



Report No.: TW2011121-02E File Reference No.: 2020-12-15

Applicant: GLORY STAR TECHNICS (SHENZHEN) CO., LTD.

Product: Commercial Kiosk Tablet

Model No.: NEB215, NEB156

Trademark: GloryStar

Test Standards: FCC Part 15.247

Test Result:

It is herewith confirmed and found to comply with the

requirements set up by ANSI C63.10, FCC Part 15.247 for

the evaluation of electromagnetic compatibility

Approved By

Jack Chung

Manager

Dated: December 15, 2020

Results appearing herein relate only to the sample tested

The technical reports is issued errors and omissions exempt and is subject to withdrawal at

SHENZHEN TIMEWAY TESTING LABORATORIES

Zone C, 1st Floor, Block B, Jun Xiang Da Building, Zhongshan Park Road West, Tong Le Village, Nanshan District, Shenzhen, China

Tel (755) 83448688, Fax (755) 83442996, E-Mail:info@timeway-lab.com

Date: 2020-12-15



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Special Statement:

The testing quality ability of our laboratory meet with "Quality Law of People's Republic of China" Clause 19.

The testing quality system of our laboratory meet with ISO/IEC-17025 requirements, which is approved by CNAS. This approval result is accepted by MRA of APLAC.

Our test facility is recognized, certified, or accredited by the following organizations:

CNAS-LAB Code: L2292

The EMC Laboratory has been assessed and in compliance with CNAS-CL01 accreditation criteria for testing Laboratories (identical to ISO/IEC 17025:2005 General Requirements) for the Competence of testing Laboratories.

FCC-Registration No.: 744189

The EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications commission. The acceptance letter from the FCC is maintained in our files. Registration No.: 744189.

Industry Canada (IC) — **Registration No.:5205A**

The EMC Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 5205A.

A2LA (Certification Number:5013.01)

The EMC Laboratory has been accredited by the American Association for Laboratory Accreditation (A2LA). Certification Number:5013.01

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Test Report Conclusion

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1.0 General Details

1.1 Test Lab Details

Name: SHENZHEN TIMEWAY TESTING LABORATORIES.

Address: Zone C, 1st Floor, Block B, Jun Xiang Da Building, Zhongshan Park Road West, Tong Le

Village, Nanshan District, Shenzhen, China

Telephone: (755) 83448688 Fax: (755) 83442996

Site Listed with Federal Communications commission (FCC)

Registration Number: 744189 For 3m Anechoic Chamber

Site Listed with Industry Canada of Ottawa, Canada

Registration Number: IC: 5205A

For 3m Anechoic Chamber

1.2 Applicant Details

Applicant: GLORY STAR TECHNICS (SHENZHEN) CO., LTD.

Address: Bldg 9, 4/F ZhongYunTai Technology Industrial Park, Tangtou No.1 Road, Shiyan Street,

Baoan, Shenzhen, China

Telephone: (0755)-26001808-305 Fax: (0755)-26002933

1.3 Description of EUT

Product: Commercial Kiosk Tablet

Manufacturer: GLORY STAR TECHNICS (SHENZHEN) CO., LTD.

Address: Bldg 9, 4/F ZhongYunTai Technology Industrial Park, Tangtou No.1 Road, Shiyan

Street, Baoan, Shenzhen, China

Brand Name: N/A

Model Number: NEB215, NEB156

Additional Model Number: N/A

Type of Modulation GFSK, 月/4DQPSK, 8DPSK for Bluetooth

Frequency range 2402-2480MHz for Bluetooth

Channel Spacing 1MHz for Bluetooth

Frequency Selection By software

Channel Number 79 channels for Bluetooth

Antenna: FPC antenna used. The gain of the antennas is 2.0dBi (get from the antenna

specification provided the applicant)

Input Voltage: NEB156: DC12V, 5A,15W (MAX); NEB215: DC12V, 5A,32W (MAX)

Power Supply: Model: SOY-1200500-327; Input: 100-240V~50/60Hz,1.7A Max;

Output: 12.0V = 5.0A,60.0W

The report refers only to the sample tested and does not apply to the bulk.

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Submitted Sample: 2 Samples

1.5 **Test Duration**

2020-11-10 to 2020-12-15

1.6 Test Uncertainty

Conducted Emissions Uncertainty = 3.6dB

Radiated Emissions below 1GHz Uncertainty =4.7dB

Radiated Emissions above 1GHz Uncertainty =6.0dB

Conducted Power Uncertainty = 6.0dB

Occupied Channel Bandwidth Uncertainty =5%

Note: The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.

1.7 Test Engineer

The sample tested by

Print Name: Terry Tang

Terry lang

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2.0 Test Equipment					
Instrument Type	Manufacturer	Model	Serial No.	Date of Cal.	Due Date
ESPI Test Receiver	R&S	ESPI 3	100379	2020-06-23	2021-06-22
LISN	R&S	EZH3-Z5	100294	2020-06-23	2021-06-22
LISN	R&S	EZH3-Z5	100253	2020-06-23	2021-06-22
Ultra Broadband ANT	R&S	HL562	100157	2020-06-23	2021-06-22
Impuls-Begrenzer	R&S	ESH3-Z2	100281	2020-06-23	2021-06-22
Loop Antenna	EMCO	6507	00078608	2018-06-25	2021-06-24
Spectrum	R&S	FSIQ26	100292	2020-06-23	2021-06-22
Horn Antenna	A-INFO	LB-180400-KF	J211060660	2019-06-21	2021-06-20
Horn Antenna	R&S	BBHA 9120D	9120D-631	2018-07-09	2021-07-08
Power meter	Anritsu	ML2487A	6K00003613	2019-08-22	2020-08-21
Power sensor	Anritsu	MA2491A	32263	2019-08-22	2020-08-21
Bilog Antenna	Schwarebeck	VULB9163	9163/340	2018-07-04	2021-07-03
9*6*6 Anechoic			N/A	2018-02-07	2021-02-06
EMI Test Receiver	RS	ESVB	826156/011	2020-06-23	2021-06-22
EMI Test Receiver	RS	ESH3	860904/006	2020-06-23	2021-06-22
Spectrum	HP/Agilent	ESA-L1500A	US37451154	2020-06-23	2021-06-22
Spectrum	HP/Agilent	E4407B	MY50441392	2020-06-23	2021-06-22
Spectrum	RS	FSP	1164.4391.38	2020-01-16	2020-01-15
RF Cable	Zhengdi	ZT26-NJ-NJ-8 M/FA		2020-06-23	2021-06-22
RF Cable	Zhengdi	7m		2020-06-23	2021-06-22
RF Switch	EM	EMSW18	060391	2020-06-23	2021-06-22
Pre-Amplifier	Schwarebeck	BBV9743	#218	2020-06-23	2021-06-22
Pre-Amplifier	HP/Agilent	8449B	3008A00160	2020-06-23	2021-06-22
LISN	SCHAFFNER	NNB42	00012	2021-01-07	2020-01-06

2.2 Automation Test Software

For Conducted Emission Test

Name	Version
EZ-EMC	Ver.EMC-CON 3A1.1

For Radiated Emissions

Name	Version
EMI Test Software BL410-EV18.91	V18.905
EMI Test Software BL410-EV18.806 High Frequency	V18.06

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3.0 **Technical Details**

3.1 **Summary of test results**

The EUT h	as heen tested	according to	o the following	specifications:
THUEUTH	as been testeu	according n		Specifications.

Requirement	CFR 47 Section	Result	Notes
Antenna Requirement	15.203, 15.247(b)(4)	PASS	Complies
Maximum Peak Out Power	15.247 (b)(1), (4)	PASS	Complies
Carrier Frequency Separation	15.247(a)(1)	PASS	Complies
20dB Channel Bandwidth	15.247 (a)(1)	PASS	Complies
Number of Hopping Channels	15.247(a)(iii), 15.247(b)(1)	PASS	Complies
Time of Occupancy (Dwell Time)	15.247(a)(iii)	PASS	Complies
Spurious Emission, Band Edge, and Restricted bands	15.247(d),15.205(a), 15.209 (a),15.109	PASS	Complies
Conducted Emissions	15.207(a), 15.107	PASS	Complies
RF Exposure	15.247(i), 1.1307(b)(1)	PASS	Complies

3.2 **Test Standards**

FCC Part 15 Subpart & Subpart C, Paragraph 15.247

4.0 **EUT Modification**

No modification by SHENZHEN TIMEWAY TESTING LABORATORIES.

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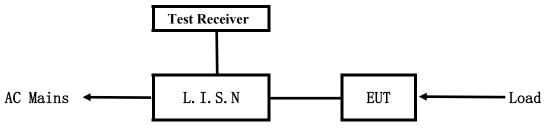
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5. Power Line Conducted Emission Test

5.1 Schematics of the test

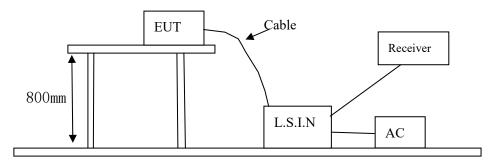


EUT: Equipment Under Test

5.2 Test Method and test Procedure

The EUT was tested according to ANSI C63.10-2013. The Frequency spectrum From 0.15MHz to 30MHz was investigated. The LISN used was 50ohm/50uH as specified by section 5.1 of ANSI C63.10-2013.

