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3825.00 5737.50 7650.00	882.5 -17.6 -13.5 -12.7 -17.8 -13.9 -11.6 1912.5 -17.1 -12.5 -12.1	V V H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.8 35.5 35.7 35.8 35.5 35.7 35.8 35.7 35.8 35.5 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	-52.5 -48.0 -47.4 -52.6 -48.4 -46.3 -51.9 -51.9 -47.0 -46.8	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-39.5 -35.0 -34.4 -39.6 -35.4 -35.4 -33.3 -38.9 -34.0 -33.8	

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FCC ID: ZNFUS991

			UL Veri	fication \$	Service	es, Inc.			
		Above 1GH	z High Fr	equency	Subst	itution	Measu	rement	
Compa	ny:	LG Electronics	5						
Project	-	15120405							
Date:		4/2/2015							
	igineer:	Jude Semana							
	-								
Configu		EUT w/ AC Ch	arger + HS						
Locatio	n:	Chamber G							
Mode:		LTE_QPSK Ba	and 25 Harm	onics, 5MH	z Bandw	vidth			
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch,		(100)	(11)	(ub)		(ubiii)	(ubiii)		
3705.00	-19.0	V	3.0	35.9	1.0	-53.8	-13.0	-40.8	
5557.50	-14.4	v	3.0	35.5	1.0	-48.9	-13.0	-35.9	
7410.00	-11.8	v	3.0	35.7	1.0	-46.5	-13.0	-33.5	
						÷			
		Н	3.0	35.9	1.0	-53.5	-13.0	-40.5	
3705.00	-18.6	H	3.0 3.0	35.9 35.5	1.0 1.0	-53.5 -48.5	-13.0 -13.0	-40.5 -35.5	
3705.00 5557.50		H H H	3.0 3.0 3.0	35.9 35.5 35.7	1.0	-48.5	-13.0	-40.5 -35.5 -33.0	
3705.00	-18.6 -14.0 -11.3	Н	3.0	35.5	\$			-35.5	
3705.00 5557.50 7410.00	-18.6 -14.0 -11.3	Н	3.0	35.5	1.0	-48.5	-13.0	-35.5	
3705.00 5557.50 7410.00 Mid Ch,	-18.6 -14.0 -11.3 1882.5	H H	3.0 3.0	35.5 35.7	1.0 1.0	-48.5 -46.0	-13.0 -13.0	-35.5 -33.0	
3705.00 5557.50 7410.00 Mid Ch, 3765.00	-18.6 -14.0 -11.3 1882.5 -17.7	H H V	3.0 3.0 3.0	35.5 35.7 35.8	1.0 1.0 1.0	-48.5 -46.0 -52.5	-13.0 -13.0 -13.0	-35.5 -33.0 -39.5	
3705.00 5557.50 7410.00 Mid Ch, 3765.00 5647.50	-18.6 -14.0 -11.3 1882.5 -17.7 -13.8 -13.0 -17.6	H H V V	3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.8 35.5	1.0 1.0 1.0 1.0	<u>48.5</u> <u>46.0</u> <u>-52.5</u> <u>48.3</u>	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-35.5 -33.0 -39.5 -35.3 -34.7 -39.4	
3705.00 5557.50 7410.00 Mid Ch, 3765.00 5647.50 7530.00	-18.6 -14.0 -11.3 1882.5 -17.7 -13.8 -13.0 -17.6 -13.8	H H V V V	3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.8 35.5 35.7	1.0 1.0 1.0 1.0 1.0	_48.5 _46.0 _52.5 _48.3 _47.7	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-35.5 -33.0 -39.5 -35.3 -34.7 -39.4 -35.3	
3705.00 5557.50 7410.00 Mid Ch, 3765.00 5647.50 7530.00 5647.50 7530.00	-18.6 -14.0 -11.3 1882.5 -17.7 -13.8 -13.0 -17.6 -13.8 -13.8 -11.4	H H V V V H	3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.8 35.5 35.7 35.8	1.0 1.0 1.0 1.0 1.0 1.0	_48.5 _46.0 52.5 _48.3 _47.7 52.4	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-35.5 -33.0 -39.5 -35.3 -34.7 -39.4	
3705.00 5557.50 7410.00 Mid Ch, 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch	-18.6 -14.0 -11.3 1882.5 -17.7 -13.8 -13.0 -17.6 -13.8 -11.4 -11.4 , 1912.5	H H V V H H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.8 35.5 35.7 35.8 35.7 35.8 35.5 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	48.5 46.0 -52.5 48.3 47.7 -52.4 48.3 46.2	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-35.5 -33.0 -39.5 -35.3 -34.7 -39.4 -35.3 -33.2	
3705.00 5557.50 7410.00 Mid Ch, 3765.00 5647.50 7530.00 5647.50 7530.00 High Ch 3825.00	-18.6 -14.0 -11.3 1882.5 -17.7 -13.8 -13.0 -17.6 -13.8 -11.4 , 1912.5 107.4	H H V V H H H V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.7 35.8 35.7 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	_48.5 _46.0 _52.5 _48.3 _47.7 _52.4 _48.3 _46.2 	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-35.5 -33.0 -39.5 -35.3 -34.7 -39.4 -35.3 -33.2 -33.2 -35.6	
3705.00 5557.50 7410.00 Mid Ch, 3765.00 5647.50 7530.00 5647.50 7530.00 High Ch 3825.00 5737.50	-18.6 -14.0 -11.3 1882.5 -17.7 -13.8 -13.0 -17.6 -13.8 -11.4 , 1912.5 107.4 -14.4	H H V V H H H V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.7 35.8 35.7 35.8 35.5	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	_48.5 _46.0 _52.5 _48.3 _47.7 _52.4 _48.3 _46.2 	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-35.5 -33.0 -39.5 -35.3 -34.7 -39.4 -35.3 -33.2 -33.2 -33.2 -35.6 -35.9	
3705.00 5557.50 7410.00 Mid Ch, 3765.00 5647.50 7530.00 5647.50 7530.00 High Ch 3825.00 5737.50 7650.00	-18.6 -14.0 -11.3 1882.5 -17.7 -13.8 -13.0 -17.6 -13.8 -11.4 , 1912.5 107.4 -14.4 -12.0	H H V V H H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.7 35.8 35.7 35.8 35.5 35.8 35.5 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	_48.5 _46.0 _52.5 _48.3 _47.7 _52.4 _48.3 _46.2 	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-35.5 -33.0 -39.5 -35.3 -34.7 -39.4 -35.3 -33.2 -33.2 -33.2 -35.6 -35.9 -33.7	
3705.00 5557.50 7410.00 Mid Ch, 3765.00 5647.50 7530.00 5647.50 7530.00 High Ch 3825.00 5737.50 7650.00 3825.00	-18.6 -14.0 -11.3 1882.5 -17.7 -13.8 -13.0 -17.6 -13.8 -11.4 , 1912.5 107.4 -14.4 -12.0 -17.5	H H V V H H H V V V V V H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.8 35.7 35.8 35.5 35.8 35.5 35.8 35.8 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	_48.5 _46.0 _52.5 _48.3 _47.7 _52.4 _48.3 _46.2 	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-35.5 -33.0 -39.5 -35.3 -34.7 -39.4 -35.3 -33.2 -33.2 -33.2 -35.9 -35.9 -35.9 -33.7 -39.2	
3705.00 5557.50 7410.00 Mid Ch, 3765.00 5647.50 7530.00 5647.50 7530.00 High Ch 3825.00 5737.50 7650.00	-18.6 -14.0 -11.3 1882.5 -17.7 -13.8 -13.0 -17.6 -13.8 -11.4 , 1912.5 107.4 -14.4 -12.0	H H V V H H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.5 35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.7 35.8 35.7 35.8 35.5 35.8 35.5 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	_48.5 _46.0 _52.5 _48.3 _47.7 _52.4 _48.3 _46.2 	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-35.5 -33.0 -39.5 -35.3 -34.7 -39.4 -35.3 -33.2 -33.2 -33.2 -35.6 -35.9 -33.7	

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MODEL NUMER: LG-US991, US991, LGUS991

FCC ID: ZNFUS991

		Above 1G		rification requenc			Measur	ement	
Compar	IV:	LG Electronic							
Project	-	15 20405	-						
Date:		4/2/2015							
Test En	aineer	Jude Semana							
	-								
Configu		EUT w/ AC Ch	arger + HS						
Locatio	n:	Chamber G							
Mode:		LTE_16QAM E	Band 25 Harn	nonics, 3MI	Hz Bandv	vidth			
f	SG reading		Distance	Preamp	Filter	EIRP	Limit	Delta	Note
MHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low Ch,			ļ						
3703.00	-16.7	V	3.0	35.9	1.0	-51.5	-13.0	-38.5	
5554.50	-14.0	V	3.0	35.5	1.0	-48.5	-13.0	-35.5	
7406.00	-11.9	V	3.0	35.7	1.0	-46.6	-13.0	-33.6	
3703.00	-16.9	Н	3.0	35.9	1.0	-51.8	-13.0	-38.8	
5554.50	-13.9	H	3.0	35.5	1.0	-48.3	-13.0	-35.3	
7406.00	-10.6	H	3.0	35.7	1.0	-45.3	-13.0	-32.3	
Mid Ch,									
	-17.0	V	3.0	35.8	1.0	-51.8	-13.0	-38.8	
3765.00			20	35.5	1.0	: 122	-13.0	-35.8	
3765.00 5647.50	-14.3	V	3.0	\$\$		-48.8		·····	
3765.00 5647.50 7530.00	-12.4	V	3.0	35.7	1.0	-47.2	-13.0	-34.2	
3765.00 5647.50 7530.00 3765.00	-12.4 -18.2	V H	3.0 3.0	35.7 35.8	1.0 1.0	-47.2 -53.0	-13.0 -13.0	-34.2 -40.0	
3765.00 5647.50 7530.00 3765.00 5647.50	-12.4 -18.2 -13.7	V H H	3.0 3.0 3.0	35.7 35.8 35.5	1.0 1.0 1.0	-47.2 -53.0 -48.2	-13.0 -13.0 -13.0	-34.2 -40.0 -35.2	
3765.00 5647.50 7530.00 3765.00 5647.50 7530.00	-12.4 -18.2 -13.7 -11.0	V H	3.0 3.0	35.7 35.8	1.0 1.0	-47.2 -53.0	-13.0 -13.0	-34.2 -40.0	
3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch,	-12.4 -18.2 -13.7 -11.0 1913.5	V H H H	3.0 3.0 3.0 3.0	35.7 35.8 35.5 35.7	1.0 1.0 1.0 1.0	47.2 -53.0 48.2 45.7	-13.0 -13.0 -13.0 -13.0	-34.2 -40.0 -35.2 -32.7	
3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3827.00	-12.4 -18.2 -13.7 -11.0 1913.5 -16.4	V H H V	3.0 3.0 3.0 3.0 3.0 3.0	35.7 35.8 35.5 35.7 	1.0 1.0 1.0 1.0 1.0	-47.2 -53.0 -48.2 -45.7 -51.2	-13.0 -13.0 -13.0 -13.0 -13.0	-34.2 -40.0 -35.2 -32.7 -38.2	
3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3827.00 5740.50	-12.4 -18.2 -13.7 -11.0 1913.5 -16.4 -14.2	V H H V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 35.8 35.5 35.7 35.8 35.8 35.5	1.0 1.0 1.0 1.0 1.0 1.0	47.2 -53.0 48.2 45.7 -51.2 48.7	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-34.2 -40.0 -35.2 -32.7 -38.2 -38.2 -35.7	
3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3827.00 5740.50 7654.00	-12.4 -18.2 -13.7 -11.0 1913.5 -16.4 -14.2 -12.0	V H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 35.8 35.5 35.7 35.8 35.8 35.5 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	47.2 -53.0 48.2 45.7 -51.2 -48.7 -46.7	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-34.2 -40.0 -35.2 -32.7 -38.2 -38.2 -35.7 -33.7	
3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3827.00 5740.50 7654.00 3827.00	-12.4 -18.2 -13.7 -11.0 1913.5 -16.4 -14.2 -12.0 -17.5	V H H V V V H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 35.8 35.5 35.7 35.8 35.8 35.5 35.8 35.8 35.8 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	47.2 -53.0 48.2 45.7 -51.2 48.7 46.7 -52.2	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-34.2 -40.0 -35.2 -32.7 -38.2 -35.7 -33.7 -39.2	
3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3827.00 5740.50 7654.00	-12.4 -18.2 -13.7 -11.0 1913.5 -16.4 -14.2 -12.0	V H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 35.8 35.5 35.7 35.8 35.8 35.5 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	47.2 -53.0 48.2 45.7 -51.2 -48.7 -46.7	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-34.2 -40.0 -35.2 -32.7 -38.2 -38.2 -35.7 -33.7	

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MODEL NUMER: LG-US991, US991, LGUS991

DATE: APRIL 22, 2015

FCC ID: ZNFUS991

			UL Ve	rification	Servic	es, Inc.			
		Above 1GH	Hz High F	requency	/ Subst	titution	Measur	ement	
Company	r:	LG Electronics	5						
Project #		15120405							
Date:		4/2/2015							
Test Eng	ineer	Jude Semana							
-									
Configur		EUT w/ AC Ch	arger + HS						
Location	:	Chamber G							
Mode:		LTE_QPSK Ba	and 25 Harn	ionics, 3MH	z Bandw	idth			
f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Note
MHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low Ch, 1	851.5								
3703.00	-18.2	V	3.0	35.9	1.0	-53.0	-13.0	-40.0	
5554.50	-13.5	V	3.0	35.5	1.0	-48.0	-13.0	-35.0	
7406.00	-11.6	V	3.0	35.7	1.0	-46.4	-13.0	-33.4	
	-17.3	H	3.0	35.9	1.0	-52.2	-13.0	-39.2	
3703.00			2 0	35.5	1.0	-47.9	-13.0	-34.9	
	-13.5	Н	3.0						
3703.00 55554.50 7406.00	-13.5 -11.4	H H	3.0 3.0	35.7	1.0	-46.2	-13.0	-33.2	
5554.50	-11.4	Å				-46.2	-13.0	-33.2	
5554.50 7406.00 Mid Ch, 18 3765.00	-11.4	H V		35.7 35.8	1.0 1.0	-46.2 -51.7	-13.0 -13.0	-33.2 -38.7	
5554.50 7406.00 Mid Ch, 18	-11.4 382.5	H V V	3.0 3.0 3.0	35.7	1.0	-46.2	-13.0	-33.2	
5554.50 7406.00 Mid Ch, 18 3765.00	-11.4 382.5 -16.9	H V	3.0 3.0	35.7 35.8	1.0 1.0	-46.2 -51.7	-13.0 -13.0	-33.2 -38.7	
5554.50 7406.00 Mid Ch, 18 3765.00 5647.50	-11.4 382.5 -16.9 -14.9	H V V	3.0 3.0 3.0	35.7 35.8 35.5	1.0 1.0 1.0	-46.2 -51.7 -49.4	-13.0 -13.0 -13.0	-33.2 -38.7 -36.4	
5554.50 7406.00 Mid Ch, 18 3765.00 5647.50 7530.00 3765.00 5647.50	-11.4 382.5 -16.9 -14.9 -12.8 -17.2 -13.8	H V V V	3.0 3.0 3.0 3.0	35.7 35.8 35.5 35.7	1.0 1.0 1.0 1.0	46.2 -51.7 -49.4 -47.5 -52.0 -48.3	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.2 -38.7 -36.4 -34.5	
5554.50 7406.00 Mid Ch, 18 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00	-11.4 382.5 -16.9 -14.9 -12.8 -17.2 -13.8 -12.1	H V V V H	3.0 3.0 3.0 3.0 3.0 3.0	35.7 35.8 35.5 35.7 35.8	1.0 1.0 1.0 1.0 1.0	-46.2 -51.7 -49.4 -47.5 -52.0	-13.0 -13.0 -13.0 -13.0 -13.0	-33.2 -38.7 -36.4 -34.5 -39.0	
5554.50 7406.00 Mid Ch, 18 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 1	-11.4 382.5 -16.9 -14.9 -12.8 -17.2 -13.8 -12.1 913.5	H V V H H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 35.8 35.5 35.7 35.8 35.5 35.5 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.2 -51.7 -49.4 -47.5 -52.0 -48.3 -46.8	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.2 -38.7 -36.4 -34.5 -39.0 -35.3 -33.8	
5554.50 7406.00 Mid Ch, 18 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 1 3827.00	-11.4 382.5 -16.9 -14.9 -12.8 -17.2 -13.8 -12.1 913.5 -16.8	H V V H H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.8 35.7 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	_46.2 _51.7 _49.4 _47.5 _52.0 _48.3 _46.8 	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.2 -38.7 -36.4 -34.5 -39.0 -35.3 -33.8 -33.8	
5554.50 7406.00 Mid Ch, 18 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 1 3827.00 5740.50	-11.4 382.5 -16.9 -14.9 -12.8 -17.2 -13.8 -12.1 913.5 -16.8 -14.0	H V V H H H V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.8 35.7 35.8 35.5	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.2 -51.7 49.4 47.5 -52.0 48.3 46.8 -51.6 48.5	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.2 -38.7 -36.4 -34.5 -39.0 -35.3 -33.8 -33.8 -38.6 -35.5	
5554.50 7406.00 Mid Ch, 18 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 1 3827.00 5740.50 7654.00	-11.4 382.5 -16.9 -14.9 -12.8 -17.2 -13.8 -17.2 -13.8 -12.1 913.5 -16.8 -14.0 -11.7	H V V H H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.8 35.7 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	_46.2 _51.7 _49.4 _47.5 _52.0 _48.3 _46.8 	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.2 -38.7 -36.4 -34.5 -39.0 -35.3 -33.8 -33.8	
5554.50 7406.00 Mid Ch, 18 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 1 3827.00 5740.50 7654.00 3827.00	-11.4 382.5 -16.9 -14.9 -12.8 -17.2 -13.8 -12.1 913.5 -16.8 -14.0 -11.7 -17.2	H V V H H H V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.8 35.7 35.8 35.5 35.8 35.8 35.8 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.2 -51.7 49.4 47.5 -52.0 48.3 46.8 -51.6 48.5 46.5 -52.0	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.2 -38.7 -36.4 -34.5 -39.0 -35.3 -33.8 -33.8 -33.8 -33.6 -35.5 -33.5 -33.5 -39.0	
5554.50 7406.00 Mid Ch, 18 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 1 3827.00 5740.50 7654.00	-11.4 382.5 -16.9 -14.9 -12.8 -17.2 -13.8 -17.2 -13.8 -12.1 913.5 -16.8 -14.0 -11.7	H V V H H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.8 35.7 35.8 35.5 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	_46.2 _51.7 _49.4 _47.5 _52.0 _48.3 _46.8 	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.2 -38.7 -36.4 -34.5 -39.0 -35.3 -33.8 -33.8 -38.6 -35.5 -33.5	

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DATE: APRIL 22, 2015

MODEL NUMER: LG-US991, US991, LGUS991

FCC ID: ZNFUS991

		Above 10	UL Ve Hz High F	rification requency			Measure	ement	
Compan	v:	LG Electronics	5						
Project	-	15120405							
Date:		4/2/2015							
Test En	nineer	Jude Semana							
Configu	-								
-		EUT w/ AC Ch	arger + HS						
Location	1:	Chamber G							
Mode:		LTE_16QAM E	and 25 Harm	onics, 1.4M	Hz Band	width			
f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Notes
MHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low Ch,	1850.7								
3701.40	-18.6	V	3.0	35.9	1.0	-53.4	-13.0	-40.4	
5552.10	-14.2	V	3.0	35.5	1.0	-48.6	-13.0	-35.6	
7402.80	-11.7	V	3.0	35.7	1.0	-46.4	-13.0	-33.4	
3701.40	-17.8	H	3.0	35.9	1.0	-52.6	-13.0	-39.6	
5552.10	-13.3	H	3.0	35.5	1.0	-47.7	-13.0	-34.7	
7402.80	-10.7	H	3.0	35.7	1.0	-45.5	-13.0	-32.5	
Mid Ch, 1									
3765.00	-17.8	V	3.0	35.8	1.0	-52.6	-13.0	-39.6	
5647.50	-13.8	V	3.0	35.5	1.0	-48.2	-13.0	-35.2	
7530.00	-12.5	V	3.0	35.7	1.0	-47.2	-13.0	-34.2	
3765.00	-17.4	H	3.0	35.8	1.0	-52.2	-13.0	-39.2	
5647.50	-13.4	H	3.0	35.5	1.0	-47.9	-13.0	-34.9	
7530.00	-11.4	Н	3.0	35.7	1.0	-46.2	-13.0	-33.2	
			2.0	25.0	4.0	60.0	42.0	20.2	
	-17.4	V	3.0	35.8 35.5	1.0	-52.2	-13.0	-39.2	
3828.60		· · · · ·			1.0	-47.9	-13.0	-34.9	
3828.60 5742.90	-13.4	V	3.0			ACE	120	22 F	
3828.60 5742.90 7657.20	-13.4 -11.8	V	3.0	35.8	1.0	-46.5	-13.0	-33.5	
3828.60 5742.90 7657.20 3828.60	-13.4 -11.8 -18.0	V H	3.0 3.0	35.8 35.8	1.0 1.0	-52.8	-13.0	-39.8	
High Ch, 3828.60 5742.90 7657.20 3828.60 5742.90 7657.20	-13.4 -11.8	V	3.0	35.8	1.0				

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DATE: APRIL 22, 2015

FCC ID: ZNFUS991

				UL Ve	rification	Servic	es, Inc.			
			Above 1G	Hz High F	requency	y Subst	titution I	Measur	ement	
	Compar	ıv:	LG Electronics							
	Project	-	15120405							
	Date:		4/2/2015							
	Test En	-	Jude Semana							
	Configu		EUT w/ AC Cha	arger + HS						
	Locatio	n:	Chamber G							
	Mode:		LTE_QPSK Ba	ind 25 Harmo	onics, 1.4MI	Hz Bandw	/idth			
	f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Notes
d	MHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	Notes
u	Low Ch,	<u> </u>	(100)				lapin	(abiii)		
5	3701.40	-18.5	V	3.0	35.9	1.0	-53.4	-13.0	-40.4	
.5	5552.10	-13.7	v	3.0	35.5	1.0	-48.2	-13.0	-35.2	
Hz	7402.80	-11.3	v	3.0	35.7	1.0	-46.0	-13.0	-33.0	
112	3701.40	-18.7	H	3.0	35.9	1.0	-53.6	-13.0	-40.6	
		¢		3.0	35.5	1.0	-48.3	-13.0	-35.3	
ĸ	5552.10	-13.9	H	: 3.0						
к	5552.10 7402.80	-13.9 -11.1	H H	3.0	35.7	1.0	-45.9	-13.0	-32.9	
к		-11.1 1882.5	Н	3.0	35.7	1.0		-13.0	-32.9	
к	7402.80	-11.1				\$	-45.9 -51.2	÷		
к	7402.80 Mid Ch,	-11.1 1882.5 -16.4 -14.3	H V V	3.0	35.7 35.8 35.5	1.0	-51.2 -48.8	-13.0 -13.0 -13.0	-32.9 -38.2 -35.8	
к	7402.80 Mid Ch, 3765.00 5647.50 7530.00	-11.1 1882.5 -16.4 -14.3 -11.6	H V V V	3.0 3.0 3.0 3.0	35.7 35.8 35.5 35.7	1.0 1.0 1.0 1.0	-51.2 -48.8 -46.4	-13.0 -13.0 -13.0 -13.0	-32.9 -38.2 -35.8 -33.4	
к	7402.80 Mid Ch, 3765.00 5647.50 7530.00 3765.00	-11.1 1882.5 -16.4 -14.3 -11.6 -17.9	H V V V H	3.0 3.0 3.0 3.0 3.0 3.0	35.7 35.8 35.5 35.7 35.8	1.0 1.0 1.0 1.0 1.0	-51.2 -48.8 -46.4 -52.7	-13.0 -13.0 -13.0 -13.0 -13.0	-32.9 -38.2 -35.8 -33.4 -39.7	
к	7402.80 Mid Ch, 3765.00 5647.50 7530.00 3765.00 5647.50	-11.1 1882.5 -16.4 -14.3 -11.6 -17.9 -13.5	H V V H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 35.8 35.5 35.7 35.8 35.8 35.5	1.0 1.0 1.0 1.0 1.0 1.0	-51.2 -48.8 -46.4 -52.7 -48.0	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-32.9 -38.2 -35.8 -33.4 -39.7 -35.0	
к	7402.80 Mid Ch, 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00	-11.1 1882.5 -16.4 -14.3 -11.6 -17.9 -13.5 -11.7	H V V V H	3.0 3.0 3.0 3.0 3.0 3.0	35.7 35.8 35.5 35.7 35.8	1.0 1.0 1.0 1.0 1.0	-51.2 -48.8 -46.4 -52.7	-13.0 -13.0 -13.0 -13.0 -13.0	-32.9 -38.2 -35.8 -33.4 -39.7	
к	7402.80 Mid Ch, 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch,	-11.1 1882.5 -16.4 -14.3 -11.6 -17.9 -13.5 -11.7 1914.3	H V V H H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 35.8 35.5 35.7 35.8 35.5 35.5 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0	-51.2 -48.8 -46.4 -52.7 -48.0 -46.4	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-32.9 -38.2 -35.8 -33.4 -39.7 -35.0 -33.4	
к	7402.80 Mid Ch, 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3828.60	-11.1 1882.5 -16.4 -14.3 -11.6 -17.9 -13.5 -11.7 1914.3 -17.5	H V V H H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.7 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	-51.2 -48.8 -46.4 -52.7 -48.0 -46.4 -52.2	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-32.9 -38.2 -35.8 -33.4 -39.7 -35.0 -33.4 -39.2	
к	7402.80 Mid Ch, 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3828.60 5742.90	-11.1 1882.5 -16.4 -14.3 -11.6 -17.9 -13.5 -11.7 1914.3 -17.5 -14.4	H V V H H H V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.7 35.8 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	-51.2 -48.8 -46.4 -52.7 -48.0 -46.4 -52.2 -48.9	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-32.9 -38.2 -35.8 -33.4 -39.7 -35.0 -33.4 -39.2 -39.2 -35.9	
к	7402.80 Mid Ch, 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3828.60 5742.90 7657.20	-11.1 1882.5 -16.4 -14.3 -11.6 -17.9 -13.5 -11.7 1914.3 -17.5 -14.4 -11.7	H V V H H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.7 35.8 35.5 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	-51.2 -48.8 -46.4 -52.7 -48.0 -46.4 -52.2 -48.9 -46.5	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-32.9 -38.2 -35.8 -33.4 -39.7 -35.0 -33.4 -39.2 -39.2 -35.9 -33.5	
К	7402.80 Mid Ch, 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3828.60 5742.90 7657.20 3828.60	-11.1 1882.5 -16.4 -14.3 -11.6 -17.9 -13.5 -11.7 1914.3 -17.5 -14.4 -11.7 -16.9	H V V H H H V V V H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.8 35.7 35.8 35.5 35.8 35.8 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	-51.2 48.8 46.4 -52.7 48.0 46.4 -52.2 48.9 46.5 -51.7	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-32.9 -38.2 -35.8 -33.4 -39.7 -35.0 -33.4 -39.2 -39.2 -35.9 -33.5 -38.7	
к	7402.80 Mid Ch, 3765.00 5647.50 7530.00 3765.00 5647.50 7530.00 High Ch, 3828.60 5742.90 7657.20	-11.1 1882.5 -16.4 -14.3 -11.6 -17.9 -13.5 -11.7 1914.3 -17.5 -14.4 -11.7	H V V H H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 35.8 35.5 35.7 35.8 35.5 35.7 35.7 35.8 35.5 35.8	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	-51.2 -48.8 -46.4 -52.7 -48.0 -46.4 -52.2 -48.9 -46.5	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-32.9 -38.2 -35.8 -33.4 -39.7 -35.0 -33.4 -39.2 -39.2 -35.9 -33.5	

