FCC PART 15C TEST REPORT FOR CERTIFICATION On Behalf of

Polk Audio

Polk DSB Soundbar System

Model Number: DSB1 SOUND BAR

FCC ID: WLQAM9520TX

Prepared for: Polk Audio

5601 Metro Drive, Baltimore, Maryland, United States, 21215

Prepared By: EST Technology Co., Ltd.

Santun(guantai Road), Houjie Town, DongGuan City,

GuangDong, China.

Tel: 86-769-83081888-808

Report Number: ESTE-R1605073 Date of Test : May 23 ~ 29, 2016 Date of Report : May 31, 2016



EST Technology Co., Ltd Report No. ESTE-R1605073

Page 1 of 109

TABLE OF CONTENTS

Descri	iption	1	<u>Page</u>
Геѕт R	EPORT	VERIFICATION	4
1.	GEN	ERAL INFORMATION	5
	1.1.	Description of Device (EUT)	5
2.	Sum	IMARY OF TEST	6
	2.1.	Summary of test result	6
	2.2.	Test Facilities	
	2.3.	Measurement uncertainty	8
	2.4.	Assistant equipment used for test	8
	2.5.	Block Diagram	8
	2.6.	Test mode	9
	2.7.	Channel List for Bluetooth	9
	2.8.	Test Equipment	10
3.	MAX	XIMUM PEAK OUTPUT POWER	11
	3.1.	Limit	11
	3.2.	Test Procedure	11
	3.3.	Test Result	11
	3.4.	Test Data	12
4.	20 D	OB BANDWIDTH	16
	4.1.	Limit	16
	4.2.	Test Procedure	16
	4.3.	Test Result	16
	4.4.	Test Data	17
5.	Car	RIER FREQUENCY SEPARATION	21
	5.1.	Limit	21
	5.2.	Test Procedure	21
	5.3.	Test Result	21
	5.4.	Test Data	22
6.	Num	BER OF HOPPING CHANNEL	26
	6.1.	Limit	26
	6.2.	Test Procedure	26
	6.3.	Test Result	26
	6.4.	Test Data	27
7.	DWE	ELL TIME	29
	7.1.	Limit	29
	7.2.	Test Procedure	29
	7.3.	Test Result	29
	7.4.	Test Data	30
8.	RAD	NATED EMISSIONS	36
	8.1.	Limit	36
	8.2.	Test Procedure	
	8.3.	Test Result	37
	8.4.	Test Data	38
9.	BAN	D EDGE COMPLIANCE	74
	9.1.	Limit	74



FCC ID: WLQAM9520TX

	9.2.	Test Procedure	74
	9.3.	Test Result	74
	9.4.	Test Data	75
10.	Powi	ER LINE CONDUCTED EMISSIONS	91
	10.1.	Limit	91
	10.2.	Test Procedure	91
11.	ANTE	nna Requirements	96
	11.1.	Limit	96
	11.2.	Result	96
12.	TEST	SETUP PHOTO	97
13	Рнот	OS OF EUT	99



Test Report Verification

	Test Report	vermeanon					
Applicant:	Polk Audio						
Address:	5601 Metro Drive, Baltimore, Maryland, United States, 21215						
Manufacturer	Polk Audio						
Address:	5601 Metro Drive, Baltin	more, Maryland, U	Jnited States, 21215				
	Zhao Yang Electronic (S	henZhen) Co.,Ltd	•				
Factory	Building 2, De Yong Jia	Industrial Park, G	uang Qiao Road,				
Address:	Yu Lv Community, Gon	Yu Lv Community, Gong Ming Street, Guang Ming New District,					
	Shenzhen, 518132, Chin						
E.U.T:	Polk DSB Soundbar Sys						
Model Number:	DSB1 SOUND BAR						
Power Supply:	DC 15V From Adapter I	nput AC 100-240V	V ~ 50/60Hz				
	AC 120V/60Hz	•					
Test Voltage:	AC 240V/60Hz						
Trade Name:	Polk	Serial No.:					
Date of Receipt:	May 20, 2016	Date of Test:	May 23 ~ 29, 2016				
	FCC Rules and Regulati						
Test Specification:	ANSI C63.10:2013						
	The device described ab	ove is tested by ES	ST Technology Co., Ltd., The				
	The device described above is tested by EST Technology Co., Ltd The measurement results were contained in this test report and EST						
Test Result:	Technology Co., Ltd. was assumed full responsibility for the accuracy						
	and completeness of these measurements. Also, this report shows that the						
			ECC Dulas and Deculations				
	Part 15 Subpart C requir	-	Thology				
	Ture 15 Suspare S requir	cinones.	Sund.				
	This report applies to ab	ove tested sample					
	reproduced in part without	ove tested sample out written approve	al of EST Technology Co. Ltd.				
	reproduced in part with	at written approve	Date: May 3 \ 2016				
Prepared by:	Tested by:		1130				
ricpared by.	rested by.						
/			Trementhe				
Ada	tom		Liementen				
N							
Ada / Assistant	Tony.Tang / E	ngineer	Iceman.Hu / Manager				
Other Aspects:							
None.							
Abbreviations: OK/P=pas	sed fail/F=failed n.a/N	l=not applicable	E.U.T=equipment under tested				
This test report is based of	n a single evaluation of one same	ole of above mentione	d products ,It is not permitted to be				
	out written approval of EST Tec		a products, it is not permitted to be				
Treestant in our wers will							



1. GENERAL INFORMATION

1.1. Description of Device (EUT)

Product Name	:	Polk DSB Soundbar System
FCC ID	:	WLQAM9520TX
Model Number	:	DSB1 SOUND BAR
Operation frequency	:	2402MHz~2480MHz
Number of channel	:	79
Antenna	:	Internal antenna, 0dBi gain
Modulation	:	BT BDR: GFSK BT EDR: π/4-DQPSK BT EDR: 8-DPSK
Sample Type	:	Prototype production



EST Technology Co., Ltd Report No. ESTE-R1605073 Page 5 of 109

2. SUMMARY OF TEST

2.1. Summary of test result

Description of Test Item	Standard	Results
Maximum Peak Output Power	FCC Part 15: 15.247(b)(1) DA 00-705	PASS
20dB Bandwidth	FCC Part 15: 15.247a1 DA 00-705	PASS
Carrier Frequency Separation	FCC Part 15: 15.247(a)(1) DA 00-705	PASS
Number Of Hopping Channel	FCC Part 15: 15.247(a)(1)(iii) DA 00-705	PASS
Dwell Time	FCC Part 15: 15.247(a)(1)(iii) DA 00-705	PASS
Radiated Emission	FCC Part 15: 15.209 FCC Part 15: 15.247(d) ANSI C63.10:2013 DA 00-705	PASS
Band Edge Compliance	FCC Part 15: 15.247(d) DA 00-705	PASS
Power Line Conducted Emissions	FCC Part 15: 15.207 ANSI C63.10:201 DA 00-705	PASS
Antenna requirement	FCC Part 15: 15.203	PASS





2.2. Test Facilities

EMC Lab : Certificated by CNAL, CHINA

Registration No.: L5288

Date of registration: December 07, 2015

Certificated by FCC, USA Registration No.: 989591

Date of registration: November 20, 2013

Certificated by Industry Canada Registration No.: 9405A-1

Date of registration: December 30, 2015

Certificated by VCCI, Japan

Registration No.: R-3663 & C-4103 Date of registration: July 25, 2011

Certificated by TUV Rheinland, Germany Registration No.: UA 50195514 0001 Date of registration: January 07, 2011

Certificated by TUV/PS, Shenzhen

Registration No.: SCN1017

Date of registration: January 27, 2011

Certificated by Intertek ETL SEMKO Registration No.: 2011-RTL-L1-18 Date of registration: April 28, 2011

Certificated by Siemic, Inc. Registration No.: SLCN021

Date of registration: November 8, 2011

Certificated by Nemko, Hong Kong

Registration No.: 175193

Date of registration: May 4, 2011

Name of Firm : EST Technology Co., Ltd.

Site Location : San Tun Management Zone, Houjie Town, Dongguan,

Guangdong, China



2.3. Measurement uncertainty

Test Item	Uncertainty
Uncertainty for Conduction emission test	2.54dB
Uncertainty for Radiation Emission test (30MHz-1GHz)	3.62dB
Uncertainty for Radiation Emission test (1GHz to 18GHz)	4.86dB
Uncertainty for radio frequency	7×10-8
Uncertainty for conducted RF Power	0.20dB
Uncertainty for Power density test	0.26dB

Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

2.4. Assistant equipment used for test

2.4.1. Adapter

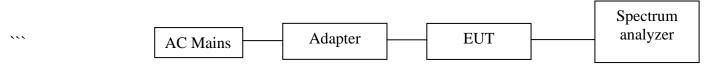
M/N : SK03G-1500250U

Input : AC 100-240V~50/60Hz 2A MAX

Output : DC 15V 2.5A

2.5. Block Diagram

For radiated emissions test: EUT was placed on a turn table, which is 0.8 (or 1.5) meter high above ground. EUT was be set into BT test mode by software before test.



(EUT: Polk DSB Soundbar System)

EST Technology Co., Ltd Report No. ESTE-R1605073 Page 8 of 109

2.6. Test mode

The test software was used to control EUT work in Continuous TX mode, and select test channel, wireless mode

Mode	Channel	Frequency
	Low	2402MHz
GFSK	Middle	2441MHz
	High	2480MHz
	Low	2402MHz
8-DPSK	Middle	2441MHz
	High	2480MHz

2.7. Channel List for Bluetooth

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
No.	(MHz)	No.	(MHz)	No.	(MHz)	No.	(MHz)
1	2402	2	2403	3	2404	4	2405
5	2406	6	2407	7	2408	8	2409
9	2410	10	2411	11	2412	12	2413
13	2414	14	2415	15	2416	16	2417
17	2418	18	2419	19	2420	20	2421
21	2422	22	2423	23	2424	24	2425
25	2426	26	2427	27	2428	28	2429
29	2430	30	2431	31	2432	32	2433
33	2434	34	2435	35	2436	36	2437
37	2438	38	2439	39	2440	40	2441
41	2442	42	2443	43	2444	44	2445
45	2446	46	2447	47	2448	48	2449
49	2450	50	2451	51	2452	52	2453
53	2454	54	2455	55	2456	56	2457
57	2458	58	2459	59	2460	60	2461
61	2462	62	2463	63	2464	64	2465
65	2466	66	2467	67	2468	68	2469
69	2470	70	2471	71	2472	72	2473
73	2474	74	2475	75	2476	76	2477
77	2478	78	2479	79	2480	_	-

EST Technology Co., Ltd Report No. ESTE-R1605073 Page 9 of 109



2.8. Test Equipment

2.8.1. For conducted emission test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESHS30	832354	June,28,15	1 Year
Artificial Mains Networ	Rohde & Schwarz	ENV216	101260	June,28,15	1 Year
Pulse Limiter	Rohde & Schwarz	ESEON ONE-Z2	101100	June,28,15	1 Year

2.8.2. For radiated emission test(30-1000MHz)

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz		100004	June,28,15	1 Year
Spectrum Analyzer	Agilent	E4411B	MY5014069 7	June,28,15	1 Year
Bilog Antenna	Teseq	CBL 6111D	27090	June,28,15	1 Year
Signal Amplifier	Agilent	310N	187037	June,28,15	1 Year

2.8.3. For radiated emission test(above 1GHz)

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Horn Antenna	SCHWARZB ECK	BBHA 9120 D	BBHA9120D1 002	June,28,15	1 Year
Signal Amplifier	SCHWARZB ECK	BBV9718	9718-212	June,28,15	1 Year
Spectrum Analyzer	Agilent	E4408B	MY44211139	June,28,15	1 Year
RF Cable	Hubersuhner	RG 214/U	513423	June,28,15	1 Year

EST Technology Co., Ltd Report No. ESTE-R1605073 Page 10 of 109



3. MAXIMUM PEAK OUTPUT POWER

3.1. Limit

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts, the e.i.r.p shall not exceed 4W

3.2. Test Procedure

The transmitter output (antenna port) was connected to the spectrum analyzer

3.3. Test Result

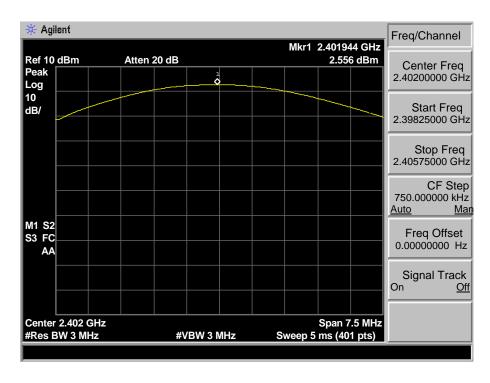
EUT: Polk DSB Soundbar System							
M/N: DSB1 SOUND BAR							
Test date: 20	16-05-25	Test site: RF site	Tested b	y: Tony Tang			
Mode	Freq	Result (dBm)	Li	Limit			
Wode	(MHz)		dBm	W	(dB)		
	2402	2.556	30.00	1	27.444		
GFSK	2441	2.530	30.00	1	27.470		
	2480	1.967	30.00	1	28.033		
	2402	1.996	21.00	0.125	19.004		
8-DPSK	2441	2.137	21.00	0.125	18.863		
	2480	1.608	21.00	0.125	19.392		
Conclusion: PASS							

EST Technology Co., Ltd Report No. ESTE-R1605073 Page 11 of 109

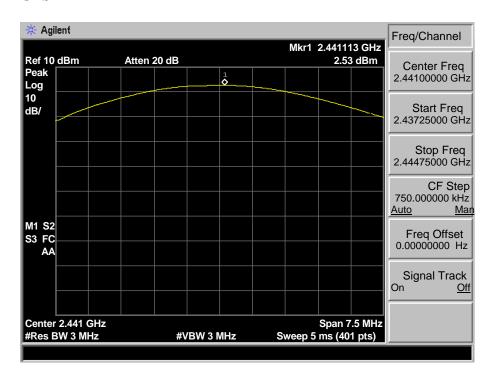


3.4. Test Data

GFSK 2402 MHz



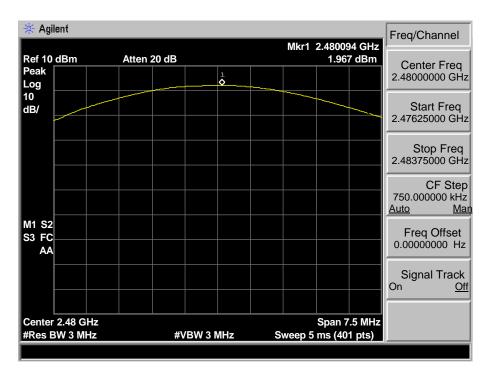
GFSK 2441 MHz





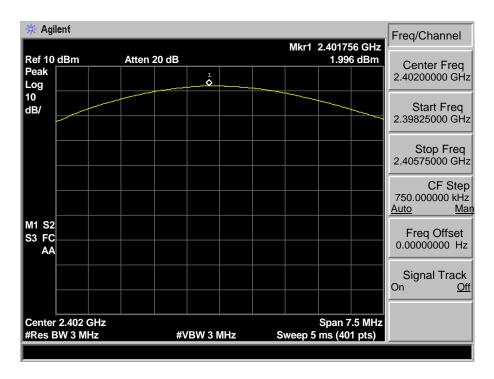
EST Technology Co., Ltd

GFSK 2480 MHz

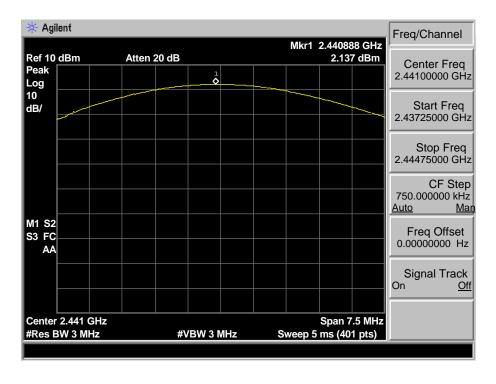




8-DPSK 2402 MHz

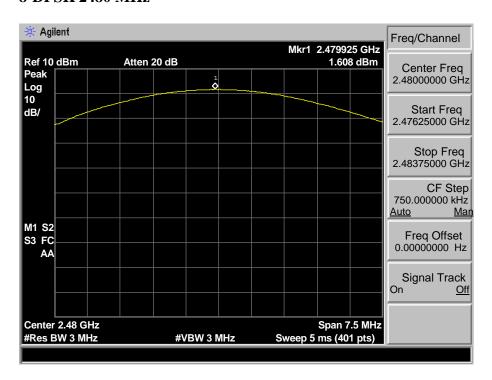


8-DPSK 2441 MHz





8-DPSK 2480 MHz





4. 20 DB BANDWIDTH

4.1. Limit

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

4.2. Test Procedure

The transmitter output was coupled to a spectrum analyzer via a antenna. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 30kHz RBW and 100kHz VBW. The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.