Test Voltage: 120V~60Hz Block diagram of Test setup



5.3 Configuration of The EUT

The EUT was configured according to ANSI C63.10-2013. All interface ports were connected to the appropriate peripherals. All peripherals and cables are listed below.

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A. EUT

Device	Manufacturer	Model	FCC ID
Commercial Kiosk	GLORY STAR TECHNICS	NEB215,	2AACS-NEB15-21FOR99
Tablet	(SHENZHEN) CO., LTD.	NEB156	ZAACS-NEB13-ZIFOR99

B. Internal Device

Device	Manufacturer	Model	Rating

C. Peripherals

Device	Manufacturer	Model	Rating
Power Supply	SOY	SOY-1200500-327	Input: 100-240V~50/60Hz,1.7A Max;
			Output: 12.0V 5.0A,60.0W

5.4 EUT Operating Condition

Operating condition is according to ANSI C63.10-2013.

- A Setup the EUT and simulators as shown on follow
- B Enable AF signal and confirm EUT active to normal condition

5.5 Power line conducted Emission Limit according to Paragraph15.207

Frequency	Limits (dB μ V)			
(MHz)	Quasi-peak Level	Average Level		
0.15 ~ 0.50	66.0~56.0*	56.0~46.0*		
$0.50 \sim 5.00$	56.0	46.0		
5.00 ~ 30.00	60.0	50.0		

Notes:

- 1. *Decreasing linearly with logarithm of frequency.
- 2. The tighter limit shall apply at the transition frequencies

5.6 Test Results

The frequency spectrum from 0.15MHz to 30MHz was investigated. All reading are quasi-peak values with a resolution bandwidth of 9kHz.

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A: Conducted Emission on Live Terminal (150kHz to 30MHz)

EUT Operating Environment

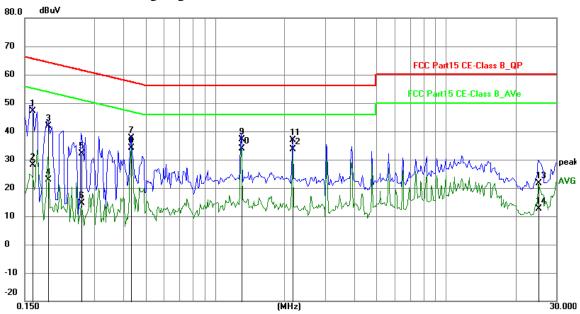
Temperature: 26°C Humidity: 65%RH Atmospheric Pressure: 101 KPa

EUT set Condition: Keep Bluetooth Transmitting (NEB156)

Equipment Level: Class B

Results: PASS

Please refer to following diagram for individual



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1617	37.34	9.78	47.12	65.38	-18.26	QP	Р
2	0.1617	18.27	9.78	28.05	55.38	-27.33	AVG	Р
3	0.1890	32.14	9.76	41.90	64.08	-22.18	QP	Р
4	0.1890	13.03	9.76	22.79	54.08	-31.29	AVG	Р
5	0.2631	22.50	9.75	32.25	61.33	-29.08	QP	Р
6	0.2631	4.80	9.75	14.55	51.33	-36.78	AVG	Р
7	0.4347	27.74	9.77	37.51	57.16	-19.65	QP	Р
8	0.4347	24.25	9.77	34.02	47.16	-13.14	AVG	Р
9	1.3005	27.39	9.79	37.18	56.00	-18.82	QP	Р
10	1.3005	24.06	9.79	33.85	46.00	-12.15	AVG	Р
11	2.1702	27.05	9.81	36.86	56.00	-19.14	QP	Р
12	2.1702	23.72	9.81	33.53	46.00	-12.47	AVG	Р
13	25.1247	10.57	11.00	21.57	60.00	-38.43	QP	Р
14	25.1247	1.64	11.00	12.64	50.00	-37.36	AVG	Р

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B: Conducted Emission on Neutral Terminal (150kHz to 30MHz)

EUT Operating Environment

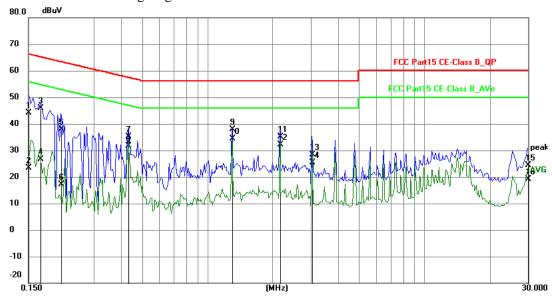
Temperature: 26°C Humidity: 65%RH Atmospheric Pressure: 101 KPa

EUT set Condition: Keep Bluetooth Transmitting (NEB156)

Equipment Level: Class B

Results: Pass

Please refer to following diagram for individual



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1500	34.24	9.79	44.03	66.00	-21.97	QP	Р
2	0.1500	13.62	9.79	23.41	56.00	-32.59	AVG	Р
3	0.1695	36.17	9.77	45.94	64.98	-19.04	QP	Р
4	0.1695	16.83	9.77	26.60	54.98	-28.38	AVG	Р
5	0.2124	28.10	9.75	37.85	63.11	-25.26	QP	Р
6	0.2124	7.48	9.75	17.23	53.11	-35.88	AVG	Р
7	0.4308	25.38	9.77	35.15	57.24	-22.09	QP	Р
8	0.4308	21.96	9.77	31.73	47.24	-15.51	AVG	Р
9	1.3005	28.04	9.79	37.83	56.00	-18.17	QP	Р
10	1.3005	24.70	9.79	34.49	46.00	-11.51	AVG	Р
11	2.1662	25.32	9.81	35.13	56.00	-20.87	QP	Р
12	2.1662	22.34	9.81	32.15	46.00	-13.85	AVG	Р
13	3.0312	18.53	9.84	28.37	56.00	-27.63	QP	Р
14	3.0312	15.54	9.84	25.38	46.00	-20.62	AVG	Р
15	30.0000	13.06	11.30	24.36	60.00	-35.64	QP	Р
16	30.0000	7.89	11.30	19.19	50.00	-30.81	AVG	Р

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C: Conducted Emission on Live Terminal (150kHz to 30MHz)

EUT Operating Environment

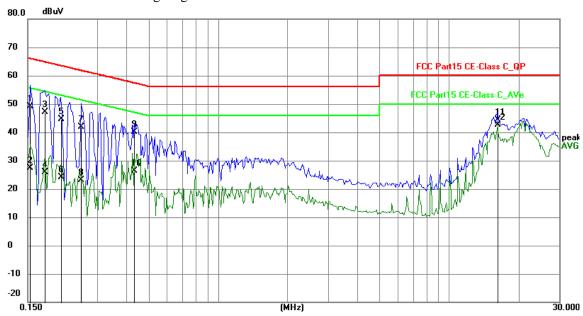
Temperature: 26°C Humidity: 65%RH Atmospheric Pressure: 101 KPa

EUT set Condition: Keep Bluetooth Transmitting (NEB215)

Equipment Level: Class B

Results: PASS

Please refer to following diagram for individual



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1539	39.24	9.78	49.02	65.79	-16.77	QP	Р
2	0.1539	17.66	9.78	27.44	55.79	-28.35	AVG	Р
3	0.1773	37.45	9.77	47.22	64.61	-17.39	QP	Р
4	0.1773	16.00	9.77	25.77	54.61	-28.84	AVG	Р
5	0.2085	34.88	9.75	44.63	63.26	-18.63	QP	Р
6	0.2085	14.46	9.75	24.21	53.26	-29.05	AVG	Р
7	0.2553	32.23	9.75	41.98	61.58	-19.60	QP	Р
8	0.2553	13.27	9.75	23.02	51.58	-28.56	AVG	Р
9	0.4347	30.48	9.77	40.25	57.16	-16.91	QP	Р
10	0.4347	16.49	9.77	26.26	47.16	-20.90	AVG	Р
11	16.2288	34.02	10.45	44.47	60.00	-15.53	QP	Р
12	16.2288	32.26	10.45	42.71	50.00	-7.29	AVG	Р

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D: Conducted Emission on Neutral Terminal (150kHz to 30MHz)