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MODEL NUMER: LG-US991, US991, LGUS991

LTE Band 13

#: gineer: ration:	15I20405 04/05/15 Jude Semana EUT w/ AC Ac Chamber C	lapter + HS	nonics, 101	MHz Bar	dwidth			
SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Note
(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
	÷							
						Å		
	÷							
		···	\$			\$	\$ <u>}</u>	
	п	3.0	30.3	1.0	0.0	-13.0	0.0	
27 4	v	2.0	27.1	10	62.6	12.0	50.6	
						Å	÷	
	÷							
			\$			\$	\$ <u>}</u>	
	÷						· · · · · · · · · · · · · · · · · · ·	
-19.1	H	3.0	36.3	1.0	-54.4		-41.4	
0.0	V	3.0	37.1	1.0	0.0	-13.0	0.0	
0.0	V	3.0	36.5	1.0	0.0	-13.0	0.0	
0.0	V	3.0	36.3	1.0	0.0	-13.0	0.0	
0.0	Н	3.0	37.1	1.0	0.0	-13.0	0.0	
0.0	Н	3.0	36.5	1.0	0.0	-13.0	0.0	
0.0		3.0	36.3	1.0	0.0	-13.0	0.0	
0.0	H							
	(dBm) 782 0.0 0.0 0.0 0.0 0.0 82 -27.4 -21.3 -28.4 -22.6 -19.1 782 0.0 0.0	#: 15/20405 04/05/15 04/05/15 gineer: Jude Semana ration: EUT w/ AC Ad 1: Chamber C LTE_16QAM I 8 (H/V) 782 0.0 0.0 V 0.0 V 0.0 V 0.0 H 72 V -27.4 V -28.4 H -22.6 H -19.1 H 782 0.0 0.0 V	#: 15I20405 04/05/15 04/05/15 gineer: Jude Semana ration: EUT w/ AC Adapter + HS n: Chamber C LTE_16QAM Band 13 Harr SG reading (H/V) (m) 782 (H/V) 0.0 V 3.0 0.0 H 3.0 22.6 H 3.0 -22.6 H 3.0 -19.1 H 3.0 782 - - 0.0 V 3.0	SG reading (dBm) Ant. Pol. (H/V) Distance (m) Preamp (dB) 782 0.0 V 3.0 37.1 0.0 V 3.0 36.5 0.0 H 3.0 36.5 -27.4 V 3.0 36.5 -19.5 V 3.0 36.5 -19.5 H 3.0 36.5 -19.1 H 3.0 36.3 782	SG reading (dBm) Ant. Pol. (H/V) Distance (m) Preamp (dB) Filter (dB) 782	#: 15/20405 04/05/15 gineer: Jude Semana ration: EUT w/ AC Adapter + HS : Chamber C LTE_16QAM Band 13 Harmonics, 10MHz Bandwidth SG reading (dBm) Ant. Pol. (H/V) Distance (m) Preamp (dB) Filter (dBm) EIRP (dBm) 782	#: 15/20405 04/05/15 gineer: Jude Semana ration: EUT w/ AC Adapter + HS N: Chamber C LTE_16QAM Band 13 Harmonics, 10MHz Bandwidth SG reading (dBm) Ant. Pol. (H/V) Distance (m) Preamp (dB) Filter (dBm) EIRP (dBm) Limit (dBm) 782	Image: second

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MODEL NUMER: LG-US991, US991, LGUS991

FCC ID: ZNFUS991

		UL Verifi						asurement
			onzingi	iiicqu	chey o	ubstite		asurement
y:	LG Electro	nics						
#:	15 20405							
	04/05/15							
aineer:		na						
-			19					
			10					
	LIE_QPSK	Dand 13 Ha	armonics, 1		inawiath			
SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Notes
	(H/V)			(dB)			(dB)	
	V	3.0	37.1	1.0	0.0	-13.0	0.0	
0.0	V	3.0	36.5	1.0	0.0	-13.0	0.0	
0.0	V	3.0	36.3	1.0	0.0	-13.0	0.0	
0.0	Н	3.0	37.1	1.0	0.0	-13.0	0.0	
0.0	Н	3.0	36.5	1.0	0.0	-13.0	0.0	
0.0	Η	3.0	36.3	1.0	0.0	-13.0	0.0	
'82								
		3.0	37.1	1.0			åi	
		3.0	36.5	1.0				
		\$	¢				åi	
							·····	
	H	3.0	36.3	1.0	-54.2	-13.0	-41.2	
						40.0		
							····· · · · · · · · · · · · · · · · ·	
			\$÷				¢	
			\$				¢i	
0.0 0.0	H H	3.0 3.0	36.5 36.3	1.0 1.0	0.0	-13.0	0.0	
		3.0	30.3	1.0	0.0	-13.0	0.0	
	#: gineer: ration: 1: SG reading (dBm) 782 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	#: 15I20405 04/05/15 gineer: Jude Sema ration: EUT w/ AC I: Chamber C LTE_QPSK SG reading Ant. Pol. (dBm) (H/V) 782 0.0 V 0.0 V 0.0 V 0.0 H 0.0 H 82 - -27.7 V -21.9 V -18.6 V -27.9 H -22.5 H -18.9 H 782 0.0 0.0 V 0.0 V	#: 15/20405 04/05/15 gineer: Jude Semana ration: EUT w/ AC Adapter + H Chamber C LTE_QPSK Band 13 H LTE_QPSK Band 13 H SG reading (H/V) (m) 782 0.0 0.0 V 3.0 0.0 H 3.0 721.9 V 3.0 -27.9 H 3.0 -27.9 H 3.0 -22.5 H 3.0 782 0.0 V 3.0 0.0 V 3.0 0.0 V 3.0 0.0 V 3.0	#: 15120405 04/05/15 gineer: Jude Semana ration: EUT w/ AC Adapter + HS :: Chamber C LTE_QPSK Band 13 Harmonics, 1 SG reading (dBm) Ant. Pol. (H/V) Distance (m) Preamp (dB) (82 - 0.0 V 3.0 36.5 0.0 V 3.0 36.5 0.0 V 3.0 36.5 0.0 H 3.0 36.5 18.6 V 3.0 36.5 -18.9 H 3.0 36.5 0.0 V 3.0	#: 15I20405 04/05/15 gineer: Jude Semana ration: EUT w/ AC Adapter + HS :: Chamber C LTE_QPSK Band 13 Harmonics, 10MHz Ba SG reading (H/V) Distance (m) Preamp (dB) Filter (dB) (dBm) (H/V) 0 monics, 10MHz Ba SG reading (dBm) Ant. Pol. Distance (m) Preamp (dB) Filter (dB) 782 - - - - 0.0 V 3.0 36.5 1.0 0.0 V 3.0 36.5 1.0 0.0 H 3.0 36.5 1.0 -277.7 V 3.0 36.5 1.0 -277.9 H 3.0 36.5 1.0 -18.6 V 3.0 36.5 1.0 -22.5 H 3.0 36.5 1.0 -	#: 15/20405 04/05/15 gineer: Jude Semana ration: EUT w/ AC Adapter + HS : Chamber C LTE_QPSK Band 13 Harmonics, 10MHz Bandwidth SG reading (dBm) Ant. Pol. (H/V) Distance (m) Preamp (dB) Filter (dB) EIRP (dBm) 0.0 V 3.0 37.1 1.0 0.0 0.0 V 3.0 36.5 1.0 0.0 0.0 H 3.0 36.5 1.0 0.0 0.0 H 3.0 36.5 1.0 0.0 82	#: 15120405 04/05/15 gineer: Jude Semana ration: EUT w/ AC Adapter + HS N: Chamber C LTE_QPSK Band 13 Harmonics, 10MHz Bandwidth SG reading (dBm) Ant. Pol. (H/V) Distance (m) Preamp (dB) Filter (dB) EIRP (dBm) Limit (dBm) 782	#: 15/20405 04/05/15 gineer: Jude Semana ration: EUT w/ AC Adapter + HS :: Chamber C LTE_QPSK Band 13 Harmonics, 10MHz Bandwidth SG reading (dBm) Ant. Pol. Distance (mm) Preamp (dB) Filter (dBm) EIRP (dBm) Limit (dB) Delta (dB) 782

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MODEL NUMER: LG-US991, US991, LGUS991

DATE: APRIL 22, 2015

FCC ID: ZNFUS991

				fication \$ IGHz Hig					easuren
Company:		LG Electror		-					
Project #:		15 20405	illos						
•									
Date:		04/05/15							
Test Engineer		Jude Sema							
Configuration:	1	EUT w/ AC		HS					
Mode:		LTE13_5M_	16QAM						
f	SG reading	Ant. Pol.	Distanco	Preamp	Filter	EIRP	Limit	Delta	Note
MHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	NOLE
Low Ch, 779.5	(ubiii)	(100)	(11)	(ub)	(ub)		(abiii)	(40)	
1559.00	-25.4	v	3.0	37.0	1.0	-61.4	-13.0	-48.4	
2338.50	-21.1	v	3.0	36.4	1.0	-56.5	-13.0	-43.5	
3118.00	-18.3	v	3.0	36.2	1.0	-53.5	-13.0	-40.5	
1559.00	-26.1	H	3.0	37.0	1.0	-62.1	-13.0	-49.1	
2338.50	-22.3	H	3.0	36.4	1.0	-57.7	-13.0	-44.7	
3118.00	-18.9	Н	3.0	36.2	1.0	-54.1	-13.0	-41.1	
Mid Ch, 782		•		•		•			
1564.00	-27.1	V	3.0	37.0	1.0	-63.1	-13.0	-50.1	
2346.00	-20.9	V	3.0	36.4	1.0	-56.3	-13.0	-43.3	
3128.00	-18.8	V	3.0	36.1	1.0	-53.9	-13.0	-40.9	
1564.00	-26.4	Н	3.0	37.0	1.0	-62.4	-13.0	-49.4	
2346.00	-22.8	Н	3.0	36.4	1.0	-58.2	-13.0	-45.2	
3128.00	-18.5	Н	3.0	36.1	1.0	-53.6	-13.0	-40.6	
High Ch, 784.5									
1569.00	-25.8	V	3.0	37.0	1.0	-61.7	-13.0	-48.7	
	-20.4	V	3.0	36.4	1.0	-55.8	-13.0	-42.8	
2353.50	-18.9	V	3.0	36.1	1.0	-54.0	-13.0	-41.0	
3138.00			3.0	37.0	1.0	-62.0	-13.0	-49.0	
3138.00 1569.00	-26.0	H					120	-45.3	
3138.00		H H H	3.0 3.0	36.4 36.1	1.0 1.0	-58.3 -53.8	-13.0 -13.0	-40.8	

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Т

DATE: APRIL 22, 2015

MODEL NUMER: LG-US991, US991, LGUS991

FCC ID: ZNFUS991

		-	UL Verif Above 1					[.] C ion Measu	rement		
Company: Project #: Date: Test Engineer: Configuration: Mode:	LG Electronics 15I20405 04/05/15 Jude Semana EUT w/ AC Adapter + HS ILTE13_5M_QPSK										
f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Note		
MHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)			
Low Ch, 779.5											
1559.00	-26.3	V	3.0	37.0	1.0	-62.3	-13.0	-49.3			
2338.50	-20.5	V	3.0	36.4	1.0	-55.9	-13.0	-42.9			
3118.00	-19.4	V	3.0	36.2	1.0	-54.6	-13.0	-41.6			
1559.00	-26.7	н	3.0	37.0	1.0	-62.7	-13.0	-49.7			
2338.50	-23.2	H	3.0	36.4	1.0	-58.6	-13.0	-45.6			
3118.00	-18.1	H	3.0	36.2	1.0	-53.3	-13.0	-40.3			
Mid Ch, 782											
1564.00	-26.9	V	3.0	37.0	1.0	-62.9	-13.0	-49.9			
2346.00	-20.4	V	3.0	36.4	1.0	-55.8	-13.0	-42.8			
3128.00	-18.7	V	3.0	36.1	1.0	-53.8	-13.0	-40.8			
1564.00	-25.6	Н	3.0	37.0	1.0	-61.6	-13.0	-48.6			
2346.00	-22.9	Н	3.0	36.4	1.0	-58.3	-13.0	-45.3			
3128.00	-18.3	H	3.0	36.1	1.0	-53.4	-13.0	-40.4			
High Ch, 784.5											
	-25.8	V	3.0	37.0	1.0	-61.8	-13.0	-48.8			
1569.00			3.0	36.4	1.0	-55.9	-13.0	-42.9			
2353.50	-20.5	V		}		3					
2353.50 3138.00	-18.8	V	3.0	36.1	1.0	-53.9	-13.0	-40.9			
2353.50 3138.00 1569.00	-18.8 -25.4	V H	3.0 3.0	36.1 37.0	1.0	-61.4	-13.0	-48.4			
2353.50 3138.00	-18.8	V	3.0	36.1		÷					

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MODEL NUMER: LG-US991, US991, LGUS991

LTE Band 12

Compar Project Date: Test Er Configu Locatio Mode:	#: ngineer: uration:	Chamber C	na Adapter + F		10MHz B	andwidth			
f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Note
MHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low Ch,	704								
1408.00	-29.1	V	3.0	37.4	1.0	-65.5	-13.0	-52.5	
2112.00	-22.5	V	3.0	36.6	1.0	-58.1	-13.0	-45.1	
2816.00	-21.2	V	3.0	36.4	1.0	-56.6	-13.0	-43.6	
1408.00	-28.4	H	3.0	37.4	1.0	-64.8	-13.0	-51.8	
2112.00	-23.5	H	3.0	36.6	1.0	-59.0	-13.0	-46.0	
2816.00	-22.3	H	3.0	36.4	1.0	-57.6	-13.0	-44.6	
Mid Ch,7									
1415.00	-29.1	V	3.0	37.3	1.0	-65.4	-13.0	-52.4	
2122.50	-22.8	V	3.0	36.6	1.0	-58.4	-13.0	-45.4	
2830.00	-21.2	V	3.0	36.4	1.0	-56.5	-13.0	-43.5	
1415.00	-28.0	H	3.0	37.3	1.0	-64.4	-13.0	-51.4	
2122.50	-23.9	H	3.0	36.6	1.0	-59.5	-13.0	-46.5	
2830.00	-21.8	Н	3.0	36.4	1.0	-57.2	-13.0	-44.2	
High Ch									
1422.00	-29.1	V	3.0	37.3	1.0	-65.4	-13.0	-52.4	
2133.00	-23.0	V	3.0	36.6	1.0	-58.6	-13.0	-45.6	
2844.00	-21.1	V	3.0	36.4	1.0	-56.5	-13.0	-43.5	
1422.00	-27.8	Н	3.0	37.3	1.0	-64.1	-13.0	-51.1	
2133.00	-23.9	Н	3.0	36.6	1.0	-59.4	-13.0	-46.4	
2844.00	-22.5	Н	3.0	36.4	1.0	-57.9	-13.0	-44.9	
	1					<u> </u>			

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MODEL NUMER: LG-US991, US991, LGUS991

FCC ID: ZNFUS991

Company: LG Electronics Project #: 15/20405 Date: 04/05/15 Test Engineer: Jude Semana Configuration: EUT w/ AC Adapter + HS Location: Chamber C Mode: LTE_QPSK Band 12 Harmonics, 10MHz Bandwidth								
· · · · ·		Distance	Preamp	Filter	EIRP	Limit	Delta	Note
	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
			¢i-					
		3.0		1.0				
			¢i-					
	H	3.0	36.4	1.0	-56.9	-13.0	-43.9	
			ļ					
	÷							
		3.0		1.0				
-27.8	H	3.0	37.3	1.0	-64.1	-13.0	-51.1	
-23.8	Н	3.0	36.6	1.0	-59.4	-13.0	-46.4	
	Н	3.0	36.4	1.0	-58.0	-13.0	-45.0	
-22.6								
,711					-65.2	-13.0	-52.2	
	v	3.0	37.3	1.0			VLIL	
,711	V V	3.0 3.0	37.3 36.6	1.0 1.0	-59.2	-13.0	-46.2	
711 -28.9			\$i-					
711 -28.9 -23.6	v	3.0	36.6	1.0	-59.2	-13.0	-46.2	
711 -28.9 -23.6 -22.6	V V	3.0 3.0	36.6 36.4	1.0 1.0	-59.2 -58.0	-13.0 -13.0	-46.2 -45.0	
	#: Iration: n: SG reading (dBm) 704 -28.3 -22.9 -20.9 -27.8 -23.5 -21.6 707.5 -28.5 -28.5 -22.3 -21.2	#: 15120405 od/05/15 ngineer: Jude Semail uration: EUT w/ AC n: Chamber C LTE_QPSK SG reading Ant. Pol. (dBm) (H/V) 704 -22.9 V -20.9 V -21.6 H -22.3 V -22.3 V -21.2 V	#: 15120405 04/05/15 04/05/15 ngineer: Jude Semana Iration: EUT w/ AC Adapter + H n: Chamber C LTE_QPSK Band 12 Ha SG reading (H/V) (m) 704 -28.3 V -22.9 V 3.0 -22.9 V 3.0 -27.8 H 3.0 -23.5 H 3.0 -21.6 H 3.0 -22.3 V 3.0 -22.3 V 3.0	#: 15120405 04/05/15 04/05/15 ngineer: Jude Semana Iration: EUT w/ AC Adapter + HS n: Chamber C LTE_QPSK Band 12 Harmonics, 1 SG reading (H/V) (m) (dBm) (H/V) (H/V) (m) 704 -22.9 V 3.0 -22.9 V 3.0 36.6 -20.9 V 3.0 36.4 -27.8 H 3.0 36.4 -21.6 H -28.5 V -28.5 V -21.2 V 3.0 36.4	#: 15120405 04/05/15 04/05/15 ngineer: Jude Semana Iration: EUT w/ AC Adapter + HS n: Chamber C LTE_QPSK Band 12 Harmonics, 10MHz Ba 704 -28.3 V 3.0 37.4 -20.9 V 3.0 36.6 -21.6 H 3.0 36.4 1.0 -21.6 H -28.5 V 3.0 37.3 -22.3 V 3.0 36.6 1.0 -21.2 V	#: 15/20405 04/05/15 04/05/15 ngineer: Jude Semana Iration: EUT w/ AC Adapter + HS n: Chamber C LTE_QPSK Band 12 Harmonics, 10MHz Bandwidth SG reading (dBm) Ant. Pol. (H/V) Distance (m) Preamp (dB) Filter (dBm) EIRP (dBm) 704 -	#: 15120405 04/05/15 04/05/15 ngineer: Jude Semana Iration: EUT w/ AC Adapter + HS n: Chamber C LTE_QPSK Band 12 Harmonics, 10MHz Bandwidth SG reading (dBm) (H/V) (H/V) (m) (m) (dB) (dB) (dB) (dBm) (H/V) (H/V) (m) (dB) (dB) (dB) (dBm) (dBm) (1.0 -28.3 V 3.0 37.4 1.0 -64.6 -13.0 -22.9 V 3.0 36.6 1.0 -56.3 -23.5 H 3.0 36.6 3.0 36.6 1.0 -56.9 -13.0 -28.5 V 3.0 36.4 -28.5 V 3.0 36.6 -28.5 V -28.5 V 3.0 36.6 <t< td=""><td>#: 15l20405 04/05/15 04/05/15 ngineer: Jude Semana Irration: EUT w/ AC Adapter + HS n: Chamber C LTE_QPSK Band 12 Harmonics, 10MHz Bandwidth SG reading (dBm) (H/V) (H/V) (m) (dB) (dB) (dB) (dBm) (dBm) (dBm) (H/V) 0 3.0 37.4 1.0 -64.6 -22.9 V 3.0 36.6 -22.9 V 3.0 36.4 1.0 -64.1 -3.0 36.6 1.0 -56.3 -22.9 V 3.0 36.4 1.0 -64.1 -3.0 36.6 1.0 -56.3 -3.0 36.4 1.0 -56.9 -3.0 36.6 1.0 -56.9 -3.0 36.4 1.0 -56.9 -3.0 36.4 <t< td=""></t<></td></t<>	#: 15l20405 04/05/15 04/05/15 ngineer: Jude Semana Irration: EUT w/ AC Adapter + HS n: Chamber C LTE_QPSK Band 12 Harmonics, 10MHz Bandwidth SG reading (dBm) (H/V) (H/V) (m) (dB) (dB) (dB) (dBm) (dBm) (dBm) (H/V) 0 3.0 37.4 1.0 -64.6 -22.9 V 3.0 36.6 -22.9 V 3.0 36.4 1.0 -64.1 -3.0 36.6 1.0 -56.3 -22.9 V 3.0 36.4 1.0 -64.1 -3.0 36.6 1.0 -56.3 -3.0 36.4 1.0 -56.9 -3.0 36.6 1.0 -56.9 -3.0 36.4 1.0 -56.9 -3.0 36.4 <t< td=""></t<>

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MODEL NUMER: LG-US991, US991, LGUS991

FCC ID: ZNFUS991

#: Igineer: Iration: n:	LG Electronics 15/20405 04/05/15 Jude Semana EUT w/ AC Adapter + HS Chamber C LTE_16QAM Band 12 Harmonics, 5MHz Bandwidth										
				Filter	EIRP	Limit	Delta	Note			
	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)				
		2.0	27.4	4.0	05.0	42.0	52.2				
÷			å			÷					
			······				·····				
	-		å			÷					
			\$i-			¢					
-28.0	V	3.0	37.3	1.0	-64.4	-13.0	-51.4				
-22.1	V	3.0	36.6	1.0	-57.7	-13.0	-44.7				
-21.1	V	3.0	36.4	1.0	-56.5	-13.0	-43.5				
-27.7	Η	3.0	37.3	1.0	-64.0	-13.0	-51.0				
-23.3	H	3.0	36.6	1.0	-58.9	-13.0	-45.9				
-22.6	Η	3.0	36.4	1.0	-58.0	-13.0	-45.0				
713.50					CE 3	-13.0	-52.2				
-28.8	۷	3.0	37.3	1.0	-65.2						
-28.8 -22.7	V	3.0	36.6	1.0	-58.2	-13.0	-45.2				
-28.8 -22.7 -20.8	V V	3.0 3.0	36.6 36.4	1.0 1.0	-58.2 -56.2	-13.0 -13.0	-45.2 -43.2				
-28.8 -22.7 -20.8 -27.9	V V H	3.0 3.0 3.0	36.6 36.4 37.3	1.0 1.0 1.0	-58.2 -56.2 -64.2	-13.0 -13.0 -13.0	-45.2 -43.2 -51.2				
-28.8 -22.7 -20.8	V V	3.0 3.0	36.6 36.4	1.0 1.0	-58.2 -56.2	-13.0 -13.0	-45.2 -43.2				
	#: gineer: iration: n: SG reading (dBm) 701.50 -28.8 -23.1 -21.6 -28.0 -23.3 -22.5 707.50 -28.0 -22.1 -21.1 -21.1 -27.7	#: 15120405 04/05/15 04/05/15 gineer: Jude Sema iration: EUT w/ AC n: Chamber C LTE_16QAI SG reading Ant. Pol. (dBm) (H/V) 701.50 -23.1 -23.1 V -21.6 V -28.0 H -23.3 H -22.5 H 707.50 -22.1 -22.1 V -21.1 V -21.1 V	#: 15I20405 04/05/15 gineer: Jude Semana Iration: Iration: EUT w/ AC Adapter + H n: Chamber C LTE_16QAM Band 12 H SG reading (H/V) (m) 701.50 -28.8 -23.1 V 3.0 -23.1 V 3.0 -23.3 H 3.0 -23.3 H 3.0 -22.5 H 3.0 -22.5 H 3.0 -22.1 V 3.0 -22.1 V 3.0 -22.1 V 3.0 -22.1 V 3.0 -21.1 V 3.0	#: 15/20405 04/05/15 gineer: Jude Semana Irration: Irration: EUT w/ AC Adapter + HS n: Chamber C LTE_16QAM Band 12 Harmonics, SG reading (H/V) (m) (dBm) (H/V) (H/V) (m) 701.50	#: 15/20405 04/05/15 gineer: Jude Semana irration: EUT w/ AC Adapter + HS n: Chamber C LTE_16QAM Band 12 Harmonics, 5MHz Ba 701.50 (dB) -28.8 V 3.0 -21.6 V 3.0 36.6 -23.1 V 3.0 36.6 1.0 -22.5 H 3.0 36.6 1.0 -22.5 H 3.0 36.4 1.0 -22.1 V 3.0 36.6 1.0 -22.1 V 3.0 36.4 1.0 -22.1 V	#: 15l20405 04/05/15 gineer: Jude Semana Irration: EUT w/ AC Adapter + HS n: Chamber C LTE_16QAM Band 12 Harmonics, 5MHz Bandwidth SG reading (dBm) (H/V) (H/V) (m) (dB) (dB) (dB) (dB) (dB) (dBm) 701.50	#: 15120405 04/05/15 gineer: Jude Semana Irration: EUT w/ AC Adapter + HS n: Chamber C LTE_16QAM Band 12 Harmonics, 5MHz Bandwidth SG reading (dBm) Ant. Pol. (H/V) (H/V) (m) (m) (dB) (dBm) (H/V) (H/V) (m) (dB) (dBm) (dBm) (H/V) (H/V) (m) (abs.)	#: 15/20405 04/05/15 gineer: Jude Semana irration: EUT w/ AC Adapter + HS n: Chamber C LTE_16QAM Band 12 Harmonics, 5MHz Bandwidth SG reading (dBm) Ant. Pol. (H/V) (m) (dB) (dB) (dB) (dB) (dB) (dB) (dBm) (H/V) (m) (dB) (dB) (dB) (dB) (dB) (dB) (dB) (dB) (23.1 V 3.0 36.6 2.16 V 3.0 36.6 1.0 -65.2 -23.1 V 3.0 36.6 1.0 -51.4 -22.5 H 3.0 36.4 1.0 -54.4 -22.5 H 3.0 36.6 1.0 -54.4 -22.5 H -22.1 V -22.0 V -22.1 V <tr< td=""></tr<>			