4.3. Test Result

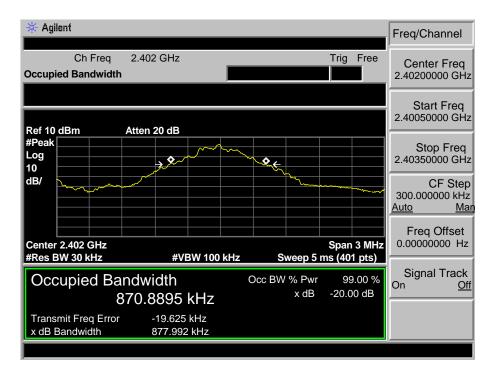
EUT: Polk DSB Soundbar System M/N: DSB1 SOUND BAR					
Test date: 201	16-05-25	Test site: RF site	Tested by: Tony Tang		
Mode	Freq (MHz)	20dB Bandwidth (MHz)	Limit (kHz)	Conclusion	
GFSK	2402	0.878	/	PASS	
	2441	0.886	/	PASS	
	2480	0.888	/	PASS	
8-DPSK	2402	1.214	/	PASS	
	2441	1.214	/	PASS	
	2480	1.220		PASS	



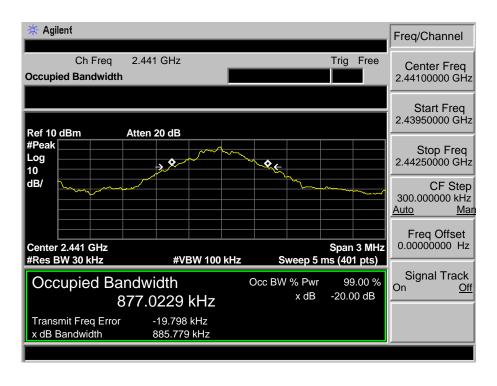
EST Technology Co., Ltd Report No. ESTE-R1605073

4.4. Test Data

GFSK 2402MHz



GFSK 2441MHz

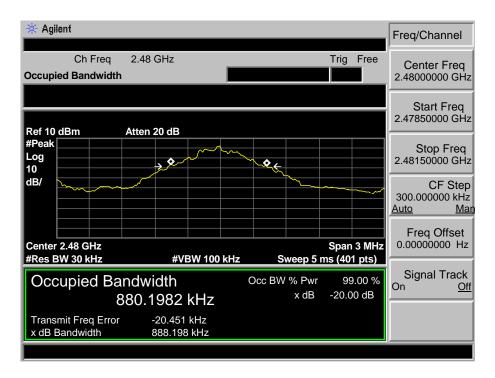




EST Technology Co., Ltd Report No. ESTE-R1605073

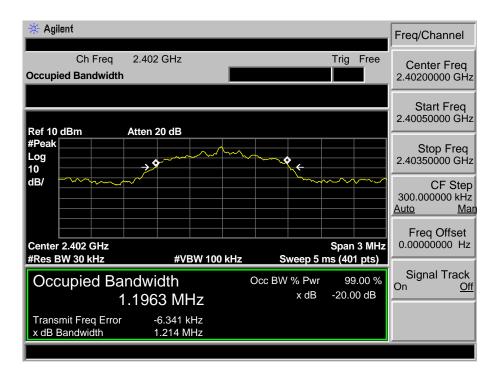
Page 17 of 109

GFSK 2480MHz

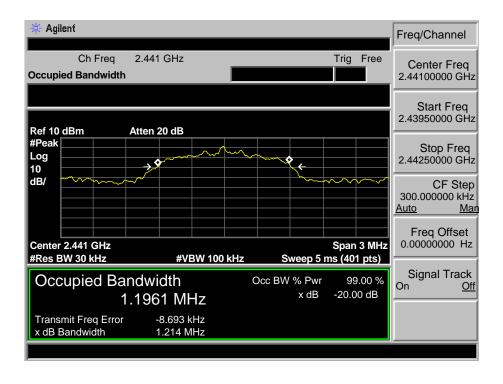




8-DPSK 2402MHz



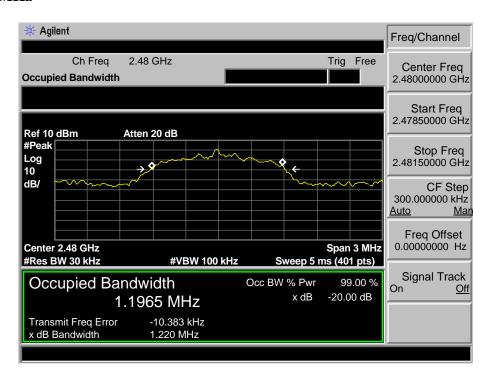
8-DPSK 2441MHz





EST Technology Co., Ltd Report No. ESTE-R1605073

8-DPSK 2480MHz





EST Technology Co., Ltd

5. CARRIER FREQUENCY SEPARATION

5.1. Limit

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW

5.2. Test Procedure

The transmitter output was coupled to a spectrum analyzer via a antenna. The carrier frequency was measured by spectrum analyzer with 100kHz RBW and 100kHz VBW.

5.3. Test Result

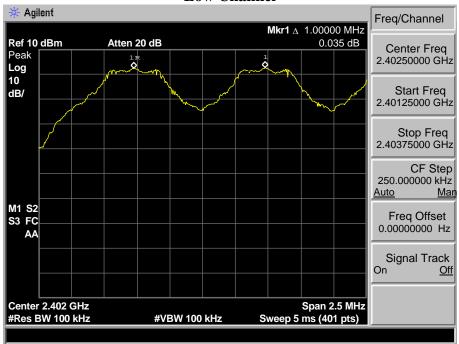
EUT: Polk DSB Soundbar System				
M/N: DSB1 SOUND BAR				
Test date: 2016-05-25			Test site: RF site Tested by: Tony Tang	
Mode	Channel	Channel		
		separation	Limit	Conclusion
		(MHz)		
	Low CH	1.000	0.878 MHz	PASS
GFSK	Mid CH	1.000	0.886 MHz	PASS
	High CH	1.000	0.888 MHz	PASS
8-DPSK	Low CH	1.000	> 2/3 of the 20dB Bandwidth or 25[kHz](whichever is greater)	PASS
	Mid CH	1.000		PASS
	High CH	1.000	25[KHZ](winchevel is gleater)	PASS

EST Technology Co., Ltd Report No. ESTE-R1605073 Page 21 of 109

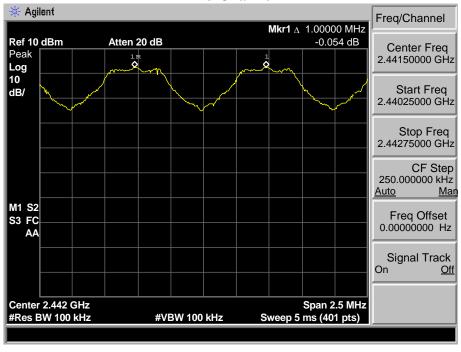


5.4. Test Data

GFSK Low Channel

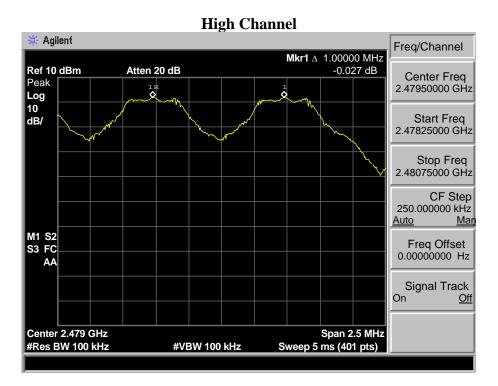


Mid Channel



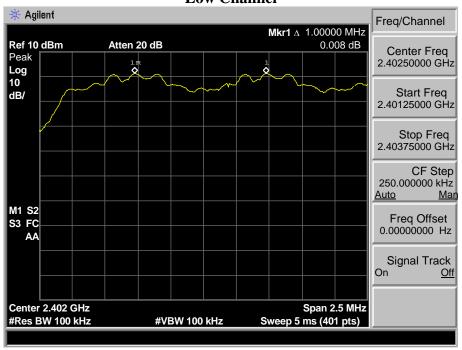


EST Technology Co., Ltd

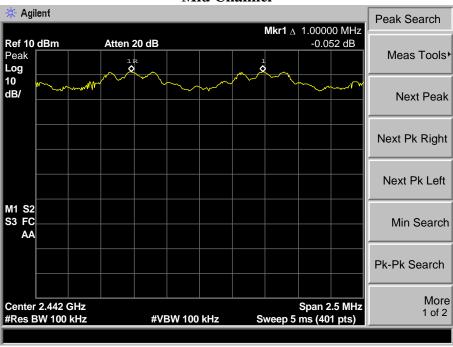




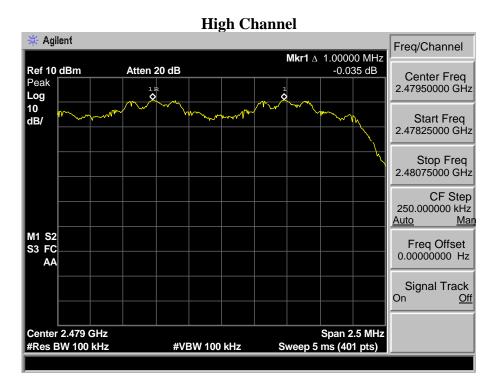
8-DPSK Low Channel



Mid Channel









6. Number Of Hopping Channel

6.1. Limit

Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels

6.2. Test Procedure

The transmitter output was coupled to a spectrum analyzer via a antenna. The number of hopping channel was measured by spectrum analyzer with 300kHz RBW and 300kHz VBW.

6.3. Test Result

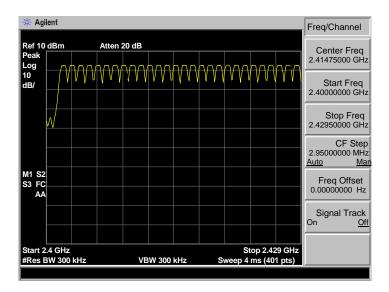
EUT: Polk DSB Soundbar System M/N: DSB1 SOUND BAR				
Test date: 2016-05-25 Test site: RF site Tested by: Tony.Tang				ony.Tang
Mode	Number of hop	oping channel	Limit	Conclusion
GFSK	79		>15	PASS
8-DPSK	79		>15	PASS

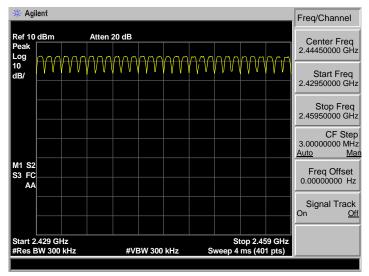


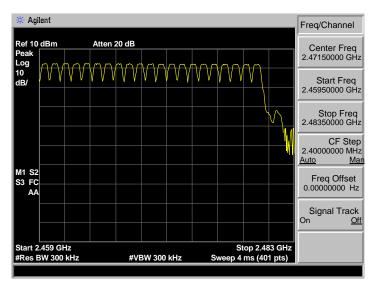


6.4. Test Data

GFSK

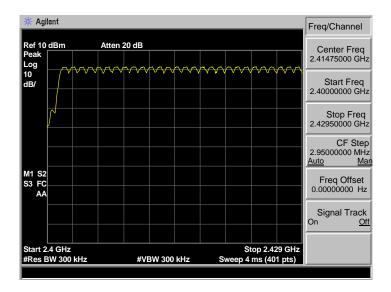


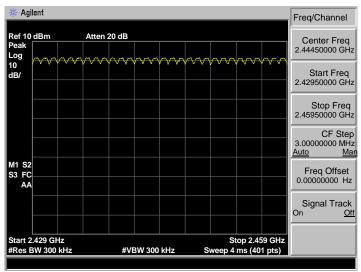


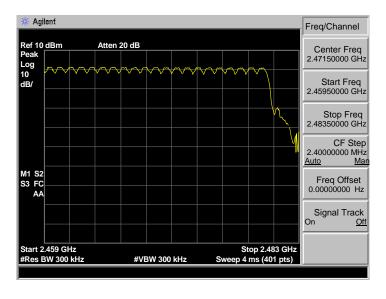




8-DPSK









7. DWELL TIME

7.1. Limit

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

7.2. Test Procedure

- 1. Connect the antenna port of the EUT to the spectrum analyzer by a low lost cable.
- 2. Set the EUT to proper test mode with relative test software and hardware.
- 3. Spectrum analyzer setting: Centered Frequency = measured channel, RBW = 1MHz, VBW = 1MHz, Frequency Span = 0~Hz.
- 4. Set sweep time properly to capture the entire dwell time per hopping channel.
- 5. Set detector type to Peak and trace mode to Max Hold and make the measurement.
- 6. Repeat step 3-5 until all channels measured were complete.

7.3. Test Result

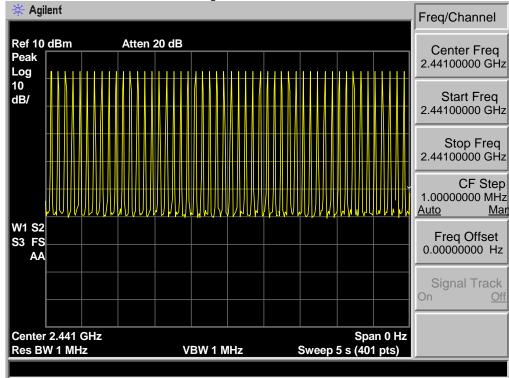
EUT: Polk DSB Soundbar System M/N: DSB1 SOUND BAR			
Test date: 2016-05-25	Test site: RF site	Tested by: Tony Tang	
Mode	Dwell time (ms)	Limit	Conclusion
GFSK DH1	145.36	<400ms	PASS
GFSK DH3	271.76	<400ms	PASS
GFSK DH5	318.02	<400ms	PASS
8-DPSK 3DH1	145.36	<400ms	PASS
8-DPSK 3DH3	271.76	<400ms	PASS
8-DPSK 3DH5	320.17	<400ms	PASS

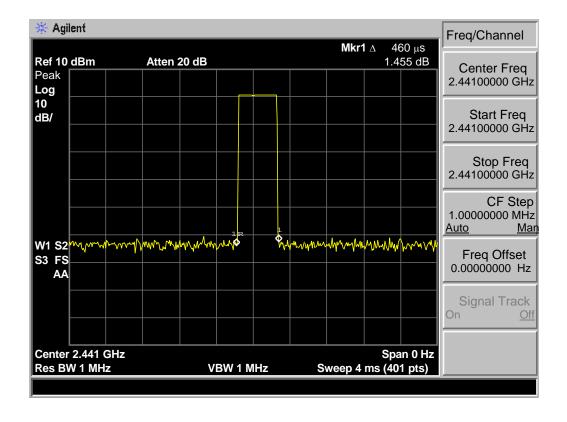
EST Technology Co., Ltd Report No. ESTE-R1605073 Page 29 of 109



7.4. Test Data

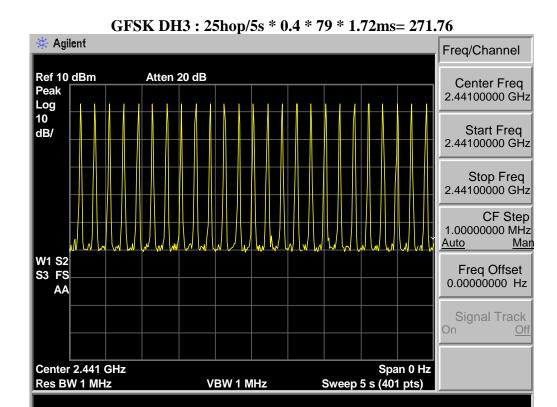
GFSK DH1: 50hop/5s * 0.4 * 79 * 0.46ms = 145.36

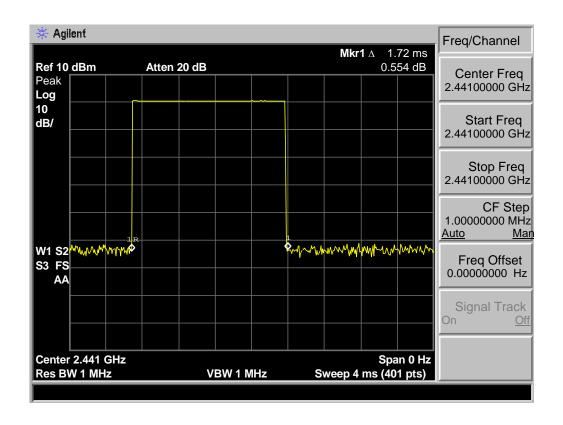






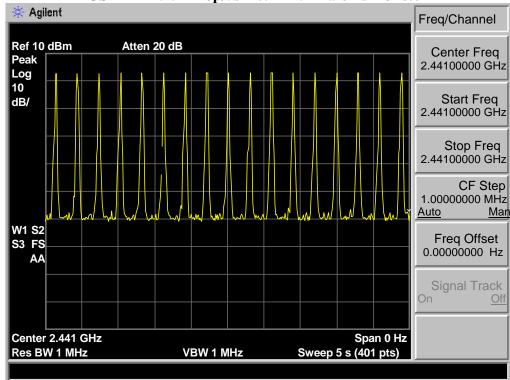
EST Technology Co., Ltd Report No.