EUT Operating Environment

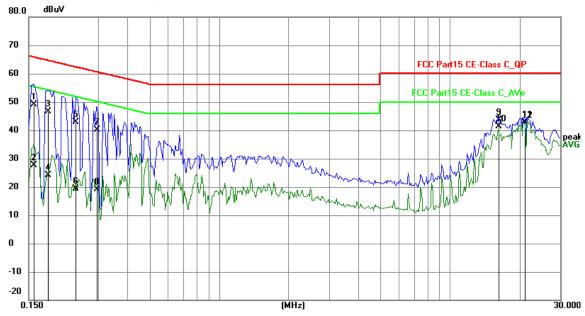
Temperature: 26°C Humidity: 65%RH Atmospheric Pressure: 101 KPa

EUT set Condition: Keep Bluetooth Transmitting (NEB215)

Equipment Level: Class B

Results: Pass

Please refer to following diagram for individual



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1578	39.24	9.78	49.02	65.58	-16.56	QP	Р
2	0.1578	17.80	9.78	27.58	55.58	-28.00	AVG	Р
3	0.1812	36.89	9.76	46.65	64.43	-17.78	QP	Р
4	0.1812	14.40	9.76	24.16	54.43	-30.27	AVG	Р
5	0.2397	33.15	9.75	42.90	62.11	-19.21	QP	Р
6	0.2397	9.51	9.75	19.26	52.11	-32.85	AVG	Р
7	0.2943	30.36	9.76	40.12	60.40	-20.28	QP	Р
8	0.2943	9.35	9.76	19.11	50.40	-31.29	AVG	Р
9	16.2288	33.13	10.45	43.58	60.00	-16.42	QP	Р
10	16.2288	31.01	10.45	41.46	50.00	-8.54	AVG	Р
11	21.1311	32.03	10.75	42.78	60.00	-17.22	QP	Р
12	21.1311	31.90	10.75	42.65	50.00	-7.35	AVG	Р

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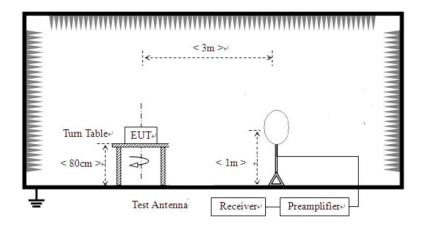
6 Radiated Emission Test

6.1 Test Method and test Procedure:

- (1) The EUT was tested according to ANSI C63.10-2013. The radiated test was performed at Timeway EMC Laboratory. This site is on file with the FCC laboratory division, Registration No. 744189
- (2) The EUT, peripherals were put on the turntable which table size is 1m x 1.5 m, table high 0.8 m. All set up is according to ANSI C63.10-2013.
- (3) The frequency spectrum from 30 MHz to 25GHz was investigated. All readings from 30 MHz to 1 GHz are quasi-peak values with a resolution bandwidth of 120 kHz. For measurement above 1GHz, peak values with RBW=VBW=1MHz and PK detector. AV value with RBW=1MHz, VBW=10Hz and PK detector. Measurements were made at 3 meters.
- (4) The antenna high is varied from 1 m to 4 m high to find the maximum emission for each frequency.
- (5) Maximizing procedure was performed on the six (6) highest emissions to ensure EUT compliance is with all installation combinations. All data was recorded in the peak detection mode. Quasi-peak readings was performed only when an emission was found to be marginal (within -4 dB of specification limit), and are distinguished with a "QP" in the data table.
- (6) The antenna polarization: Vertical polarization and Horizontal polarization.

Block diagram of Test setup

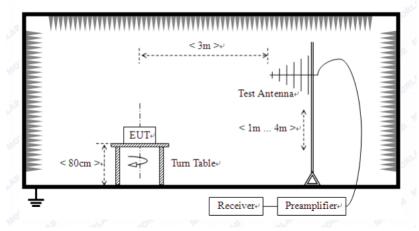
For radiated emissions from 9kHz to 30MHz



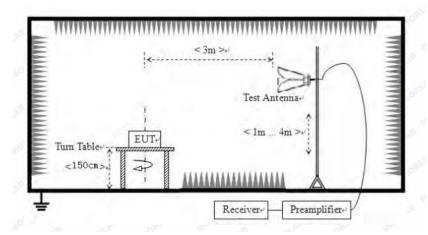
Date: 2020-12-15



For radiated emissions from 30MHz to1GHz



For radiated emissions above 1GHz



- 6.2 Configuration of The EUT
 Same as section 5.3 of this report
- 6.3 EUT Operating Condition

 Same as section 5.4 of this report.
- 6.4 Radiated Emission Limit

All emission from a digital device, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strength specified below:

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Frequencies in restricted band are complied to limit on Paragraph 15.2090

	•	8 1
Frequency Range (MHz)	Distance (m)	Field strength (dB μ V/m)
30-88	3	40.0
88-216	3	43.5
216-960	3	46.0
Above 960	3	54.0

Note:

- 1. RF Voltage $(dBuV) = 20 \log RF \text{ Voltage } (uV)$
- 2. In the Above Table, the higher limit applies at the band edges.
- 3. Distance refers to the distance in meters between the measuring instrument antenna and the EUT
- 4. 8DPSK was the worse case because it has highest output power

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Test result

General Radiated Emission Data and Harmonics Radiated Emission Data

Radiated Emission In Horizontal/Vertical (30MHz----1000MHz)

EUT set Condition: Keep Bluetooth Transmitting

Results: Pass

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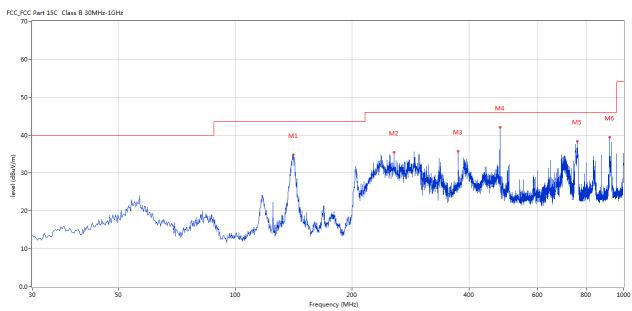
Report No.: TW2011121-02E

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Test Figure: for model NEB215

H



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	141.280	34.79	-17.27	43.5	-8.71	Peak	38.00	200	Horizontal	Pass
2	256.196	35.51	-12.04	46.0	-10.49	Peak	312.00	100	Horizontal	Pass
3	374.991	35.76	-9.44	46.0	-10.24	Peak	360.00	200	Horizontal	Pass
4	479.968	42.03	-7.40	46.0	-3.97	Peak	214.00	100	Horizontal	Pass
5	759.500	38.39	-3.27	46.0	-7.61	Peak	95.00	100	Horizontal	Pass
6	919.510	39.42	-1.84	46.0	-6.58	Peak	307.00	100	Horizontal	Pass

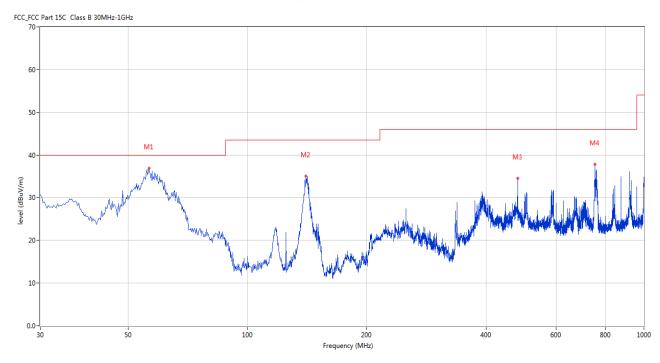
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Test Figure: for model NEB215

V



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	56.426	36.87	-12.15	40.0	-3.13	Peak	99.00	100	Vertical	Pass
2	140.310	35.07	-17.22	43.5	-8.43	Peak	34.00	100	Vertical	Pass
3	479.968	34.58	-7.40	46.0	-11.42	Peak	17.00	200	Vertical	Pass
4	751.500	37.85	-3.48	46.0	-8.15	Peak	360.00	200	Vertical	Pass

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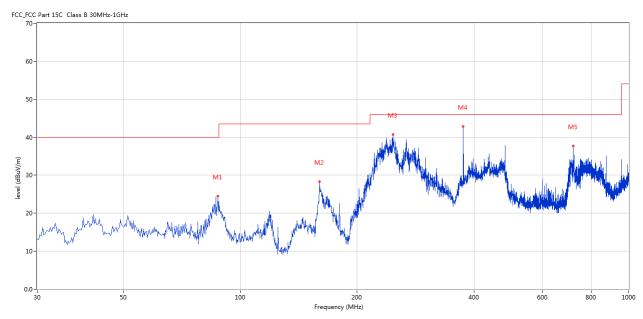
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Test Figure: for model NEB156

H



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	87.458	24.51	-15.72	40.0	-15.49	Peak	109.00	100	Horizontal	Pass
2	159.948	28.38	-16.36	43.5	-15.12	Peak	289.00	100	Horizontal	Pass
3	247.226	40.70	-12.10	46.0	-5.30	Peak	248.00	100	Horizontal	Pass
4	374.991	42.90	-9.44	46.0	-3.10	Peak	3.00	100	Horizontal	Pass
5	719.983	37.75	-4.06	46.0	-8.25	Peak	360.00	100	Horizontal	Pass