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MODEL NUMER: LG-US991, US991, LGUS991

FCC ID: ZNFUS991

ny: #: gineer: Iration: n:	15I20405 04/05/15 Jude Sema EUT w/ AC Chamber C	0405 5/15 e Semana ⁻ w/ AC Adapter + HS mber C								
			•	Filter	EIRP	Limit	Delta	Note		
(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)			
					05.6	10.6				
						Å				
	÷									
					÷	Q				
	å									
			÷			\$				
						-10.0				
-29.0	V	3.0	37.3	1.0	-65.3	-13.0	-52.3			
-22.5	v	3.0	36.6	1.0	-58.0	-13.0	-45.0			
-21.1	V	3.0	36.4	1.0	-56.5	-13.0	-43.5			
-27.2	Н	3.0	37.3	1.0	-63.6	-13.0	-50.6			
-23.9	Н	3.0	36.6	1.0	-59.5	-13.0	-46.5			
-21.6	H	3.0	36.4	1.0	-57.0	-13.0	-44.0			
713.50			ļ							
-28.8	V	3.0	37.3	1.0	-65 .1	-13.0	-52.1			
••••••••••••••••••••••••••••••••••••••	V	3.0	36.6	1.0	-58.2	-13.0	-45.2			
-22.7		20	36.4	1.0	-56.7	-13.0	-43.7			
-21.3	V	3.0	\$							
-21.3 -27.8	Н	3.0	37.3	1.0	-64.1	-13.0	-51.1			
-21.3			\$	1.0 1.0 1.0	-64.1 -59.0 -57.4	-13.0 -13.0 -13.0	-51.1 -46.0 -44.4			
	#: gineer: iration: n: SG reading (dBm) 701.50 -28.6 -20.1 -27.7 -24.3 -22.7 707.50 -29.0 -22.5 -21.1 -27.2 -23.9	#: 15120405 04/05/15 04/05/15 irration: EUT w/ AC n: Chamber C LTE_QPSK SG reading Ant. Pol. (dBm) (H/V) 701.50 -22.6 -22.6 V -22.6 V -20.1 V -27.7 H -24.3 H -22.7 H 707.50 -22.5 -22.5 V -21.1 V -27.2 H -23.9 H	#: 15I20405 04/05/15 gineer: Jude Semana Jude Semana Iration: EUT w/ AC Adapter + H n: Chamber C LTE_QPSK Band 12 Ha SG reading (H/V) (m) 701.50 -28.6 -28.6 V 3.0 -22.6 V 3.0 -22.6 V 3.0 -22.7 H 3.0 -24.3 H 3.0 -22.7 H 3.0 -22.5 V 3.0 -22.5 V 3.0 -27.2 H 3.0 -23.9 H 3.0	#: 15/20405 04/05/15 gineer: Jude Semana Iration: EUT w/ AC Adapter + HS n: Chamber C LTE_QPSK Band 12 Harmonics, 5 SG reading (H/V) (m) 701.50 - -28.6 V 3.0 -28.6 V 3.0 37.4 -22.6 V 3.0 36.4 -27.7 H 3.0 36.4 -27.2 V 3.0 36.6 -21.1	#: 15/20405 04/05/15 gineer: Jude Semana Irration: EUT w/ AC Adapter + HS n: Chamber C LTE_QPSK Band 12 Harmonics, 5MHz Ban 701.50 (dB) -28.6 V 3.0 -28.6 V 3.0 36.6 -22.6 V 3.0 36.4 1.0 -27.7 H 3.0 36.4 1.0 -27.2 H 3.0 36.6 1.0 -27.2 H 3.0 36.6 1.0 -27.2 H	#: 15/20405 04/05/15 gineer: Jude Semana Irration: EUT w/ AC Adapter + HS n: Chamber C LTE_QPSK Band 12 Harmonics, 5MHz Bandwidth SG reading (dBm) (H/V) (H/V) (m) (dB) (dB) (dB) (dB) (dB) (dBm) 701.50 - -28.6 V 3.0 -22.6 V 3.0 36.6 -20.1 V 3.0 36.4 1.0 -27.7 H 3.0 36.6 1.0 -59.8 -22.7 H 3.0 36.4 1.0 -58.0 -22.7 H 3.0 36.6 1.0 -58.0 -22.7 V	#: 15l20405 04/05/15 gineer: Jude Semana Irration: EUT w/ AC Adapter + HS n: Chamber C LTE_QPSK Band 12 Harmonics, 5MHz Bandwidth SG reading (dBm) Ant. Pol. (H/V) Distance (m) Preamp (dB) Filter (dB) EIRP (dBm) Limit (dBm) 701.50	#: 15/20405 04/05/15 gineer: Jude Semana iration: EUT w/ AC Adapter + HS n: Chamber C LTE_QPSK Band 12 Harmonics, 5MHz Bandwidth SG reading (H/V) Distance (m) Preamp (dB) Filter (dB) Limit (dBm) Delta (dB) 701.50		

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MODEL NUMER: LG-US991, US991, LGUS991

FCC ID: ZNFUS991

Company:LG ElectronicsProject #:15/20405Date:04/05/15Test Engineer:Jude SemanaConfiguration:EUT w/ AC Adapter + HSLocation:Chamber CMode:LTE_16QAM Band 12 Harmonics, 3MHz Bandwidth								
			•••	Filter	EIRP	Limit	Delta	Note
	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
¢			\$÷		••••••••••••••••••••••••••••••••••••••	¢		
			å		÷			
	\$							
\$			\$÷-			¢		
	п	3.0	36.4	1.0	-31.6	-13.0	-44.6	
	v	2.0	27.2	4.0	C4 C	42.0	E4.C	
·····	•						۰۰۰۰۰ ¢۰۰۰۰ ،	
			å					
	÷							
\$			\$÷					
	å		······					
	н	3.0	36.4	1.0	-36.7	-13.0	-43.1	
714.5 -28.2		2.0	27.2	4.0	CAE	42.0	EAE	
. /8/	V	3.0	37.3	1.0	-64.5	-13.0	-51.5	
		3.0	36.6	1.0 1.0	-57.9	-13.0	-44.9	
-22.3	V	2 0			-57.3	-13.0	-44.3	
-22.3 -21.9	V	3.0	36.4			43.0	E0 4	
-22.3 -21.9 -27.0	V H	3.0	37.3	1.0	-63.4	-13.0	-50.4	
-22.3 -21.9	V		¢			-13.0 -13.0 -13.0	-50.4 -46.2 -44.4	
	#: igineer: iration: n:	#: 15120405 04/05/15 04/05/15 igineer: Jude Semail iration: EUT w/ AC n: Chamber C LTE_16QAI 8 (H/V) 700.5 -28.7 V -21.3 V -27.5 H -23.8 H -22.2 H 707.50 - -28.3 V -22.5 V -20.9 V -27.4 H -22.6 H	#: 15/20405 04/05/15 04/05/15 iration: EUT w/ AC Adapter + F n: Chamber C LTE_16QAM Band 12 F SG reading (H/V) (m) 700.5 - -28.7 V 3.0 -21.3 V 3.0 -27.5 H 3.0 -23.8 H 3.0 -22.2 H 3.0 707.50 - - -22.5 V 3.0 -22.5 V 3.0 -22.5 V 3.0 -22.5 V 3.0 -22.6 H 3.0	#: 15l20405 04/05/15 04/05/15 regineer: Jude Semana Irration: EUT w/ AC Adapter + HS n: Chamber C LTE_16QAM Band 12 Harmonics, 700.5 (H/V) -28.7 V 3.0 -28.7 V 3.0 36.6 -21.3 V 3.0 36.4 -27.5 H 3.0 36.4 -27.5 H 3.0 36.4 -27.5 V 3.0 36.4 -27.5 H 3.0 36.4 -27.5 V 3.0 36.4 -27.5 H 3.0 36.4 -22.2 H 3.0 36.6 -22.6 V	#: 15/20405 04/05/15 04/05/15 iration: EUT w/ AC Adapter + HS n: Chamber C LTE_16QAM Band 12 Harmonics, 3MHz Ba 700.5 (dB) -28.7 V 3.0 37.4 1.0 -22.3 V 3.0 36.6 1.0 -27.5 H 3.0 36.4 1.0 -27.5 H 3.0 36.4 1.0 -27.5 V 3.0 36.4 1.0 -27.5 H 3.0 36.4 1.0 -22.2 H 3.0 36.4 1.0 -22.5 V 3.0 36.6 1.0 -22.5 V 3.0 36.6 1.0 -27	#: 15/20405 04/05/15 04/05/15 ogineer: Jude Semana Irration: EUT w/ AC Adapter + HS n: Chamber C LTE_16QAM Band 12 Harmonics, 3MHz Bandwidth SG reading (dBm) (H/V) (H/V) (m) (dB) (dB) (dB) (dB) 700.5	#: 15l20405 04/05/15 04/05/15 ogineer: Jude Semana Irration: EUT w/ AC Adapter + HS n: Chamber C LTE_16QAM Band 12 Harmonics, 3MHz Bandwidth SG reading (dBm) (H/V) (H/V) (m) (dBm) (H/V) (m) (dB) (dB) (dBm) (dBm) (H/V) (m) (dB) (dB) (dBm) 700.5	#: 15I20405 04/05/15

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MODEL NUMER: LG-US991, US991, LGUS991

FCC ID: ZNFUS991

Compar Project Date: Test En Configu Locatio Mode:	#: gineer: iration:	LG Electror 15I20405 04/05/15 Jude Sema EUT w/ AC Chamber C LTE_QPSK	na Adapter + H		MHz Ban	ndwidth			
f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Note
MHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low Ch,									
1401.00	-28.9	V	3.0	37.4	1.0	-65.3	-13.0	-52.3	
2101.50	-22.6	V	3.0	36.6	1.0	-58.2	-13.0	-45.2	
2802.00	-21.6	V	3.0	36.4	1.0	-57.0	-13.0	-44.0	
1401.00	-28.0	H	3.0	37.4	1.0	-64.3	-13.0	-51.3	
2101.50	-22.7	H	3.0	36.6	1.0	-58.2	-13.0	-45.2	
2802.00	-22.2	H	3.0	36.4	1.0	-57.6	-13.0	-44.6	
Mid Ch,								50.4	
1415.00	-29.8	V	3.0	37.3	1.0	-66.1	-13.0	-53.1	
2122.00	-22.4	V	3.0	36.6	1.0	-57.9	-13.0	-44.9	
2830.00	-20.3	V	3.0	36.4	1.0	-55.7	-13.0	-42.7	
	-27.9	H	3.0	37.3	1.0	-64.3	-13.0	-51.3	
	-23.2	H	3.0	36.6	1.0	-58.8	-13.0	-45.8	
2122.00	22.2	H	3.0	36.4	1.0	-57.6	-13.0	-44.6	
2122.00 2830.00	-22.3					1	ļ	60.0	
2122.00 2830.00 High Ch,	714.5	v	20	27.2	1.0	66.0	120		
2122.00 2830.00 High Ch, 1429.00	714.5 -28.8	V	3.0	37.3	1.0	-65.2	-13.0	-52.2	
2122.00 2830.00 High Ch, 1429.00 2143.50	714.5 -28.8 -22.9	v	3.0	36.6	1.0	-58.5	-13.0	-45.5	
2122.00 2830.00 High Ch, 1429.00 2143.50 2858.00	714.5 -28.8 -22.9 -21.1	V V	3.0 3.0	36.6 36.4	1.0 1.0	-58.5 -56.4	-13.0 -13.0	-45.5 -43.4	
2122.00 2830.00 High Ch, 1429.00 2143.50 2858.00 1429.00	714.5 -28.8 -22.9 -21.1 -27.7	V V H	3.0 3.0 3.0	36.6 36.4 37.3	1.0 1.0 1.0	-58.5 -56.4 -64.1	-13.0 -13.0 -13.0	-45.5 -43.4 -51.1	
1415.00 2122.00 2830.00 High Ch, 1429.00 2143.50 2858.00 1429.00 2143.50 2858.00	714.5 -28.8 -22.9 -21.1	V V	3.0 3.0	36.6 36.4	1.0 1.0	-58.5 -56.4	-13.0 -13.0	-45.5 -43.4	

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DATE: APRIL 22, 2015

MODEL NUMER: LG-US991, US991, LGUS991

FCC ID: ZNFUS991

			UL Verifi Above 1					C ion Meas	urement
Compar	nv:	LG Electror	nics						
Project	-	15 20405							
Date:		04/05/15							
	gineer:	Jude Sema	na						
Configu	-		Adapter + H	10					
Locatio		Chamber C		15					
Mode:	n:		M Band 12 H						
f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Note
MHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low Ch,									
1399.40	-28.7	V	3.0	37.4	1.0	-65.1	-13.0	-52.1	
2099.10	-23.1	V	3.0	36.6	1.0	-58.7	-13.0	-45.7	
2798.80	-21.4	V	3.0	36.4	1.0	-56.8	-13.0	-43.8	
1399.40	-27.5	H	3.0	37.4	1.0	-63.9	-13.0	-50.9	
2099.10 2798.80	-24.2 -22.6	H	3.0 3.0	36.6 36.4	1.0 1.0	-59.7 -57.9	-13.0 -13.0	-46.7 -44.9	
Mid Ch,			3.0	J0.4	1.0	-31.3	-13.0	-44.5	
	-29.6	v	3.0	37.3	1.0	-66.0	-13.0	-53.0	
		÷	3.0	36.6	1.0	-58.1	-13.0	-45.1	
1415.00		: V					-13.0	-44.4	
1415.00 2122.00	-22.6	V V		36.4	1.0	÷ -5(.4			
1415.00 2122.00 2830.00	-22.6 -22.0	V	3.0	36.4 37.3	1.0 1.0	-57.4 -63.7			
1415.00 2122.00 2830.00 1415.00	-22.6			36.4 37.3 36.6	1.0 1.0 1.0	-57.4 -63.7 -59.8	-13.0 -13.0 -13.0	-50.7 -46.8	
1415.00 2122.00 2830.00 1415.00 2122.00	-22.6 -22.0 -27.4	V H	3.0 3.0	37.3	1.0	-63.7	-13.0	-50.7	
1415.00 2122.00 2830.00 1415.00 2122.00 2830.00	-22.6 -22.0 -27.4 -24.2 -22.1	V H H	3.0 3.0 3.0	37.3 36.6 36.4	1.0 1.0	-63.7 -59.8	-13.0 -13.0	-50.7 -46.8	
1415.00 2122.00 2830.00 1415.00 2122.00 2830.00 High Ch,	-22.6 -22.0 -27.4 -24.2 -22.1	V H H	3.0 3.0 3.0	37.3 36.6	1.0 1.0	-63.7 -59.8	-13.0 -13.0	-50.7 -46.8	
1415.00 2122.00 2830.00 1415.00 2122.00 2830.00 High Ch, 1430.60	-22.6 -22.0 -27.4 -24.2 -22.1 715.3	V H H H	3.0 3.0 3.0 3.0	37.3 36.6 36.4	1.0 1.0 1.0	-63.7 -59.8 -57.5	-13.0 -13.0 -13.0	-50.7 -46.8 -44.5	
1415.00 2122.00 2830.00 1415.00 2122.00 2830.00 High Ch, 1430.60 2145.90	-22.6 -22.0 -27.4 -24.2 -22.1 715.3 -27.5	V H H H V	3.0 3.0 3.0 3.0 3.0	37.3 36.6 36.4 37.3	1.0 1.0 1.0 1.0	-63.7 -59.8 -57.5 -63.8	-13.0 -13.0 -13.0 -13.0	-50.7 -46.8 -44.5 -50.8	
1415.00 2122.00 2830.00 1415.00 2122.00 2830.00 High Ch, 1430.60 2145.90 2861.20 1430.60	-22.6 -22.0 -27.4 -24.2 -22.1 715.3 -27.5 -22.8	V H H V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0	37.3 36.6 36.4 37.3 36.6	1.0 1.0 1.0 1.0 1.0	-63.7 -59.8 -57.5 -63.8 -58.4	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-50.7 -46.8 -44.5 -50.8 -45.4	
1415.00 2122.00 2830.00 1415.00 2122.00 2830.00 High Ch, 1430.60 2145.90 2861.20	-22.6 -22.0 -27.4 -24.2 -22.1 715.3 -27.5 -22.8 -20.6	V H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	37.3 36.6 36.4 37.3 36.6 36.4	1.0 1.0 1.0 1.0 1.0 1.0 1.0	-63.7 -59.8 -57.5 -63.8 -58.4 -58.4 -56.0	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-50.7 -46.8 -44.5 -50.8 -50.8 -45.4 -43.0	

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DATE: APRIL 22, 2015

MODEL NUMER: LG-US991, US991, LGUS991

FCC ID: ZNFUS991

			UL Verific	cation Se	ervices,	Inc. Cha	amber C	;	
			Above 10	3Hz High	Freque	ency Sub	ostitutio	n Measur	ement
Compan	v:	LG Electron	ics						
Project		15120405							
Date:		04/05/15							
Test Eng	nineer:	Jude Sema	na						
Configu			Adapter + H	S					
Location		Chamber C		0					
Mode:			Band 12 Ha	rmonics 1	4MHz Ba	ndwidth			
	1			1		i	F		
f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Note
MHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low Ch,	3			07.4			40.0		
1399.40	-28.5	V	3.0	37.4	1.0	-64.9	-13.0	-51.9	
2099.10	-22.9	<u>v</u>	3.0	36.6	1.0	-58.5	-13.0	-45.5	
2798.80	-20.6	<u>v</u>	3.0	36.4	1.0	-56.0	-13.0	-43.0	
1399.40	-27.3	H	3.0	37.4	1.0	-63.7	-13.0	-50.7	
2099.10	-23.7	H	3.0	36.6	1.0	-59.2	-13.0	-46.2	
	-22.5	H	3.0	36.4	1.0	-57.9	-13.0	-44.9	
	/								
Mid Ch, 7	07.50	V	2.0	27.2	10	65.3	12.0	52.3	
Mid Ch, 7 1415.00	07.50 -29.0	V	3.0	37.3	1.0	-65.3	-13.0	-52.3	
2122.00	707.50 -29.0 -22.8	V	3.0	36.6	1.0	-58.4	-13.0	-45.4	
Mid Ch, 7 1415.00 2122.00 2830.00	707.50 -29.0 -22.8 -21.4	V V	3.0 3.0	36.6 36.4	1.0 1.0	-58.4 -56.8	-13.0 -13.0	-45.4 -43.8	
Mid Ch, 7 1415.00 2122.00 2830.00 1415.00	707.50 -29.0 -22.8 -21.4 -27.6	V V H	3.0 3.0 3.0	36.6 36.4 37.3	1.0 1.0 1.0	-58.4 -56.8 -64.0	-13.0 -13.0 -13.0	-45.4 -43.8 -51.0	
Mid Ch, 7 1415.00 2122.00 2830.00 1415.00 2122.00	07.50 -29.0 -22.8 -21.4 -27.6 -22.8	V V H H	3.0 3.0 3.0 3.0	36.6 36.4 37.3 36.6	1.0 1.0 1.0 1.0	-58.4 -56.8 -64.0 -58.4	-13.0 -13.0 -13.0 -13.0	-45.4 -43.8 -51.0 -45.4	
Mid Ch, 7 1415.00 2122.00 2830.00 1415.00 2122.00 2830.00	07.50 -29.0 -22.8 -21.4 -27.6 -22.8 -22.6	V V H	3.0 3.0 3.0	36.6 36.4 37.3	1.0 1.0 1.0	-58.4 -56.8 -64.0	-13.0 -13.0 -13.0	-45.4 -43.8 -51.0	
Mid Ch, 7 1415.00 2122.00 2830.00 1415.00 2122.00 2830.00 High Ch,	07.50 -29.0 -22.8 -21.4 -27.6 -22.8 -22.6 715.3	V V H H	3.0 3.0 3.0 3.0 3.0 3.0	36.6 36.4 37.3 36.6 36.4	1.0 1.0 1.0 1.0 1.0	-58.4 -56.8 -64.0 -58.4 -57.9	-13.0 -13.0 -13.0 -13.0 -13.0	-45.4 -43.8 -51.0 -45.4	
Mid Ch, 7 1415.00 2122.00 2830.00 1415.00 2122.00 2830.00 High Ch, 1430.60	07.50 -29.0 -22.8 -21.4 -27.6 -22.8 -22.6 715.3 -29.3	V V H H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0	36.6 36.4 37.3 36.6	1.0 1.0 1.0 1.0 1.0 1.0	-58.4 -56.8 -64.0 -58.4	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-45.4 -43.8 -51.0 -45.4 -44.9	
Mid Ch, 7 1415.00 2122.00 2830.00 1415.00 2122.00 2830.00 High Ch,	07.50 -29.0 -22.8 -21.4 -27.6 -22.8 -22.6 715.3	V V H H V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	36.6 36.4 37.3 36.6 36.4 37.3	1.0 1.0 1.0 1.0 1.0	-58.4 -56.8 -64.0 -58.4 -57.9 -65.6	-13.0 -13.0 -13.0 -13.0 -13.0	-45.4 -43.8 -51.0 -45.4 -44.9 -52.6	
Mid Ch, 7 1415.00 2122.00 2830.00 1415.00 2122.00 2830.00 High Ch, 1430.60 2145.90	07.50 -29.0 -22.8 -21.4 -27.6 -22.8 -22.6 715.3 -29.3 -22.2	V V H H V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0	36.6 36.4 37.3 36.6 36.4 37.3 37.3 36.6	1.0 1.0 1.0 1.0 1.0 1.0 1.0	-58.4 -56.8 -64.0 -58.4 -57.9 -65.6 -57.8	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-45.4 -43.8 -51.0 -45.4 -44.9 -52.6 -44.8	
Mid Ch, 7 1415.00 2122.00 2830.00 1415.00 2122.00 2830.00 High Ch, 1430.60 2145.90 2861.20 1430.60	07.50 -29.0 -22.8 -21.4 -27.6 -22.8 -22.6 715.3 -29.3 -29.3 -22.2 -21.2	V V H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	36.6 36.4 37.3 36.6 36.4 37.3 36.6 36.6 36.6 36.4	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	-58.4 -56.8 -64.0 -58.4 -57.9 -65.6 -57.8 -56.6	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-45.4 -43.8 -51.0 -45.4 -44.9 -52.6 -44.8 -43.6	
Mid Ch, 7 1415.00 2122.00 2830.00 1415.00 2122.00 2830.00 High Ch, 1430.60 2145.90 2861.20	07.50 -29.0 -22.8 -21.4 -27.6 -22.8 -22.6 715.3 -29.3 -29.3 -22.2 -21.2 -21.2 -27.8	V H H V V V V H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	36.6 36.4 37.3 36.6 36.4 37.3 36.6 36.6 36.4 37.3	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	-58.4 -56.8 -64.0 -58.4 -57.9 -65.6 -57.8 -56.6 -64.2	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-45.4 -43.8 -51.0 -45.4 -44.9 -52.6 -44.8 -43.6 -51.2	

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MODEL NUMER: LG-US991, US991, LGUS991

LTE Band 5

			UL Verific Above 1G						rement
Comp	anv:	LG Electro	nics						
Proje	-	15 20405							
Date:	σt π .	04/05/15							
	. .								
	Engineer:	Jude Sema							
	guration:		Adapter + H						
Mode	:	LIE5 10MH	Hz 16QAM HA	ARIM					
	Chamb	er	Pre-an	nplifer		Filte	r		Limit
	3m Chamber	•	T34 8449B	-		Filter 1	•	Part 2	2
	·			_					
f	SG reading		Distance	•		1		Delta	Notes
GHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low C	h, 829MHz								
1.658	-26.4	V	3.0	37.4	1.0	-62.8	-13.0	-49.8	
2.487	-19.2	V	3.0	36.4	1.0	-54.5	-13.0	-41.5	
3.316	-20.4	V	3.0	35.8	1.0	-55.2	-13.0	-42.2	
1.658	-25.9	H	3.0	37.4	1.0	-62.3	-13.0	-49.3	
2.487	-24.3	H	3.0	36.4	1.0	-59.7	-13.0	-46.7	
3.316	-21.7	H	3.0	35.8	1.0	-56.5	-13.0	-43.5	
	h, 836.5MHz	•							
1.673	-26.3	V	3.0	37.3	1.0	-62.7	-13.0	-49.7	
2.510	-21.2	V	3.0	36.4	1.0	-56.5	-13.0	-43.5	
3.346	-21.2	V	3.0	35.8	1.0	-55.9	-13.0	-42.9	
1.673	-26.2	H	3.0	37.3	1.0	-62.5	-13.0	-49.5	
2.510	-22.7	H	3.0	36.4	1.0	-58.0	-13.0	-45.0	
3.346	-21.5	H	3.0	35.8	1.0	-56.2	-13.0	-43.2	
	ih, 844MHz								
1.688	-25.2	V	3.0	37.3	1.0	-61.5	-13.0	-48.5	
2.532	-21.3	V	3.0	36.3	1.0	-56.6	-13.0	-43.6	
3.376	-20.4	V	3.0	35.7	1.0	-55.1	-13.0	-42.1	
1.688	-25.6	Н	3.0	37.3	1.0	-61.9	-13.0	-48.9	
2.532	-22.7	H	3.0	36.3	1.0	-58.1	-13.0	-45.1	
3.376	-20.4	Н	3.0	35.7	1.0	-55.1	-13.0	-42.1	