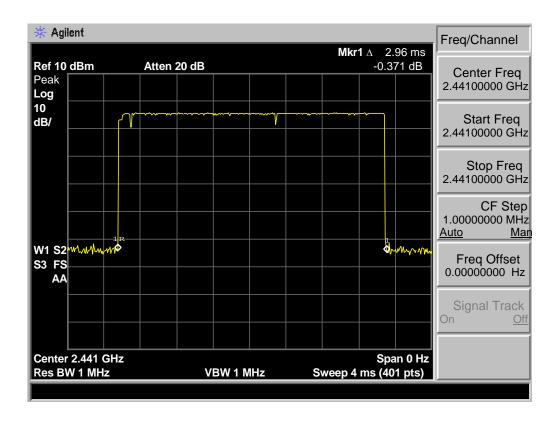




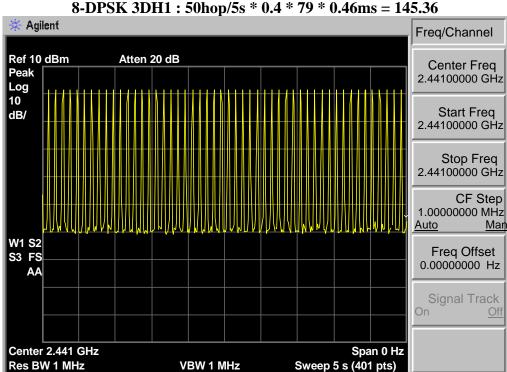


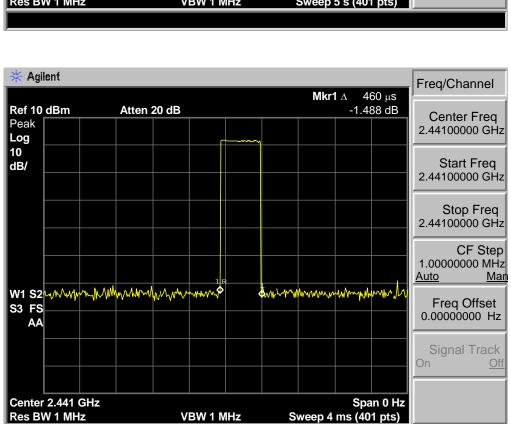




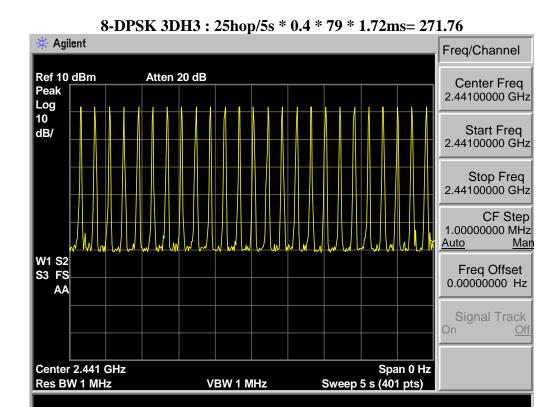


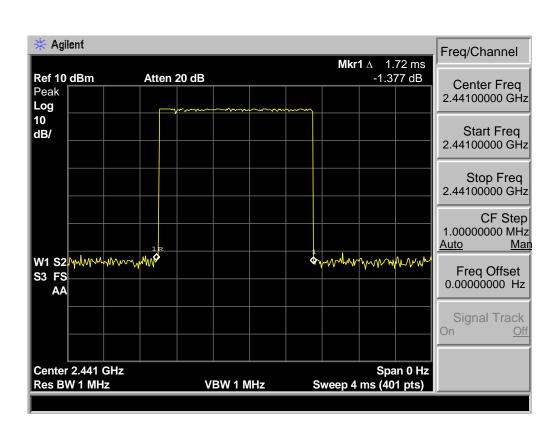




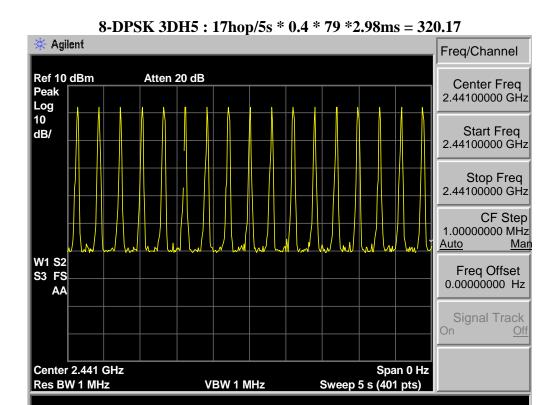


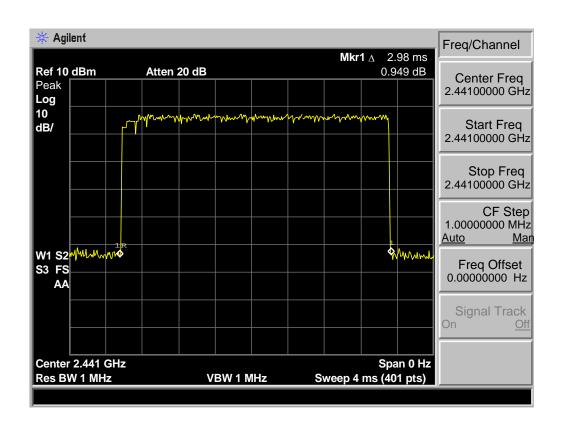














8. RADIATED EMISSIONS

8.1. Limit

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

15.205 Restricted frequency band

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(2)

15.209 Limit

FREQUENCY		DISTANCE	FIELD STRENGTHS LIMIT	
M	ſНz	Meters	$\mu V/m$	$dB(\mu V)/m$
30 ~ 88		3	100	40.0
88 ~ 216		3	150	43.5
216 ~ 960		3	200	46.0
960 ~ 1000		3	500	54.0
Above	1000	3	74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	

Remark : (1) Emission level $dB\mu V = 20 \log$ Emission level $\mu V/m$

- (2) The smaller limit shall apply at the cross point between two frequency bands.
- (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.



EST Technology Co., Ltd Report No. ESTE-R1605073

8.2. Test Procedure

EUT was placed on a turn table, which is 0.8 meter high above ground for 30~1000MHz test, and which is 1.5 meter high above ground for above 1GHz test. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it. EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarization of the antenna are set on test.

The bandwidth of the EMI test receiver (R&S ESVS10) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the Spectrum's VBW is set at 1MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz

PEAK detector, 1MHz/1MHz for PAEK measurement,

PEAK detector, 1MHz/10Hz for Average measurement

The frequency range from 30MHz to 10th harmonic (25GHz) are checked.

8.3. Test Result

PASS.

All the emissions from 30MHz to 25 GHz were comply with 15.209 limits.

- Note: 1. For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.
 - 2. The frequency 2402MHz . 2441MHz and 2480MHz is fundamental frequency which no limit, the limit on plots is automatically generated by the software, it's not fundamental limit, we can't remove it.

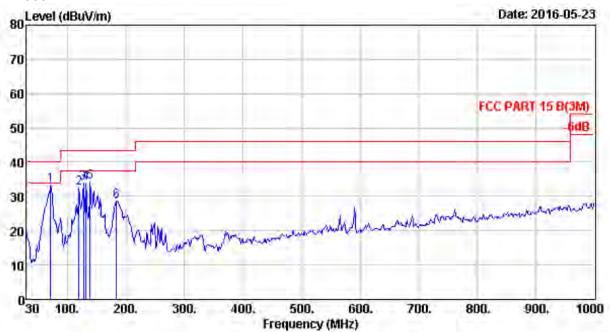


EST Technology Co., Ltd Report No. ESTE-R1605073

Page 37 of 109

8.4. Test Data

30 MHz - 1000 MHz



Site no. : 966 1# chamber Data no. : 1

Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL

Limit : FCC PART 15 B(3M)

Env. / Ins. : Temp: 23.6'; Humi: 56%; Press: 101.52kPa

Engineer : Tony

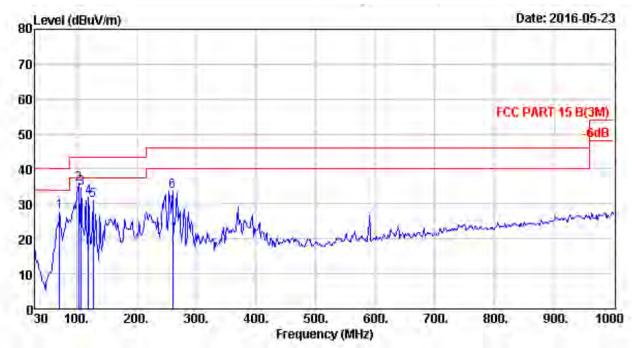
EUT : Polk DSB Soundbar System

Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR
Test Mode : GFSK TX 2402MHz

	Freq.	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	70.74	5.82	1,04	26.60	33.46	40,00	6.54	QP
2	119.24	11.11	1.42	19.89	32.42	43.50	11.08	QP
3	127.00	11.34	1.50	21.01	33.85	43.50	9.65	OP
4	131.85	11.34	1.50	21.04	33.88	43.50	9.62	QP
5	138.64	11.42	1.54	21.15	34.11	43.50	9.39	QP
6	183.26	8.67	1.69	18.30	28.66	43.50	14.84	OP





: 966 I# chamber Site no.

Data no. : 2 Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL

: FCC PART 15 B(3M)

Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

: Tony Engineer

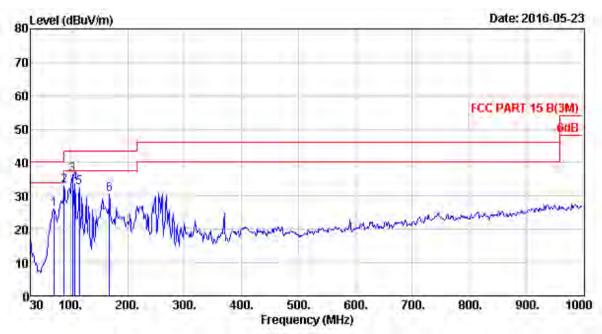
EUT : Polk DSB Soundbar System

Power ; DC 15V From Adapter Input AC 120V/60Hz

M/N ; DSB1 SOUND BAR Test Mode g GFSK TX 2402MHz

	Freq.	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	70.74	5,82	1.04	20.81	27,67	40.00	12,33	QP
2	102.75	9.75	1.35	24.61	35.71	43.50	7.79	QP
3	107.60	10.24	1.39	22.87	34.50	43.50	9.00	QP
4	119.24	11.11	1.42	19,22	31.75	43.50	11.75	QP
5	127.00	11.34	1.50	18.01	30.85	43.50	12.65	QP
6	260.86	12.96	2.22	18.49	33.67	46.00	12.33	QP





Site no. : 966 1# chamber Data no. : 3

Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B(3M)

Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

Engineer : Tony

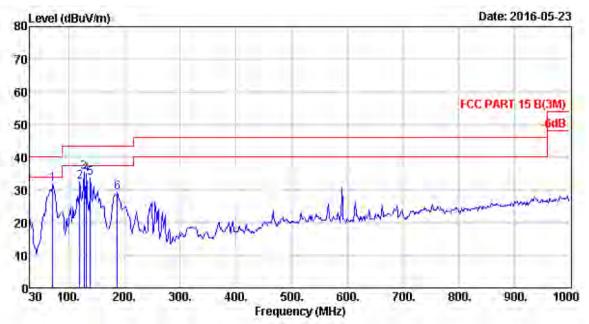
EUT : Polk DSB Soundbar System

Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR Test Mode : GFSK TX 2441MHz

	Freq.	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	70.74	5.82	1.04	19.11	25.97	40.00	14.03	QP
2	88.20	8.11	1.31	23.64	33.06	43.50	10.44	QP
3	102.75	9.75	1.35	25.29	36.39	43.50	7.11	QP
4	107.60	10.24	1.39	21.94	33.57	43.50	9.93	QP
5	115.36	10.93	1.46	20.11	32.50	43.50	11.00	QP
6	167.74	9.43	1.71	19.18	30.32	43.50	13.18	QP





Site no. : 966 l# thamber Dis. / Ant. : 3m 27137

Data no. : 4 Ant. pol. : VEPTICAL

; FCC PART 15 B (3M) Limit

Env. / Ins. : Temp: 23.6'; Humi: 56%; Press: 101.52kPa

: Tony Engineer

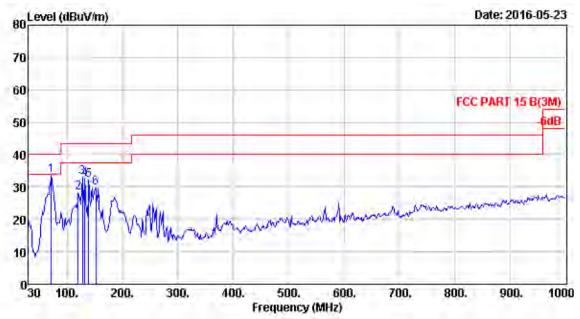
: Polk DSB Soundbar System EUT

Power : DC 15V From Adapter Input AC 120V/60Hz

: DSB1 SOUND BAR M/N Test Mode : GFSK TX 2441MHz

	Freq.	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	70.74	5,82	1.04	25.11	31.97	40.00	8.03	QP
2	119.24	11,11	1.42	19,89	32.42	43.50	11.08	OP
3	127.00	11.34	1.50	22.68	35.52	43.50	7.98	OF
4	131.85	11.34	1.50	21.95	34.79	43.50	8.71	OP
5	138.64	11,42	1,54	20.61	33.57	43,50	9.93	QP
6	187.14	8.26	1.84	18.98	29.08	43.50	14.42	QP





Site no. : 966 1# chamber Dis. / Ant. : 3m 27137

Data no. : 5 Ant. pol. : VERTICAL

Limit : FCC PART 15 B(3M)

Env. / Ins. : Temp:23.6'; Humi: 56%; Press; 101.52kPa

Engineer : Tony

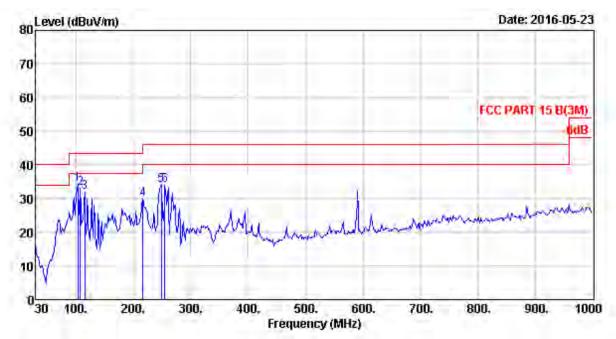
EUT : Polk DSE Soundbar System

Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR Test Mode : GFSK TX 2480MHz