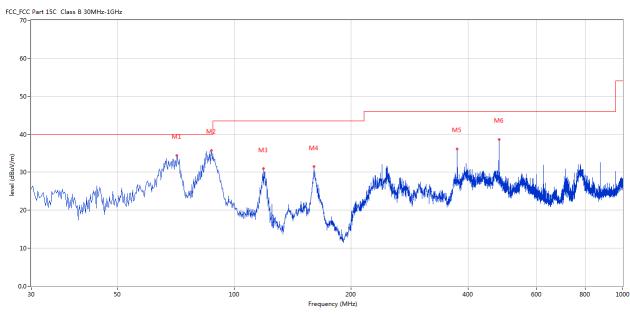
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Test Figure: for model NEB215

V



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	71.215	34.36	-16.18	40.0	-5.64	Peak	180.00	200	Vertical	Pass
2	87.216	35.73	-15.78	40.0	-4.27	Peak	177.00	100	Vertical	Pass
3	118.975	30.92	-15.06	43.5	-12.58	Peak	106.00	100	Vertical	Pass
4	160.432	31.45	-16.32	43.5	-12.05	Peak	352.00	100	Vertical	Pass
5	374.991	36.08	-9.44	46.0	-9.92	Peak	117.00	100	Vertical	Pass
6	479.968	38.63	-7.40	46.0	-7.37	Peak	159.00	100	Vertical	Pass

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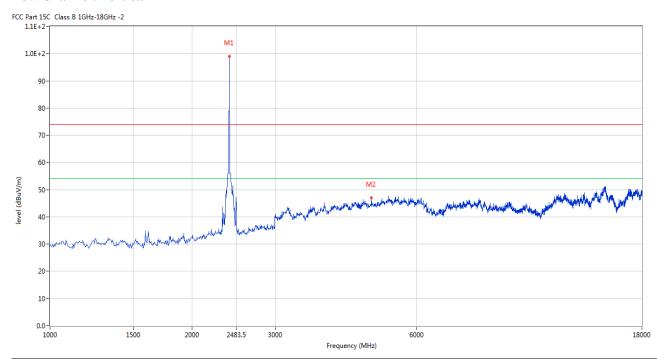


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Test Figures above 1GHz:

Please refer to the following test plots for details:

Low Channel: Vertical



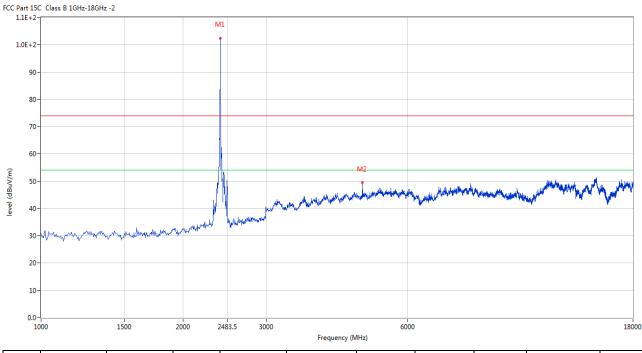
No.	Frequency	Results	Factor (dB)	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)		(dBuV/m)	(dB)		(o)	(cm)		
2	4803.750	45.11	3.13	54.0	-8.89	Peak	242.00	100	Vertical	Pass

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Low Channel: Horizontal



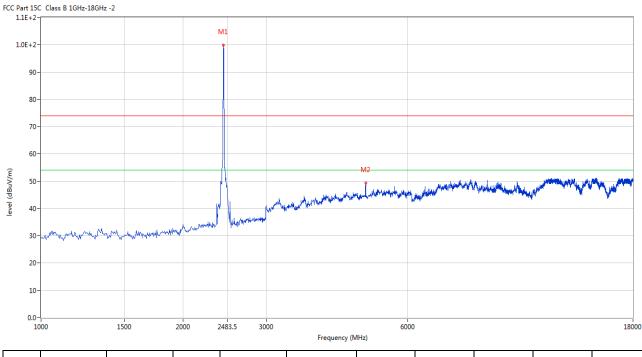
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
2	4803.750	49.61	3.13	54.0	-4.39	Peak	313.00	100	Horizontal	Pass

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Middle Channel: Vertical



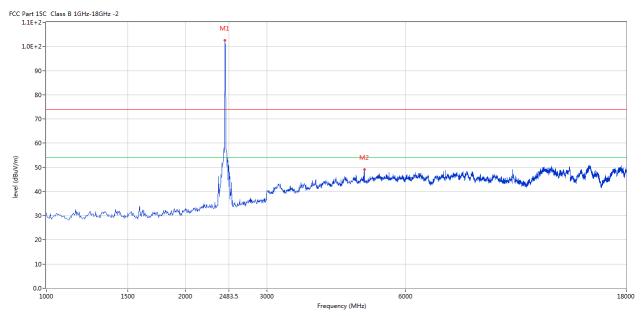
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
2	4880.250	49.26	3.20	54.0	-4.74	Peak	169.00	100	Vertical	Pass

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Middle Channel: Horizontal



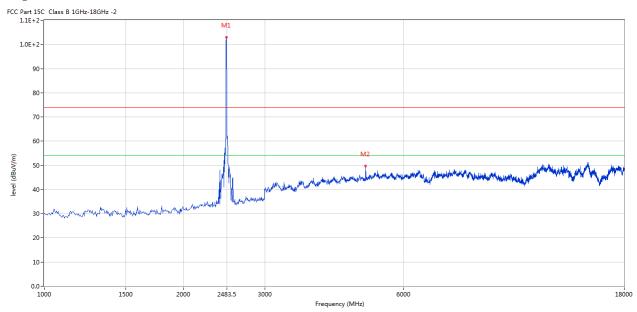
	No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
		(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
-	2	4880.250	49.07	3.20	54.0	-4.93	Peak	325.00	100	Horizontal	Pass

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High Channel: Horizontal



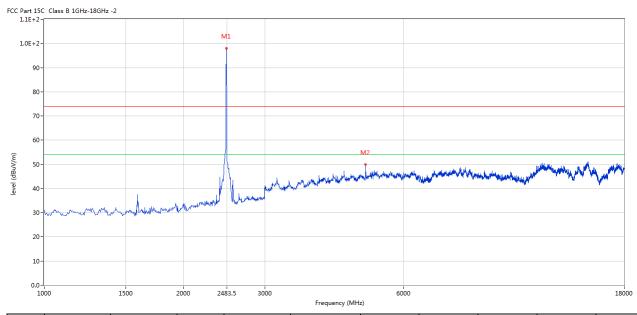
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
2	4956.750	49.67	3.35	54.0	-4.33	Peak	72.00	100	Horizontal	Pass

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High Channel: Vertical



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	2479.000	99.01	-3.57	74.0	25.01	Peak	127.00	100	Vertical	N/A
2	4956.750	50.06	3.35	74.0	-23.94	Peak	96.00	100	Vertical	Pass

Note: 1. Level = Reading + AF + Cable - Preamp

- 2. For the radiated emissions above 18G and below 30MHz, it is the floor noise.
- 3. The measured PK value less than the AV limit, no necessary to take down the AV measurement result.

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7.0 20dB Bandwidth Measurement

7.1 Regulation

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.

7.2 Limits of 20dB Bandwidth Measurement

N/A

7.3 Test Procedure.

- 1. Check the calibration of the measuring instrument (spectrum analyzer) using either an internal calibrator or a known signal from an external generator.
- 2. Set the spectrum analyzer as follows: Span =3MHz, RBW =30 kHz, VBW=100 kHz, Sweep = auto Detector function = peak, Trace = max hold
- 3. Measure the highest amplitude appearing on spectral display and record the level to calculate results. 6. Repeat above procedures until all frequencies measured were complete.