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FCC ID: ZNFUS991

			UL Verific Above 1G						rement
Compa	anv:	LG Electroni	cs						
Projec	-	15 20405							
Date:		04/05/15							
	nainear		-						
	ngineer:	Jude Seman							
Mode:	uration:		Adapter + HS z QPSK HARN	-					
moue.						F 114			1
	Chamb	er	Pre-am	plifer		Filter			Limit
Ē	3m Chamber	•	T34 8449B	•		Filter 1	-	Part 2	2
	on onaniser	·	<u> </u>	_			_	I	
f	SG reading	Ant. Pol.	Distance		Filter	EIRP	Limit	Delta	Notes
GHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low Ch	i, 829MHz								
1.658	-26.6	V	3.0	37.4	1.0	-63.0	-13.0	-50.0	
2.487	-20.4	V	3.0	36.4	1.0	-55.8	-13.0	-42.8	
3.316	-21.2	V	3.0	35.8	1.0	-56.0	-13.0	-43.0	
1.658	-26.7	Н	3.0	37.4	1.0	-63.1	-13.0	-50.1	
2.487	-21.5	Н	3.0	36.4	1.0	-56.9	-13.0	-43.9	
3.316	-21.1	Н	3.0	35.8	1.0	-55.8	-13.0	-42.8	
Mid Ch	i, 836.5MHz								
1.673	-25.4	V	3.0	37.3	1.0	-61.8	-13.0	-48.8	
2.510	-21.0	V	3.0	36.4	1.0	-56.3	-13.0	-43.3	
3.346	-20.5	V	3.0	35.8	1.0	-55.2	-13.0	-42.2	
1.673	-26.6	Н	3.0	37.3	1.0	-62.9	-13.0	-49.9	
2.510	-22.3	H	3.0	36.4	1.0	-57.7	-13.0	-44.7	
3.346	-21.2	H	3.0	35.8	1.0	-56.0	-13.0	-43.0	
	n,844 MHz								
High Cl	1, 044 MILL			37.3	1.0	-62.0	-13.0	-49.0	
High Cl 1.688	-25.6	V	3.0	JI .J					
1.688 2.532		V V	3.0 3.0	36.3	1.0	-56.0	-13.0	-43.0	
1.688	-25.6		······································		1.0 1.0	-56.0 -54.3	-13.0 -13.0	-41.3	
1.688 2.532	-25.6 -20.6	V	3.0 3.0 3.0	36.3					
1.688 2.532 3.376	-25.6 -20.6 -19.6	V V	3.0 3.0	36.3 35.7	1.0	-54.3	-13.0	-41.3	

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FCC ID: ZNFUS991

				UL Verific Above 1G					Measu	rement	
		ct #: Engineer: guration:	LG Electroni 15I20405 04/05/15 Jude Seman EUT w/ AC / LTE5 5M 16	a Adapter + HS							
		Chamb 3m Chamber	er	Pre-an T34 8449B	-	F	Filter ilter 1		Part	Limit 22	•
Band	f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Notes	_
LTE5	GHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)		
5MHz	Low C	h, 826.5MHz					ļ				
511112	1.653	-26.0	V	3.0	37.4	1.0	-62.3	-13.0	-49.3		
16QAM	2.480	-20.7	V	3.0	36.4	1.0	-56.1	-13.0	-43.1		
	3.306	-19.7	V	3.0	35.8	1.0	-54.5	-13.0	-41.5		
	1.653	-26.1	H	3.0	37.4	1.0	-62.5	-13.0	-49.5		
	2.480	-22.4	H	3.0	36.4	1.0	-57.8	-13.0	-44.8		
	3.306	-19.7	H	3.0	35.8	1.0	-54.5	-13.0	-41.5		
	Mid C 1.673	h, 836.5MHz -25.1	v	3.0	37.3	1.0	-61.5	-13.0	-48.5		
	2.510	-20.1 -20.1	V	3.0	37.3 36.4	1.0	-01.5	-13.0 -13.0	-40.5 -42.5		
	3.346	-20.1	V	3.0	35.8	1.0	-56.1	-13.0	-42.5		
	1.673	-33.0	Ĥ	3.0	37.3	1.0	-69.4	-13.0	-56.4		
	2.510	-22.5	H	3.0	36.4	1.0	-57.9	-13.0	-44.9		
	3.346	-20.7	Н	3.0	35.8	1.0	-55.5	-13.0	-42.5		
	High C	h, 846.5MHz									
	1.693	-26.5	V	3.0	37.3	1.0	-62.8	-13.0	-49.8		
	2.540	-20.7	V	3.0	36.3	1.0	-56.1	-13.0	-43.1		
	3.386	-20.7	V	3.0	35.7	1.0	-55.4	-13.0	-42.4		
	1.693	-26.6	Н	3.0	37.3	1.0	-62.9	-13.0	-49.9		
	2.540	-22.9	H	3.0	36.3	1.0	-58.2	-13.0	-45.2		
	3.386	-21.2	Н	3.0	35.7	1.0	-55.9	-13.0	-42.9		

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FCC ID: ZNFUS991

			UL Verific Above 1G					Measur	ement	I
	et #: Engineer: guration:	LG Electron 15I20405 04/05/15 Jude Semar EUT w/ AC / LTE5 5M QF	ia Adapter + HS							
	Chamb	er	Pre-an	nplifer		Filter			Limit	
Γ	3m Chamber	•	T34 8449B	•		Filter 1	Ŧ	Part	22 🗸	
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes	
	h, 826.5MHz	(11/4)	(111)	(40)	(48)		(abiii)	(40)		=
1.653	-25.8	V	3.0	37.4	1.0	-62.2	-13.0	-49.2		
2.480	-21.1	v	3.0	36.4	1.0	-56.5	-13.0	-43.5		~
3.306	-20.9	V	3.0	35.8	1.0	-55.7	-13.0	-42.7		,
1.653	-25.9	Н	3.0	37.4	1.0	-62.3	-13.0	-49.3		
2.480	-22.6	Н	3.0	36.4	1.0	-58.0	-13.0	-45.0		
3.306	-20.7	Н	3.0	35.8	1.0	-55.5	-13.0	-42.5		
Mid Cl	n, 836.5MHz									
1.673	-25.8	V	3.0	37.3	1.0	-62.1	-13.0	-49.1		
2.510	-19.8	V	3.0	36.4	1.0	-55.1	-13.0	-42.1		
3.346	-21.1	V	3.0	35.8	1.0	-55.9	-13.0	-42.9]
1.673	-26.1	H	3.0	37.3	1.0	-62.5	-13.0	-49.5		
2.510	-21.9	H	3.0	36.4	1.0	-57.3	-13.0	-44.3		
3.346	-21.7	Н	3.0	35.8	1.0	-56.5	-13.0	-43.5		
	h, 846.5MHz						40.0			[]
1.693	-26.1	V	3.0	37.3	1.0	-62.4	-13.0	-49.4		
2.540	-20.4	V	3.0	36.3	1.0	-55.7	-13.0	-42.7]
	<u>.</u>		· · · · · · · · · · · · · · · · · · ·							
3.386	-20.9	V	3.0	35.7	1.0	-55.6	-13.0	-42.6		
3.386 1.693	-20.9 -26.2	V H	3.0	37.3	1.0	-62.5	-13.0	-49.5		
3.386	-20.9	V					å			····

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DATE: APRIL 22, 2015

MODEL NUMER: LG-US991, US991, LGUS991

FCC ID: ZNFUS991

			UL Verific Above 1G		-			Measur	rement
 Compa	ny:	LG Electroni	cs						
Project	:#:	15120405							
Date:		04/05/15							
Test Er	ngineer:	Jude Seman	а						
Config	uration:	EUT w/ AC A	Adapter + HS						
Mode:		LTE2_3M_160	QAM						
			Dresser	an life v		Filter			Limit
	Chamb	er	Pre-an	ipiliter		Filler			Limit
Г	3m Chamber	-	T34 8449B	•		Filter 1	•	Part	22
								,	
f	SG reading	Ant. Pol.	Distance		Filter	EIRP	Limit	Delta	Note
GHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low Ch	, 825.5MHz					1			
1.651	-26.2	V	3.0	37.4	1.0	-62.6	-13.0	-49.6	
2.477	-19.9	V	3.0	36.4	1.0	-55.3	-13.0	-42.3	
3.302	-21.7	V	3.0	35.8	1.0	-56.5	-13.0	-43.5	
1.651	-26.4	Н	3.0	37.4	1.0	-62.7	-13.0	-49.7	
2.477	-21.4	H	3.0	36.4	1.0	-56.8	-13.0	-43.8	
3.302	-21.1	Н	3.0	35.8	1.0	-55.9	-13.0	-42.9	
	, 836.5MHz								
1.673	-25.3	V	3.0	37.3	1.0	-61.7	-13.0	-48.7	ļ
2.510	-22.2	V	3.0	36.4	1.0	-57.5	-13.0	-44.5	
3.346	-18.3	V	3.0	35.8	1.0	-53.0	-13.0	-40.0	<u> </u>
1.673	-25.8	Н	3.0	37.3	1.0	-62.2	-13.0	-49.2	ļ
2.510	-23.6	Н	3.0	36.4	1.0	-59.0	-13.0	-46.0	
3.346	-18.8	Н	3.0	35.8	1.0	-53.5	-13.0	-40.5	
	, 847.5 MHz								
1.695	-25.5	V	3.0	37.3	1.0	-61.8	-13.0	-48.8	
2.543	-21.2	<u>V</u>	3.0	36.3	1.0	-56.5	-13.0	-43.5	
3.390	-21.0	<u>v</u>	3.0	35.7	1.0	-55.7	-13.0	-42.7	
	-25.9	H	3.0	37.3	1.0	-62.2	-13.0	-49.2	
1.695			3.0	36.3	1.0	-58.0	-13.0	-45.0	
1.695 2.543	-22.6	H				7	1	7	1
1.695	-22.6 -21.4	H	3.0	35.7	1.0	-56.2	-13.0	-43.2	

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FCC ID: ZNFUS991

			UL Verific Above 1G						rement
Compa	any:	LG Electroni	cs						
Projec	-	15 20405							
Date:		04/05/15							
	ingineer:	Jude Seman	2						
	-								
Mode:	juration:	LTE2_3M_Q	Adapter + HS						
Γ	Chambo 3m Chamber	er •	Pre-am T34 8449B	nplifer •		Filter Filter 1	· •	Part 2	Limit 2
f	SG reading			(40)	Filter		Limit	Delta	Note
GHz		(H/V)	(m)	(dB)	(dB)	(aBm)	(dBm)	(dB)	
	n, 825.5MHz	.,		07.4	4.0	00.7	42.0	40.7	
1.651 2.477	-26.3	V V	3.0 3.0	37.4	1.0	-62.7 -55.4	-13.0	-49.7 -42.4	
3.302	-20.0 -20.6	V V	3.0	36.4 35.8	1.0 1.0	-33.4	-13.0 -13.0	-42.4 -42.4	
1.651	-20.6	V H	3.0	37.4	1.0	-55.4	-13.0	-42.4	
2.477	-20.7	п Н	3.0	36.4	1.0	-03.1	-13.0	-30.1	
3.302	-22.1	H	3.0	35.8	1.0	-56.3	-13.0	-44.5	
	n, 836.5MHz		5.0	33.0	1.0	-30.3	-13.0	-40.0	
1.673	-24.9	v	3.0	37.3	1.0	-61.2	-13.0	-48.2	
2.510	-21.4	v	3.0	36.4	1.0	-56.8	-13.0	-43.8	
3.346	-18.9	v	3.0	35.8	1.0	-53.7	-13.0	-40.7	
1.673	-25.8	H	3.0	37.3	1.0	-62.1	-13.0	-49.1	
2.510	-22.9	H	3.0	36.4	1.0	-58.3	-13.0	-45.3	
3.346	-19.6	H	3.0	35.8	1.0	-54.3	-13.0	-41.3	
	h, 847.5 MHz	•	1				¢		
1.695	-24.9	V	3.0	37.3	1.0	-61.2	-13.0	-48.2	
2.543	-20.8	V	3.0	36.3	1.0	-56.1	-13.0	-43.1	
3.390	-21.2	V	3.0	35.7	1.0	-55.9	-13.0	-42.9	
	-26.0	H	3.0	37.3	1.0	-62.3	-13.0	-49.3	
1.695			* • • •			EC 0	-13.0	-43.9	
1.695 2.543	-21.6	Н	3.0	36.3	1.0	-56.9	-13.0	-43.3	

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FCC ID: ZNFUS991

			UL Ve Above 1G	rification Hz High					ement
Comp	anv:	LG Electroni	ics						
Proje	-	15 20405							
Date:		04/05/15							
	Ingineer:	Jude Seman							
	-								
Mode	guration:		Adapter + HS Iz 16QAM HAI						
	Chamb		Pre-am	nplifer		Filter Filter 1		Part 22	Limit
	3m Chamber	•	1 34 04490	•		ritter 1	•	Part 22	2
f	SG reading	Ant. Pol.	Distance		Filter	EIRP	Limit	Delta	Notes
GHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low C	h, 824.7MHz								
1.649	-26.4	V	3.0	37.4	1.0	-62.8	-13.0	-49.8	
2.474	-20.7	V	3.0	36.4	1.0	-56.1	-13.0	-43.1	
3.299	-20.7	V	3.0	35.8	1.0	-55.5	-13.0	-42.5	
1.649	-27.3	Н	3.0	37.4	1.0	-63.6	-13.0	-50.6	
2.474	-21.9	H	3.0	36.4	1.0	-57.3	-13.0	-44.3	
3.299	-21.1	H	3.0	35.8	1.0	-55.9	-13.0	-42.9	
	h, 836.5MHz								
1.673	-25.5	V	3.0	37.3	1.0	-61.8	-13.0	-48.8	
2.510	-22.3	V	3.0	36.4	1.0	-57.6	-13.0	-44.6	
3.346	-20.1	V	3.0	35.8	1.0	-54.8	-13.0	-41.8	
1.673	-25.9	H	3.0	37.3	1.0	-62.3	-13.0	-49.3	
2.510	-23.5	H	3.0	36.4	1.0	-58.8	-13.0	-45.8	
3.346	-20.9	H	3.0	35.8	1.0	-55.6	-13.0	-42.6	
	h, 848.3 MHz	v		07.0	4.0		42.0	40.4	
1.697	-25.1	÷	3.0	37.3	1.0	-61.4	-13.0	-48.4	
2.545	-21.1	V	3.0	36.3	1.0	-56.5	-13.0	-43.5	
3.393	-21.2	V	3.0	35.7	1.0	-55.9	-13.0	-42.9	
	-24.8	H	3.0	37.3	1.0	-61.1	-13.0	-48.1	
1.697		••	^ •	20.2					
1.697 2.545 3.393	-22.6 -20.6	H	3.0 3.0	36.3 35.7	1.0 1.0	-57.9 -55.3	-13.0 -13.0	-44.9 -42.3	

FCC ID: ZNFUS991

			UL Ve Above 1G	rification Hz High					rement
Comp	any:	LG Electroni	cs						
Proje	ct #:	15 20405							
Date:		04/05/15							
Test E	Engineer:	Jude Seman	а						
	guration:	FUT w/ AC /	Adapter + HS						
Mode	-	LTE5_1.4M_(
ſ	Chambo 3m Chamber	er •	Pre-am T34 8449B	nplifer _▼		Filter Filter 1		Part 2	Limit 2 🗸
f	SG reading			(15)	Filter	EIRP	Limit	Delta	Notes
GHz		(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
	h, 829MHz								
1.649	-26.4	V	3.0	37.4	1.0	-62.7	-13.0	-49.7	
2.474	-20.6	V V	3.0	36.4	1.0	-55.9	-13.0	-42.9	
3.299	-21.1		3.0	35.8	1.0	-55.9	-13.0	-42.9	
1.649 2.474	-27.0 -21.6	H H	3.0 3.0	37.4 36.4	1.0 1.0	-63.4 -57.0	-13.0 -13.0	-50.4 -44.0	
3.299	-21.0	H	3.0	35.8	1.0	-57.0	-13.0	-44.0	
	h, 836.5MHz		5.0	33.0	1.0	-33.3	-13.0	-42.J	
1.673	-25.7	V	3.0	37.3	1.0	-62.1	-13.0	-49.1	
2.510	-22.3	v	3.0	36.4	1.0	-57.7	-13.0	-44.7	
3.346	-20.2	v	3.0	35.8	1.0	-54.9	-13.0	-41.9	
1.673	-26.1	Н	3.0	37.3	1.0	-62.4	-13.0	-49.4	
2.510	-23.6	Н	3.0	36.4	1.0	-59.0	-13.0	-46.0	
3.346	-20.9	Н	3.0	35.8	1.0	-55.6	-13.0	-42.6	
High C	h, 844 MHz	•							
1.697	-26.0	V	3.0	37.3	1.0	-62.3	-13.0	-49.3	
2 646	-21.2	V	3.0	36.3	1.0	-56.6	-13.0	-43.6	
2.545	-21.2	-			T		40.0	10 7	
2.545 3.393	-21.2	V	3.0	35.7	1.0	-55.7	-13.0	-42.7	
	·····ò		3.0 3.0	35.7 37.3	1.0 1.0	-55.1 -62.3	-13.0 -13.0	-42.7 -49.3	
3.393	-21.0	V			*				

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MODEL NUMER: LG-US991, US991, LGUS991

LTE Band 4

		Above 10	UL V Hz High I	erification Frequenc				rement	
Compa	nv:	LG							
Project	-	15 20405							
Date:		4/6/2015							
			_						
	ngineer:	Jude Seman							
_	uration:	EUT + Charg	ger + Headse	t					
Locatio	on:	Chamber G							
Mode:		LTE_16QAM	Band 4 Har	monics, 20M	/Hz Band	dwidth			
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Note
Low Ch									
3440.00	-13.6	V	3.0	36.0	1.0	-48.6	-13.0	-35.6	
5160.00	-11.9	V	3.0	35.4	1.0	-46.3	-13.0	-33.3	
	-11.6	V	3.0	35.7	1.0	-46.3	-13.0	-33.3	
6880.00				260	10			-32.9	
3440.00	-10.8	H	3.0	36.0	1.0	-45.9	-13.0		
3440.00 5160.00	-11.8	Н	3.0	35.4	1.0	-46.3	-13.0	-33.3	
3440.00 5160.00 6880.00	-11.8 -9.0		÷				¢		
3440.00 5160.00 6880.00 Mid Ch,	-11.8 -9.0 1732.5	H	3.0 3.0	35.4 35.7	1.0 1.0	-46.3 -43.6	-13.0 -13.0	-33.3 -30.6	
3440.00 5160.00 6880.00 Mid Ch, 3465.00	-11.8 -9.0 1732.5 -15.1	H H V	3.0 3.0 3.0	35.4 35.7 36.0	1.0 1.0 1.0	-46.3 -43.6 -50.1	-13.0 -13.0 -13.0	-33.3 -30.6 -37.1	
3440.00 5160.00 6880.00 Mid Ch, 3465.00 5197.50	-11.8 -9.0 1732.5 -15.1 -11.3	H H V V	3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.0 35.4	1.0 1.0 1.0 1.0	46.3 43.6 -50.1 45.7	-13.0 -13.0 -13.0 -13.0	-33.3 -30.6 -37.1 -32.7	
3440.00 5160.00 6880.00 Mid Ch, 3465.00 5197.50 6930.00	-11.8 -9.0 1732.5 -15.1 -11.3 -11.5	H H V V V	3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.0 35.4 35.7	1.0 1.0 1.0 1.0 1.0	46.3 43.6 -50.1 45.7 46.2	-13.0 -13.0 -13.0 -13.0 -13.0	-33.3 -30.6 -37.1 -32.7 -33.2	
3440.00 5160.00 6880.00 Mid Ch, 3465.00 5197.50 6930.00 3465.00	-11.8 -9.0 1732.5 -15.1 -11.3 -11.5 -12.0	H H V V V H	3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.0 35.4 35.7 36.0	1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.3 43.6 -50.1 45.7 46.2 47.1	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.3 -30.6 -37.1 -32.7 -33.2 -34.1	
3440.00 5160.00 6880.00 Mid Ch, 3465.00 5197.50 6930.00 3465.00 5197.50	-11.8 -9.0 1732.5 -15.1 -11.3 -11.5 -12.0 -11.4	H H V V V H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.0 35.4 35.7 36.0 35.4	1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.3 43.6 -50.1 45.7 46.2 47.1 45.9	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.3 -30.6 -37.1 -32.7 -33.2 -34.1 -32.9	
3440.00 5160.00 6880.00 Mid Ch, 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00	-11.8 -9.0 1732.5 -15.1 -11.3 -11.5 -12.0 -11.4 -10.0	H H V V V H	3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.0 35.4 35.7 36.0	1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.3 43.6 -50.1 45.7 46.2 47.1	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.3 -30.6 -37.1 -32.7 -33.2 -34.1	
3440.00 5160.00 6880.00 Mid Ch, 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch	-11.8 -9.0 1732.5 -15.1 -11.3 -11.5 -12.0 -11.4 -10.0 , 1745	H H V V H H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.3 43.6 -50.1 45.7 46.2 47.1 45.9 44.7	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.3 -30.6 -37.1 -32.7 -33.2 -34.1 -32.9 -31.7	
3440.00 5160.00 6880.00 Mid Ch, 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch 3490.00	-11.8 -9.0 1732.5 -15.1 -11.3 -11.5 -12.0 -11.4 -10.0 , 1745 -13.9	H H V V H H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 35.4 35.7 36.0	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.3 43.6 -50.1 45.7 46.2 47.1 45.9 44.7 -48.9	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.3 -30.6 -37.1 -32.7 -33.2 -34.1 -32.9 -34.1 -32.9 -31.7 -35.9	
3440.00 5160.00 6880.00 Mid Ch, 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch	-11.8 -9.0 1732.5 -15.1 -11.3 -11.5 -12.0 -11.4 -10.0 , 1745 -13.9	H H V V H H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.3 43.6 -50.1 45.7 46.2 47.1 45.9 44.7	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.3 -30.6 -37.1 -32.7 -33.2 -34.1 -32.9 -31.7	
3440.00 5160.00 6880.00 Mid Ch, 3465.00 5197.50 6930.00 5197.50 6930.00 High Ch 3490.00 5235.00 6980.00	-11.8 -9.0 1732.5 -15.1 -11.3 -11.5 -12.0 -11.4 -10.0 , 1745 -13.9 -11.3 -11.1	H H V V H H H V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.3 43.6 -50.1 45.7 46.2 47.1 45.9 44.7 48.9 45.7 45.8	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.3 -30.6 -37.1 -32.7 -33.2 -34.1 -32.9 -34.1 -32.9 -31.7 -35.9 -32.7 -32.8	
3440.00 5160.00 6880.00 Mid Ch, 3465.00 5197.50 6930.00 5197.50 6930.00 High Ch 3490.00 5235.00	-11.8 -9.0 1732.5 -15.1 -11.3 -11.5 -12.0 -11.4 -10.0 , 1745 -13.9 -11.3	H H V V H H H V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.3 43.6 -50.1 45.7 46.2 47.1 45.9 44.7 -48.9 45.7	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.3 -30.6 -37.1 -32.7 -33.2 -34.1 -32.9 -34.1 -32.9 -31.7 -35.9 -32.7	

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DATE: APRIL 22, 2015

FCC ID: ZNFUS991

				Verificatio					
		Above	1GHz High	Frequen	cy Subs	stitution	Measur	ement	
Company	<i>r</i> :	LG							
Project #		15 20405							
Date:		4/6/2015							
Test Eng	ineer:	Jude Sema	na						
Configur			ger + Headse	at					
Location		Chamber G	-	51					
	•								
Mode:		LIE_QPSK	Band 4 Harn	nonics, zuwi	nz bandwi	ath			
f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Notes
MHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low Ch, 1									
3440.00	-13.0	V	3.0	36.0	1.0	-48.1	-13.0	-35.1	
5160.00	-11.5	V	3.0	35.4	1.0	-45.9	-13.0	-32.9	
6880.00	-11.6	V	3.0	35.7	1.0	-46.2	-13.0	-33.2	
3440.00	-10.1	Н	3.0	36.0	1.0	-45.1	-13.0	-32.1	
5160.00	-11.0	H	3.0	35.4	1.0	-45.4	-13.0	-32.4	
6880.00	-10.4	Н	3.0	35.7	1.0	-45.0	-13.0	-32.0	
	732 5								
Mid Ch, 1			3.0	36.0	1.0	-50.5	-13.0	-37.5	
Mid Ch, 1 3465.00	-15.4	V							
Mid Ch, 1 3465.00 5197.50	-15.4 -11.4	V	3.0	35.4	1.0	-45.8	-13.0	-32.8	
Mid Ch, 1 3465.00 5197.50 6930.00	-15.4 -11.4 -11.3	V V	3.0 3.0	35.7	1.0	-46.0	-13.0	-33.0	
Mid Ch, 1 3465.00 5197.50 6930.00 3465.00	-15.4 -11.4 -11.3 -11.7	V V H	3.0 3.0 3.0	35.7 36.0	1.0 1.0	-46.0 -46.8	-13.0 -13.0	-33.0 -33.8	
Mid Ch, 1 3465.00 5197.50 6930.00 3465.00 5197.50	-15.4 -11.4 -11.3 -11.7 -11.6	V V H H	3.0 3.0 3.0 3.0	35.7 36.0 35.4	1.0 1.0 1.0	-46.0 -46.8 -46.0	-13.0 -13.0 -13.0	-33.0 -33.8 -33.0	
Mid Ch, 1 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00	-15.4 -11.4 -11.3 -11.7 -11.6 -9.8	V V H	3.0 3.0 3.0	35.7 36.0	1.0 1.0	-46.0 -46.8	-13.0 -13.0	-33.0 -33.8	
Mid Ch, 1 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 1	-15.4 -11.4 -11.3 -11.7 -11.6 -9.8 1745	V V H H H	3.0 3.0 3.0 3.0 3.0 3.0	35.7 36.0 35.4 35.7	1.0 1.0 1.0 1.0	46.0 46.8 46.0 44.5	-13.0 -13.0 -13.0 -13.0	-33.0 -33.8 -33.0 -31.5	
Mid Ch, 1 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 1 3490.00	-15.4 -11.4 -11.3 -11.7 -11.6 -9.8 1745 -13.3	V V H H V	3.0 3.0 3.0 3.0 3.0 3.0	35.7 36.0 35.4 35.7 	1.0 1.0 1.0 1.0 1.0	46.0 46.8 46.0 44.5 -48.4	-13.0 -13.0 -13.0 -13.0 -13.0	-33.0 -33.8 -33.0 -31.5 -35.4	
Mid Ch, 1 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 4 3490.00 5235.00	-15.4 -11.4 -11.3 -11.7 -11.6 -9.8 1745 -13.3 -11.3	V V H H V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 36.0 35.4 35.7 36.0 35.4	1.0 1.0 1.0 1.0 1.0 1.0	46.0 46.8 46.0 44.5 48.4 45.7	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.0 -33.8 -33.0 -31.5 -35.4 -32.7	
Mid Ch, 1 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 4 3490.00 5235.00 6980.00	-15.4 -11.4 -11.3 -11.7 -11.6 -9.8 1745 -13.3 -11.3 -11.4	V V H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 36.0 35.4 35.7 36.0 35.4 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.0 46.8 46.0 44.5 48.4 45.7 46.1	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.0 -33.8 -33.0 -31.5 -35.4 -32.7 -33.1	
Mid Ch, 1 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 4 3490.00 5235.00 6980.00 3490.00	-15.4 -11.4 -11.3 -11.7 -11.6 -9.8 1745 -13.3 -11.3 -11.3 -11.4 -10.7	V H H V V V V H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 36.0 35.4 35.7 36.0 35.4 35.7 35.7 36.0	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.0 46.8 46.0 44.5 48.4 45.7 46.1 45.7	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.0 -33.8 -33.0 -31.5 -35.4 -32.7 -33.1 -32.7	
Mid Ch, 1 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 4 3490.00 5235.00 6980.00	-15.4 -11.4 -11.3 -11.7 -11.6 -9.8 1745 -13.3 -11.3 -11.4	V V H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 36.0 35.4 35.7 36.0 35.4 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.0 46.8 46.0 44.5 48.4 45.7 46.1	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.0 -33.8 -33.0 -31.5 -35.4 -32.7 -33.1	