	Freq.	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	70.74	5.82	1.04	26.68	33.54	40.00	6.46	QP
2	119,24	11.11	1.42	15.84	28.37	43.50	15.13	QP
3	127.00	11.34	1.50	20.34	33.18	43.50	10.32	QP
4	131.85	11,34	1.50	19.55	32.39	43.50	11.11	QP
5	138.64	11.42	1.54	19.15	32.11	43.50	11,39	QP
6	151,25	10.82	1.61	17.50	29.93	43.50	13.57	QP





Site no. : 966 1# chamber Data no. : 6

Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : Temp:23.6'; Humi: 56%; Press: 101.52kPa

Engineer : Tony

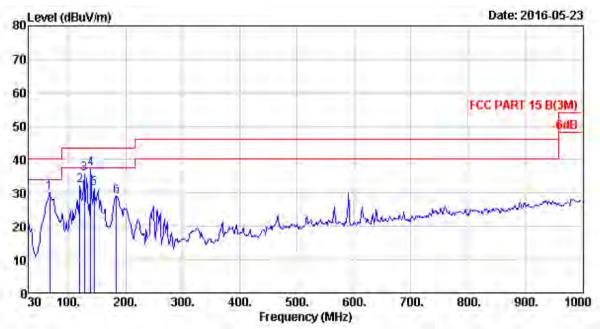
EUT : Folk DSB Soundbar System

Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR Test Mode : GFSK TX 2480MHz

	Freq.	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
	102.75	9.75	1,35	23.09	34.19	43.50	9.31	QP
9	107.60	10.24	1.39	21.38	33,01	43,50	10.49	QP
3	115.36	10.93	1.46	19.59	31.98	43.50	11.52	OP
4	216.24	8.80	1.95	19.12	29.87	46.00	16.13	OP
5	248.25	11.52	2,13	20.23	33.88	46,00	12.12	QP
6	255.04	12.41	2.13	19.41	33.95	46.00	12.05	QP





Site no. : 966 1# chamber Data no. : 7
Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL

Limit : FCC PART 15 B(3M)

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

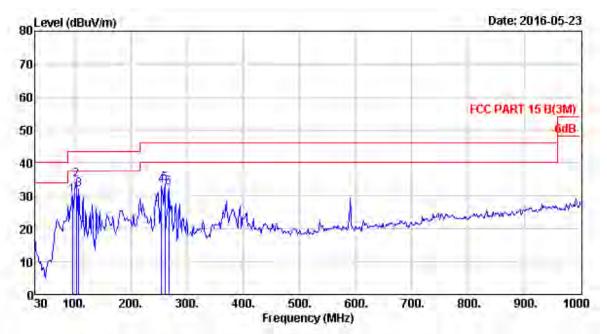
EUT : Polk DSB Soundbar System

Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR
Test Mode : 8-DPSK TX 2402MHz

	Freq.	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	66.86	5.28	1.06	23.83	30,17	40.00	9.83	QP
2	119.24	11.11	1,42	19.75	32.28	43.50	11.22	QP
3	127.00	11.34	1.50	22.84	35.68	43.50	7.82	QP
24	138.64	11.42	1.54	24.14	37.10	43.50	6.40	QP
5	144.46	11.26	1.54	18.59	31.39	43.50	12.11	QP
6	183.26	8.67	1.69	18.55	28.91	43.50	14.59	QP





Site no. : 966 l# chamber Data no. : 8

Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B(3M)

Eny. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

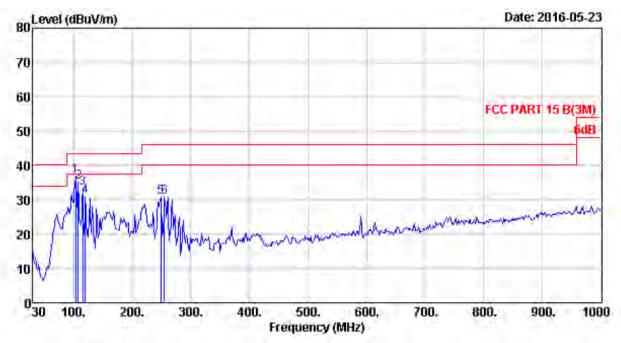
EUT : Polk DSB Soundbar System

Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR Test Mode : 8-DPSK TX 2402MHz

	Freq. (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
D	95.96	8.92	1.31	19.95	30.18	43.50	13.32	QP
2	102.75	9.75	1.35	23.79	34.89	43.50	8.61	QP
3	107.60	10.24	1.39	20,16	31.79	43.50	11.71	QP
4	255.04	12.41	2.13	18.60	33.14	46.00	12.86	QP
5	260.86	12.96	2.22	18.33	33.51	46.00	12.49	QP
6	267.65	12.71	2.26	17.40	32.37	46.00	13.63	QP





Site no. : 966 1# chamber Data no. : 9

Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B(3M)

Env. / Ins. : Temp: 23.6'; Humi: 56%; Press: 101.52kPa

Engineer : Tony

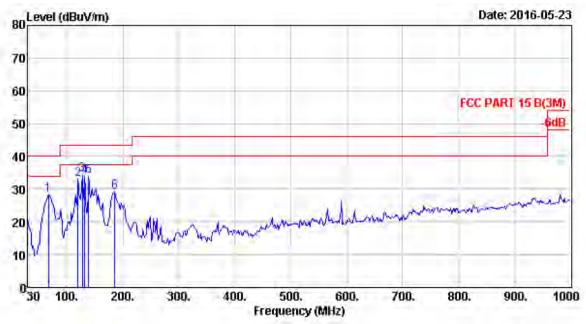
EUT : Polk DSB Soundbar System

Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR
Test Mode : 8-DPSK TX 2441MHz

	Freq.	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	102,75	9.75	1.35	25.77	36,87	43.50	6.63	QP
2	107.60	10.24	1,39	23.39	35.02	43.50	8.48	QP
3	115.36	10.93	1.46	20.86	33.25	43.50	10.25	QP
4	119.24	11.11	1.42	18.44	30.97	43.50	12.53	QP
5	248,25	11.52	2.13	17,08	30.73	46.00	15.27	QP
6	255.04	12.41	2.13	16.31	30.85	46.00	15.15	QP





Site no. : 966 l# chamber Data no. : 10
Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL

Limit : FCC PART 15 B(3M)

Env. / Ins. : Temp; 23.6'; Humi; 56%; Press; 101.52kPa

Engineer : Tony

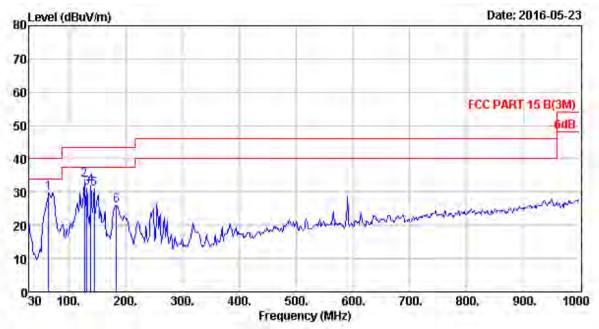
EUT : Polk DSB Soundbar System

Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR
Test Mode : 8-DFSK TX 2441MHz

	Freq.	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	66.86	5.28	1.06	22.02	28.36	40.00	11.64	QP
2	119.24	11.11	1.42	20.67	33.20	43.50	10.30	QP
3	127.00	11.34	1.50	21.57	34.41	43.50	9.09	QP
4	131.85	11.34	1.50	21.09	33.93	43.50	9.57	QP
5	138.64	11.42	1.54	20.89	33.85	43.50	9.65	QP
6	185.20	8.48	1.75	19.10	29.33	43.50	14.17	QP





Site no. : 966 1# chamber Data no. : 11

Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL

Limit : FCC PART 15 B(3M)

Env. / Ins. ; Temp: 23.6 ; Humi: 56%; Press: 101.52kPa

Engineer : Tony

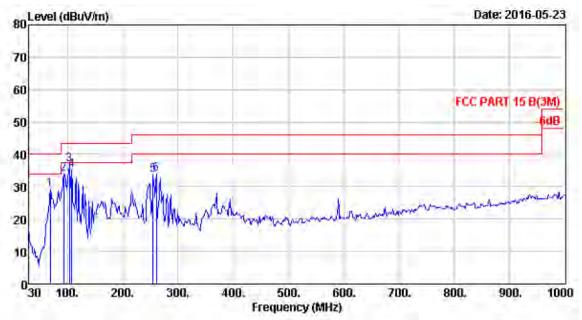
EUT : Folk DSB Soundbar System

Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR Test Mode : 8-DFSK TX 2480MHz

	Freq.	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	63.95	4.87	1.02	23.96	29.85	40.00	10.15	QP
2	127.00	11.34	1.50	20,73	33.57	43.50	9.93	QP
3	131.85	11.34	1.50	18.54	31.38	43.50	12.12	QP
4	138.64	11.42	1.54	18.82	31.78	43,50	11.72	QP
5	144.46	11.26	1.54	18.07	30.87	43.50	12.63	QP
6	183.26	8.67	1.69	15.67	26.03	43.50	17.47	QP





Data no. : 12

Site no. : 966 1# chamber

Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B(3M)

Env. / Ins. : Temp: 23.6'; Humi: 56%; Press: 101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

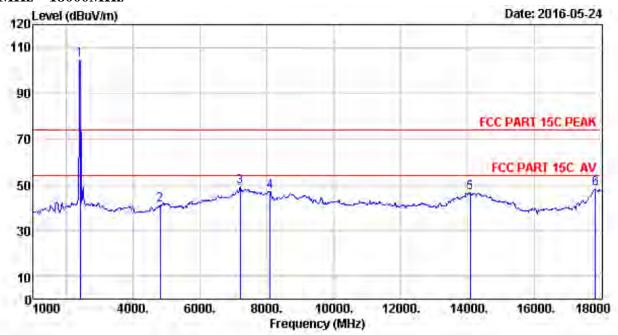
Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR
Test Mode : 8-DPSK TX 2480MHz

	Freq.	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	68,80	5,51	1,10	22.50	29,11	40,00	10.89	QP
2	93.05	8.59	1.27	24.05	33.91	43.50	9.59	QP
3	102.75	9.75	1.35	25.69	36.79	43.50	6.71	QP.
4	107.60	10,24	1.39	23.50	35.13	43.50	8.37	QP
5	255.04	12.41	2.13	19.02	33.56	46.00	12.44	QP
6	260.86	12.96	2.22	18.75	33.93	46.00	12.07	QP



1000 MHz - 18000 MHz



Site no. : 966 1# chamber Data no. : 57
Dis. / Ant. : 3m ANT 1-186 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

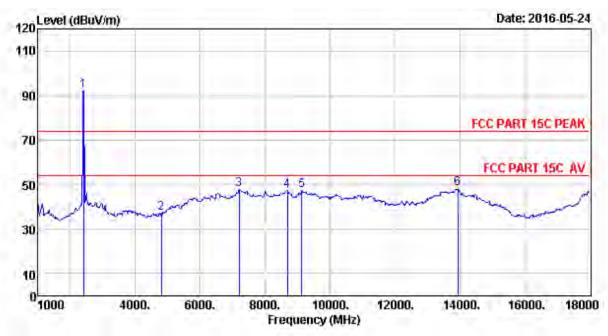
Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR Test Mode : GFSK TX 2402MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402,00	27.61	6.62	34.64	104.94	104,53	74.00	-30.53	Peak
2	4804.00	31,25	11.77	35.64	33.90	41.28	74.00	32.72	Peak
3	7206.00	36.52	11.54	33.95	34.98	49.09	74.00	24.91	Peak
4	8089,00	36.85	11.41	34.93	33.74	47.07	74.00	26.93	Peak
5	14090.00	41.54	10.91	33.13	27.15	46.47	74.00	27.53	Peak
6	17847.00	44.95	11.20	30.52	22.80	48.43	74.00	25.57	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Data no. : 58

Site no. : 966 I# chamber Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

: FCC PART 15C PEAK Limit

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

: Tony Engineer

: Polk DSB Soundbar System EUT

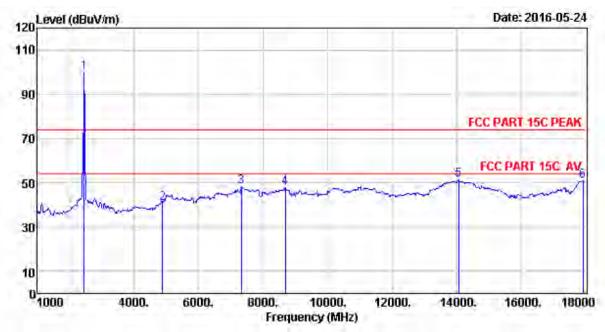
Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR Test Mode : GFSK TX 2402MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.00	27.61	6.62	34.64	92.54	92.13	74.00	-18.13	Peak
2	4804.00	31.25	11.77	35.64	29.94	37.32	74.00	36.68	Peak
3	7206.00	36.52	11.54	33.95	33.58	47.69	74.00	26.31	Peak
4	8684.00	37.32	11.45	33.66	32.40	47.51	74.00	26.49	Peak
- 5	9126.00	37.62	11.52	34.09	32.11	47.16	74.00	26.84	Peak
6	13937.00	41,31	10.98	33.00	28.96	48,25	74.00	25.75	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 l# chamber Data no. : 59

Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp: 23.6 '; Humi: 56 %; Press: 101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

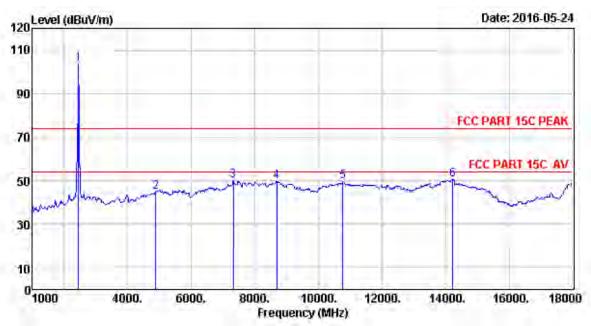
Power : DC 15V From Adapter Input AC 120V/60Hz

M/N ; DSB1 SOUND BAR Test Mode ; GFSK TX 2441MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dHuV/m)	Margin (dB)	Remark
1	2441.00	27.60	6.67	34.85	100.71	100.13	74.00	-26,13	Peak
2	4882,00	31.37	12.07	35.76	33.26	40.94	74.00	33.06	Peak
3	7323.00	36.55	11.57	34.14	34.10	48.08	74.00	25.92	Peak
4	8684.00	37.32	11.45	33.66	32.62	47.73	74.00	26.27	Peak
5	14056.00	41.51	10.90	33.06	32.00	51.35	74.00	22.65	Peak
6	17915.00	45.62	11.28	31.26	25.46	51.10	74.00	22.90	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 l# chamber Data no. : 60

Dis. / Ant. : Sm ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6 ; Humi: 56%; Press: 101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

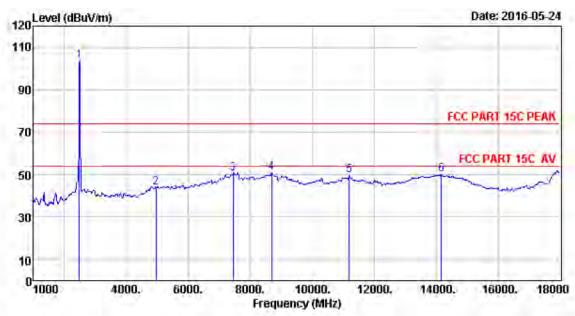
Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR Test Mode : GFSK TX 2441MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2441.00	27.60	6.67	34,85	104,02	103.44	74.00	-29,44	Peak
2	4882.00	31.37	12.07	35.76	36.86	44.54	74.00	29.46	Peak
3	7323.00	36.55	11.57	34.14	36.02	50.00	74.00	24.00	Peak
4	8684.00	37.32	11.45	33.66	34.60	49.71	74.00	24.29	Peak
5	10775,00	39.28	11.30	34.02	32,96	49.52	74.00	24.48	Peak
- 6	14226.00	41.66	10.91	33.41	31.41	50.57	74.00	23.43	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 965 1# champer Data no. : 61
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp: 23.6'; Humi: 56%; Press: 101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