7.4 Test Result

Type of Modulation: GFSK

-, F · · · · · · · · · · · · · · · · · ·						
EUT	Comm	ercial Kiosk Tablet	Model	NEB215		
Mode	Ke	ep Transmitting	Input Voltage	120V~		
Temperat	ure	24 deg. C,	Humidity	56% RH		
Channel	Channel Frequency (MHz)	20 dB Bandwidth (kHz)	Minimum Limit (kHz)	Pass/ Fail		
Low	2402	842		Pass		
Middle	2441	842		Pass		
High	2480	842		Pass		

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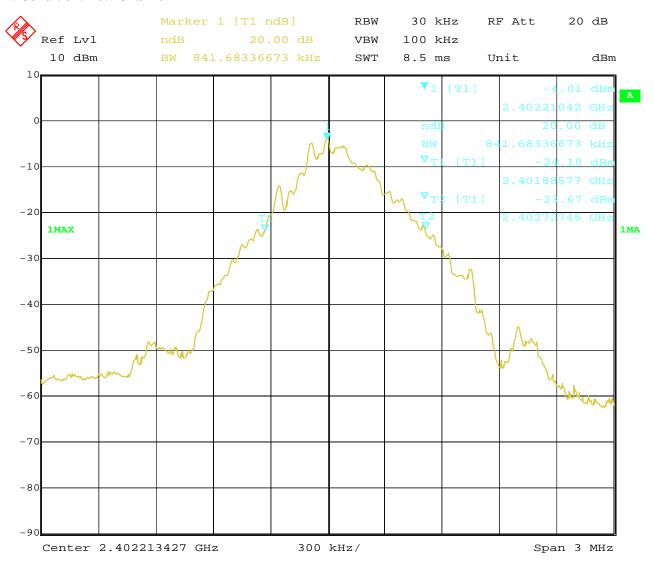
Report No.: TW2011121-02E

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Test Figure:

1. Condition: Low Channel



8.DEC.2020 10:24:04

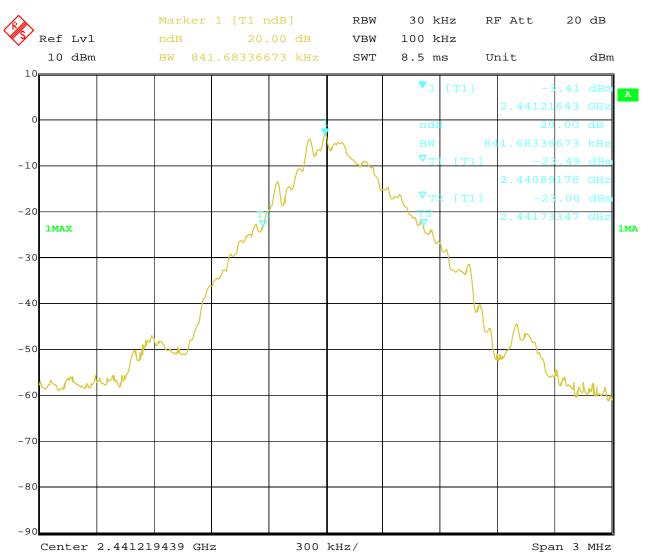
Date:

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2. Condition: Middle Channel



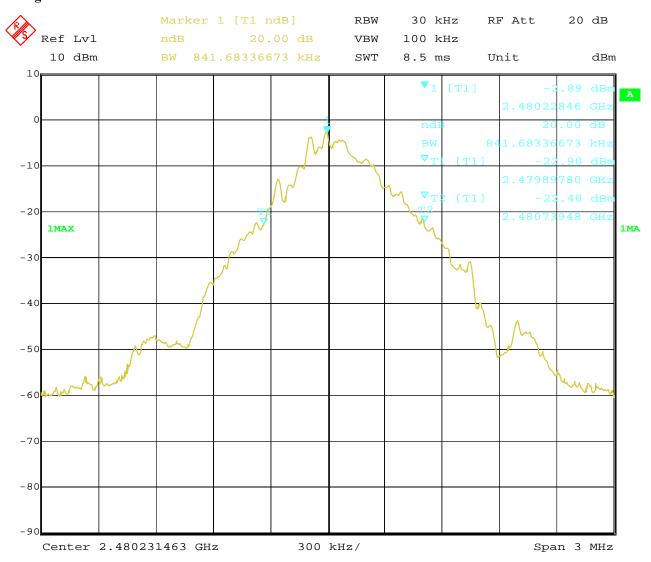
8.DEC.2020 10:46:31 Date:

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3. High Channel



8.DEC.2020 10:53:30 Date:

Date: 2020-12-15



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Test Result

Type of Modulation: $\sqrt{1/4}$ DQPSK

EUT	Comr	nercial Kiosk Tablet	Model	NEB215	
Mode	Ke	eep Transmitting	Input Voltage	120V~	
Temperat	ure	24 deg. C,		56% RH	
Channel	Channel Frequency (MHz)	20 dB Bandwidth (kHz)	Maximum Limit (kHz)	Pass/ Fail	
Low	2402	1281		Pass	
Middle	2441	1275		Pass	
High 2480		1281	-	Pass	

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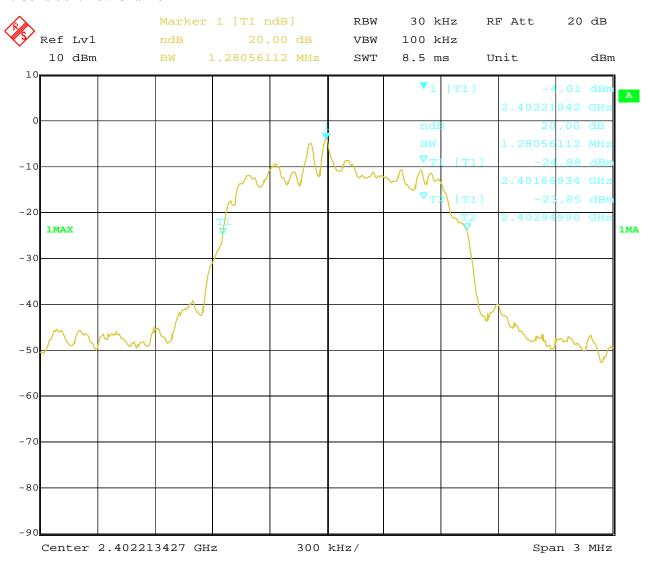
Report No.: TW2011121-02E

Date: 2020-12-15



Test Figure:

1. Condition: Low Channel

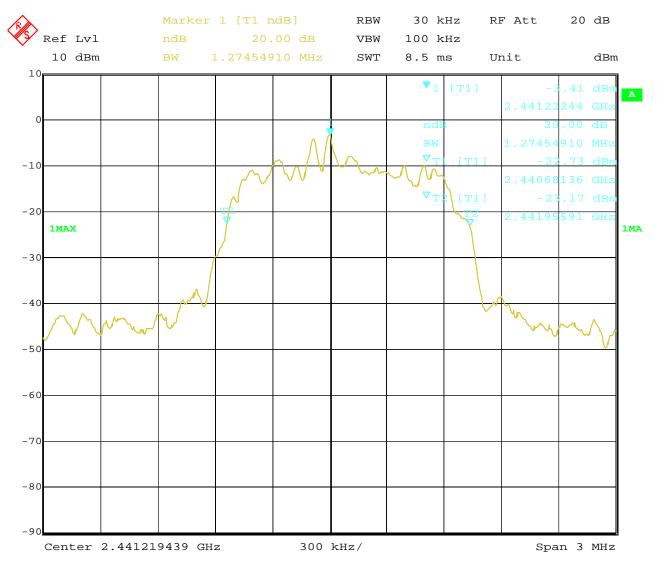


Date: 8.DEC.2020 10:27:21 Report No.: TW2011121-02E Page 34 of 78

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2. Condition: Middle Channel



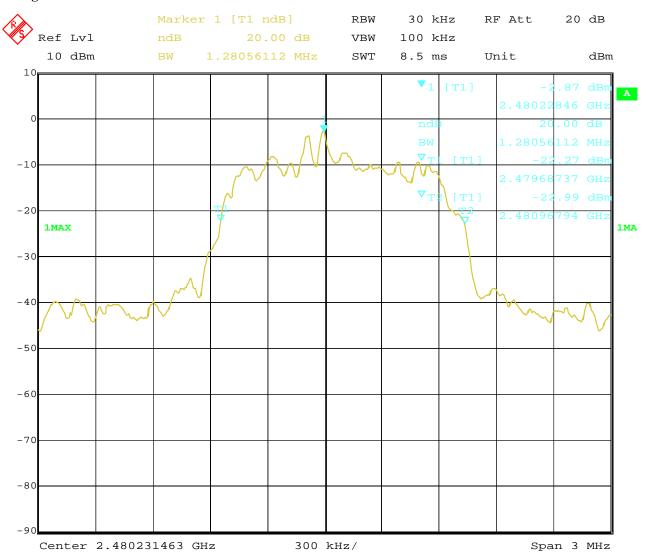
8.DEC.2020 10:45:10 Date:

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3. High Channel



8.DEC.2020 11:19:26 Date:

Date: 2020-12-15



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Test Result

Type of Modulation: 8DPSK

EUT	Comr	nercial Kiosk Tablet	Model	NEB215	
Mode	Ke	eep Transmitting	Input Voltage	120V~	
Temperat	ure	24 deg. C,	Humidity	56% RH	
Channel	Channel Frequency (MHz)	20 dB Bandwidth (kHz)	Maximum Limit (kHz)	Pass/ Fail	
Low	2402	1244		Pass	
Middle	2441	1244		Pass	
High	2480	1238		Pass	