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MODEL NUMER: LG-US991, US991, LGUS991

DATE: APRIL 22, 2015

FCC ID: ZNFUS991

		Above 1	UL V GHz High	/erification Frequence			Measur	ement	
Company:		LG							
Project #:		15120405							
Date:		4/6/2015							
Test Engi		Jude Semar							
Configura	tion:		ger + Headse	et					
Location:		Chamber G							
Mode:		LTE_16QAN	/I Band 4 Har	monics, 15N	/Hz Band	width			
f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Note
MHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	Note
Low Ch, 17		(1)		(ab)	(ub)	lanu	lanit	(40)	
3435.00	-12.5	V	3.0	36.1	1.0	-47.5	-13.0	-34.5	
5152.50	-12.4	V	3.0	35.4	1.0	-46.8	-13.0	-33.8	
6870.00	-11.9	V	3.0	35.7	1.0	-46.5	-13.0	-33.5	
3435.00	-10.0	Н	3.0	36.1	1.0	-45.0	-13.0	-32.0	
5152.50	-11.3	Н	3.0	35.4	1.0	-45.8	-13.0	-32.8	
6870.00	-9.9	Н	3.0	35.7	1.0	-44.6	-13.0	-31.6	
Mid Ch, 173	32.5	• •		•		•	•		
3465.00	-15.2	V	3.0	36.0	1.0	-50.3	-13.0	-37.3	
5197.50	-10.7	V	3.0	35.4	1.0	-45.2	-13.0	-32.2	
3131.30	· · · · ·	17	3.0	35.7	1.0	-46.1	-13.0	22.4	
	-11.5	V	J.U	JJ 1	1.0	-40.1	-13.0	-33.1	
6930.00 3465.00	-11.5 -10.2	V H	3.0	35.7 36.0	1.0	-40.1 -45.2	-13.0	-33.1 -32.2	
6930.00 3465.00		ô		å		&	ô		
6930.00 3465.00 5197.50 6930.00	-10.2 -10.9 -10.1	H	3.0	36.0	1.0	-45.2	-13.0	-32.2	
6930.00 3465.00 5197.50	-10.2 -10.9 -10.1 747.5	H H	3.0 3.0	36.0 35.4 35.7	1.0 1.0 1.0	-45.2 -45.3 -44.7	-13.0 -13.0 -13.0	-32.2 -32.3 -31.7	
6930.00 3465.00 5197.50 6930.00	-10.2 -10.9 -10.1	H H	3.0 3.0	36.0 35.4	1.0 1.0	-45.2 -45.3	-13.0 -13.0	-32.2 -32.3	
6930.00 3465.00 5197.50 6930.00 High Ch, 17	-10.2 -10.9 -10.1 747.5	H H H	3.0 3.0 3.0	36.0 35.4 35.7	1.0 1.0 1.0	-45.2 -45.3 -44.7	-13.0 -13.0 -13.0	-32.2 -32.3 -31.7	
6930.00 3465.00 5197.50 6930.00 High Ch, 17 3495.00	-10.2 -10.9 -10.1 747.5 -13.1 -9.7 -11.3	H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0	36.0 35.4 35.7 36.0	1.0 1.0 1.0 1.0 1.0 1.0 1.0	45.2 45.3 44.7 48.1	-13.0 -13.0 -13.0 -13.0	32.2 -32.3 -31.7 -35.1 -31.1 -33.0	
6930.00 3465.00 5197.50 6930.00 High Ch, 17 3495.00 5242.50 6990.00 3495.00	-10.2 -10.9 -10.1 747.5 -13.1 -9.7 -11.3 -9.6	H H V V V H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	36.0 35.4 35.7 36.0 35.4 35.7 36.0	1.0 1.0 1.0 1.0 1.0 1.0	45.2 45.3 44.7 48.1 44.1 46.0 44.6	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-32.2 -32.3 -31.7 -35.1 -31.1 -33.0 -31.6	
6930.00 3465.00 5197.50 6930.00 High Ch, 17 3495.00 5242.50 6990.00	-10.2 -10.9 -10.1 747.5 -13.1 -9.7 -11.3	H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0	36.0 35.4 35.7 36.0 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0	45.2 45.3 44.7 48.1 44.1 46.0	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	32.2 -32.3 -31.7 -35.1 -31.1 -33.0	
6930.00 3465.00 5197.50 6930.00 High Ch, 17 3495.00 5242.50 6990.00 3495.00	-10.2 -10.9 -10.1 747.5 -13.1 -9.7 -11.3 -9.6	H H V V V H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	36.0 35.4 35.7 36.0 35.4 35.7 36.0	1.0 1.0 1.0 1.0 1.0 1.0 1.0	45.2 45.3 44.7 48.1 44.1 46.0 44.6	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-32.2 -32.3 -31.7 -35.1 -31.1 -33.0 -31.6	

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MODEL NUMER: LG-US991, US991, LGUS991

DATE: APRIL 22, 2015

FCC ID: ZNFUS991

				erification	n Servio	ces, Inc.			
		Above 10	GHz High	Frequence	cy Subs	titution	Measu	rement	
Company:		LG							
Project #:		15 20405							
Date:		4/6/2015							
Test Engir	leer:	Jude Seman	-						
-									
Configurat	lion:	EUT + Charg	ger + Headse	et					
Location:		Chamber G							
Mode:		LTE_QPSK	Band 4 Harn	nonics, 15M	Hz Bandv	vidth			
f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Note
MHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low Ch, 17	17.5								
		V	3.0	36.1	1.0	-47.2	-13.0	-34.2	
3435.00	-12.2	v	J.U	30.1					
3435.00 5152.50	-12.2 -11.9	V	3.0	35.4	1.0	-46.3	-13.0	-33.3	
5152.50		-		å					
5152.50 6870.00	-11.9	V	3.0	35.4	1.0	-46.3	-13.0	-33.3	
5152.50 6870.00 3435.00	-11.9 -11.2 -9.6 -12.5	V V H H	3.0 3.0 3.0 3.0	35.4 35.7 36.1 35.4	1.0 1.0 1.0 1.0	-46.3 -45.9	-13.0 -13.0 -13.0 -13.0	-33.3 -32.9 -31.7 -34.0	
5152.50 6870.00 3435.00 5152.50	-11.9 -11.2 -9.6	V V H	3.0 3.0 3.0	35.4 35.7 36.1	1.0 1.0 1.0	-46.3 -45.9 -44.7	-13.0 -13.0 -13.0	-33.3 -32.9 -31.7	
5152.50 6870.00 3435.00 5152.50	-11.9 -11.2 -9.6 -12.5 -10.0 2.5	V V H H	3.0 3.0 3.0 3.0	35.4 35.7 36.1 35.4	1.0 1.0 1.0 1.0	-46.3 -45.9 -44.7 -47.0 -44.6	-13.0 -13.0 -13.0 -13.0	-33.3 -32.9 -31.7 -34.0 -31.6	
5152.50 6870.00 3435.00 5152.50 6870.00 Mid Ch, 173 3465.00	-11.9 -11.2 -9.6 -12.5 -10.0	V V H H	3.0 3.0 3.0 3.0	35.4 35.7 36.1 35.4 35.7 36.0	1.0 1.0 1.0 1.0	-46.3 -45.9 -44.7 -47.0	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.3 -32.9 -31.7 -34.0 -31.6 -37.0	
5152.50 6870.00 3435.00 5152.50 6870.00 Mid Ch, 173 3465.00	-11.9 -9.6 -12.5 -10.0 2.5 -15.0 -11.5	V V H H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.1 35.4 35.7 36.0 35.4	1.0 1.0 1.0 1.0 1.0	46.3 45.9 44.7 47.0 44.6 -50.0 45.9	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.3 -32.9 -31.7 -34.0 -31.6 -37.0 -32.9	
5152.50 6870.00 3435.00 5152.50 6870.00 Mid Ch, 173 3465.00 5197.50 6930.00	-11.9 -9.6 -12.5 -10.0 2.5 -15.0 -11.5 -11.9	V V H H V V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.1 35.4 35.7 36.0 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.3 45.9 44.7 47.0 44.6 -50.0 45.9 46.6	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.3 -32.9 -31.7 -34.0 -31.6 -37.0 -37.0 -32.9 -33.6	
5152.50 6870.00 3435.00 5152.50 6870.00 Mid Ch, 173 3465.00 5197.50 6930.00 3465.00	-11.9 -11.2 -9.6 -12.5 -10.0 2.5 -15.0 -11.5 -11.9 -11.0	V V H H V V V V H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.1 35.4 35.7 36.0 35.4 35.7 36.0	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.3 45.9 44.7 47.0 44.6 -50.0 45.9 46.6 46.0	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.3 -32.9 -31.7 -34.0 -31.6 -37.0 -37.0 -32.9 -33.6 -33.0	
5152.50 6870.00 3435.00 5152.50 6870.00 Mid Ch, 173 3465.00 5197.50 6930.00 3465.00 5197.50	-11.9 -11.2 -9.6 -12.5 -10.0 2.5 -15.0 -11.5 -11.9 -11.0 -11.2	V V H H V V V V H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.1 35.4 35.7 36.0 35.4 35.7 36.0 35.4	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.3 45.9 44.7 47.0 44.6 -50.0 45.9 46.6 46.0 45.6	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.3 -32.9 -31.7 -34.0 -31.6 -37.0 -37.0 -32.9 -33.6 -33.0 -32.6	
5152.50 6870.00 3435.00 5152.50 6870.00 Mid Ch, 173 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00	-11.9 -11.2 -9.6 -12.5 -10.0 2.5 -15.0 -11.5 -11.9 -11.0 -11.2 -9.0	V V H H V V V V H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.1 35.4 35.7 36.0 35.4 35.7 36.0	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.3 45.9 44.7 47.0 44.6 -50.0 45.9 46.6 46.0	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.3 -32.9 -31.7 -34.0 -31.6 -37.0 -37.0 -32.9 -33.6 -33.0	
5152.50 6870.00 3435.00 5152.50 6870.00 Mid Ch, 173 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 174	-11.9 -11.2 -9.6 -12.5 -10.0 2.5 -15.0 -11.5 -11.9 -11.0 -11.2 -9.0 47.5	V V H H V V V V V H H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.1 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.3 45.9 44.7 47.0 44.6 -50.0 45.9 46.6 46.0 45.6 43.7	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.3 -32.9 -31.7 -34.0 -31.6 -37.0 -32.9 -33.6 -33.0 -32.6 -30.7	
5152.50 6870.00 3435.00 5152.50 6870.00 Mid Ch, 173 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 17 3495.00	-11.9 -11.2 -9.6 -12.5 -10.0 2.5 -15.0 -11.5 -11.9 -11.0 -11.2 -9.0 47.5 -13.7	V V H H V V V V V V V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.1 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.3 45.9 44.7 47.0 44.6 -50.0 45.9 46.6 46.0 45.6 43.7 -48.7	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.3 -32.9 -31.7 -34.0 -31.6 -37.0 -32.9 -33.6 -33.0 -32.6 -30.7 -35.7	
5152.50 6870.00 3435.00 5152.50 6870.00 Mid Ch, 173 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 17 3495.00 5242.50	-11.9 -11.2 -9.6 -12.5 -10.0 2.5 -15.0 -11.5 -11.9 -11.0 -11.2 -9.0 47.5 -13.7 -10.3	V V H H V V V V H H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.1 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.3 45.9 44.7 47.0 44.6 -50.0 45.9 46.6 46.0 45.6 43.7 - 48.7 44.7	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.3 -32.9 -31.7 -34.0 -31.6 -37.0 -32.9 -33.6 -33.0 -32.6 -30.7 -35.7 -35.7 -31.7	
5152.50 6870.00 3435.00 5152.50 6870.00 Mid Ch, 173 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 17 3495.00 5242.50 6990.00	-11.9 -11.2 -9.6 -12.5 -10.0 2.5 -15.0 -11.5 -11.9 -11.0 -11.2 -9.0 47.5 -13.7 -10.3 -11.3	V V H H V V V V V V V V V V V V V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.1 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.3 45.9 44.7 47.0 44.6 -50.0 45.9 46.6 46.0 45.6 43.7 48.7 48.7 44.7 46.0	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.3 -32.9 -31.7 -34.0 -31.6 -37.0 -32.9 -33.6 -33.0 -32.6 -30.7 -35.7 -35.7 -31.7 -33.0	
5152.50 6870.00 3435.00 5152.50 6870.00 Mid Ch, 173 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 17 3495.00 5242.50 6990.00 3495.00	-11.9 -11.2 -9.6 -12.5 -10.0 2.5 -15.0 -11.5 -11.9 -11.0 -11.2 -9.0 47.5 -13.7 -10.3 -11.3 -9.5	V V H H V V V V V V V V V V V V V V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.1 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.3 45.9 44.7 47.0 44.6 -50.0 45.9 46.6 46.0 45.6 43.7 - 48.7 44.7 46.0 44.5	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.3 -32.9 -31.7 -34.0 -31.6 -37.0 -32.9 -33.6 -33.0 -32.6 -30.7 -30.7 -35.7 -31.7 -31.7 -33.0 -31.5	
5152.50 6870.00 3435.00 5152.50 6870.00 Mid Ch, 173 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 17 3495.00 5242.50 6990.00	-11.9 -11.2 -9.6 -12.5 -10.0 2.5 -15.0 -11.5 -11.9 -11.0 -11.2 -9.0 47.5 -13.7 -10.3 -11.3	V V H H V V V V V V V V V V V V V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.1 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.3 45.9 44.7 47.0 44.6 -50.0 45.9 46.6 46.0 45.6 43.7 48.7 48.7 44.7 46.0	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.3 -32.9 -31.7 -34.0 -31.6 -37.0 -32.9 -33.6 -33.0 -32.6 -30.7 -35.7 -35.7 -31.7 -33.0	

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DATE: APRIL 22, 2015

FCC ID: ZNFUS991

		Above 10	UL V GHz High	/erificatio Frequen			Measure	ement	
0	_	1.0	-	-	-				
Company		LG							
Project #	:	15 20405							
Date:		4/6/2015							
Test Eng	ineer:	Jude Semana	a						
Configura	ation:	EUT + Charg	er + Headset						
Location:		Chamber G							
Mode:		LTE_16QAM	Band & Harn	nonice 10M	IHz Bandu	vidth			
			Dana Tham		Dunin Dunin				
f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Note
MHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low Ch, 1	715								
3430.00	-12.8	V	3.0	36.1	1.0	-47.9	-13.0	-34.9	
5145.00	-11.0	V	3.0	35.4	1.0	-45.4	-13.0	-32.4	
			••••••••••••••••••••••••••••••••••••••		4 0	45.0	40.0	<u> </u>	
6860.00	-10.9	V	3.0	35.7	1.0	-45.6	-13.0	-32.6	
6860.00 3430.00	-10.9 -10.1	V H	3.0 3.0	35.7 36.1	1.0 1.0	-45.6 -45.2	-13.0 -13.0	-32.6	
3430.00				·				·····ò···	
3430.00	-10.1	Н	3.0	36.1	1.0	-45.2	-13.0	-32.2	
3430.00 5145.00	-10.1 -12.0 -9.5	H H	3.0 3.0	36.1 35.4	1.0 1.0	-45.2 -46.4	-13.0 -13.0	-32.2 -33.4	
3430.00 5145.00 6860.00 Mid Ch, 17	-10.1 -12.0 -9.5	H H H V	3.0 3.0	36.1 35.4	1.0 1.0	-45.2 -46.4	-13.0 -13.0	-32.2 -33.4	
3430.00 5145.00 6860.00	-10.1 -12.0 -9.5 32.5	H H H	3.0 3.0 3.0	36.1 35.4 35.7	1.0 1.0 1.0	-45.2 -46.4 -44.1	-13.0 -13.0 -13.0	-32.2 -33.4 -31.1	
3430.00 5145.00 6860.00 Mid Ch, 17 3465.00	-10.1 -12.0 -9.5 '32.5 -14.5	H H H V	3.0 3.0 3.0 3.0	36.1 35.4 35.7 36.0	1.0 1.0 1.0 1.0	<u>45.2</u> <u>46.4</u> <u>44.1</u> <u>49.5</u>	-13.0 -13.0 -13.0 -13.0	-32.2 -33.4 -31.1 -36.5	
3430.00 5145.00 6860.00 Mid Ch, 17 3465.00 5197.50	-10.1 -12.0 -9.5 '32.5 -14.5 -11.8	H H V V	3.0 3.0 3.0 3.0 3.0 3.0	36.1 35.4 35.7 36.0 35.4	1.0 1.0 1.0 1.0 1.0	.45.2 .46.4 .44.1 .49.5 .46.2	-13.0 -13.0 -13.0 -13.0 -13.0	-32.2 -33.4 -31.1 -36.5 -33.2	
3430.00 5145.00 6860.00 Mid Ch, 17 3465.00 5197.50 6930.00	-10.1 -12.0 -9.5 (32.5 -14.5 -11.8 -11.3	H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0	36.1 35.4 35.7 36.0 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0	45.2 46.4 44.1 49.5 46.2 46.0	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-32.2 -33.4 -31.1 -36.5 -33.2 -33.0	
3430.00 5145.00 6860.00 Mid Ch, 17 3465.00 5197.50 6930.00 3465.00	-10.1 -12.0 -9.5 '32.5 -14.5 -11.8 -11.3 -13.0	H H V V V V H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	36.1 35.4 35.7 36.0 35.4 35.7 36.0	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	45.2 46.4 44.1 49.5 46.2 46.0 48.0	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-32.2 -33.4 -31.1 -36.5 -33.2 -33.0 -35.0	
3430.00 5145.00 6860.00 Mid Ch, 17 3465.00 5197.50 6930.00 3465.00 5197.50	-10.1 -12.0 -9.5 '32.5 -14.5 -11.8 -11.3 -13.0 -11.4 -9.2	H H V V V H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	36.1 35.4 35.7 36.0 35.4 35.7 36.0 35.4	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	45.2 46.4 44.1 49.5 46.2 46.0 48.0 45.8	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-32.2 -33.4 -31.1 -36.5 -33.2 -33.0 -35.0 -32.8	
3430.00 5145.00 6860.00 Mid Ch, 17 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00	-10.1 -12.0 -9.5 '32.5 -14.5 -11.8 -11.3 -13.0 -11.4 -9.2	H H V V V H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	36.1 35.4 35.7 36.0 35.4 35.7 36.0 35.4	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	45.2 46.4 44.1 49.5 46.2 46.0 48.0 45.8	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-32.2 -33.4 -31.1 -36.5 -33.2 -33.0 -35.0 -32.8	
3430.00 5145.00 6860.00 Mid Ch, 17 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 1	-10.1 -12.0 -9.5 '32.5 -14.5 -11.8 -11.3 -13.0 -11.4 -9.2 750	H H V V V H H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	36.1 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	45.2 46.4 44.1 49.5 46.2 46.0 48.0 45.8 43.9	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-32.2 -33.4 -31.1 -36.5 -33.2 -33.0 -35.0 -32.8 -30.9	
3430.00 5145.00 6860.00 Mid Ch, 17 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 1 3500.00	-10.1 -12.0 -9.5 '32.5 -14.5 -11.8 -11.3 -13.0 -11.4 -9.2 750 -12.7	H H V V V H H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	36.1 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	45.2 46.4 44.1 49.5 46.2 46.0 48.0 45.8 43.9 47.7	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-32.2 -33.4 -31.1 -36.5 -33.2 -33.0 -35.0 -32.8 -30.9 -34.7	
3430.00 5145.00 6860.00 Mid Ch, 17 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 1 3500.00 5250.00	-10.1 -12.0 -9.5 '32.5 -14.5 -11.8 -11.3 -13.0 -11.4 -9.2 750 -12.7 -7.7	H H V V V H H H V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	36.1 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	45.2 46.4 44.1 49.5 46.2 46.0 48.0 45.8 43.9 47.7 42.1	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-32.2 -33.4 -31.1 -36.5 -33.2 -33.0 -35.0 -32.8 -30.9 -34.7 -29.1	
3430.00 5145.00 6860.00 Mid Ch, 17 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 1 3500.00 5250.00 7000.00	-10.1 -12.0 -9.5 '32.5 -14.5 -11.8 -11.3 -13.0 -11.4 -9.2 750 -12.7 -7.7 -7.7 -10.9	H H V V V H H H V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	36.1 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	45.2 46.4 44.1 49.5 46.2 46.0 48.0 45.8 43.9 47.7 42.1 45.6	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-32.2 -33.4 -31.1 -36.5 -33.2 -33.0 -35.0 -32.8 -30.9 -34.7 -29.1 -32.6	

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MODEL NUMER: LG-US991, US991, LGUS991

DATE: APRIL 22, 2015

FCC ID: ZNFUS991

		Above 1	UL V GHz High	Verificatio				ement	
			_						
Compan	-	LG							
Project #	#:	15120405							
Date:		4/6/2015							
Test Eng	gineer:	Jude Seman	а						
Configu	-	EUT + Char	ger + Headse	t					
Location		Chamber G	,	-					
Mode:			Band 4 Harm	onice 10M	Hz Bandw	idth			
inouc.			bana 4 nam	ionico, romi	2 Danaw				
f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Note
MHz	(dBm)	(H/V)	(m)	(dB)	(dB)	dBm)	(dBm)	(dB)	
Low Ch, 1									
3430.00	-12.9	V	3.0	36.1	1.0	-48.0	-13.0	-35.0	
5145.00	-11.6	V	3.0	35.4	1.0	-46.0	-13.0	-33.0	
6860.00	-11.4	V	3.0	35.7	1.0	-46.0	-13.0	-33.0	
3430.00	-9.4	H	3.0	36.1	1.0	-44.5	-13.0	-31.5	
5145.00	-11.8	H	3.0	35.4	1.0	-46.2	-13.0	-33.2	
6860.00	-9.8	H	3.0	35.7	1.0	-44.4	-13.0	-31.4	
0000.00			Į						
Mid Ch, 1				20.0	4 0	10 5			
Mid Ch, 1 3465.00	732.5 -14.4	V	3.0	36.0	1.0	-49.5	-13.0	-36.5	
Mid Ch, 1 3465.00 5197.50	-14.4 -12.3	V	3.0	35.4	1.0	-46.7	-13.0	-33.7	
Mid Ch, 1 3465.00 5197.50 6930.00	-14.4 -12.3 -11.3	V V	3.0 3.0	35.4 35.7	1.0 1.0	-46.7 -46.0	-13.0 -13.0	-33.7 -33.0	
Mid Ch, 1 3465.00 5197.50 6930.00 3465.00	-14.4 -12.3	V	3.0	35.4	1.0	-46.7	-13.0	-33.7	
Mid Ch, 1 3465.00 5197.50 6930.00	-14.4 -12.3 -11.3	V V	3.0 3.0	35.4 35.7	1.0 1.0	-46.7 -46.0	-13.0 -13.0	-33.7 -33.0	
Mid Ch, 1 3465.00 5197.50 6930.00 3465.00	-14.4 -12.3 -11.3 -14.5	V V H	3.0 3.0 3.0	35.4 35.7 36.0	1.0 1.0 1.0	-46.7 -46.0 -49.5	-13.0 -13.0 -13.0	-33.7 -33.0 -36.5	
Mid Ch, 1 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch,	-14.4 -12.3 -11.3 -14.5 -11.1 -9.7 1750	V V H H	3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.0 35.4 35.7	1.0 1.0 1.0 1.0 1.0	46.7 46.0 49.5 45.5 44.4	-13.0 -13.0 -13.0 -13.0 -13.0	-33.7 -33.0 -36.5 -32.5 -31.4	
Mid Ch, 1 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 3500.00	-14.4 -12.3 -11.3 -14.5 -11.1 -9.7	V V H H	3.0 3.0 3.0 3.0	35.4 35.7 36.0 35.4	1.0 1.0 1.0 1.0	46.7 46.0 49.5 45.5 44.4 47.8	-13.0 -13.0 -13.0 -13.0	-33.7 -33.0 -36.5 -32.5 -31.4 -34.8	
Mid Ch, 1 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 3500.00 5250.00	-14.4 -12.3 -11.3 -14.5 -11.1 -9.7 1750 -12.8 -10.3	V V H H V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.0 35.4 35.7 36.0 35.4	1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.7 46.0 49.5 45.5 44.4 47.8 44.8	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.7 -33.0 -36.5 -32.5 -31.4 -34.8 -31.8	
Mid Ch, 1 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 3500.00 5250.00 7000.00	-14.4 -12.3 -11.3 -14.5 -11.1 -9.7 1750 -12.8 -10.3 -11.2	V H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.0 35.4 35.7 36.0 35.4 36.0 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.7 46.0 49.5 45.5 44.4 47.8 44.8 45.9	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.7 -33.0 -36.5 -32.5 -31.4 -34.8 -31.8 -32.9	
Mid Ch, 1 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 3500.00 5250.00 7000.00 3500.00	-14.4 -12.3 -11.3 -14.5 -11.1 -9.7 1750 -12.8 -10.3	V V H H V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.0 35.4 35.7 36.0 35.4	1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.7 46.0 49.5 45.5 44.4 47.8 44.8 45.9 43.6	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.7 -33.0 -36.5 -32.5 -31.4 -34.8 -31.8 -32.9 -30.6	
Mid Ch, 1 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 3500.00 5250.00 7000.00	-14.4 -12.3 -11.3 -14.5 -11.1 -9.7 1750 -12.8 -10.3 -11.2	V H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.0 35.4 35.7 36.0 35.4 36.0 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.7 46.0 49.5 45.5 44.4 47.8 44.8 45.9	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.7 -33.0 -36.5 -32.5 -31.4 -34.8 -31.8 -32.9	