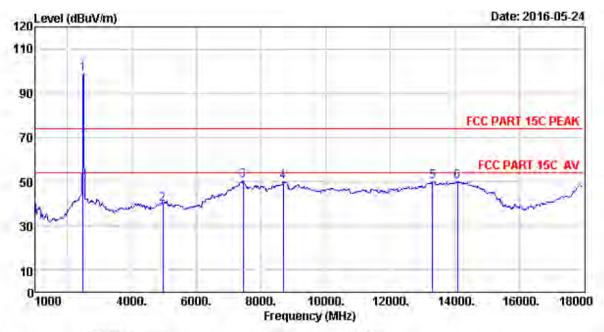
Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR Test Mode : GFSK TX 2480MHz

Freq.	Factor (dB/m)	Loss (dB)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
2480.00	27.58	6.71	35.11	104.32	103,50	74.00	-29.50	Peak
4960.00	31.49	12.44	36.01	35.83	43.75	74.00	30.25	Peak
7440.00	36,54	11.61	34.22	36.66	50.59	74.00	23.41	Peak
8684.00	37.32	11.45	33.66	35.82	50.93	74.00	23.07	Peak
11200.00	39.39	11.14	33.24	32.21	49.50	74.00	24.50	Peak
14175.00	41.61	10.91	33.35	30.75	49.92	74.00	24.08	Peak
	2480.00 4960.00 7440.00 8684.00 11200.00	(MHz) (dB/m) 2480.00 27.58 4960.00 31.49 7440.00 36.54 8684.00 37.32 11200.00 39.39	(MHz) (dB/m) (dB) 2480.00 27.58 6.71 4960.00 31.49 12.44 7440.00 36.54 11.61 8684.00 37.32 11.45 11200.00 39.39 11.14	(MHz) (dB/m) (dB) (dB) 2480.00 27.58 6.71 35.11 4960.00 31.49 12.44 36.01 7440.00 36.54 11.61 34.22 8684.00 37.32 11.45 33.66 11200.00 39.39 11.14 33.24	(MHz) (dB/m) (dB) (dB) (dBuV) 2480.00 27.58 6.71 35.11 104.32 4960.00 31.49 12.44 36.01 35.83 7440.00 36.54 11.61 34.22 36.66 8684.00 37.32 11.45 33.66 35.82 11200.00 39.39 11.14 33.24 32.21	(MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m) 2480.00 27.58 6.71 35.11 104.32 103.50 4960.00 31.49 12.44 36.01 35.83 43.75 7440.00 36.54 11.61 34.22 36.66 50.59 8684.00 37.32 11.45 33.66 35.82 50.93 11200.00 39.39 11.14 33.24 32.21 49.50	(MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m) (dBuV/m) 2480.00 27.58 6.71 35.11 104.32 103.50 74.00 4960.00 31.49 12.44 36.01 35.83 43.75 74.00 7440.00 36.54 11.61 34.22 36.66 50.59 74.00 8684.00 37.32 11.45 33.66 35.82 50.93 74.00 11200.00 39.39 11.14 33.24 32.21 49.50 74.00	(MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m) (dBuV/m) (dB) 2480.00 27.58 6.71 35.11 104.32 103.50 74.00 -29.50 4960.00 31.49 12.44 36.01 35.83 43.75 74.00 30.25 7440.00 36.54 11.61 34.22 36.66 50.59 74.00 23.41 8684.00 37.32 11.45 33.66 35.82 50.93 74.00 23.07 11200.00 39.39 11.14 33.24 32.21 49.50 74.00 24.50

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 l# chamber

Data no. : 62 Ant. pol. : HORIZONTAL Dis. / Ant. : 3m ANT 1-18G Limit : FCC PART 15C PEAK

Env. / Ins. : Temp: 23.6'; Humi: 56%; Press: 101.52kPa

: Tony Engineer

EUT : Polk DSB Soundbar System

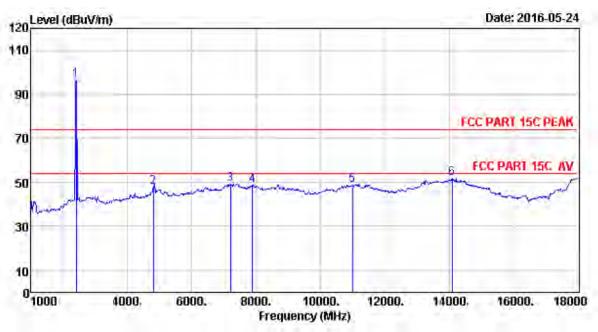
Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR : GFSK TX 2480MHz Test Mode

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.58	6.71	35,11	99,58	98.76	74.00	-24.76	Peak
2	4960.00	31.49	12.44	36.01	32.06	39.98	74.00	34.02	Peak
3	7440.00	36.54	11.61	34.22	36.46	50.39	74.00	23.61	Peak
4	8684.00	37.32	11,45	33.66	35.05	50.16	74.00	23.84	Peak
5	13325.00	39.66	11.48	32.94	31.84	50.04	74.00	23.96	Peak
6	14090.00	41.54	10.91	33,13	30.79	50.11	74.00	23.89	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 l# chamber Data no. : 63

Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi: 56%; Press: 101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

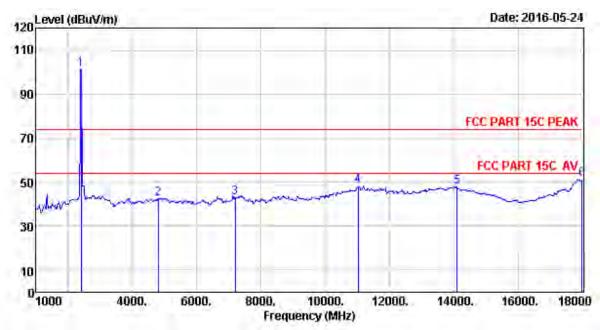
Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR
Test Mode : 8-DPSK TX 2402MHz

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.00	27.61	6.62	34.64	97.01	96.60	74.00	-22.60	Peak
2	4804.00	31.25	11.77	35.64	40.55	47.93	74.00	26.07	Peak
3	7206.00	36.52	11.54	33.95	35.13	49.24	74.00	24.76	Peak
4	7885.00	36.78	11.45	35.09	35.77	48.91	74.00	25.09	Peak
5	10996.00	39.52	11.29	34.11	32.20	48.90	74.00	25.10	Feak
- 6	14090.00	41.54	10.91	33.13	32.45	51.77	74.00	22.23	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 1# chamber Data no. : 64
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp: 23.6'; Humi: 56%; Press: 101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

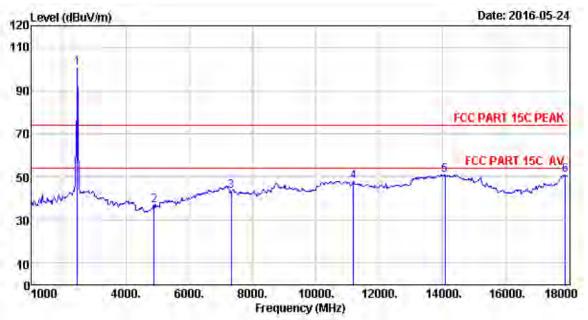
Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR
Test Mode : 8-DPSK TX 2402MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.00	27.61	6.62	34.64	101,89	101.48	74.00	-27,48	Peak
2	4804.00	31.25	11.77	35.64	35.33	42.71	74.00	31.29	Peak
3	7206.00	36.52	11.54	33.95	28.87	42.98	74.00	31.02	Peak
4	11030.00	39.50	11.27	33.98	31.51	48.30	74.00	25.70	Peak
5	14107,00	41.55	10.91	33.16	28,63	47.93	74.00	26,07	Peak
6	18000.00	46.45	11.38	32.12	25.63	51.34	74.00	22,66	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 L# chamber Data no. : 65
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

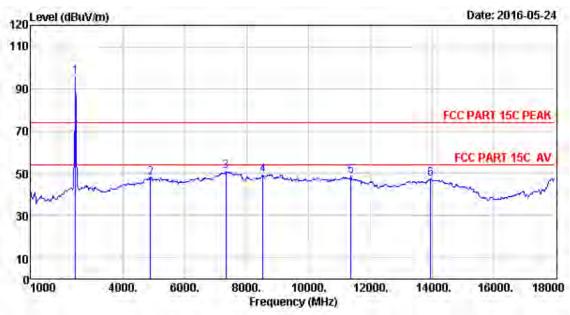
Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR
Test Mode : 8-DPSK TX 2441MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2441.00	27.60	6.67	34.85	101.29	100.71	74.00	-26.71	Peak
2	4882.00	31.37	12.07	35.76	28,95	36.63	74.00	37.37	Peak
3	7323.00	36.55	11.57	34.14	29.24	43,22	74.00	30.78	Peak
4	11200.00	39.39	11.14	33.24	30.66	47.95	74.00	26.05	Peak
5	14090.00	41.54	10.91	33.13	31.74	51.06	74.00	22.94	Peak
б	17898.00	45,45	11.26	30.94	25,03	50.60	74.00	23.20	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 1# chamber Data no. : 66

Dis. / Ant. : 3m ANT 1-18G Limit : FCC PART 15C PEAK Ant. pol. : HORIZONTAL

: Temp: 23.6'; Humi: 56%; Press: 101.52kPa Env. / Ins.

Engineer : Tony

EUT : Polk DSB Soundbar System

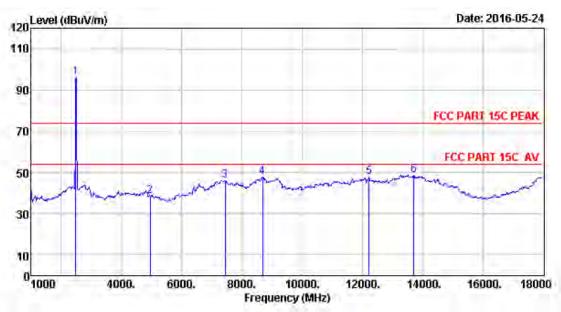
Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR Test Mode : 8-DPSK TX 2441MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuW/m)	Margin (dB)	Remark
1	2441.00	27.60	6.67	34.85	96.15	95.57	74.00	-21.57	Peak
2	4882.00	31.37	12.07	35.76	40.19	47.87	74.00	26.13	Peak
3	7323.00	36.55	11.57	34.14	37.00	50.98	74.00	23.02	Peak
4	8514,00	36.96	11.45	34.07	35.03	49.37	74.00	24.63	Peak
5	11370.00	39.28	11.02	33,51	31.87	48.66	74.00	25.34	Peak
6	13954.00	41.35	10.96	32.99	28.21	47.53	74.00	26.47	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : site Data no. : 67

Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp: 23.6'; Humi; 56%; Press: 101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

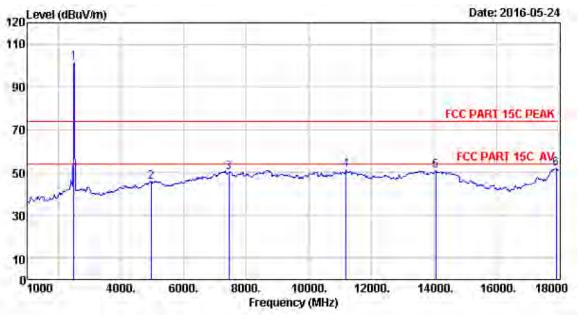
Power ; DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR Test Mode : 8-DPSK TX 2480MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.58	6.71	35.11	97.12	96.30	74.00	-22.30	Peak
2	4960.00	31,49	12.44	36.01	30.49	38.41	74.00	35.59	Peak
3	7440.00	36.54	11.61	34.22	32.21	46.14	74.00	27.86	Peak
4	8684.00	37.32	11.45	33.66	32.55	47.66	74.00	26.34	Peak
- 5	12220,00	38.68	11,19	33.57	31.39	47.69	74.00	26.31	Peak
-6	13716.00	40.69	11.24	32.94	29.85	48.84	74.00	25.16	Peak

Remarks: I. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 I# chamber Data no. : 68
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi: 56%; Press: 101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

Power : DC 15V From Adapter Input AC 120V/60Hz

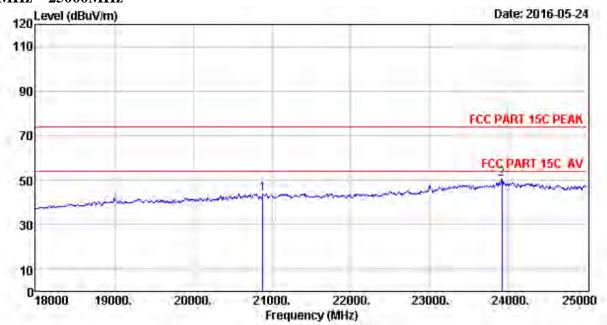
M/N : DSB1 SOUND BAR
Test Mode : 8-DPSK TX 2480MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.58	6.71	35.11	102.32	101.50	74.00	-27,50	Peak
2	4960.00	31,49	12.44	36.01	37.50	45.42	74.00	28.58	Peak
3	7440.00	36.54	11.61	34.22	35.97	49.90	74.00	24.10	Peak
4	11200,00	39.39	11.14	33.24	33,99	51.28	74.00	22,72	Peak
5	14056.00	41.51	10.90	33.06	31.55	50.90	74.00	23.10	Peak
6	17915.00	45.62	11.28	31.26	26.18	51.82	74.00	22.18	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.



18000MHz - 25000MHz



Site no. : 966 1# chamber Data no. : 85
Dis. / Ant. : 3m ANT ABOVE 18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp: 23.6'; Humi: 56%; Press: 101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

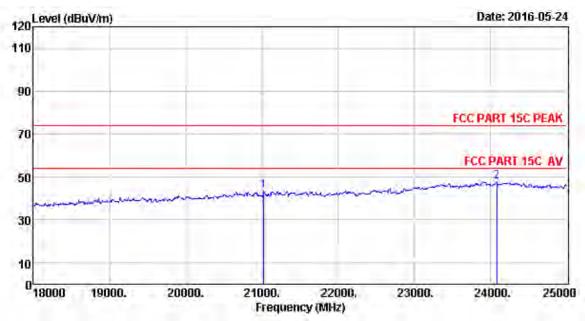
Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR Test Mode : GFSK TX 2402MHz

V. The	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	20884.00	46.23	20.08	35.91	13.54	43.94	74.00	30.06	Peak
2	23915.00	45.62	21.97	32.88	15.85	50.56	74.00	23.44	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 l# chamber Data no. : 86

Dis. / Ant. : 3m ANT ABVOE 18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6': Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

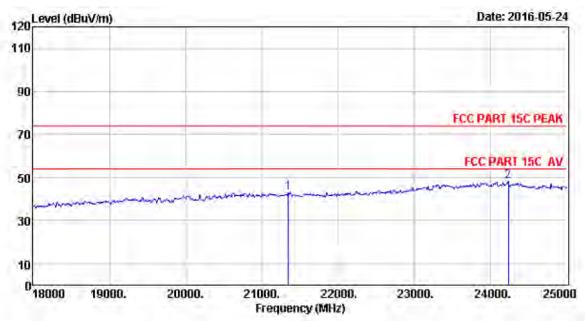
Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR Test Mode : GFSK TX 2402MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	21024.00	46.29	20.14	35.78	12.88	43.53	74.00	30,47	Peak
2	24076,00	45.61	22.09	32.92	12.94	47.72	74.00	26.28	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 l# chamber Data no. : 87

Dis. / Ant. : 3m ANT ABVOE 18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

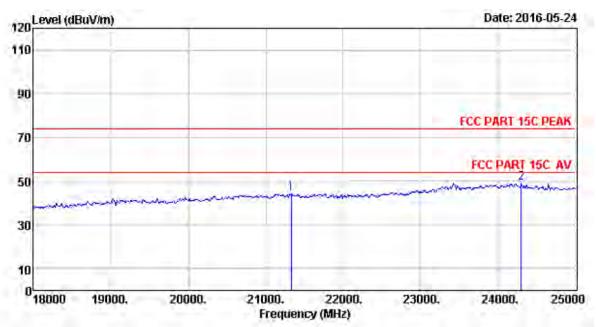
Power ; DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR Test Mode : GFSK TX 2441MHz

		Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
7	1	21346.00	46.09	20.28	35.49	12.24	43.12	74.00	30,88	Peak
	2	24230,00	45.65	22.17	33.15	13.44	48.11	74.00	25.89	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 I# chamber Data no. : 88
Dis. / Ant. : 3m ANT ABOVE 18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp: 23.6'; Humi: 56%; Press: 101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