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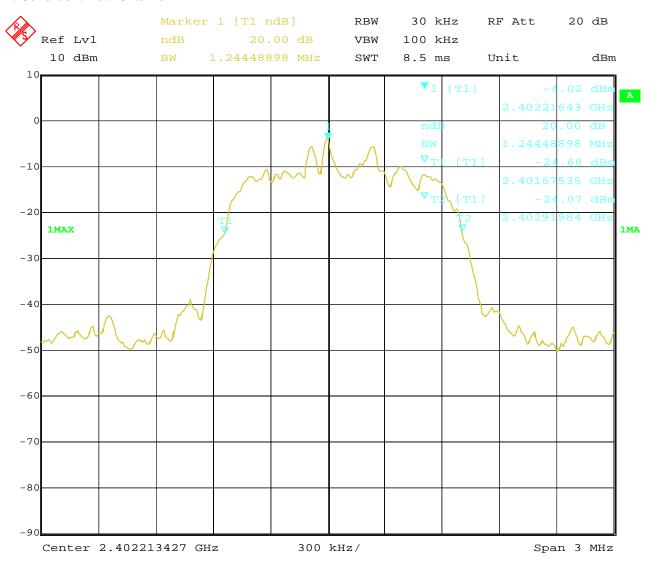
Report No.: TW2011121-02E

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Test Figure:

1. Condition: Low Channel



Date: 8.DEC.2020 10:36:15

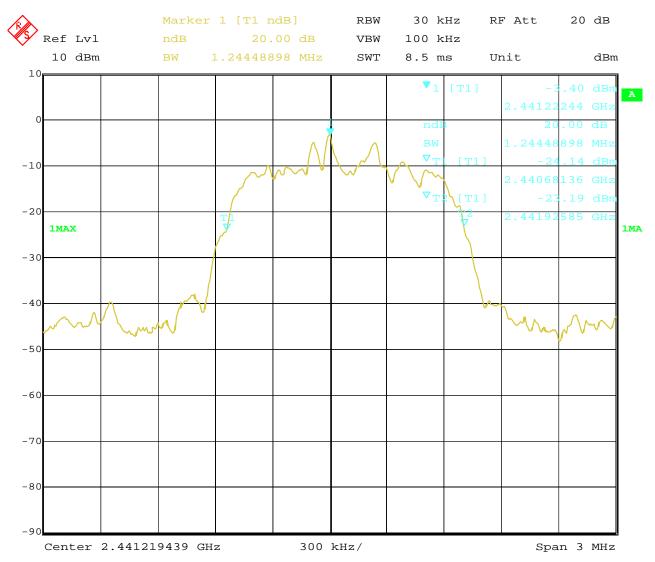
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2. Condition: Middle Channel



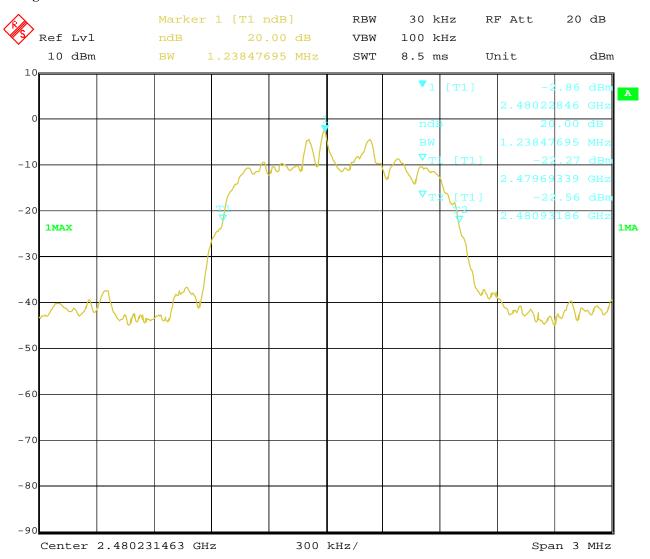
8.DEC.2020 10:40:52 Date:

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3. High Channel



8.DEC.2020 11:28:28 Date:

Date: 2020-12-15



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8. Maximum Output Power

8.1 Regulation

According to §15.247(b)(1), 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 2400-2483.5MHz band:0.125 watts. According to §15.247(b)(4), the conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

8.2 Limits of Maximum Output Power

The Maximum Output Power Measurement is 30dBm.

8.3 Test Procedure

- 1. Check the calibration of the measuring instrument (spectrum analyzer) using either an internal calibrator or a known signal from an external generator.
- 2. Set the spectrum analyzer as follows: Span = approximately 5 times the 20 dB bandwidth, centered on a hopping channel; RBW > the 20 dB bandwidth of the emission being measured; VBW = 10MHz, RBW=3MHz; Sweep = 60s; Detector function = PK; Trace = max hold
- 3. Measure the highest amplitude appearing on spectral display and record the level to calculate results.
- 4. Repeat above procedures until all frequencies measured were complete.

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8.4Test Results

Type of Modulation: GFSK

EUT	Comi	Commercial Kiosk Tablet		Model	NEB215
Mode	K	eep Transmitting	Input Voltage		120V~
Temperature	е	24 deg. C, Humio		dity	56% RH
Channel	Channel Frequency (MHz)	Max. Power Output (dBm	Max. Power Output (dBm)		Pass/ Fail
Low	2402	-2.70		30	Pass
Middle	2441	-2.11		30	Pass
High	2480	-1.55		30	Pass

Note: 1. the result basic equation calculation as follow:

Max. Power Output = Power Reading + Cable loss + Attenuator

- 2. The worse case was recorded
- 3. The Peak power was measured

EUT		Commercial Kiosk Tablet		Model		NEB215
Mode		Ke	ep Transmitting	Input Voltage		120V~
Temperature	;		24 deg. C,	Humi	idity	56% RH
Channel	Channel Channel Frequency (MHz) Max. Power Output (do Peak		Max. Power Output (dBm)	Peak Power	Pass/ Fail
			Peak		Limit (dBm)	
Low	240	02	0.30		30	Pass
Middle	244	41	1.09		30	Pass
High	248	80	1.77		30	Pass

Note: 1. the result basic equation calculation as follow:

Max. Power Output = Power Reading + Cable loss + Attenuator

- 2. The worse case was recorded
- 3. The Peak power was measured

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Type of Modulation: 8DPSK

EUT	Comm	Commercial Kiosk Tablet		Model	NEB215
Mode	Ke	ep Transmitting	Inpu	ıt Voltage	120V~
Temperature		24 deg. C, Humidity		umidity	56% RH
Channel	Channel Frequency (MHz)	Max. Power Output (dBm	Max. Power Output (dBm) Peak		Pass/ Fail
Low	2402	0.96		30	Pass
Middle	2441	1.77		30	Pass
High	2480	2.47		30	Pass

Note: 1. the result basic equation calculation as follow:

Max. Power Output = Power Reading + Cable loss + Attenuator

- 2. The worse case was recorded
- 3. The Peak power was measured

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9. Carrier Frequency Separation

9.1 Regulation

According to §15.247(a)(1), 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.

9.2 Limits of Carrier Frequency Separation

The Maximum Power Spectral Density Measurement is 25kHz or two-thirds of the 20dB bandwidth of the hopping Channel which is great.

9.3 Test Procedure

- 1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- 2. Set the spectrum analyzer as follows: Span = wide enough to capture the peaks of two adjacent channels: Resolution (or IF) Bandwidth (RBW) \geq 1% of the span; Video (or Average) Bandwidth (VBW) \geq RBW; Sweep = auto; Detector function = peak; Trace = max hold
- 3. Measure the separation between the peaks of the adjacent channels using the marker-delta function.
- 4. Repeat above procedures until all frequencies measured were complete.

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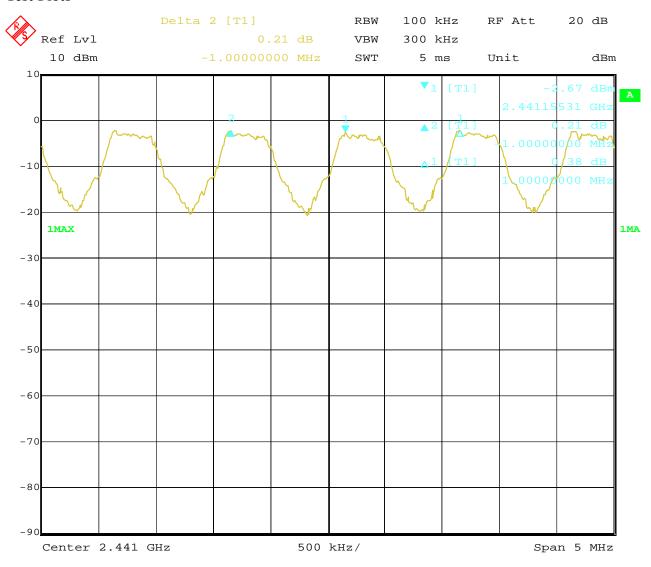


9.4Test Result

Type of Modulation: GFSK

EUT	Commercial Kios	Model		NEB215	
Mode	Hopping O	Input Voltage		120V~	
Temperature	24 deg. C,		Humidity	56% RH	
Carrier I	rier Frequency Separation		Limit		Pass/ Fail
	1.000MHz	≥ 25 kHz or 2/3	of the 20 dB ban	dwidth	Pass