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DATE: APRIL 22, 2015

MODEL NUMER: LG-US991, US991, LGUS991

FCC ID: ZNFUS991

			ULV	Verification	on Serv	ices, Inc.			
		Above 10	GHz High	Frequer	ncy Sub	stitution	Measu	rement	
Company:		LG							
Project #:		15120405							
Date:		4/6/2015							
Test Engir		Jude Sema							
Configurat	tion:	EUT + Cha	rger + Head	lset					
Location:		Chamber G	6						
Mode:		LTE 16QA	M Band 4 H	larmonics, {	5MHz Ban	dwidth			
					-	5100		D b	
f	SG reading	Ant. Pol.			Filter	EIRP	Limit	Delta	Notes
MHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low Ch, 171			• •	20.4		-50.6	40.0	-37.6	
0405.00	45.5							(/h :	
3425.00	-15.5	V	3.0	36.1	1.0		-13.0		
5137.50	-15.7	V	3.0	35.4	1.0	-50.1	-13.0	-37.1	
5137.50 6850.00	-15.7 -15.6	V V	3.0 3.0	35.4 35.7	1.0 1.0	-50.1 -50.3	-13.0 -13.0	-37.1 -37.3	
5137.50 6850.00 3425.00	-15.7 -15.6 -12.6	V V H	3.0 3.0 3.0	35.4 35.7 36.1	1.0 1.0 1.0	-50.1 -50.3 -47.7	-13.0 -13.0 -13.0	-37.1 -37.3 -34.7	
5137.50 6850.00 3425.00 5137.50	-15.7 -15.6 -12.6 -16.7	V V H H	3.0 3.0 3.0 3.0	35.4 35.7 36.1 35.4	1.0 1.0 1.0 1.0	-50.1 -50.3 -47.7 -51.1	-13.0 -13.0 -13.0 -13.0	-37.1 -37.3 -34.7 -38.1	
5137.50 6850.00 3425.00 5137.50 6850.00	-15.7 -15.6 -12.6 -16.7 -14.7	V V H	3.0 3.0 3.0	35.4 35.7 36.1	1.0 1.0 1.0	-50.1 -50.3 -47.7	-13.0 -13.0 -13.0	-37.1 -37.3 -34.7	
5137.50 6850.00 3425.00 5137.50 6850.00 Mid Ch, 173	-15.7 -15.6 -12.6 -16.7 -14.7 2.5	V V H H H	3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.1 35.4 35.7	1.0 1.0 1.0 1.0 1.0	-50.1 -50.3 -47.7 -51.1 -49.4	-13.0 -13.0 -13.0 -13.0 -13.0	-37.1 -37.3 -34.7 -38.1 -36.4	
5137.50 6850.00 3425.00 5137.50 6850.00 Mid Ch, 173 3465.00	-15.7 -15.6 -12.6 -16.7 -14.7 2.5 -14.4	V V H H V	3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.1 35.4 35.7 	1.0 1.0 1.0 1.0 1.0 1.0	-50.1 -50.3 -47.7 -51.1 -49.4 -49.4	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-37.1 -37.3 -34.7 -38.1 -36.4 -36.4	
5137.50 6850.00 3425.00 5137.50 6850.00 Mid Ch, 173 3465.00 5197.50	-15.7 -15.6 -12.6 -16.7 -14.7 2.5 -14.4 -10.3	V V H H V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.1 35.4 35.7 36.0 35.4	1.0 1.0 1.0 1.0 1.0 1.0 1.0	-50.1 -50.3 -47.7 -51.1 -49.4 -49.4 -49.4 -44.7	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-37.1 -37.3 -34.7 -38.1 -36.4 -36.4 -36.4 -31.7	
5137.50 6850.00 3425.00 5137.50 6850.00 Mid Ch, 173 3465.00 5197.50 6930.00	-15.7 -15.6 -12.6 -16.7 -14.7 2.5 -14.4 -10.3 -11.3	V V H H V V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.1 35.4 35.7 36.0 35.4 35.4 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	-50.1 -50.3 -47.7 -51.1 -49.4 -49.4 -49.4 -44.7 -46.0	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-37.1 -37.3 -34.7 -38.1 -36.4 -36.4 -36.4 -31.7 -33.0	
5137.50 6850.00 3425.00 5137.50 6850.00 Mid Ch, 173 3465.00 5197.50 6930.00 3465.00	-15.7 -15.6 -12.6 -16.7 -14.7 2.5 -14.4 -10.3 -11.3 -7.6	V V H H V V V V H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.1 35.4 35.7 36.0 35.4 35.7 36.0	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	-50.1 -50.3 -47.7 -51.1 -49.4 -49.4 -49.4 -49.4 -44.7 -46.0 -42.7	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-37.1 -37.3 -34.7 -38.1 -36.4 -36.4 -36.4 -31.7 -33.0 -29.7	
5137.50 6850.00 3425.00 5137.50 6850.00 Mid Ch, 173 3465.00 5197.50 6930.00 3465.00 5197.50	-15.7 -15.6 -12.6 -16.7 -14.7 2.5 -14.4 -10.3 -11.3 -7.6 -11.2	V H H V V V V H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.1 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	-50.1 -50.3 -47.7 -51.1 -49.4 -49.4 -49.4 -44.7 -46.0 -42.7 -45.6	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-37.1 -37.3 -34.7 -38.1 -36.4 -36.4 -36.4 -31.7 -33.0 -29.7 -32.6	
5137.50 6850.00 3425.00 5137.50 6850.00 Mid Ch, 173 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00	-15.7 -15.6 -12.6 -16.7 -14.7 2.5 -14.4 -10.3 -11.3 -7.6 -11.2 -9.1	V V H H V V V V H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.1 35.4 35.7 36.0 35.4 35.7 36.0	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	-50.1 -50.3 -47.7 -51.1 -49.4 -49.4 -49.4 -49.4 -44.7 -46.0 -42.7	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-37.1 -37.3 -34.7 -38.1 -36.4 -36.4 -36.4 -31.7 -33.0 -29.7	
5137.50 6850.00 3425.00 5137.50 6850.00 Mid Ch, 173 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 17	-15.7 -15.6 -12.6 -16.7 -14.7 2.5 -14.4 -10.3 -11.3 -7.6 -11.2 -9.1 52.5	V H H H V V V V H H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.1 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	-50.1 -50.3 -47.7 -51.1 -49.4 -49.4 -49.4 -44.7 -46.0 -42.7 -45.6 -43.8	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-37.1 -37.3 -34.7 -38.1 -36.4 -36.4 -36.4 -36.4 -31.7 -33.0 -29.7 -32.6 -30.8	
5137.50 6850.00 3425.00 5137.50 6850.00 Mid Ch, 173 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 17 3505.00	-15.7 -15.6 -12.6 -16.7 -14.7 2.5 -14.4 -10.3 -11.3 -7.6 -11.2 -9.1 52.5 -10.6	V V H H H H V V V V H H H V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.1 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	-50.1 -50.3 -47.7 -51.1 -49.4 -49.4 -49.4 -44.7 -46.0 -42.7 -45.6 -43.8 -45.6	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-37.1 -37.3 -34.7 -38.1 -36.4 -36.4 -36.4 -36.4 -36.4 -31.7 -33.0 -29.7 -32.6 -30.8 -32.6	
5137.50 6850.00 3425.00 5137.50 6850.00 Mid Ch, 173 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 17 3505.00 5257.50	-15.7 -15.6 -12.6 -16.7 -14.7 2.5 -14.4 -10.3 -11.3 -7.6 -11.2 -9.1 52.5 -10.6 -10.3	V V H H H H V V V H H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.1 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	-50.1 -50.3 -47.7 -51.1 -49.4 -49.4 -49.4 -44.7 -46.0 -42.7 -45.6 -43.8 -45.6 -44.8	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-37.1 -37.3 -34.7 -38.1 -36.4 -36.4 -36.4 -31.7 -33.0 -29.7 -32.6 -30.8 -32.6 -31.8	
5137.50 6850.00 3425.00 5137.50 6850.00 Mid Ch, 173 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 17 3505.00 5257.50 7010.00	-15.7 -15.6 -12.6 -16.7 -14.7 2.5 -14.4 -10.3 -11.3 -7.6 -11.2 -9.1 52.5 -10.6 -10.3 -11.8	V V H H H H V V V H H H V V V V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.1 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	-50.1 -50.3 -47.7 -51.1 -49.4 -49.4 -49.4 -49.4 -49.4 -44.7 -46.0 -42.7 -45.6 -43.8 -45.6 -44.8 -46.5	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-37.1 -37.3 -34.7 -38.1 -36.4 -36.4 -36.4 -31.7 -33.0 -29.7 -32.6 -30.8 -32.6 -31.8 -33.5	
5137.50 6850.00 3425.00 5137.50 6850.00 Mid Ch, 173 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 17 3505.00 5257.50	-15.7 -15.6 -12.6 -16.7 -14.7 2.5 -14.4 -10.3 -11.3 -7.6 -11.2 -9.1 52.5 -10.6 -10.3	V V H H H H V V V H H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.4 35.7 36.1 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	-50.1 -50.3 -47.7 -51.1 -49.4 -49.4 -49.4 -44.7 -46.0 -42.7 -45.6 -43.8 -45.6 -44.8	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-37.1 -37.3 -34.7 -38.1 -36.4 -36.4 -36.4 -31.7 -33.0 -29.7 -32.6 -30.8 -32.6 -31.8	

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MODEL NUMER: LG-US991, US991, LGUS991

DATE: APRIL 22, 2015

FCC ID: ZNFUS991

			UL V	/erificatio	n Servic	es, Inc.			
		Above 1	GHz High	Frequence	cy Subs	titution	Measu	rement	
Company:		LG							
Project #:		15 20405							
Date:		4/6/2015							
Test Engi	neer:	Jude Semar							
Configura									
-	uon.		ger + Heads	el					
Location:		Chamber G							
Mode:		LIE_QPSK	Band 4 Harr	nonics, 5ivir	12 Dandwid	ath			
f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Note
MHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low Ch, 17		(()	(1	(/		
3425.00	-12.8	v	3.0	36.1	1.0	-47.8	-13.0	-34.8	
5137.50	-15.5	V	3.0	35.4	1.0	-49.9	-13.0	-36.9	
6850.00	-15.9	V	3.0	35.7	1.0	-50.6	-13.0	-37.6	
3425.00	-12.7	Н	3.0	36.1	1.0	-47.8	-13.0	-34.8	
5137.50	-16.3	H	3.0	35.4	1.0	-50.7	-13.0	-37.7	
6850.00	-14.2	Н	3.0	35.7	1.0	-48.9	-13.0	-35.9	
M11 CL 473	2.5								
Mid Ch, 173	-13.8	V	3.0	36.0	1.0	-48.9	-13.0	-35.9	
3465.00		V	3.0	35.4	1.0	-44.7	-13.0	-31.7	
	-10.2		j		•••	-44.1			
3465.00 5197.50 6930.00	-10.2 -11.2	V V	3.0	35.7	1.0	-45.9	-13.0	-32.9	
3465.00 5197.50 6930.00 3465.00	-11.2 -7.8					-45.9 -42.8	-13.0 -13.0	-32.9 -29.8	
3465.00 5197.50 6930.00 3465.00 5197.50	-11.2 -7.8 -11.3	V H H	3.0 3.0 3.0	35.7 36.0 35.4	1.0 1.0 1.0	-45.9 -42.8 -45.7	-13.0 -13.0 -13.0	-32.9 -29.8 -32.7	
3465.00 5197.50 6930.00 3465.00 5197.50 6930.00	-11.2 -7.8 -11.3 -10.0	V H	3.0 3.0	35.7 36.0	1.0 1.0	-45.9 -42.8	-13.0 -13.0	-32.9 -29.8	
3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 17	-11.2 -7.8 -11.3 -10.0 52.5	V H H H	3.0 3.0 3.0 3.0	35.7 36.0 35.4 35.7	1.0 1.0 1.0 1.0	45.9 42.8 45.7 44.7	-13.0 -13.0 -13.0 -13.0	-32.9 -29.8 -32.7 -31.7	
3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 17 3505.00	-11.2 -7.8 -11.3 -10.0 52.5 -11.3	V H H V	3.0 3.0 3.0 3.0 3.0 3.0	35.7 36.0 35.4 35.7 	1.0 1.0 1.0 1.0 1.0	45.9 42.8 45.7 44.7 46.3	-13.0 -13.0 -13.0 -13.0 -13.0	-32.9 -29.8 -32.7 -31.7 -33.3	
3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 17 3505.00 5257.50	-11.2 -7.8 -11.3 -10.0 52.5 -11.3 -10.2	V H H V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 36.0 35.4 35.7 36.0 35.4	1.0 1.0 1.0 1.0 1.0 1.0	45.9 42.8 45.7 44.7 46.3 44.6	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-32.9 -29.8 -32.7 -31.7 -33.3 -31.6	
3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 17 3505.00 5257.50 7010.00	-11.2 -7.8 -11.3 -10.0 52.5 -11.3 -10.2 -10.3	V H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 36.0 35.4 35.7 36.0 35.4 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	45.9 42.8 45.7 44.7 46.3 44.6 45.0	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-32.9 -29.8 -32.7 -31.7 -33.3 -33.3 -31.6 -32.0	
3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 17 3505.00 5257.50 7010.00 3505.00	-11.2 -7.8 -11.3 -10.0 52.5 -11.3 -10.2 -10.3 -7.1	V H H V V V H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	45.9 42.8 45.7 44.7 46.3 44.6 45.0 42.1	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-32.9 -29.8 -32.7 -31.7 -33.3 -31.6 -32.0 -29.1	
3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 17 3505.00 5257.50 7010.00	-11.2 -7.8 -11.3 -10.0 52.5 -11.3 -10.2 -10.3	V H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 36.0 35.4 35.7 36.0 35.4 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	45.9 42.8 45.7 44.7 46.3 44.6 45.0	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-32.9 -29.8 -32.7 -31.7 -33.3 -33.3 -31.6 -32.0	

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FCC ID: ZNFUS991

		A b a v a d		Verificatio					
		Above 1	GHz High	Frequen	icy Sub	Stitutio	n Measu	rement	
Company:		LG							
Project #:		15 20405							
Date:		4/6/2015							
Test Engi	neer	Jude Sema	ma						
Configura			rger + Heads	ot					
Location:	uon.	Chamber G		ber					
Mode:		LIE_16QA	M Band 4 Ha	armonics, 31	VIHZ Band	lwidth			
f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Notes
MHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low Ch, 17	· · · · ·			(42)	(42)	(Jubin	(42)	
3423.00	-10.4	v	3.0	36.1	1.0	-45.4	-13.0	-32.4	
	å	v		35.4	1.0	-46.1	-13.0	-33.1	
5134.50	-11.6	: V	: 3.0	33.4	1.0	-40.1	-13.0	-33.	
5134.50 6846.00	-11.6 -11.4		3.0 3.0						
6846.00	-11.4	V	3.0	35.7	1.0	-46.0	-13.0	-33.0	
6846.00 3423.00	-11.4 -7.0		3.0 3.0	35.7 36.1	1.0 1.0	-46.0 -42.1	-13.0 -13.0	-33.0 -29.1	
6846.00	-11.4	V H	3.0	35.7	1.0	-46.0	-13.0	-33.0	
6846.00 3423.00 5134.50	-11.4 -7.0 -11.3 -9.8	V H H	3.0 3.0 3.0	35.7 36.1 35.4	1.0 1.0 1.0	-46.0 -42.1 -45.7	-13.0 -13.0 -13.0	-33.0 -29.1 -32.7	
6846.00 3423.00 5134.50 6846.00	-11.4 -7.0 -11.3 -9.8	V H H	3.0 3.0 3.0	35.7 36.1 35.4	1.0 1.0 1.0	-46.0 -42.1 -45.7	-13.0 -13.0 -13.0 -13.0	-33.0 -29.1 -32.7	
6846.00 3423.00 5134.50 6846.00 Mid Ch, 173	-11.4 -7.0 -11.3 -9.8 32.5	V H H H	3.0 3.0 3.0 3.0	35.7 36.1 35.4 35.7	1.0 1.0 1.0 1.0	-46.0 -42.1 -45.7 -44.5	-13.0 -13.0 -13.0	-33.0 -29.1 -32.7 -31.5	
6846.00 3423.00 5134.50 6846.00 Mid Ch, 173 3465.00	-11.4 -7.0 -11.3 -9.8 32.5 -14.0 -9.9 -11.2	V H H V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 36.1 35.4 35.7 	1.0 1.0 1.0 1.0 1.0	-46.0 -42.1 -45.7 -44.5 -49.0	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.0 -29.1 -32.7 -31.5 -36.0 -31.3 -32.9	
6846.00 3423.00 5134.50 6846.00 Mid Ch, 173 3465.00 5197.50	-11.4 -7.0 -11.3 -9.8 32.5 -14.0 -9.9	V H H V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 36.1 35.4 35.7 36.0 35.4	1.0 1.0 1.0 1.0 1.0 1.0	-46.0 -42.1 -45.7 -44.5 -49.0 -49.0	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.0 -29.1 -32.7 -31.5 -36.0 -31.3	
6846.00 3423.00 5134.50 6846.00 Mid Ch, 173 3465.00 5197.50 6930.00 3465.00 5197.50	-11.4 -7.0 -11.3 -9.8 32.5 -14.0 -9.9 -11.2 -5.8 -11.2	V H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 36.1 35.4 35.7 36.0 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.0 42.1 45.7 44.5 49.0 49.0 44.3 45.9	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.0 -29.1 -32.7 -31.5 -36.0 -31.3 -32.9 -27.8 -32.6	
6846.00 3423.00 5134.50 6846.00 Mid Ch, 173 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00	-11.4 -7.0 -11.3 -9.8 32.5 -14.0 -9.9 -11.2 -5.8 -11.2 -9.2	V H H V V V V H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 36.1 35.4 35.7 36.0 35.4 35.7 36.0	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.0 42.1 45.7 44.5 49.0 44.3 45.9 40.8	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.0 -29.1 -32.7 -31.5 -36.0 -31.3 -32.9 -27.8	
6846.00 3423.00 5134.50 6846.00 Mid Ch, 173 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 17	-11.4 -7.0 -11.3 -9.8 32.5 -14.0 -9.9 -11.2 -5.8 -11.2 -9.2 '53.5	V H H V V V V H H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 36.1 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.0 42.1 45.7 44.5 49.0 49.0 44.3 45.9 40.8 45.6 43.9	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.0 -29.1 -32.7 -31.5 -36.0 -31.3 -32.9 -27.8 -32.6 -30.9	
6846.00 3423.00 5134.50 6846.00 Mid Ch, 173 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 17 3507.00	-11.4 -7.0 -11.3 -9.8 32.5 -14.0 -9.9 -11.2 -5.8 -11.2 -9.2 '53.5 -13.7	V H H V V V V H H H V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 36.1 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.0 42.1 45.7 44.5 49.0 49.0 44.3 45.9 40.8 45.6 43.9 48.7	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.0 -29.1 -32.7 -31.5 -36.0 -31.3 -32.9 -27.8 -32.6 -30.9 -35.7	
6846.00 3423.00 5134.50 6846.00 Mid Ch, 173 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 17 3507.00 5260.50	-11.4 -7.0 -11.3 -9.8 32.5 -14.0 -9.9 -11.2 -5.8 -11.2 -9.2 '53.5	V H H V V V H H H V V V V V V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 36.1 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.0 42.1 45.7 44.5 49.0 44.3 45.9 40.8 45.6 43.9 48.7 48.7 45.8	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.0 -29.1 -32.7 -31.5 -36.0 -31.3 -32.9 -27.8 -32.6 -30.9 -35.7 -32.8	
6846.00 3423.00 5134.50 6846.00 Mid Ch, 173 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 17 3507.00 5260.50 7014.00	-11.4 -7.0 -11.3 -9.8 32.5 -14.0 -9.9 -11.2 -5.8 -11.2 -9.2 53.5 -13.7 -11.4 -10.8	V H H V V V V H H H V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 36.1 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.0 42.1 45.7 44.5 49.0 44.3 45.9 40.8 45.6 43.9 48.7 48.7 45.8 45.5	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.0 -29.1 -32.7 -31.5 -36.0 -31.3 -32.9 -27.8 -32.6 -30.9 -35.7 -32.8 -32.5	
6846.00 3423.00 5134.50 6846.00 Mid Ch, 173 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 17 3507.00 5260.50 7014.00 3507.00	-11.4 -7.0 -11.3 -9.8 32.5 -14.0 -9.9 -11.2 -5.8 -11.2 -9.2 53.5 -13.7 -11.4 -10.8 -7.9	V H H V V V H H H H H H H H H H H H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 36.1 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.0 42.1 45.7 44.5 49.0 44.3 45.9 40.8 45.9 40.8 45.6 43.9 48.7 48.7 48.7 45.8 45.5 42.9	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.0 -29.1 -32.7 -31.5 -36.0 -31.3 -32.9 -27.8 -32.6 -30.9 -35.7 -32.8 -32.5 -29.9	
6846.00 3423.00 5134.50 6846.00 Mid Ch, 173 3465.00 5197.50 6930.00 3465.00 5197.50 6930.00 High Ch, 17 3507.00 5260.50 7014.00	-11.4 -7.0 -11.3 -9.8 32.5 -14.0 -9.9 -11.2 -5.8 -11.2 -9.2 53.5 -13.7 -11.4 -10.8	V H H V V V V H H H V V V V V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.7 36.1 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7 36.0 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	46.0 42.1 45.7 44.5 49.0 44.3 45.9 40.8 45.6 43.9 48.7 48.7 45.8 45.5	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-33.0 -29.1 -32.7 -31.5 -36.0 -31.3 -32.9 -27.8 -32.6 -30.9 -35.7 -32.8 -32.5	

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FCC ID: ZNFUS991

			UL	Verificat	ion Ser	vices, In	IC.		
		Above	1GHz Hig	h Freque	ncy Su	bstitutio	on Meas	urement	
Company:	:	LG							
Project #:		15 20405							
Date:		4/6/2015							
Test Engi	neer	Jude Sem	ana						
Configura			arger + Head	leat					
-			-	ISEL					
Location: Mode:		Chamber (∍ K Band 4 Ha						
f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Notes
MHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low Ch, 17						· · ·			
3423.00	-6.9	V	3.0	36.1	1.0	-42.0	-13.0	-29.0	
5134.50	-10.7	V	3.0	35.4	1.0	-45.1	-13.0	-32.1	
6846.00	-11.5	V	3.0	35.7	1.0	-46.1	-13.0	-33.1	
3423.00	-7.3	Н	3.0	36.1	1.0	-42.3	-13.0	-29.3	
5134.50	-11.2	Н	3.0	35.4	1.0	-45.7	-13.0	-32.7	
6846.00	-9.4	H	3.0	35.7	1.0	-44.1	-13.0	-31.1	
Mid Ch, 173	32.5								
3465.00	-6.7	V	3.0	36.0	1.0	-41.7	-13.0	-28.7	
	-10.4	V	3.0	35.4	1.0	-44.8	-13.0	-31.8	
5197.50								22 E	
6930.00	-10.9	V	3.0	35.7	1.0	-45.5	-13.0	-32.5	
6930.00 3465.00	-5.7	Н	3.0	36.0	1.0	-40.7	-13.0	-27.7	
6930.00 3465.00 5197.50	-5.7 -11.0	H H	3.0 3.0	36.0 35.4	1.0 1.0	-40.7 -45.4	-13.0 -13.0	-27.7 -32.4	
6930.00 3465.00 5197.50 6930.00	-5.7 -11.0 -9.8	Н	3.0	36.0	1.0	-40.7	-13.0	-27.7	
6930.00 3465.00 5197.50 6930.00 High Ch, 17	-5.7 -11.0 -9.8 753.5	H H H	3.0 3.0 3.0	36.0 35.4 35.7	1.0 1.0 1.0	-40.7 -45.4 -44.5	-13.0 -13.0 -13.0	-27.7 -32.4 -31.5	
6930.00 3465.00 5197.50 6930.00 High Ch, 17 3507.00	-5.7 -11.0 -9.8 753.5 -8.8	H H H	3.0 3.0 3.0 3.0	36.0 35.4 35.7 36.0	1.0 1.0 1.0	-40.7 -45.4 -44.5 -43.8	-13.0 -13.0 -13.0 -13.0	-27.7 -32.4 -31.5 -30.8	
6930.00 3465.00 5197.50 6930.00 High Ch, 11 3507.00 5260.50	-5.7 -11.0 -9.8 753.5 -8.8 -10.5	H H V V	3.0 3.0 3.0 3.0 3.0 3.0	36.0 35.4 35.7 36.0 35.4	1.0 1.0 1.0 1.0 1.0	-40.7 -45.4 -44.5 -43.8 -43.8	-13.0 -13.0 -13.0 -13.0 -13.0	-27.7 -32.4 -31.5 -30.8 -31.9	
6930.00 3465.00 5197.50 6930.00 High Ch, 17 3507.00 5260.50 7014.00	-5.7 -11.0 -9.8 753.5 -8.8 -10.5 -10.7	H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0	36.0 35.4 35.7 36.0 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0	40.7 45.4 44.5 43.8 44.9 45.4	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-27.7 -32.4 -31.5 -30.8 -31.9 -32.4	
6930.00 3465.00 5197.50 6930.00 High Ch, 17 3507.00 5260.50 7014.00 3507.00	-5.7 -11.0 -9.8 753.5 -8.8 -10.5 -10.7 -8.5	H H V V V H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	36.0 35.4 35.7 36.0 35.4 35.7 36.0	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	40.7 45.4 44.5 43.8 44.9 45.4 43.5	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-27.7 -32.4 -31.5 -30.8 -31.9 -32.4 -30.5	
6930.00 3465.00 5197.50 6930.00 High Ch, 17 3507.00 5260.50 7014.00	-5.7 -11.0 -9.8 753.5 -8.8 -10.5 -10.7	H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0	36.0 35.4 35.7 36.0 35.4 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0	40.7 45.4 44.5 43.8 44.9 45.4	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-27.7 -32.4 -31.5 -30.8 -31.9 -32.4	