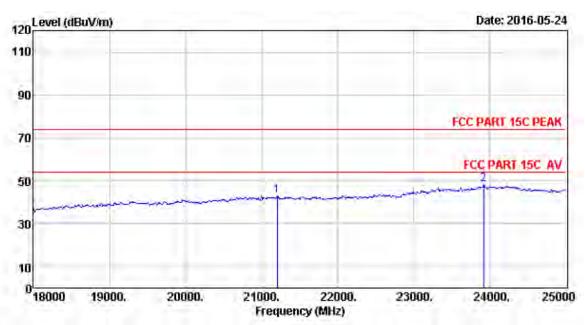
Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR Test Mode : GFSK TX 2441MHz

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	21325.00	46.10	20.27	35,51	13.32	44,18	74.00	29.82	Peak
2	24300.00	45.66	22.21	33.26	14.72	49.33	74.00	24.67	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 1# chamber Data no. : 89
Dis. / Ant. : 3m ANT ABOVE 18G Ant. pwl. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

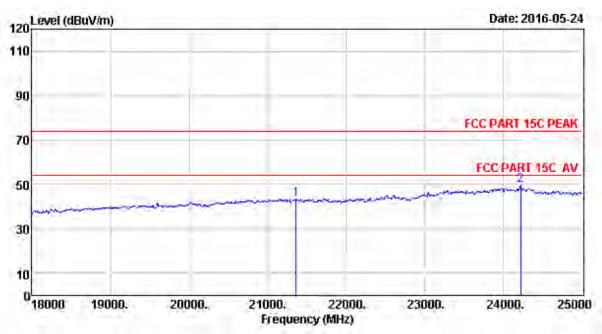
Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR Test Mode : GFSK TX 2480MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	21206.00	46.17	20.22	35.62	12.35	43.12	74.00	30.88	Peak
2	23915.00	45.62	21.97	32.88	13.43	48,14	74.00	25,86	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 1# chamber Data no. : 90

Dis. / Ant. : 3m ANT ABVOE 18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

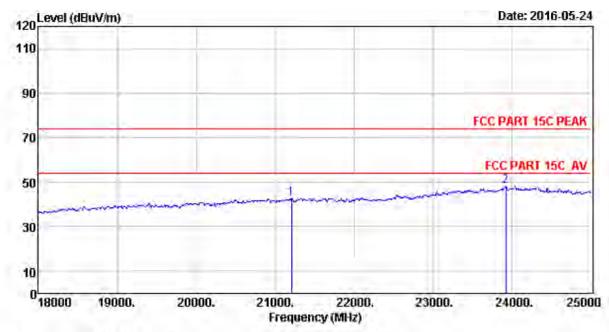
Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR Test Mode : GFSK TX 2480MHz

	Freq.	Ant, Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	21360.00	46.08	20.28	35.49	12.58	43.45	74.00	30,55	Peak
2	24216.00	45.65	22.17	33.15	15.06	49.73	74.00	24.27	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 l# chamber Data no. : 91

Dis. / Ant. : 3m ANT ABVOE 18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. ; Temp: 23.6'; Humi: 56%; Press: 101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

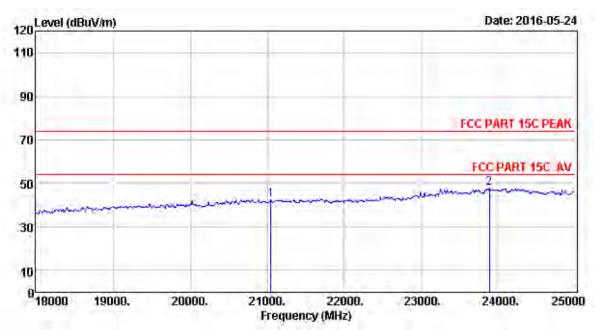
Power : DC 15V From Adapter Input AC 120V/60Hz

M/N ; DSB1 SOUND BAR Test Mode ; 8-DPSK TX 2402MHz

		Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
	1	21206.00	46.17	20.22	35.62	11.81	42.58	74.00	31,42	Peak
- 5	2	23915,00	45.62	21.97	32.88	13.50	48.21	74.00	25.79	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 1# chamber Data no. : 92

Dis. / Ant. : 3m ANT ABOVE 18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp: 23.6'; Humi: 56%; Press: 101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

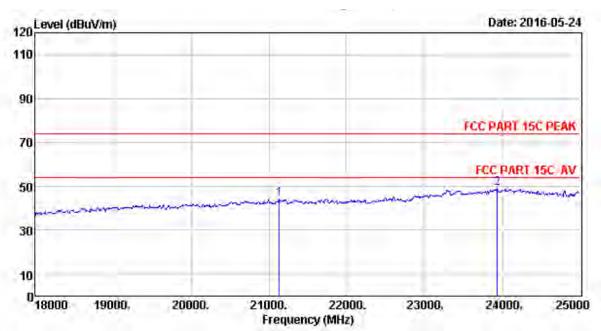
Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR Test Mode : 8-DPSK TX 2402MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	21045.00	46.27	20.15	35.76	11.88	42.54	74.00	31.46	Peak
2	23880,00	45.63	21.94	32.93	13.37	48.01	74.00	25.99	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no.

: 966 1# chamber

Data no. : 93

Ant. pol. : VERTICAL

Dis. / Ant. : 3m ANT ABOVE 18G

: FCC PART 15C PEAK

Env. / Ins. : Temp: 23.6'; Humi: 56%; Press: 101, 52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

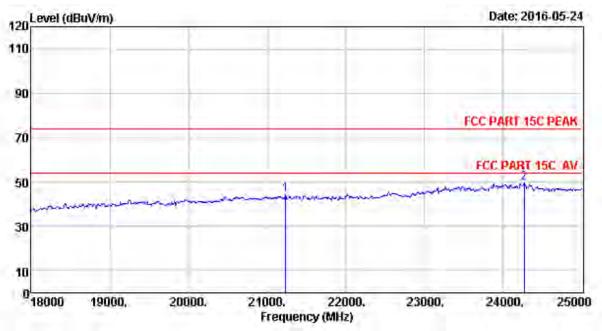
Power : DC 15V From Adapter Input AC 120V/60Hz

: DSB1 SOUND BAR M/N : 8-DPSK TX 2441MHz Test Mode

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	21136.00	46.21	20.19	35,69	13.63	44.34	74.00	29.66	Peak
2	23936.00	45.61	21.99	32.88	14.39	49.11	74.00	24.89	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 1# chamber Data no. : 94

Dis. / Ant. : 3m ANT ABVOE 18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp: 23.6'; Humi: 56%; Press: 101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

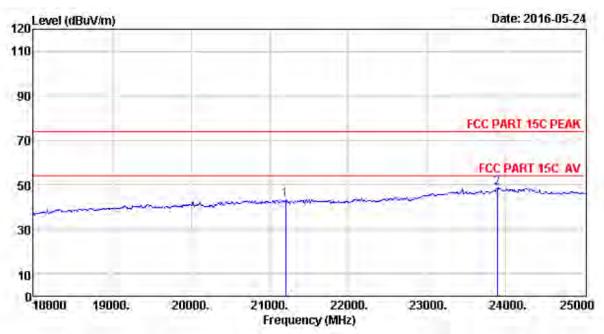
Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR Test Mode : 8-DFSK TX 2441MHz

وبنتها	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	21234.00	46.16	20.23	35.60	13.32	44.11	74.00	29.89	Peak
2	24265.00	45.65	22.19	33.23	14.94	49.55	74.00	24.45	Peak

Remarks: 1. Emission Level= Anterma Factor + Cable Loss - Amp Factor + Reading.





: 966 1# chamber Site no.

Data no. : 95 Ant. pol. : HORIZONTAL ANT ABVOE 18G : 3m Dis. / Ant.

: FCC PART 15C PEAK Limit

Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

: Tony Engineer

: Polk DSB Soundbar System EUT

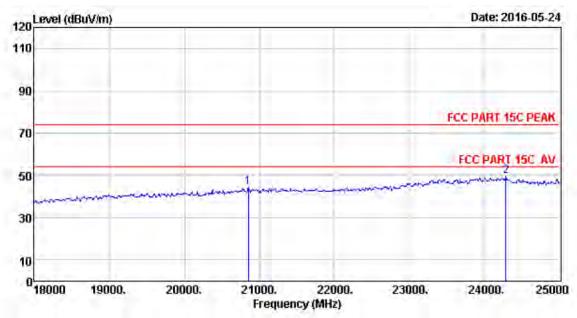
: DC 15V From Adapter Input AC 120V/60Hz Power

: DSB1 SOUND BAR M/N : 8-DPSK TX 2480MHz Test Mode

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	21206.00	46.17	20.22	35.62	12.57	43.34	74.00	30.66	Peak
2	23894.00	45.62	21.95	32.90	13.98	48.65	74.00	25.35	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 1# chamber Data no. : 96
Dis. / Ant. : 3m ANT ABOVE 186 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp: 23.6'; Humi: 56%; Press: 101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR Test Mode : 8-DPSK TX 2480MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	20856.00	46.22	20.07	35.94	13.77	44.12	74.00	29.88	Peak
2	24286.00	45.66	22.20	33.23	14.93	49.56	74.00	24.44	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.



9. BAND EDGE COMPLIANCE

9.1. Limit

All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

9.2. Test Procedure

EUT was placed on a turn table, which is 1.5 m high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it. EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarization of the antenna are set on test.

Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of emissions

Peak: RBW = 1MHz, VBW = 1MHz, Detector=PEAK detector, Sweep time = auto. AV: RBW = 1MHz, VBW = 10Hz, Detector=PEAK detector, Sweep time = auto.

9.3. Test Result

Pass (The testing data was attached in the next pages.)

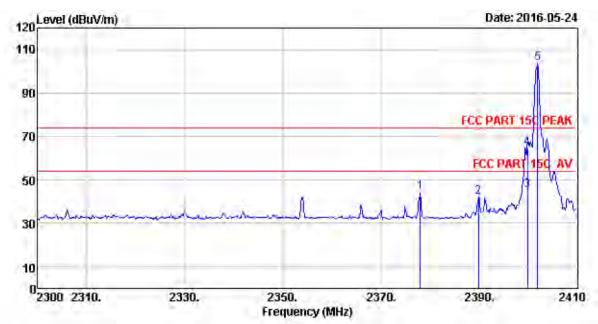
- Note: 1. For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.
 - 2. The frequency 2402MHz . 2441MHz and 2480MHz is fundamental frequency which no limit, the limit on plots is automatically generated by the software, it's not fundamental limit, we can't remove it.



EST Technology Co., Ltd Report No. ESTE-R1605073

Page 74 of 109

9.4. Test Data



Site no. : 966 1# chamber Data no. : 59
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp: 23.6'; Humi: 56%; Press: 101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

Power : DC 15V From Adapter Input AC 120V/60Hz

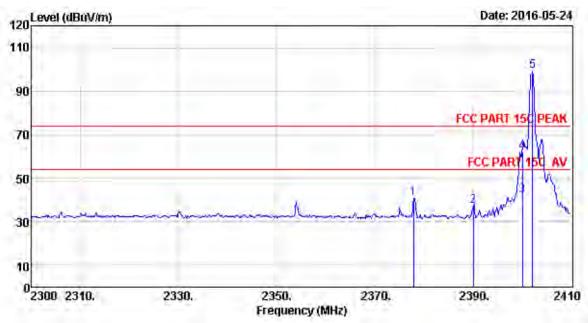
M/N : DSB1 SOUND BAR

Test Mode ; GFSK TX 2402MHz (No Hopping)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2378.10	27.64	6.60	34.59	44.55	44.20	74.00	29.80	Peak
2	2390.00	27.64	6.62	34.62	42.64	42.28	74.00	31.72	Peak
3	2400,00	27.61	6.62	34.64	45.40	44.99	54.00	9.01	Average
4	2400.00	27.61	6.62	34.64	65.07	64.66	74.00	9.34	Peak
5	2402.08	27.61	6.62	34.64	104.14	103.73	74.00	-29.73	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 1# chamber Data no. : 70

Dis. / Ant. ; 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp: 23.6'; Humi: 56%; Press: 101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

Power : DC 15V From Adapter Input AC 120V/60Hz

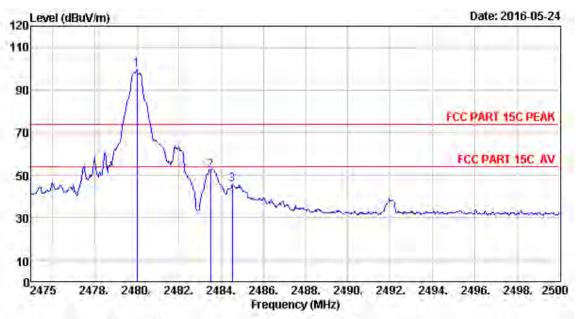
M/N : DSB1 SOUND BAR

Test Mode : GFSK TX 2402MHz (No Hopping)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Pemark
1	2377.88	27.64	6.60	34.59	40.98	40.63	74.00	33.37	Peak
2	2390,00	27.64	6.62	34.62	37,41	37.05	74.00	36.95	Peak
3	2400.00	27.61	6.62	34.64	42.58	42.17	54.00	11.83	Average
4	2400.00	27.61	6.62	34.64	62.24	61.83	74.00	12.17	Peak
5	2402.08	27.61	6,62	34.64	99.53	99.12	74.00	-25.12	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 1# chamber Data no. : 71

Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

Power : DC 15V From Adapter Input AC 120V/60Hz

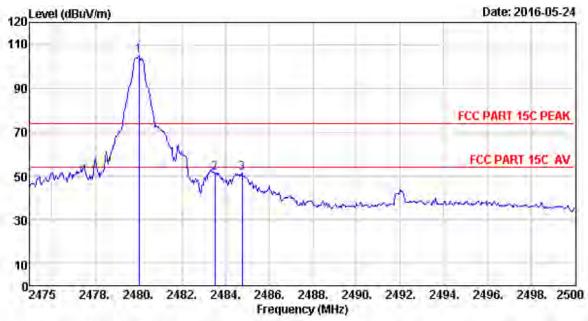
M/N : DSB1 SOUND BAR

Test Mode : GFSK TX 2480MHz (No Hopping)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.58	6.71	35.11	100.29	99.47	74.00	-25.47	Peak
2	2483.50	27.58	6.71	35.11	53.20	52.38	74.00	21.62	Peak
3	2484.53	27.58	6.71	35.11	46,42	45.60	74.00	28.40	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 956 1# chamber Data no. : 72 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp: 23.6'; Humi: 564; Press: 101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

Power : DC 15V From Adapter Input AC 120V/60Hz

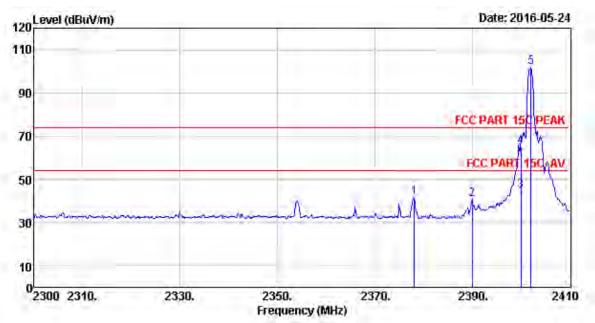
M/N : DSB1 SOUND BAR

Test Mode : GFSK TX 2480MHz (No Hopping)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480,00	27.56	6.71	35.11	105.78	104.96	74.00	-30.96	Peak
2	2483.50	27.58	6.71	35.11	52.00	51.18	74.00	22.82	Peak
3	2484.75	27.58	6.71	35.11	52.29	51.47	74.00	22.53	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 1# chamber Data no. : 73
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp: 23.6'; Humi: 56%; Press: 101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

Power : DC 15V From Adapter Input AC 120V/60Hz

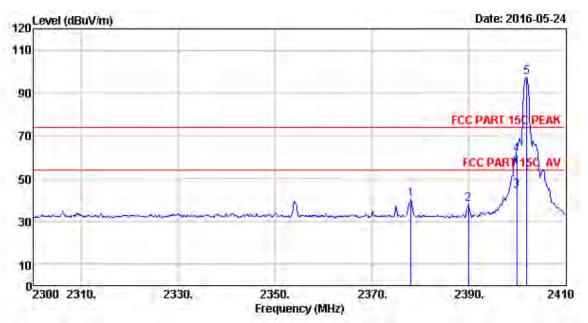
M/N : DSB1 SOUND BAR

Test Node : 8-DPSK TX 2402MHz (No Hopping)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2378.10	27.64	6.60	34.59	41.85	41.50	74.00	32,50	Peak
2	2390.00	27.64	6.62	34.62	40.94	40.58	74.00	33.42	Peak
3	2400.00	27.61	6.62	34.64	45.08	44.67	54.00	9.33	Average
4	2400,00	27.61	6.62	34.64	65.62	65.21	74.00	8.79	Peak
5	2402,08	27.61	6.62	34.64	102.44	102.03	74.00	-28,03	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : site Data no. : 74

Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

Power : DC 15V From Adapter Input AC 120V/60Hz

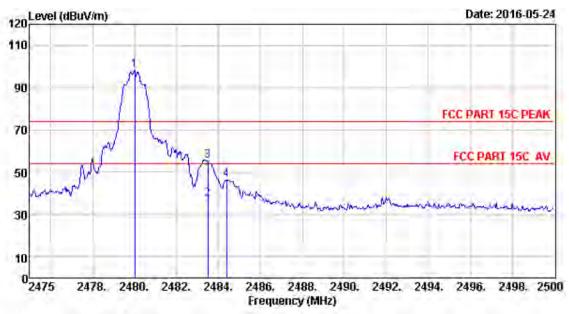
M/N : DSB1 SOUND BAR

Test Mode : 8-DPSK TX 2402MHz (No Hopping)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
i	2378.10	27.64	6.60	34.59	40.49	40,14	74.00	33,86	Peak
2	2390.00	27.64	6.62	34.62	38.43	38.07	74,00	35.93	Peak
3	2400.00	27.61	6.62	34.64	44.58	44.17	54.00	9.83	Average
4	2400.00	27.61	6.62	34.64	61,30	60.89	74.00	13.11	Peak
5	2402.08	27.61	6.62	34.64	97.85	97.44	74.00	-23.44	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





: 966 1# chamber Data no. : 75 Site no.