Test Plots



7.DEC.2020 15:23:50 Date:

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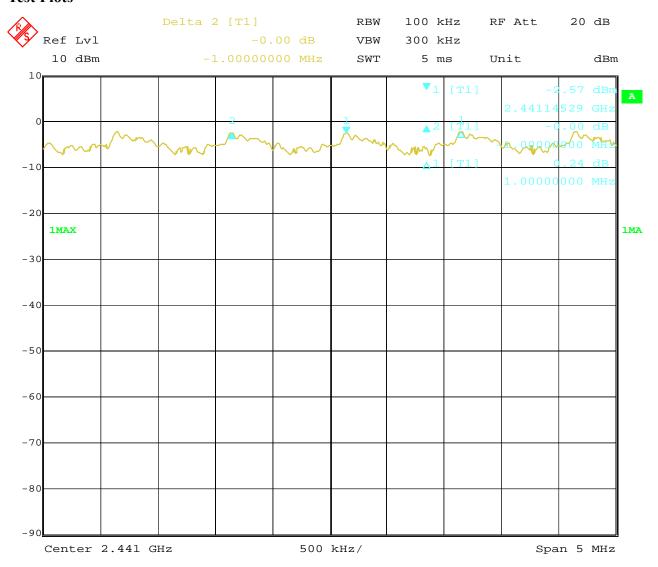
Date: 2020-12-15



Type of Modulation: Л/4DQPSK

EUT	Commercial Kiosl	Model		NEB215	
Mode	Hopping O	Input Voltage		120V~	
Temperature	24 deg. C,		Humidity	56% RH	
Carrier I	Frequency Separation		Limit		Pass/ Fail
1.000MHz		≥ 25 kHz or 2	2/3 of 20 dB bandy	width	Pass

Test Plots



7.DEC.2020 15:58:14

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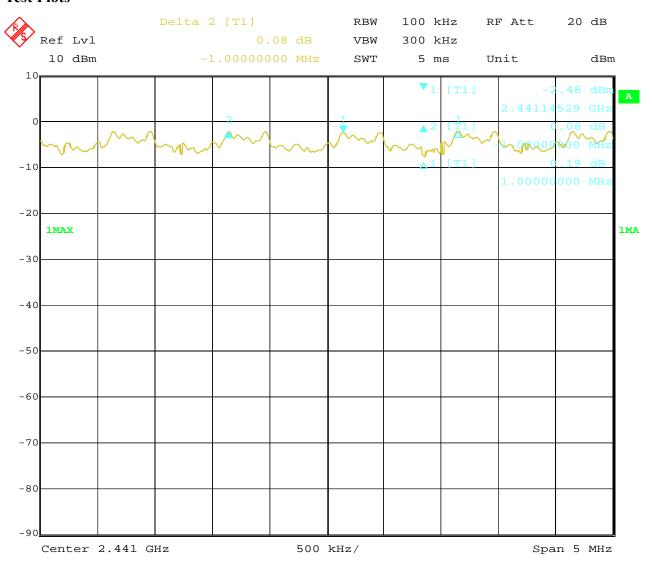
Date: 2020-12-15



Type of Modulation: 8DPSK

EUT	Commercial Kios	Model		NEB215	
Mode	Hopping On In		Input Voltage	120V~	
Temperature	24 deg. C,		Humidity	56% RH	
Carrier I	Frequency Separation		Limit		Pass/ Fail
1.000MHz		≥ 25 kHz or 2	/3 of 20 dB bands	vidth	Pass

Test Plots



7.DEC.2020 17:44:55 Date:

Date: 2020-12-15



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10. Number of Hopping Channels

10.1 Regulation

According to §15.247(a)(1)(iii), frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels. 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. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used. According to §15.247(b)(1), 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.

10.2 Limits of Number of Hopping Channels

The frequency hopping systems in the 2400-2483.5MHz band shall use at least 15 channels.

10.3 Test Procedure

- 1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- 2. Set the spectrum analyzer as follows: Span = the frequency band of operation; RBW=100 kHz, VBW=300 kHz; Sweep = auto; Detector function = peak; Trace = max hold
- 3. Record the number of hopping channels.

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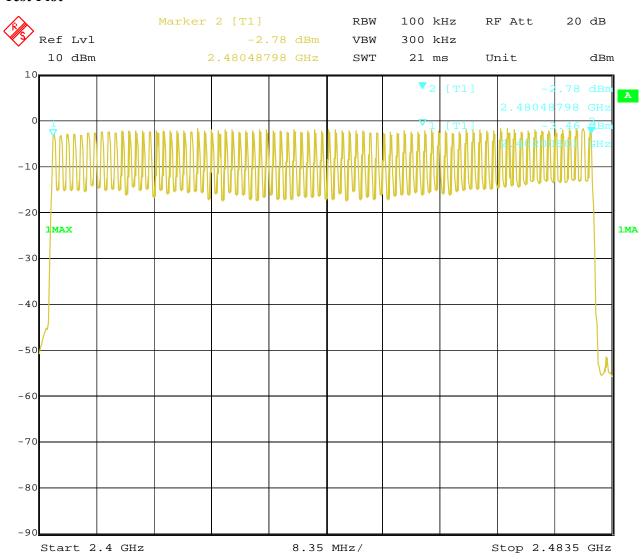


10.4Test Result

Type of Modulation: GFSK

EUT	Commercial Kiosk Tablet		Model		NEB215	
Mode	Hopping On		Input Voltage	120V~		
Temperature	2	24 deg. C,	Humidity	56% RH		
Operating Frequency Number of		Number of hopp	ping channels	Limit	Pass/ Fail	
2402-2480MHz		79		≥ 15	Pass	

Test Plot



Date: 7.DEC.2020 15:08:23

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Report No.: TW2011121-02E

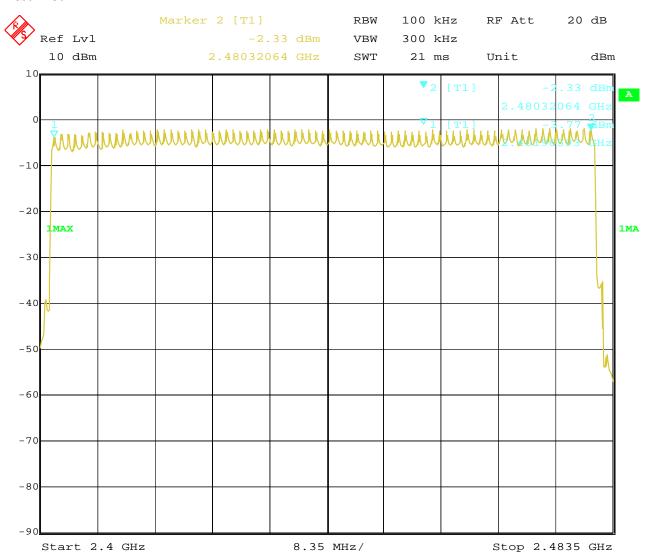
Date: 2020-12-15



Type of Modulation: $\sqrt{J/4DQPSK}$

EUT	Commercial Kiosk Tablet		Model	NEB215
Mode	Hopping On		Input Voltage	120V~
Temperature	24 deg. C,		Humidity	56% RH
Operating Frequency		Number of hopping channels	Limit	Pass/ Fail
2402-2480MHz		79	≥ 15	Pass

Test Plot



7.DEC.2020

Date:

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16:52:11

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Report No.: TW2011121-02E

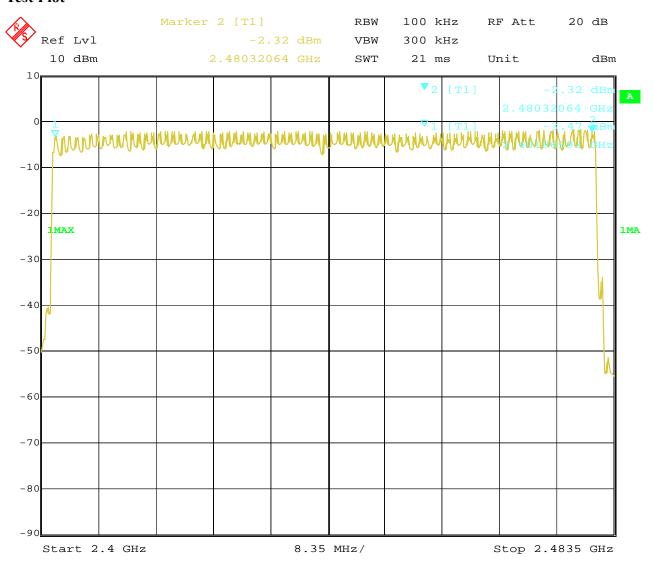
Date: 2020-12-15



Type of Modulation: 8DPSK

EUT	Commercial Kiosk Tablet		M	odel		NEB215	
Mode	Hopping On		Input	Voltage		120V~	
Temperature	24 deg. C,		Humi	dity		56% RH	
Operating Frequency		Number of hopping channels	ng	Liı	mit	Pass/ Fail	
2402-2480MHz		79		>	15	Pass	

Test Plot



7.DEC.2020 17:00:26

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Date: 2020-12-15



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11. Time of Occupancy (Dwell Time)

11.1 Regulation

According to §15.247(a)(1)(iii), frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels. 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. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

11.2 Limits of Carrier Frequency Separation

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

11.3 Test Procedure

- 1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- 2. Set the spectrum analyzer as follows: Span = zero span, centered on a hopping channel; RBW = 1 MHz; VBW \geq RBW; Sweep = as necessary to capture the entire dwell time per hopping channel; Detector function = peak; Trace = max hold
- 3. Measure the dwell time using the marker-delta function.
- 4. Repeat above procedures until all frequencies measured were complete.
- 5. Repeat this test for different modes of operation (e.g., data rate, modulation format, etc.), if applicable.