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: ineer: ation: SG reading (dBm) 710.7 -9.5 -11.9 -12.6 -6.4 -12.9	Above 10 LG 15/20405 4/6/2015 Jude Semar EUT + Char Chamber G LTE_16QAI Ant. Pol. (H/V) V V V V H H	na rger + Head W Band 4 H Distance (m) 3.0 3.0 3.0 3.0 3.0	lset	.4MHz Ba Filter (dB) 1.0 1.0 1.0		Limit	Delta (dB) -31.6 -33.4 -34.2	Notes
SG reading (dBm) 710.7 -9.5 -11.9 -12.6 -6.4	15I20405 4/6/2015 Jude Sema EUT + Char Chamber G LTE_16QAI LTE_16QAI (H/V) V V V V	rger + Head M Band 4 H Distance (m) 3.0 3.0 3.0 3.0 3.0	Preamp (dB) 36.1 35.4 35.7	Filter (dB) 1.0 1.0 1.0	EIRP (dBm) -44.6 -46.4	(dBm) -13.0 -13.0	(dB) -31.6 -33.4	Notes
SG reading (dBm) 710.7 -9.5 -11.9 -12.6 -6.4	15I20405 4/6/2015 Jude Sema EUT + Char Chamber G LTE_16QAI LTE_16QAI (H/V) V V V V	rger + Head M Band 4 H Distance (m) 3.0 3.0 3.0 3.0 3.0	Preamp (dB) 36.1 35.4 35.7	Filter (dB) 1.0 1.0 1.0	EIRP (dBm) -44.6 -46.4	(dBm) -13.0 -13.0	(dB) -31.6 -33.4	Notes
ineer: ation: SG reading (dBm) 710.7 -9.5 -11.9 -12.6 -6.4	4/6/2015 Jude Sema EUT + Char Chamber G LTE_16QAI (H/V) V V V V H	rger + Head M Band 4 H Distance (m) 3.0 3.0 3.0 3.0 3.0	Preamp (dB) 36.1 35.4 35.7	Filter (dB) 1.0 1.0 1.0	EIRP (dBm) -44.6 -46.4	(dBm) -13.0 -13.0	(dB) -31.6 -33.4	Notes
SG reading (dBm) 710.7 -9.5 -11.9 -12.6 -6.4	Jude Semar EUT + Char Chamber G LTE_16QAI Ant. Pol. (H/V) V V V H	rger + Head M Band 4 H Distance (m) 3.0 3.0 3.0 3.0 3.0	Preamp (dB) 36.1 35.4 35.7	Filter (dB) 1.0 1.0 1.0	EIRP (dBm) -44.6 -46.4	(dBm) -13.0 -13.0	(dB) -31.6 -33.4	Notes
SG reading (dBm) 710.7 -9.5 -11.9 -12.6 -6.4	EUT + Char Chamber G LTE_16QAI Ant. Pol. (H/V) V V V V H	rger + Head M Band 4 H Distance (m) 3.0 3.0 3.0 3.0 3.0	Preamp (dB) 36.1 35.4 35.7	Filter (dB) 1.0 1.0 1.0	EIRP (dBm) -44.6 -46.4	(dBm) -13.0 -13.0	(dB) -31.6 -33.4	Notes
SG reading (dBm) 710.7 -9.5 -11.9 -12.6 -6.4	Chamber G LTE_16QAI Ant. Pol. (H/V) V V V V H	M Band 4 H	Preamp (dB) 36.1 35.4 35.7	Filter (dB) 1.0 1.0 1.0	EIRP (dBm) -44.6 -46.4	(dBm) -13.0 -13.0	(dB) -31.6 -33.4	Notes
SG reading (dBm) 710.7 -9.5 -11.9 -12.6 -6.4	LTE_16QAI	V Band 4 H Distance (m) 3.0 3.0 3.0 3.0 3.0	Preamp (dB) 36.1 35.4 35.7	Filter (dB) 1.0 1.0 1.0	EIRP (dBm) -44.6 -46.4	(dBm) -13.0 -13.0	(dB) -31.6 -33.4	Notes
(dBm) 710.7 -9.5 -11.9 -12.6 -6.4	Ant. Pol. (H/V) V V V H	Distance (m) 3.0 3.0 3.0 3.0 3.0	Preamp (dB) 36.1 35.4 35.7	Filter (dB) 1.0 1.0 1.0	EIRP (dBm) -44.6 -46.4	(dBm) -13.0 -13.0	(dB) -31.6 -33.4	Notes
(dBm) 710.7 -9.5 -11.9 -12.6 -6.4	(H/V) V V V H	(m) 3.0 3.0 3.0 3.0 3.0	(dB) 36.1 35.4 35.7	(dB) 1.0 1.0 1.0	(dBm) -44.6 -46.4	(dBm) -13.0 -13.0	(dB) -31.6 -33.4	Notes
(dBm) 710.7 -9.5 -11.9 -12.6 -6.4	(H/V) V V V H	(m) 3.0 3.0 3.0 3.0 3.0	(dB) 36.1 35.4 35.7	(dB) 1.0 1.0 1.0	(dBm) -44.6 -46.4	(dBm) -13.0 -13.0	(dB) -31.6 -33.4	Notes
710.7 -9.5 -11.9 -12.6 -6.4	V V V H	3.0 3.0 3.0 3.0 3.0	36.1 35.4 35.7	1.0 1.0 1.0	-44.6 -46.4	-13.0 -13.0	-31.6 -33.4	
-9.5 -11.9 -12.6 -6.4	V V H	3.0 3.0 3.0	35.4 35.7	1.0 1.0	-46.4	-13.0	-33.4	
-11.9 -12.6 -6.4	V V H	3.0 3.0 3.0	35.4 35.7	1.0 1.0	-46.4	-13.0	-33.4	
-12.6 -6.4	V H	3.0 3.0	35.7	1.0	.*			
-6.4	Н	3.0			-47.2	-13.0	-34.2	
	***************************************		36.1		å		UTIL	
-12.9	L L			1.0	-41.5	-13.0	-28.5	
		3.0	35.4	1.0	-47.4	-13.0	-34.4	
-10.0	H	3.0	35.7	1.0	-44.6	-13.0	-31.6	
32.5						l		
-13.9	V	3.0	36.0	1.0	-48.9	-13.0	-35.9	
-9.5	V	3.0	35.4	1.0	-43.9	-13.0	-30.9	
-11.5	V	3.0	35.7	1.0	-46.2	-13.0	-33.2	
-4.1	H	3.0	36.0	1.0	-39.2	-13.0	-26.2	
-11.4	H	3.0	35.4	1.0	-45.8	-13.0	-32.8	
	H	3.0	35.7	1.0	-44.9	-13.0	-31.9	
754.3								
-16.1	V	3.0	36.0	1.0	-51.1			
-14.1	V	3.0	35.4	1.0	-48.6	-13.0	-35.6	
-15.7	V	3.0	35.7	1.0	-50.4	-13.0	-37.4	
	H	3.0	36.0	1.0	-44.7	-13.0	-31.7	
-13.8	H	3.0	35.4	1.0	-48.2	-13.0	-35.2	
-14.5	H	3.0	35.7	1.0	-49.2	-13.0	-36.2	
7	4.1 -11.4 -10.2 54.3 -16.1 -14.1 -15.7 -9.7 -13.8	4.1 H -11.4 H -10.2 H 54.3 - -16.1 V -14.1 V -15.7 V -9.7 H -13.8 H	4.1 H 3.0 -11.4 H 3.0 -10.2 H 3.0 54.3 - - -16.1 V 3.0 -14.1 V 3.0 -15.7 V 3.0 -9.7 H 3.0 -13.8 H 3.0	4.1 H 3.0 36.0 -11.4 H 3.0 35.4 -10.2 H 3.0 35.7 54.3 - - - -16.1 V 3.0 36.0 -14.1 V 3.0 35.4 -15.7 V 3.0 35.7 -9.7 H 3.0 36.0 -13.8 H 3.0 35.4	4.1 H 3.0 36.0 1.0 -11.4 H 3.0 35.4 1.0 -10.2 H 3.0 35.7 1.0 54.3 - - - - -16.1 V 3.0 36.0 1.0 -14.1 V 3.0 35.4 1.0 -15.7 V 3.0 35.7 1.0 -9.7 H 3.0 36.0 1.0 -13.8 H 3.0 35.4 1.0	4.1 H 3.0 36.0 1.0 -39.2 -11.4 H 3.0 35.4 1.0 45.8 -10.2 H 3.0 35.7 1.0 44.9 54.3 - - - - - -16.1 V 3.0 36.0 1.0 -51.1 -14.1 V 3.0 35.4 1.0 48.6 -15.7 V 3.0 35.7 1.0 -50.4 -9.7 H 3.0 35.4 1.0 44.7 -13.8 H 3.0 35.4 1.0 48.2	4.1 H 3.0 36.0 1.0 -39.2 -13.0 -11.4 H 3.0 35.4 1.0 45.8 -13.0 -10.2 H 3.0 35.7 1.0 44.9 -13.0 -10.2 H 3.0 35.7 1.0 44.9 -13.0 -16.1 V 3.0 36.0 1.0 -51.1 -13.0 -14.1 V 3.0 35.4 1.0 48.6 -13.0 -15.7 V 3.0 35.7 1.0 -50.4 -13.0 -9.7 H 3.0 36.0 1.0 44.7 -13.0 -13.8 H 3.0 35.4 1.0 48.2 -13.0	4.1 H 3.0 36.0 1.0 -39.2 -13.0 -26.2 -11.4 H 3.0 35.4 1.0 45.8 -13.0 -32.8 -10.2 H 3.0 35.7 1.0 -44.9 -13.0 -32.8 -10.2 H 3.0 35.7 1.0 -44.9 -13.0 -31.9 54.3 - - - - - - - - - - - - - -31.9 - 3.6.1 -

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FCC ID: ZNFUS991

				UL Ve	rificatior	n Servio	es, Inc.	•		
			Above 1G	Hz High F	requenc	y Subs	titution	Measu	rement	
	Compar	nv:	LG							
	Project	-	15 20405							
	Date:	.	4/6/2015							
		igineer:	Jude Semana							
	Configu	iration:	EUT + Charge	er + Headse	t					
	Locatio	n:	Chamber G							
	Mode:		LTE_QPSK E	and 4 Harm	onics, 1.4N	/Hz Band	width			
			-							
Band	f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Notes
	MHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)		(dB)	
LTE4	Low Ch,	1710.7								
	3421.40	-5.7	V	3.0	36.1	1.0	-40.7	-13.0	-27.7	
1.4MHz	5132.10	-11.5	V	3.0	35.4	1.0	-45.9	-13.0	-32.9	
	6842.80	-12.7	V	3.0	35.7	1.0	-47.4	-13.0	-34.4	
QPSK	3421.40	-6.7	H	3.0	36.1	1.0	-41.7	-13.0	-28.7	
	5132.10	-12.1	H	3.0	35.4	1.0	-46.5	-13.0	-33.5	
	6842.80	-10.1	H	3.0	35.7	1.0	-44.8	-13.0	-31.8	
	Mid Ch,									
	3465.00	-14.0	V	3.0	36.0	1.0	-49.1	-13.0	-36.1	
	5197.50	-8.8	V	3.0	35.4	1.0	-43.2	-13.0	-30.2	
	6930.00	-10.9	V	3.0	35.7	1.0	-45.5	-13.0	-32.5	
	3465.00	-4.4	Н	3.0	36.0	1.0	-39.4	-13.0	-26.4	
	5197.50	-9.9	H	3.0	35.4	1.0	-44.3	-13.0	-31.3	
	6930.00	-10.1	H	3.0	35.7	1.0	-44.8	-13.0	-31.8	
	High Ch,	, 1754.3								
	3508.60	-9.6	V	3.0	36.0	1.0	-44.6	-13.0	-31.6	
	5262.90	-14.5	V	3.0	35.4	1.0	-48.9	-13.0	-35.9	
	7017.20	-16.1	V	3.0	35.7	1.0	-50.7	-13.0	-37.7	
	3508.60	-9.9	H	3.0	36.0	1.0	-44.9	-13.0	-31.9	
	5262.90	-14.5	H	3.0	35.4	1.0	-48.9	-13.0	-35.9	
	7017.20	-13.6	H	3.0	35.7	1.0	-48.3	-13.0	-35.3	

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GSM

			UI Above 1G	L Verificat Hz High F				Measure	ment
Com	pany:	LG Electro	nics						
Proje		15 20405							
Date		4/2/2015							
Test	Engineer:	Jude Sema	ana						
	iguration:		Charger + HS						
Mode	-	EGPRS 19							
	Cha 3m Cham	mber ber –	Pre-an T34 8449B			Filter		Part 2	Limit 4
			I				_		
1	f SG rea	ading Ant. Pol	. Distance	Preamp	Filter	EIRP	Limit	Delta	Not
Gł	Hz (dBı	m) (H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low (Ch, 1850.2MHz								
3.700	-17.		3.0	35.4	1.0	-52.2	-13.0	-39.2	
5.551	-5.3		3.0	34.7	1.0	-39.1	-13.0	-26.1	
7.401	-7.0	0 V	3.0	34.9	1.0	-40.9	-13.0	-27.9	
3.700	-17.	.6 H	3.0	35.4	1.0	-52.0	-13.0	-39.0	
5.551	-13.	.4 H	3.0	34.7	1.0	-47.2	-13.0	-34.2	
7.401	-10.	.1 H	3.0	34.9	1.0	-44.1	-13.0	-31.1	
1.401	Ch, 1880.0MHz								
Mid (40.0	-39.6	
Mid (3.760	-18.		3.0	35.3	1.0	-52.6	-13.0		
Mid (3.760 5.640	-9.3	3 V	3.0	34.7	1.0	-43.0	-13.0	-30.0	
Mid (3.760 5.640 7.520	-9.3 -7.3	3 V 3 V	3.0 3.0	34.7 34.9	1.0 1.0	-43.0 -41.2	-13.0 -13.0	-30.0 -28.2	
Mid (3.760 5.640 7.520 3.760	-9.: -7.: -17.	3 V 3 V .5 H	3.0 3.0 3.0	34.7 34.9 35.3	1.0 1.0 1.0	-43.0 -41.2 -51.8	-13.0 -13.0 -13.0	-30.0 -28.2 -38.8	
Mid (3.760 5.640 7.520 3.760 5.640	-9.: -7.: -17. -4.8	3 V 3 V .5 H	3.0 3.0	34.7 34.9	1.0 1.0	-43.0 -41.2	-13.0 -13.0	-30.0 -28.2	
Mid (3.760 5.640 7.520 3.760 5.640 7.520	-9.3 -7.5 -17. -17. -4.8 -9.7	3 V 3 V .5 H 8 H 7 H	3.0 3.0 3.0	34.7 34.9 35.3	1.0 1.0 1.0	-43.0 -41.2 -51.8	-13.0 -13.0 -13.0	-30.0 -28.2 -38.8	
Mid (3.760 5.640 7.520 3.760 5.640 7.520 High (-9.: -7.: -17. -4.8	3 V 3 V .5 H 8 H 7 H	3.0 3.0 3.0 3.0 3.0 3.0	34.7 34.9 35.3 34.7 34.9	1.0 1.0 1.0 1.0 1.0	43.0 41.2 -51.8 -38.5 -43.6	-13.0 -13.0 -13.0 -13.0 -13.0	-30.0 -28.2 -38.8 -25.5 -30.6	
Mid (3.760 5.640 7.520 3.760 5.640 7.520	-9.3 -7.5 -17. -17. -4.8 -9.7	3 V 3 V .5 H 8 H 7 H	3.0 3.0 3.0 3.0 3.0 3.0 3.0	34.7 34.9 35.3 34.7 34.9 35.3	1.0 1.0 1.0 1.0 1.0 1.0	43.0 41.2 -51.8 -38.5 43.6 -49.8	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-30.0 -28.2 -38.8 -25.5 -30.6 -36.8	
Mid (3.760 5.640 7.520 3.760 5.640 7.520 7.520 High 3.820 5.729	9., -7., -17. 4.(-9., -9., Ch, 1909.8MHz -15. -11.	3 V 3 V 5 H 8 H 7 H 5 V .0 V	3.0 3.0 3.0 3.0 3.0 3.0	34.7 34.9 35.3 34.7 34.9	1.0 1.0 1.0 1.0 1.0 1.0 1.0	43.0 41.2 -51.8 -38.5 -43.6	-13.0 -13.0 -13.0 -13.0 -13.0	-30.0 -28.2 -38.8 -25.5 -30.6 -36.8 -31.8	
Mid 0 3.760 5.640 7.520 3.760 5.640 7.520 High 0 3.820	-9.: -7.: -17. -17. -4.(-9.) Ch, 1909.8MHz -15.	3 V 3 V 5 H 8 H 7 H 5 V .0 V	3.0 3.0 3.0 3.0 3.0 3.0 3.0	34.7 34.9 35.3 34.7 34.9 35.3	1.0 1.0 1.0 1.0 1.0 1.0	43.0 41.2 -51.8 -38.5 43.6 -49.8	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-30.0 -28.2 -38.8 -25.5 -30.6 -36.8	
Mid (3.760 5.640 7.520 3.760 5.640 7.520 High 3.820 5.729 7.639 3.820	9., 7., -17. 4.(9., -15. -15. -11. -8., -16.	3 V 3 V 5 H 8 H 7 H .5 V .0 V 2 V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	34.7 34.9 35.3 34.7 34.9 35.3 35.3 34.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	43.0 41.2 -51.8 -38.5 43.6 -49.8 44.8 42.1 -50.5	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-30.0 -28.2 -38.8 -25.5 -30.6 -36.8 -31.8 -29.1 -37.5	
Mid (3.760 5.640 7.520 3.760 5.640 7.520 High 3.820 5.729 7.639	9., 7., -17. 4.(9., -15. -15. -11. -8., -16.	3 V 3 V 5 H 8 H 7 H 5 V .5 V .0 V 2 V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	34.7 34.9 35.3 34.7 34.9 35.3 34.7 35.3 34.7 35.0	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	43.0 41.2 -51.8 -38.5 43.6 -49.8 -49.8 -49.8 -44.8 -42.1	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-30.0 -28.2 -38.8 -25.5 -30.6 -36.8 -36.8 -31.8 -29.1	

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DATE: APRIL 22, 2015

MODEL NUMER: LG-US991, US991, LGUS991

FCC ID: ZNFUS991

			UI Above 1G	L Verifica Hz High I				n Measur	rement
Comp	any:	LG Electroni	ics						
Proje	ct #:	15 20405							
Date:		4/2/2015							
Test E	Engineer:	Jude Seman	a						
	guration:	EUT w/ AC (Charger + HS						
Mode		GPRS1900	0						
			D			F : H = -			1.1
	Chambe	er 🛛	Pre-am	npliter		Filter			Limit
ſ	3m Chamber	•	T34 8449B	•		Filter 1	•	Part 2	24
L	on onumber	-					_		
f				•		EIRP	Limit	Delta	Not
GH	z (dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low C	h, 1850.2MHz								
3.700	-17.1	V	3.0	35.4	1.0	-51.5	-13.0	-38.5	
5.551	-4.9	V	3.0	34.7	1.0	-38.6	-13.0	-25.6	
7.401	-5.2	V	3.0	34.9	1.0	-39.1	-13.0	-26.1	
3.700	-17.3	H	3.0	35.4	1.0	-51.7	-13.0	-38.7	
5.551	-13.2	H	3.0	34.7	1.0	-46.9	-13.0	-33.9	
7.401	-9.9	H	3.0	34.9	1.0	-43.9	-13.0	-30.9	
	h, 1880.0MHz								
3.760	-14.6	V	3.0	35.3	1.0	-49.0	-13.0	-36.0	
5.640	-9.4	V	3.0	34.7	1.0	-43.2	-13.0	-30.2	
7.520	-7.4	V	3.0	34.9	1.0	-41.3	-13.0	-28.3	
3.760	-17.1	H	3.0	35.3	1.0	-51.4	-13.0	-38.4	
5.640	-7.5	H	3.0	34.7	1.0	-41.2	-13.0	-28.2	
	-8.3	H	3.0	34.9	1.0	-42.2	-13.0	-29.2	
7.520				05.0			40.0		
High C					1.0	-47.9	-13.0	-34.9	
High C 3.820	-13.6	V	3.0	35.3			40.0	00 0	
High C 3.820 5.729	-13.6 -9.1	v	3.0	34.7	1.0	-42.9	-13.0	-29.9	
High C 3.820 5.729 7.639	-13.6 -9.1 -7.3	V V	3.0 3.0	34.7 35.0	1.0 1.0	-42.9 -41.3	-13.0	-28.3	
High C 3.820 5.729 7.639 3.820	-13.6 -9.1 -7.3 -15.9	V V H	3.0 3.0 3.0	34.7 35.0 35.3	1.0 1.0 1.0	-42.9 -41.3 -50.2	-13.0 -13.0	-28.3 -37.2	
High C 3.820 5.729 7.639	-13.6 -9.1 -7.3	V V	3.0 3.0	34.7 35.0	1.0 1.0	-42.9 -41.3	-13.0	-28.3	

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DATE: APRIL 22, 2015

MODEL NUMER: LG-US991, US991, LGUS991

FCC ID: ZNFUS991

			U Above 1G	L Verificat Hz High F			titution	Measurem	nent
Com	pany:	LG Electroni	cs						
Proje		15 20405							
Date		4/2/2015							
	Engineer:	Jude Seman	a						
	iguration:	EUT w/ AC 0							
Mode	-	EGPRS 850							
	Chamb	er	Pre-ar	nplifer		Filter			Limit
	3m Chamber	· •	T34 8449B	•		Filter 1	•	Part 22	2
	omenanber						_		
1	f SG readin	g Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Note
GI	Hz (dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low (Ch, 824.2MHz								
1.648		V	3.0	37.4	1.0	-62.5	-13.0	-49.5	
2.473	-20.6	V	3.0	36.4	1.0	-56.0	-13.0	-43.0	
3.297	-20.9	V	3.0	35.8	1.0	-55.7	-13.0	-42.7	
1.648	-26.3	H	3.0	37.4	1.0	-62.7	-13.0	-49.7	
2.473	-22.5	H	3.0	36.4	1.0	-57.9	-13.0	-44.9	
3.297	-21.5	Н	3.0	35.8	1.0	-56.3	-13.0	-43.3	
Mid (Ch, 836.6MHz								
Mid (1.673	-25.9	V	3.0	37.3	1.0	-62.2	-13.0	-49.2	
Mid (1.673 2.510	-25.9 -21.1	V	3.0	36.4	1.0	-56.4	-13.0	-43.4	
Mid (1.673 2.510 3.346	-25.9 -21.1 -20.5	V V	3.0 3.0	36.4 35.8	1.0 1.0	-56.4 -55.3	-13.0 -13.0	-43.4 -42.3	
Mid (1.673 2.510 3.346 1.673	-25.9 -21.1 -20.5 -25.9	V V H	3.0 3.0 3.0	36.4 35.8 37.3	1.0 1.0 1.0	-56.4 -55.3 -62.2	-13.0 -13.0 -13.0	-43.4 -42.3 -49.2	
Mid (1.673 2.510 3.346 1.673 2.510	-25.9 -21.1 -20.5 -25.9 -23.0	V V H H	3.0 3.0 3.0 3.0 3.0	36.4 35.8 37.3 36.4	1.0 1.0 1.0 1.0	-56.4 -55.3 -62.2 -58.4	-13.0 -13.0 -13.0 -13.0	-43.4 -42.3 -49.2 -45.4	
Mid (1.673 2.510 3.346 1.673 2.510 3.346	-25.9 -21.1 -20.5 -25.9 -23.0 -20.6	V V H	3.0 3.0 3.0	36.4 35.8 37.3	1.0 1.0 1.0	-56.4 -55.3 -62.2	-13.0 -13.0 -13.0	-43.4 -42.3 -49.2	
Mid (1.673 2.510 3.346 1.673 2.510 3.346 High	-25.9 -21.1 -20.5 -25.9 -23.0 -20.6 Ch, 848.8MHz	V V H H H	3.0 3.0 3.0 3.0 3.0 3.0	36.4 35.8 37.3 36.4 35.8	1.0 1.0 1.0 1.0 1.0	-56.4 -55.3 -62.2 -58.4 -55.4	-13.0 -13.0 -13.0 -13.0 -13.0	43.4 42.3 49.2 45.4 42.4	
Mid 0 1.673 2.510 3.346 1.673 2.510 3.346 High 1.698	-25.9 -21.1 -20.5 -25.9 -23.0 -20.6 Ch, 848.8MHz -25.5	V V H H H V	3.0 3.0 3.0 3.0 3.0 3.0 3.0	36.4 35.8 37.3 36.4 35.8 37.3	1.0 1.0 1.0 1.0 1.0 1.0	-56.4 -55.3 -62.2 -58.4 -55.4 -61.8	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0	43.4 42.3 49.2 45.4 42.4 42.4	
Mid 0 1.673 2.510 3.346 1.673 2.510 3.346 High 1.698 2.547	-25.9 -21.1 -20.5 -25.9 -23.0 -20.6 Ch, 848.8MHz -25.5 -21.9	V V H H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	36.4 35.8 37.3 36.4 35.8 37.3 36.3	1.0 1.0 1.0 1.0 1.0 1.0 1.0	-56.4 -55.3 -62.2 -58.4 -55.4 -61.8 -57.3	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	43.4 42.3 49.2 45.4 42.4 42.4 48.8 44.3	
Mid 0 1.673 2.510 3.346 1.673 2.510 3.346 High 1.698 2.547 3.395	-25.9 -21.1 -20.5 -25.9 -23.0 -20.6 Ch, 848.8MHz -25.5 -21.9 -20.8	V V H H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	36.4 35.8 37.3 36.4 35.8 37.3 36.3 36.3 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	-56.4 -55.3 -62.2 -58.4 -55.4 -61.8 -57.3 -55.5	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	43.4 42.3 49.2 45.4 42.4 42.4 48.8 44.3 42.5	
Mid 0 1.673 2.510 3.346 1.673 2.510 3.346 High 1.698 2.547 3.395 1.698	-25.9 -21.1 -20.5 -25.9 -23.0 -20.6 Ch, 848.8MHz -25.5 -21.9 -20.8 -20.8 -25.7	V V H H H V V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	36.4 35.8 37.3 36.4 35.8 37.3 36.3 36.3 35.7 37.3	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	-56.4 -55.3 -62.2 -58.4 -55.4 -61.8 -57.3 -55.5 -62.0	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	43.4 42.3 49.2 45.4 42.4 48.8 44.3 42.5 49.0	
Mid 0 1.673 2.510 3.346 1.673 2.510 3.346 High 1.698 2.547 3.395	-25.9 -21.1 -20.5 -25.9 -23.0 -20.6 Ch, 848.8MHz -25.5 -21.9 -20.8	V V H H H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	36.4 35.8 37.3 36.4 35.8 37.3 36.3 36.3 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	-56.4 -55.3 -62.2 -58.4 -55.4 -61.8 -57.3 -55.5	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	43.4 42.3 49.2 45.4 42.4 42.4 48.8 44.3 42.5	