Dis. / Ant. : 3m ANT 1-18G Limit : FCC PART 15C PEAK Ant. pol. : HORIZONTAL

Env. / Ins. : Temp:23.6 ;Humi:56%;Press:101.52kPa

: Tony Engineer

EUT : Polk DSB Soundbar System

Power : DC 15V From Adapter Input AC 120V/60Hz

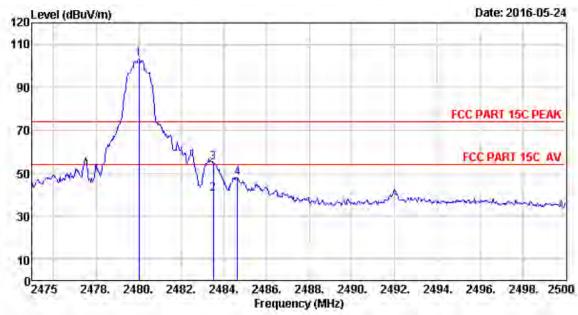
M/N : DSB1 SOUND BAR

Test Mode : 8-DPSK TX 2480MHz (No Hopping)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.58	6.71	35.11	98.92	98.10	74.00	-24.10	Peak
2	2483.50	27.58	6.71	35.11	38.06	37.24	54.00	16.76	Average
3	2483.50	27.58	6.71	35.11	56.12	55.30	74.00	18.70	Peak
4	2484.38	27.58	6.71	35.11	47.31	46.49	74.00	27.51	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 l# chamber Data no. : 76
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit ; FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi: 56%; Press: 101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

Power : DC 15V From Adapter Input AC 120V/60Hz

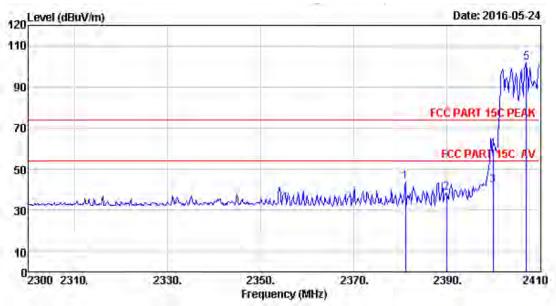
M/N : DSB1 SOUND BAR

Test Mode : 8-DPSK TX 2480MHz (No Hopping)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.58	6.71	35.11	104.14	103.32	74.00	-29.32	Peak
2	2483.50	27.58	6.71	35.11	41.06	40.24	54.00	13.76	Average
3	2483.50	27.59	6.71	35.11	55.77	54.95	74.00	19.05	Peak
4	2484.63	27.58	6,71	35.11	48.60	47.78	74.00	26.22	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no.

: 966 1# chamber

Data no. : 77

Dis. / Ant. :

; 3m ANT 1-18G

Ant. pol. : VERTICAL

Limit

: FCC PART 15C PEAK

Env. / Ins. : 7

: Temp: 23.6'; Humi: 56%; Press: 101.52kPa

Engineer

Tony

EUT

: Polk DSB Soundbar System

Power

: DC 15V From Adapter Input AC 120V/60Hz

M/N

: DSB1 SOUND BAR

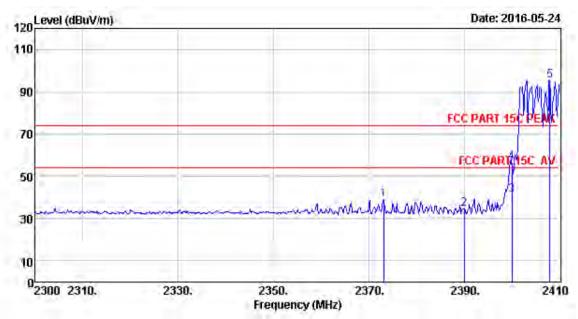
Test Mode

: GFSK TX 2402MHz (Hopping On)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2381.18	27.64	6.60	34.62	44.24	43.86	74.00	30.14	Peak
- 2	2390,00	27.64	6.62	34.62	38.74	38.38	74.00	35.62	Peak
3	2400.00	27.61	6.62	34.64	42.50	42.09	54.00	11.91	Average
4	2400.00	27.61	6.62	34.64	60.38	59.97	74.00	14.03	Peak
5	2407.25	27.61	6.64	34.64	102.01	101.62	74.00	-27.62	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





; 966 1# chamber

Data no. ; 78 Ant. pol. : HORIZONTAL Dis. / Ant. : 3m ANT 1-18G

: FCC PART 15C PEAK Limit

Env. / Ins. : Temp: 23.6'; Humi: 56%; Press: 101.52kPa

Engineer : Tony

EUT : Polk DSB Soundhar System

Power : DC 15V From Adapter Input AC 120V/60Hz

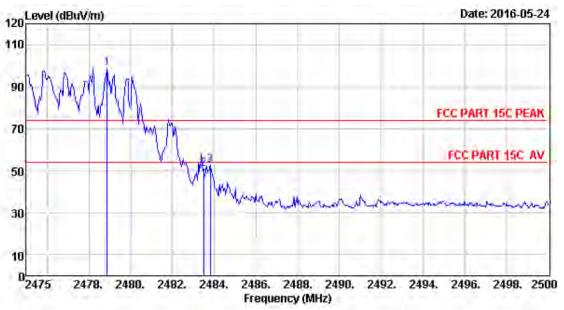
M/N : DSB1 SOUND BAR

Test Mode : GFSK TX 2402MHz (Hopping On)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2373.15	27.67	6.60	34.59	39,48	39.16	74.00	34.84	Peak
2	2390.00	27.64	6.62	34.62	34.93	34.57	74.00	39.43	Peak
3	2400.00	27.61	6.62	34.64	41.58	41.17	54.00	12.83	Awerage
4	2400.00	27.61	6.62	34.64	57.03	56.62	74.00	17.38	Peak
5	2408.02	27.61	6.64	34.64	95,77	95.38	74.00	-21.38	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Data no. : 79 Site no. : 966 1# chamber

: 3m ANT 1-18G Dis. / Ant. Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

: Temp:23.6';Humi:56%;Press:101.52kPa : Tony Env. / Ins.

Engineer

: Polk DSB Soundbar System EUT

: DC 15V From Adapter Input AC 120V/60Hz Power

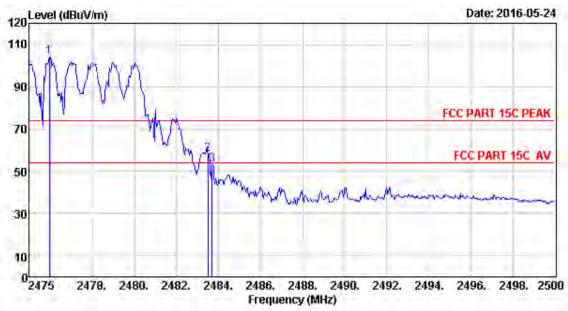
: DSB1 SOUND BAR M/N

Test Mode : GFSR TX 2480MHz (Hopping On)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2478.88	27.58	6.71	35.11	99.54	98.72	74.00	-24.72	Peak
2	2483.50	27.58	6.71	35.11	51.71	50.89	74.00	23.11	Peak
3	2483.80	27.58	6.71	35.11	53.60	52.78	74.00	21.22	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 1# chamber Data no. : 80 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK
Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

Engineer

: Tony : Polk DSB Soundbar System EUT

Power ; DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR

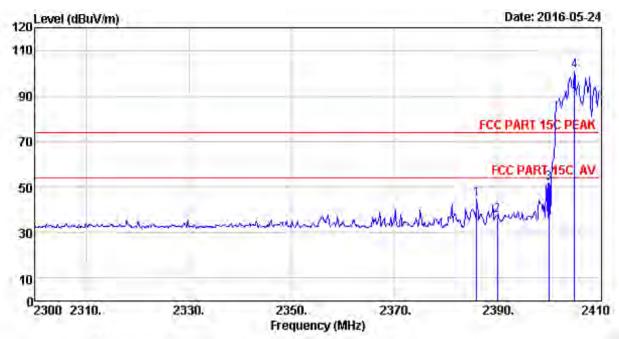
Test Mode : GFSK TX 2480MHz (Hopping On)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2475.95	27,58	6.71	35.11	104.66	103.84	74.00	-29.84	Peak
2	2483,50	27.58	6.71	35.11	58.71	57.89	74.00	16.11	Peak
3	2483.70	27.58	6.71	35.11	54.18	53.36	74.00	20.64	Peak

Remarks: 1. Emission Level = Antenna Factor + Cable Loss - Amp Factor + Reading.



^{2.} The emission levels that are 20dB below the official limit are not reported.



Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

Power : DC 15V From Adapter Input AC 120V/60Hz

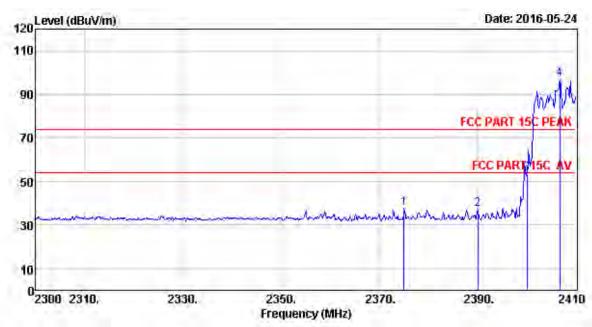
M/N : DSB1 SOUND BAR

Test Mode : 8-DPSK TX 2402MHz (Hopping On)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2386.02	27.64	6.62	34.62	45.09	44.73	74.00	29.27	Peak
2	2390.00	27.64	6.62	34.62	38.04	37.68	74.00	36.32	Peak
3	2400.00	27.61	6.62	34.64	52.36	51.95	74.00	22.05	Peak
4	2405.05	27.61	6.64	34.64	101.52	101.13	74.00	-27.13	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 1# chamber Data no. : 82

Dis. / Ant. ; 3m ANT 1-18G Ant. pol. ; HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

Power : DC 15V From Adapter Input AC 120V/60Hz

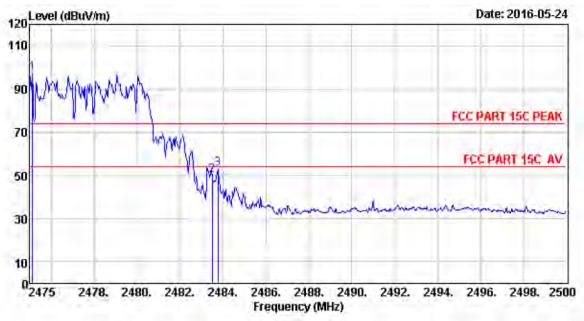
M/N : DSB1 SOUND BAR

Test Mode : 8-DPSK TX 2402MHz (Hopping On)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2375.02	27.64	6.60	34.59	37.82	37.47	74.00	36.53	Peak
2	2390.00	27.64	6.62	34.62	37.48	37.12	74.00	36.88	Peak
3	2400.00	27.61	6.62	34.64	54.15	53.74	74.00	20.26	Peak
4	2406.70	27.61	6.64	34.64	97.41	97.02	74.00	-23.02	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. ; 966 1# chamber Data no. ; 83

Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

Power : DC 15V From Adapter Input AC 120V/60Hz

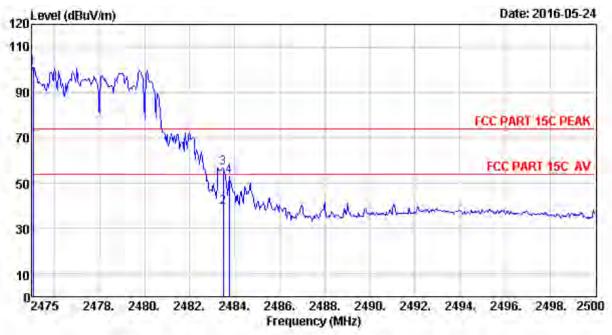
M/N : DSB1 SOUND BAR

Test Mode : 8-DPSK TX 2480MHz (Hopping On)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2475.13	27.58	6.71	35.11	98.20	97.38	74.00	-23,38	Peak
2	2483.50	27.58	6.71	35.11	50.81	49.99	74.00	24.01	Peak
3	2483.75	27.58	6.71	35.11	53.79	52.97	74.00	21.03	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 966 I# chamber Data no. : 84

Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp: 23.6'; Humi: 56%; Press: 101.52kPa

Engineer : Tony

EUT : Polk DSB Soundbar System

Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR

Test Mode : 8-DPSK TX 2480MHz (Hopping On)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2475.05	27.58	6.71	35.11	101.82	101.00	74.00	-27.00	Peak
2	2483.50	27.58	6.71	35.11	40.20	39.38	54.00	14.62	Average
3	2483,50	27.58	6.71	35.11	57.65	56.83	74.00	17.17	Peak
4	2483.75	27.58	6.71	35.11	53.79	52.97	74.00	21.03	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.



10. POWER LINE CONDUCTED EMISSIONS

10.1.Limit

	Maximum RF Line Voltage				
Frequency	Quasi-Peak Level	Average Level			
	dB(µV)	$dB(\mu V)$			
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*			
500kHz ~ 5MHz	56	46			
5MHz ~ 30MHz	60	50			

Notes: 1. * Decreasing linearly with logarithm of frequency.

10.2.Test Procedure

The EUT was placed on a non-metallic table, 80 cm above the ground plane. The EUT was charged form PC's USB port which connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#).. Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.4: 2009 on Conducted Emission Test.

The bandwidth of test receiver (R & S ESHS30) is set at 10kHz.

The frequency range from 150kHz to 30MHz is checked.

10.3.Test Result

PASS. (All emissions not reported below are too low against the prescribed limits.)

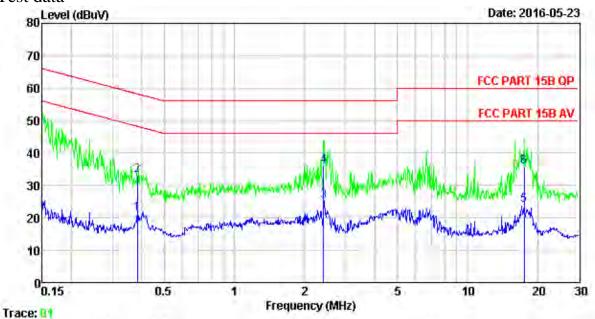


EST Technology Co., Ltd Report No. ESTE-R1605073

Page 91 of 109

^{2.} The lower limit shall apply at the transition frequencies.

10.4. Test data



Site no : 844 Shield Room Data no. : 82

Env. / Ins. : Temp: 25.3 C Humi: 58% Press: 101.50kPa LINE Phase : NEUTRAL

Limit : FCC PART 15B QP

Engineer : Tony

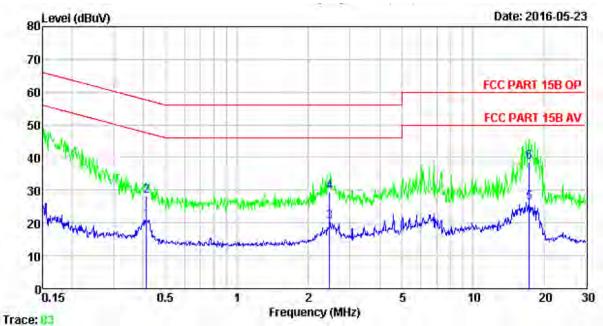
EUT : Polk DSB Soundbar System

Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR

	Freq.	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuv)	Limits (dBuv)	Margin (dB)	Remark
1	0.38	9,59	9,82	1,90	21.31	48,21	26.90	Average
2	0.38	9.59	9.82	13.51	32.92	58.21	25.29	QP
3	2.42	9.63	9.84	5.48	24.95	46.00	21.05	Average
4	2.42	9.63	9.84	16.58	36.05	56.00	19.95	QP
5	17.57	9.78	9.93	4.10	23.81	50.00	26.19	Average
6	17.57	9.78	9.93	15.98	35.69	60.00	24.31	QP





Site no : 844 Shield Room Data no. : 84
Env. / Ins. : Temp:25.3 C Humi:58% Press:101,50kPa LINE Phase : LINE

Limit : FCC PART 15B QP

Engineer : Tony

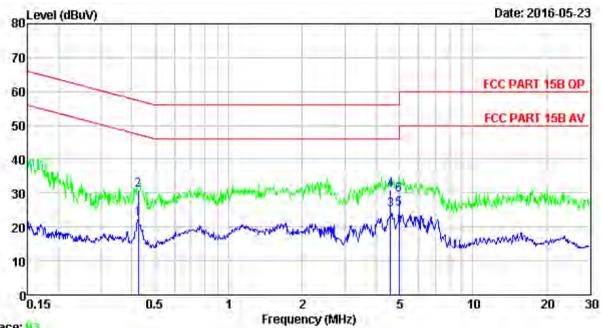
EUT : Polk DSB Soundbar System

Power : DC 15V From Adapter Input AC 120V/60Hz

M/N : DSB1 SOUND BAR

	Freq.	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuv)	Limits (dBuv)	Margin (dB)	Remark
1	0.41	9.61	9.82	1.60	21.03	47.59	26.56	Average
2	0.41	9.61	9.82	9,03	28.46	57.59	29,13	QP
3	2.46	9.62	9.84	0.80	20.26	46.00	25.74	Average
4	2.46	9.62	9.84	9.98	29.44	56.00	26.56	QP
5	17.29	9.70	9.93	6.76	26.39	50.00	23.61	Average
6	17.29	9.70	9.93	19.01	38.64	60.00	21.36	QP





Trace: 93

: 844 Shield Room

Data no. : 94

Site no

Env. / Ins. : Temp:25.3'C Humi;58% Press:101.50kPa LINE Phase : LINE

Limit : FCC PART 15B QP

Engineer : Tony

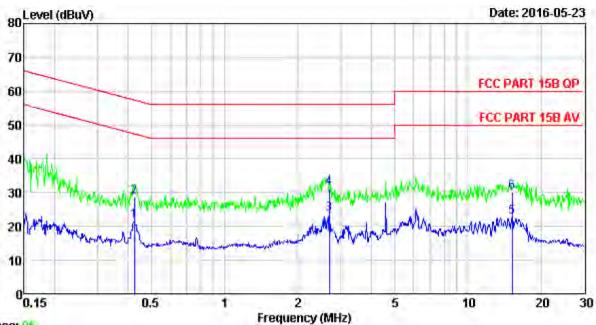
EUT : Polk DSB Soundbar System

Power : DC 15V From Adapter Input AC 240V/50Hz

M/N : DSB1 SOUND BAR

	Freq.	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuv)	Limits (dBuv)	Margin (dB)	Remark
1	0.43	9.61	9.81	3.13	22.55	47.33	24,78	Average
2	0,43	9.61	9.81	11.49	30.91	57.33	26,42	QP
3	4.60	9.65	9,85	5.69	25.19	46.00	20.81	Average
4	4.60	9.65	9.85	11.41	30.91	56.00	25.09	QP
5	4.98	9.65	9.84	5.94	25.43	46.00	20.57	Average
6	4.98	9.65	9.84	10.10	29.59	56.00	26.41	QP





Trace: 95

: 844 Shield Room Data no. : 96

Env. / Ins. : Temp:25.3'C Humi:58% Press:101.50kPa LINE Phase : NEUTRAL

Limit : FCC PART 15B QP

Engineer : Tony

EUT : Polk DSB Soundbar System

Power : DC 15V From Adapter Input AC 240V/50Hz

M/N : DSB1 SOUND BAR

	Freq.	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuv)	Limits (dBuv)	Margin (dB)	Remark
1	0.43	9,59	9,81	2.02	21.42	47,33	25.91	Average
2	0.43	9.59	9.81	9.32	28.72	57.33	28.61	QP
3	2.69	9.63	9.84	4.25	23.72	46.00	22.28	Average
4	2.69	9.63	9.84	11.72	31,19	56,00	24.81	QP
5	15.23	9.74	9.93	3.19	22.86	50.00	27.14	Average
6	15.23	9.74	9.93	10.41	30.08	60.00	29.92	QP



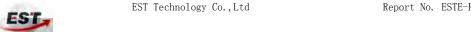
11. ANTENNA REQUIREMENTS

11.1.Limit

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

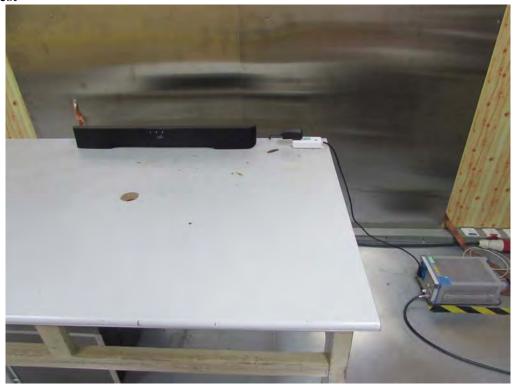
11.2.Result

The antennas used for this product are internal Antenna and that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is only 0dBi.



12. TEST SETUP PHOTO

Conducted Test

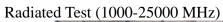






Radiated Test (30-1000 MHz)









13.PHOTOS OF EUT

External Photos M/N: DSB1 SOUND BAR







External Photos M/N: DSB1 SOUND BAR







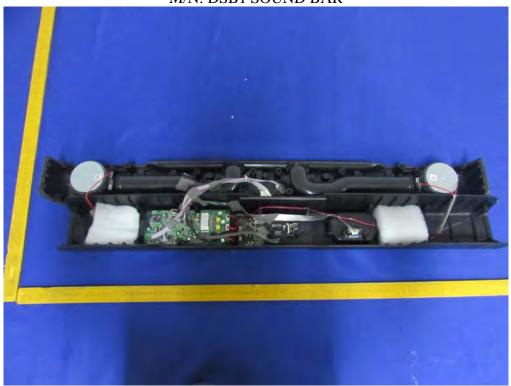
External Photos M/N: DSB1 SOUND BAR

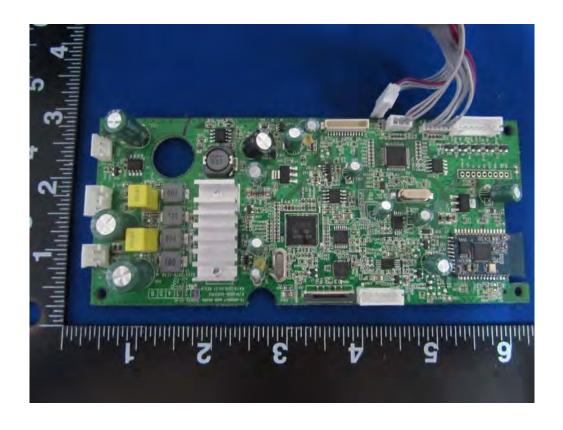






Internal Photos M/N: DSB1 SOUND BAR



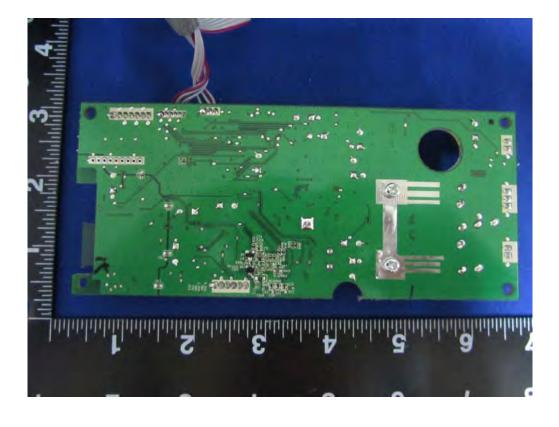




Internal Photos M/N: DSB1 SOUND BAR

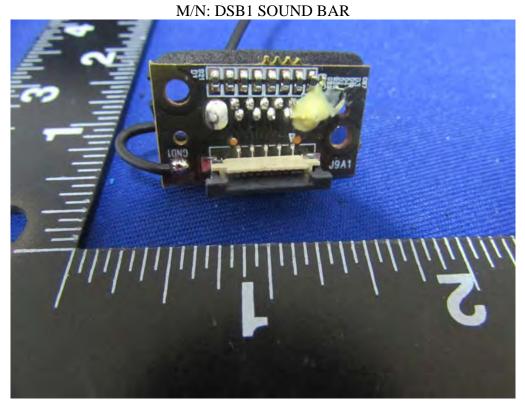


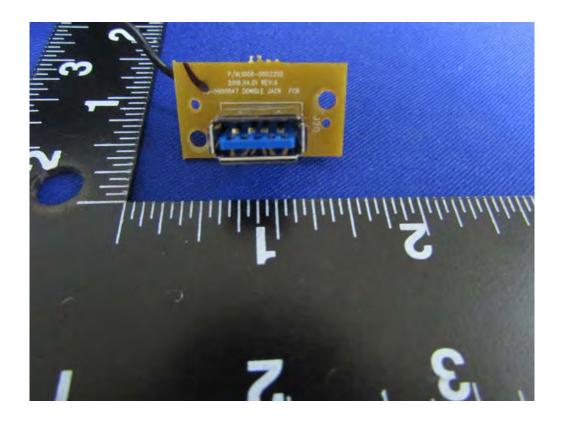
Bluetooth Antenna





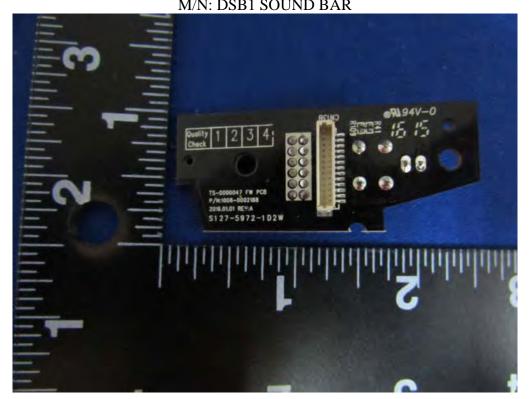
Internal Photos

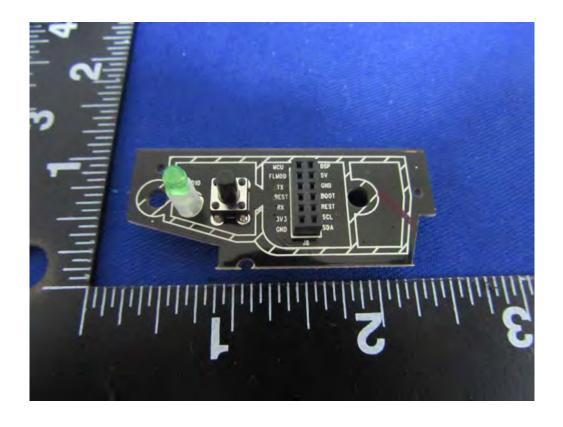






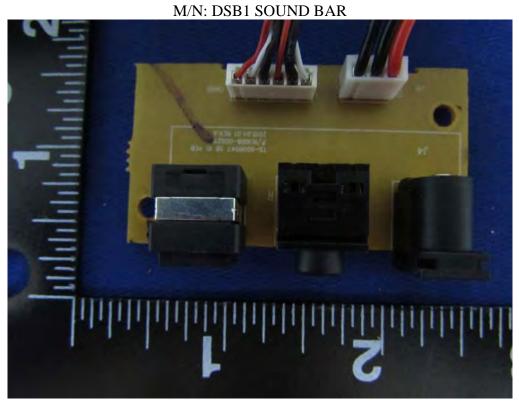
Internal Photos M/N: DSB1 SOUND BAR

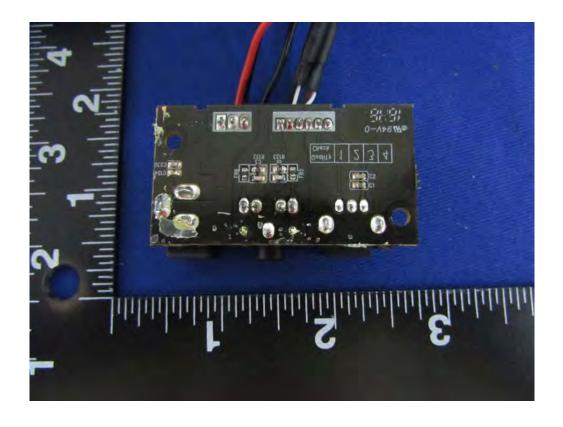






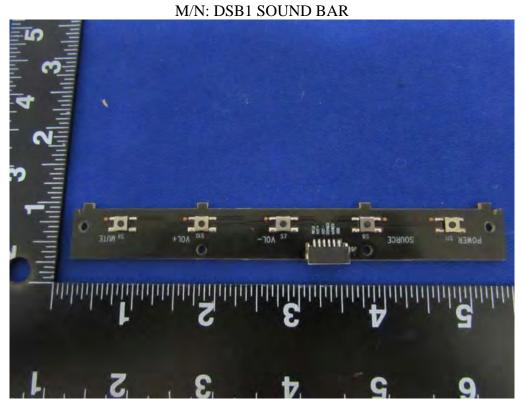
Internal Photos

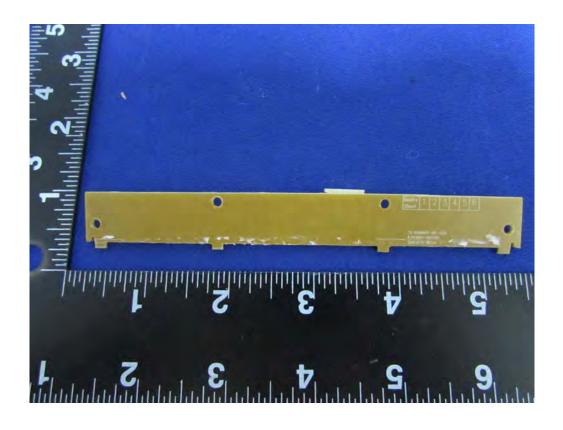






Internal Photos

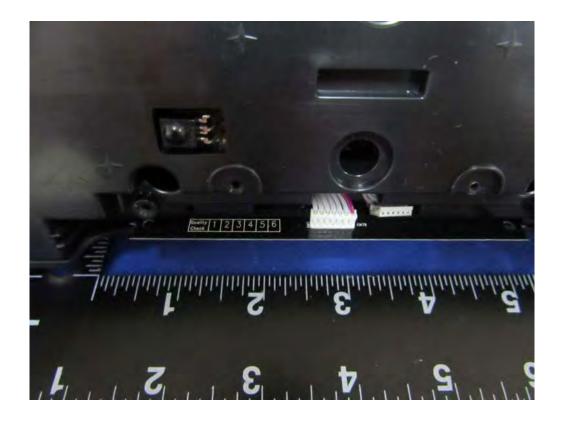






Internal Photos







Internal Photos M/N: DSB1 SOUND BAR