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DATE: APRIL 22, 2015

MODEL NUMER: LG-US991, US991, LGUS991

FCC ID: ZNFUS991

			UL Above 1G	- Verificati Hz High Fr			tution Me	easureme	nt
Compar Project		LG Electronic: 15I20405	5						
Date:	#.	4/2/2015							
Test En									
	-	Jude Semana							
Configu Mode:	ration:	EUT w/ AC Ch GPRS 850	arger + HS						
wode.		GPR5 050							
	Chambo	er	Pre-an	nplifer		Filter			Limit
	3m Chamber	•	T34 8449B	•	F	ilter 1	-	Part 22	2
f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Note
GHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
	824.2MHz	()	()	(/	()	((()	
1.648	-26.0	V	3.0	37.4	1.0	-62.3	-13.0	-49.3	
2.473	-20.7	V	3.0	36.4	1.0	-56.1	-13.0	-43.1	
3.297	-21.1	V	3.0	35.8	1.0	-55.9	-13.0	-42.9	
1.648	-25.8	Н	3.0	37.4	1.0	-62.2	-13.0	-49.2	
2.473	-22.3	Н	3.0	36.4	1.0	-57.7	-13.0	-44.7	
3.297	-21.2	Н	3.0	35.8	1.0	-56.0	-13.0	-43.0	
	836.6MHz								
1.673	-25.7	V	3.0	37.3	1.0	-62.0	-13.0	-49.0	
2.510	-20.9	V	3.0	36.4	1.0	-56.2	-13.0	-43.2	
3.346	-19.9	V	3.0	35.8	1.0	-54.7	-13.0	-41.7	
1.673	-25.8	H	3.0	37.3	1.0	-62.1	-13.0	-49.1	
2 540	-22.7	H H	3.0	36.4	1.0	-58.1	-13.0	-45.1	
2.510			3.0	35.8	1.0	-55.8	-13.0	-42.8	
3.346	-21.1	п	0.0	••••••					
3.346 High Ch,	848.8MHz			27.2	10	61.2	12.0	18.2	
3.346 High Ch, 1.698	848.8MHz -24.9	V	3.0	37.3	1.0	-61.2 57.6	-13.0 13.0	-48.2	
3.346 High Ch, 1.698 2.547	848.8MHz -24.9 -22.2	V V	3.0 3.0	36.3	1.0	-57.6	-13.0	-44.6	
3.346 High Ch, 1.698 2.547 3.395	848.8MHz -24.9 -22.2 -20.1	V V V	3.0 3.0 3.0	36.3 35.7	1.0 1.0	-57.6 -54.8	-13.0 -13.0	-44.6 -41.8	
3.346 High Ch, 1.698 2.547 3.395 1.698	848.8MHz -24.9 -22.2 -20.1 -25.4	V V V H	3.0 3.0 3.0 3.0 3.0	36.3 35.7 37.3	1.0 1.0 1.0	-57.6 -54.8 -61.7	-13.0 -13.0 -13.0	-44.6 -41.8 -48.7	
3.346 High Ch, 1.698 2.547 3.395	848.8MHz -24.9 -22.2 -20.1	V V V	3.0 3.0 3.0	36.3 35.7	1.0 1.0	-57.6 -54.8	-13.0 -13.0	-44.6 -41.8	

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WCDMA

			U Above 1G	L Verifica Hz High I				n Measure	ement
Compa	nv:	LG Electroni	C 9						
Project	-	15 20405	00						
Date:	# .								
		4/2/2015							
	ngineer:	Jude Seman	_						
_	uration:	X Position, A	C Charger + I	Headset					
Mode:		HSDPA B2							
	Chamb	er	Pre-an	n p lifer		Filter			Limit
	3m Chamber	-	T 343 8449E	З 🚽	Γ	Filter 1	•	Part 24	4
1								1	
f	SG reading		Distance			EIRP	Limit	Delta	Note
GHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low Ch	, 1852.4MHz								
3.704	-16.1	V	3.0	35.4	1.0	-50.5	-13.0	-37.5	
5.557	-10.9	V	3.0	34.7	1.0	-44.6	-13.0	-31.6	
7.409	-12.3	V	3.0	34.9	1.0	-46.2	-13.0	-33.2	
3.704	-13.4	Н	3.0	35.4	1.0	-47.8	-13.0	-34.8	
5.557	-13.0	H	3.0	34.7	1.0	-46.7	-13.0	-33.7	
7.409	-10.5	H	3.0	34.9	1.0	-44.5	-13.0	-31.5	
Mid Ch	, 1880.0MHz								
3.760	-14.3	V	3.0	35.3	1.0	-48.6	-13.0	-35.6	
5.640	-11.7	V	3.0	34.7	1.0	-45.4	-13.0	-32.4	
7.520	-12.1	V	3.0	34.9	1.0	-46.0	-13.0	-33.0	
3.760	-16.1	H	3.0	35.3	1.0	-50.4	-13.0	-37.4	
5.640	-11.0	H	3.0	34.7	1.0	-44.7	-13.0	-31.7	
7.520	-11.5	H	3.0	34.9	1.0	-45.5	-13.0	-32.5	
	, 1907.6 MHz								
3.815	-6.5	V	3.0	35.3	1.0	-40.8	-13.0	-27.8	
5.723	-9.3	V	3.0	34.7	1.0	-43.0	-13.0	-30.0	
7.630	-11.6	V	3.0	34.9	1.0	-45.6	-13.0	-32.6	
	-5.1	Н	3.0	35.3	1.0	-39.4	-13.0	-26.4	
3.815							40.0	22.4	
3.815 5.723	-11.7	Н	3.0	34.7	1.0	-45.4	-13.0	-32.4 -31.0	

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DATE: APRIL 22, 2015

MODEL NUMER: LG-US991, US991, LGUS991

FCC ID: ZNFUS991

				U Above 1G	L Verifica Hz High				n Measure	ement	
Cor	mpa	nv:	LG Electron	ics							
Pro		-	15 20405								
Dat	-		4/2/2015								
				_							
		ngineer:	Jude Semar								
	_	uration:	-	AC Charger +	Headset						
Moo	ae:		REL99 B2								
		Chamber		Pre-amplifer			Filter			Limit	
		3m Chamber	-	T343 8449	в 🚽		Filter 1	-	Part 2	4	
	1			1				_	1		
1	f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Notes	
G	Ηz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)		
Low	v Ch	1852.4MHz									
3.70	4	-13.1	V	3.0	35.4	1.0	-47.5	-13.0	-34.5		
5.55	7	-10.7	V	3.0	34.7	1.0	-44.4	-13.0	-31.4		
7.40	9	-11.5	V	3.0	34.9	1.0	-45.4	-13.0	-32.4		
3.70	4	-13.3	Н	3.0	35.4	1.0	-47.7	-13.0	-34.7		
5.55	7	-11.2	Н	3.0	34.7	1.0	-44.9	-13.0	-31.9		
7.40	9	-10.8	Н	3.0	34.9	1.0	-44.7	-13.0	-31.7		
		1880.0MHz									
3.76	0	-12.6	V	3.0	35.3	1.0	-46.9	-13.0	-33.9		
5.64	0	-11.7	V	3.0	34.7	1.0	-45.4	-13.0	-32.4		
7.52	0	-12.8	V	3.0	34.9	1.0	-46.8	-13.0	-33.8		
3.76	0	-12.8	Н	3.0	35.3	1.0	-47.2	-13.0	-34.2		
5.64		-12.3	Η	3.0	34.7	1.0	-46.0	-13.0	-33.0		
7.52		-10.9	Н	3.0	34.9	1.0	-44.9	-13.0	-31.9		
		, 1907.6 MHz									
3.81		-3.7	V	3.0	35.3	1.0	-38.0	-13.0	-25.0		
5.72		-10.0	V	3.0	34.7	1.0	-43.8	-13.0	-30.8		
7.63	•••••	-12.1	V	3.0	34.9	1.0	-46.0	-13.0	-33.0		
		-5.3	H	3.0	35.3	1.0	-39.6	-13.0	-26.6		
3.81		-12.5	Н	3.0	34.7	1.0	-46.2	-13.0	-33.2		
3.81 5.72 7.63		-12.5	H	3.0	34.9	1.0	-44.8	-13.0	-31.8		

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MODEL NUMER: LG-US991, US991, LGUS991

DATE: APRIL 22, 2015

FCC ID: ZNFUS991

			Abo	U ve 1GHz Hig	L Verificatio gh Frequen			asureme	nt	
c	Company:		LG Electronics							
	Project #:		15120405							
)ate:		4/2/2015							
	lest Engi	neer	Jude Semana							
	Configura		EUT + Charge	- 1 H C						
	ocation:	luon.	Chamber G	1 + 113						
	location. Node:		HSDPA Band							
	noue.			JTIannonics						
_	f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Not
	MHz	(dBm)	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
ī	ow Ch, 82	6.4								
	652.80	-25.7	V	3.0	37.0	1.0	-61.7	-13.0	-48.7	
	479.20	-22.1	V	3.0	36.4	1.0	-57.5	-13.0	-44.5	
3	305.60	-18.8	V	3.0	36.1	1.0	-54.0	-13.0	-41.0	
	652.80	-25.5	Н	3.0	37.0	1.0	-61.5	-13.0	-48.5	
	479.20	-24.0	Н	3.0	36.4	1.0	-59.4	-13.0	-46.4	
	305.60	-18.0	H	3.0	36.1	1.0	-53.1	-13.0	-40.1	
	lid Ch, 830									
	673.20	-25.6	V	3.0	37.0	1.0	-61.6	-13.0	-48.6	
	509.80	-20.7	V	3.0	36.4	1.0	-56.1	-13.0	-43.1	
	346.40	-20.4	V	3.0	36.1	1.0	-55.5	-13.0	-42.5	
	673.20	-24.8	Н	3.0	37.0	1.0	-60.7	-13.0	-47.7	
	509.80	-21.7	H	3.0	36.4	1.0	-57.1	-13.0	-44.1	
	346.40	-19.7	Н	3.0	36.1	1.0	-54.9	-13.0	-41.9	
	ligh Ch, 84	-24.1	V	3.0	37.0	10	-60.0	-13.0	-47.0	
	693.20 539.80	-24.1 -20.5	V	3.0 3.0	37.0	1.0 1.0	-60.0	-13.0 -13.0	-47.0 -42.9	
	386.40	-20.5	v	3.0	36.4 36.1	1.0	-55.9	-13.0	-42.9 -39.8	
	693.20	-11.7	H	3.0	37.0	1.0	-52.0	-13.0	-35.0	
		-24.1	H	3.0	36.4	1.0	-57.8	-13.0	-44.8	
1	539.80		H	3.0	36.1	1.0	-53.3	-13.0	-40.3	
1 2	539.80 386.40	-18.2	• H							

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MODEL NUMER: LG-US991, US991, LGUS991

DATE: APRIL 22, 2015

FCC ID: ZNFUS991

		Abo	UI ve 1GHz Hig	L Verificatio gh Frequen			asuremei	nt	
Company	:	LG Electronics							
Project #:		15120405							
Date:		4/2/2015							
Test Engi									
-		Jude Semana							
Configura		EUT + Charger	r + HS						
Location:		Chamber G							
Mode:		Rel99 Band 5 I	Harmonics						
					C 14			D k	
f MHz	SG reading (dBm)	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Note
	· · · · · ·	(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low Ch, 82 1652.80	-26.0	V	3.0	37.0	1.0	-62.0	-13.0	-49.0	
2479.20	-20.0 -21.4	v	3.0	36.4	1.0	-02.0	-13.0	-43.8	
3305.60	-21.4	v	3.0	36.4 36.1	1.0	-56.4	-13.0	-43.4	
1652.80	-21.3	H	3.0	37.0	1.0	-50.4	-13.0	-49.7	
2479.20	-20.7	H	3.0	36.4	1.0	-58.5	-13.0	-45.5	
3305.60	-23.1	H	3.0	36.1	1.0	-56.2	-13.0	-43.2	
Mid Ch, 83			5.0	50.1	1.0	-30.2	-13.0	-43.2	
1673.20	-25.5	V	3.0	37.0	1.0	-61.5	-13.0	-48.5	
2509.80	-21.3	v	3.0	36.4	1.0	-56.7	-13.0	-43.7	
	-21.2	v	3.0	36.1	1.0	-56.3	-13.0	-43.3	
		Ĥ	3.0	37.0	1.0	-62.0	-13.0	-49.0	
3346.40	-26.0		3.0	36.4	1.0	-58.4	-13.0	-45.4	
3346.40 1673.20	-26.0 -23.0	i H							
3346.40 1673.20 2509.80	-23.0	H			1.0	-56.0	-13.0	-43.0	
3346.40 1673.20 2509.80 3346.40	-23.0 -20.9	H	3.0	36.1	1.0	-56.0	-13.0	-43.0	
3346.40 1673.20 2509.80	-23.0 -20.9				1.0 1.0	-56.0 -61.3	-13.0 -13.0	-43.0 -48.3	
3346.40 1673.20 2509.80 3346.40 High Ch, 8	-23.0 -20.9 46.6	H	3.0	36.1		•			
3346.40 1673.20 2509.80 3346.40 High Ch, 8 1693.20	-23.0 -20.9 46.6 -25.3	H V	3.0 3.0	36.1 37.0	1.0	-61.3	-13.0	-48.3	
3346.40 1673.20 2509.80 3346.40 High Ch, 8 1693.20 2539.80	-23.0 -20.9 46.6 -25.3 -21.5	H V V	3.0 3.0 3.0	36.1 37.0 36.4	1.0 1.0	-61.3 -56.9	-13.0 -13.0	_48.3 _43.9	
3346.40 1673.20 2509.80 3346.40 High Ch, 8 1693.20 2539.80 3386.40	-23.0 -20.9 46.6 -25.3 -21.5 -20.7	H V V V	3.0 3.0 3.0 3.0	36.1 37.0 36.4 36.1	1.0 1.0 1.0	-61.3 -56.9 -55.8	-13.0 -13.0 -13.0	_48.3 _43.9 _42.8	

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DATE: APRIL 22, 2015 FCC ID: ZNFUS991

CDMA

			UL Above 1GH	Verification Iz High Free				ement	
Comp	oanv:	LG							
Proje	-	15 20405							
Date:		04/11/15							
	Engineer:	Charles Vergo	nio						
		-							
Mode	iguration:	EUT w/ AC A	uapter + HS						
wode		EVDO BC1							
	Chambe	er	Pre-ar	nplifer		Filter		Lir	nit
			T34 8449B	· •	Fil	ter 1	-	Part 24	
	5m Chamber I	3 -			1		·		
f	SG reading	Ant. Pol.	Distance	Preamp	Filter	EIRP	Limit	Delta	Not
GH		(H/V)	(m)	(dB)	(dB)	(dBm)	(dBm)	(dB)	
Low (Ch, 1851.25 MHz								
3.703	-7.4	H	3.0	35.4	1.0	-41.8	-13.0	-28.8	
5.554	-6.8	Н	3.0	34.7	1.0	-40.5	-13.0	-27.5	
7.405	-11.6	H	3.0	34.9	1.0	-45.5	-13.0	-32.5	
3.703	-9.0	V	3.0	35.4	1.0	-43.4	-13.0	-30.4	
5.554	-4.3	V	3.0	34.7	1.0	-38.0	-13.0	-25.0	
7.405	-13.3	V	3.0	34.9	1.0	-47.2	-13.0	-34.2	
	Ch, 1880 MHz								
3.760	-6.0	Н	3.0	35.3	1.0	-40.4	-13.0	-27.4	
5.640	-3.7	H	3.0	34.7	1.0	-37.4	-13.0	-24.4	
7.520	-11.7	Н	3.0	34.9	1.0	-45.6	-13.0	-32.6	
3.760	-9.2	V	3.0	35.3	1.0	-43.5	-13.0	-30.5	
5.640	-3.0	V	3.0	34.7	1.0	-36.8	-13.0	-23.8	
7.520	-13.1	V	3.0	34.9	1.0	-47.0	-13.0	-34.0	
	Ch, 1908.75 MHz								
3.818	-1.0	H	3.0	35.3	1.0	-35.3	-13.0	-22.3	
5.726	-4.0	Н	3.0	34.7	1.0	-37.8	-13.0	-24.8	
7.635	-11.5	H	3.0	34.9	1.0	-45.4	-13.0	-32.4	
	-1.9	V	3.0	35.3	1.0	-36.2	-13.0	-23.2	
3.818	120	V	3.0 3.0	34.7	1.0	-47.7	-13.0	-34.7	
	-13.9 -12.9	V		34.9	1.0	-46.8	-13.0	-33.8	

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DATE: APRIL 22, 2015

MODEL NUMER: LG-US991, US991, LGUS991

FCC ID: ZNFUS991

Compar Project Date: Test En Configu Mode:	#: gineer:	LG 15I20405 04/11/15 Charles Vergo EUT w/ AC Ac RTT BC1 HAR	nio lapter + HS	lz High Freq	uency Si	ubsututioi	n weasur	ement	
	Chambe		Pre-an	nplifer		Filter		Lii	mit
	5m Chamber E	-	T34 8449B		Fil	ter 1	•	Part 24	
			1		1			I	-
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Note
	1851.25 MHz			<u>,/</u>	11		(
3.703	-7.1	Н	3.0	35.4	1.0	-41.5	-13.0	-28.5	
5.554	-6.2	Н	3.0	34.7	1.0	-39.9	-13.0	-26.9	
7.405	-12.6	Н	3.0	34.9	1.0	-46.5	-13.0	-33.5	
3.703	-9.6	V	3.0	35.4	1.0	-44.0	-13.0	-31.0	
5.554	-4.9	V	3.0	34.7	1.0	-38.6	-13.0	-25.6	
7.405	-13.4	V	3.0	34.9	1.0	-47.3	-13.0	-34.3	
Mid Ch,	1880 MHz								
3.760	-5.1	Н	3.0	35.3	1.0	-39.5	-13.0	-26.5	
5.640	-3.4	H	3.0	34.7	1.0	-37.1	-13.0	-24.1	
7.520	-11.6	H	3.0	34.9	1.0	-45.5	-13.0	-32.5	
3.760	-9.3	V	3.0	35.3	1.0	-43.6	-13.0	-30.6	
5.640	-3.1	V	3.0	34.7	1.0	-36.8	-13.0	-23.8	
7.520	-13.0	V	3.0	34.9	1.0	-47.0	-13.0	-34.0	
······································	1908.75 MHz								
3.818	-1.0	Н	3.0	35.3	1.0	-35.3	-13.0	-22.3	
5.726	-2.0	Н	3.0	34.7	1.0	-35.8	-13.0	-22.8	
	-11.1	H	3.0	34.9	1.0	-45.1	-13.0	-32.1	
7.635	-2.0	V	3.0	35.3	1.0	-36.3	-13.0	-23.3	
7.635 3.818	·····			. 347	1.0	-47.8	-13.0	-34.8	
7.635	-2.0 -14.1 -13.2	V V	3.0 3.0	34.7 34.9	1.0	-47.1	-13.0	-34.1	

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DATE: APRIL 22, 2015

MODEL NUMER: LG-US991, US991, LGUS991

FCC ID: ZNFUS991

				Verification z High Freq				rement	
Com	pany:	LG							
Proje	ect #:	15 20405							
Date:		04/11/15							
	Engineer:	Charles Vergo	nio						
	iguration:	EUT w/ AC Ad							
Mode	-	EVDO BC0	apter + HS						
Mode	.	EVDO BCU							
	Chambe	er	Pre-an	nplifer		Filter		Lin	nit
	5m Chamber I	3 🖵	T34 8449B	-	Fil	ter 1	-	Part 22	
				_					
GH	f SG reading Iz (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Not
	Ch, 824.7MHz	(11/4)	(111)	(46)	(ub)		(ubiii)	(00)	
1.649	-27.2	Н	3.0	37.4	1.0	-63.5	-13.0	-50.5	
2.474	-24.3	H	3.0	36.4	1.0	-59.7	-13.0	-46.7	
3.299	-21.5	Н	3.0	35.8	1.0	-56.3	-13.0	-43.3	
1.649	-25.6	V	3.0	37.4	1.0	-61.9	-13.0	-48.9	
2.474	-18.9	V	3.0	36.4	1.0	-54.3	-13.0	-41.3	
3.299	-20.5	V	3.0	35.8	1.0	-55.3	-13.0	-42.3	
	Ch, 836.52MHz		•						
Mid (Н	3.0	37.3	1.0	-61.6	-13.0	-48.6	
Mid (-25.2		· • •	20.4			40.0		
	-25.2 -24.7	Н	3.0	36.4	1.0	-60.1	-13.0	-47.1	
1.673		H H	3.0 3.0	36.4 35.8	1.0 1.0	-60.1 -56.1	-13.0 -13.0	-47.1 -43.1	
1.673 2.510 3.346 1.673	-24.7								
1.673 2.510 3.346	-24.7 -21.3	H V V	3.0 3.0 3.0	35.8	1.0	-56.1	-13.0	_43.1 _48.7 _41.1	
1.673 2.510 3.346 1.673 2.510 3.346	-24.7 -21.3 -25.3 -18.7 -20.2	H V	3.0 3.0	35.8 37.3	1.0 1.0	-56.1 -61.7	-13.0 -13.0	-43.1 -48.7	
1.673 2.510 3.346 1.673 2.510 3.346	-24.7 -21.3 -25.3 -18.7	H V V	3.0 3.0 3.0 3.0	35.8 37.3 36.4	1.0 1.0 1.0	-56.1 -61.7 -54.1 -55.0	-13.0 -13.0 -13.0 -13.0	_43.1 _48.7 _41.1	
1.673 2.510 3.346 1.673 2.510 3.346	-24.7 -21.3 -25.3 -18.7 -20.2	H V V H	3.0 3.0 3.0	35.8 37.3 36.4	1.0 1.0 1.0	-56.1 -61.7 -54.1 -55.0 -59.0	-13.0 -13.0 -13.0	_43.1 _48.7 _41.1	
1.673 2.510 3.346 1.673 2.510 3.346 High (1.697 2.545	-24.7 -21.3 -25.3 -18.7 -20.2 Ch, 848.31MHz -22.7 -24.5	H V V V	3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.8 37.3 36.4 35.8	1.0 1.0 1.0 1.0	-56.1 -61.7 -54.1 -55.0	-13.0 -13.0 -13.0 -13.0	43.1 48.7 41.1 42.0	
1.673 2.510 3.346 1.673 2.510 3.346 High 0 1.697	-24.7 -21.3 -25.3 -18.7 -20.2 Ch, 848.31MHz -22.7	H V V H H	3.0 3.0 3.0 3.0 3.0	35.8 37.3 36.4 35.8 37.3	1.0 1.0 1.0 1.0 1.0	-56.1 -61.7 -54.1 -55.0 -59.0	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-43.1 -48.7 -41.1 -42.0 -46.0 -46.8 -42.2	
1.673 2.510 3.346 1.673 2.510 3.346 High 0 1.697 2.545 3.393 1.697	-24.7 -21.3 -25.3 -18.7 -20.2 Ch, 848.31MHz -22.7 -24.5	H V V H H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.8 37.3 36.4 35.8 37.3 36.3	1.0 1.0 1.0 1.0 1.0 1.0	-56.1 -61.7 -54.1 -55.0 -59.0 -59.8	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-43.1 -48.7 -41.1 -42.0 -46.0 -46.8	
1.673 2.510 3.346 1.673 2.510 3.346 High 0 1.697 2.545 3.393	-24.7 -21.3 -25.3 -18.7 -20.2 Ch, 848.31MHz -22.7 -24.5 -20.5	H V V H H	3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	35.8 37.3 36.4 35.8 37.3 36.3 35.7	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	-56.1 -61.7 -54.1 -55.0 -59.0 -59.8 -55.2	-13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0 -13.0	-43.1 -48.7 -41.1 -42.0 -46.0 -46.8 -42.2	

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DATE: APRIL 22, 2015

MODEL NUMER: LG-US991, US991, LGUS991

FCC ID: ZNFUS991

					Verification				ement	
Com	pany:		LG							
Proj	ect #:		15 20405							
Date			04/11/15							
		neer:	Charles Vergo	nio						
	figura		EUT w/ AC Ad							
Mod	-	luon.	RTT BC0	apter + 115						
WOU	е.		KII DCU							
		Chambe	r	Pre-ar	nplifer		Filter		Li	mit
	5n	n Chamber E	3 -	T34 8449B	-	Fil	ter 1	-	Part 22	
	I					,	,		,	-
	f Hz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Note
Low	Ch, 82	4.7MHz								
1.649)	-27.6	Н	3.0	37.4	1.0	-64.0	-13.0	-51.0	
2.474		-24.5	Н	3.0	36.4	1.0	-59.9	-13.0	-46.9	
3.299)	-21.2	Н	3.0	35.8	1.0	-56.0	-13.0	-43.0	
1.649		-26.7	V	3.0	37.4	1.0	-63.0	-13.0	-50.0	
2.474		-18.5	V	3.0	36.4	1.0	-53.9	-13.0	-40.9	
3.299		-20.2	V	3.0	35.8	1.0	-55.0	-13.0	-42.0	
		6.52MHz			ļ					
1.673		-26.0	H	3.0	37.3	1.0	-62.3	-13.0	-49.3	
2.510		-23.8	H	3.0	36.4	1.0	-59.2	-13.0	-46.2	
3.346		-20.7	H V	3.0	35.8	1.0	-55.4	-13.0	-42.4	
1.673		-26.0 -18.5	V	3.0 3.0	37.3 36.4	1.0 1.0	-62.4 -53.9	-13.0 -13.0	-49.4 -40.9	
3.346		-10.5	V	3.0	36.4 35.8	1.0	-55.9	-13.0	-40.9 -42.1	
		-20.3 18.31MHz	v	5.0	33.0	1.0	-33.1	-13.0	-42.1	
1.697		-23.4	Н	3.0	37.3	1.0	-59.7	-13.0	-46.7	
		-24.4	H	3.0	36.3	1.0	-59.8	-13.0	-46.8	
2 545		-20.3	H	3.0	35.7	1.0	-55.0	-13.0	-42.0	
2.545		-21.0	v	3.0	37.3	1.0	-57.3	-13.0	-44.3	
3.393			•		36.3	1.0	-54.3	-13.0	-41.3	
3.393 1.697			V	3.0						
3.393	; ;	-18.9 -20.4	V V	3.0 3.0	35.7	1.0	-55.1	-13.0	-42.1	

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