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11.4 Test Result

Type of Modulation: GFSK

EUT	CUT Commercial Kiosk Tablet Mo		Model	1	NEB215	
Mode	Keep Tı	ransmitting	Input Voltage		120V~	
Temperatur	re 24 c	leg. C,	Humidity	5	66% RH	
Channel	Reading	Hoping	g Rate	Actual	Limit	
	DH5					
Middle	2.946ms	266.66	7 hop/s	0.315s	0.4s	

Actual = Reading × (Hopping rate / Number of channels) × Test period, Test period = 0.4 [seconds / channel] × 79 [channel] = 31.6 [seconds] NOTE: The EUT makes worst case 1600 hops per second or 1 time slot has a length of $625\mu s$ with 79 channels.

A DH5 Packet needs 5 time slot for transmitting and 1 time slot for receiving. Then the EUT makes worst case 266.667 hops per second with 79 channels.

A DH3 Packet needs 3 time slot for transmitting and 1 time slot for receiving. Then the EUT makes worst case 400 hops per second with 79 channels.

A DH1 Packet needs 1 time slot for transmitting and 1 time slot for receiving. Then the EUT makes worst case 800 hops per second with 79 channels.

Note: DH5 was the worst case.

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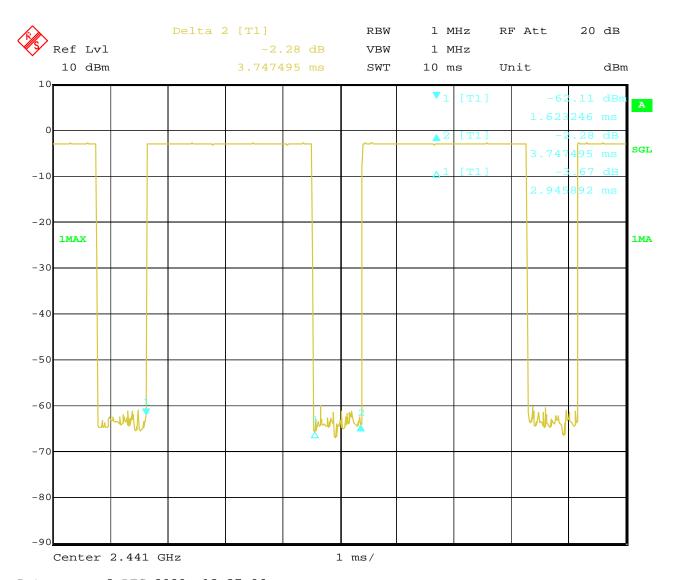
Report No.: TW2011121-02E

Date: 2020-12-15



Test Plots:

DH5



8.DEC.2020 13:37:06 Date:

Date: 2020-12-15



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Test Result

Type of Modulation: JI/4DQPSK

EUT	Commercia	l Kiosk Tablet	Model	N	NEB215	
Mode	Keep Tr	ansmitting	Input Voltage 120V~		120V~	
Temperatur	e 24 d	leg. C,	Humidity	5	56% RH	
Channel	Reading	Hoping	g Rate	Actual	Limit	
	DH5					
Middle	2.946ms	266.667 hop/s		0.315s	0.4s	

Actual = Reading \times (Hopping rate / Number of channels) \times Test period, Test period = 0.4 [seconds / channel] \times 79 [channel] = 31.6 [seconds] NOTE: The EUT makes worst case 1600 hops per second or 1 time slot has a length of 625 μ s with 79 channels.

A DH5 Packet needs 5 time slot for transmitting and 1 time slot for receiving. Then the EUT makes worst case 266.667 hops per second with 79 channels.

A DH3 Packet needs 3 time slot for transmitting and 1 time slot for receiving. Then the EUT makes worst case 400 hops per second with 79 channels.

A DH1 Packet needs 1 time slot for transmitting and 1 time slot for receiving. Then the EUT makes worst case 800 hops per second with 79 channels.

Note: 2DH5 was the worst case.

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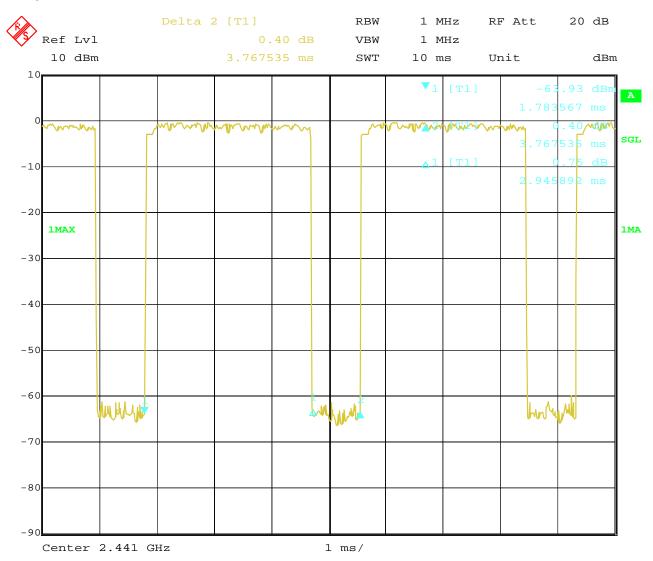
Report No.: TW2011121-02E

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Test Plots:

2DH5



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Type of Modulation: 8DPSK

EUT	Commercial Kiosk Tablet		Model	1	NEB215	
Mode	Keep Tra	ansmitting	Input Voltage	120V~		
Temperature	e 24 d	eg. C,	Humidity	5	56% RH	
Channel	Reading	Hoping	g Rate	Actual	Limit	
	DH5					
Middle	2.946ms	266.66	7 hop/s	0.315s	0.4s	

Actual = Reading \times (Hopping rate / Number of channels) \times Test period, Test period = 0.4 [seconds / channel] \times 79 [channel] = 31.6 [seconds] NOTE: The EUT makes worst case 1600 hops per second or 1 time slot has a length of 625 μ s with 79 channels.

A DH5 Packet needs 5 time slot for transmitting and 1 time slot for receiving. Then the EUT makes worst case 266.667 hops per second with 79 channels.

A DH3 Packet needs 3 time slot for transmitting and 1 time slot for receiving. Then the EUT makes worst case 400 hops per second with 79 channels.

A DH1 Packet needs 1 time slot for transmitting and 1 time slot for receiving. Then the EUT makes worst case 800 hops per second with 79 channels.

Note: 3DH5 was the worst case.

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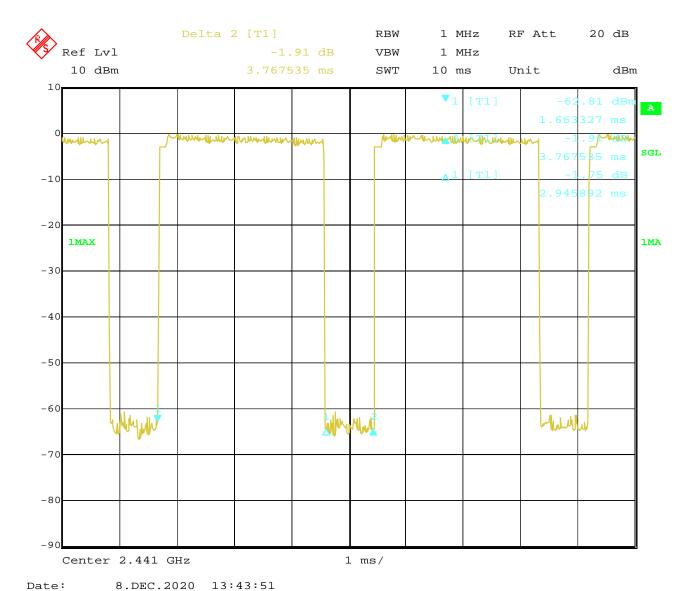
Report No.: TW2011121-02E

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Test Plots:

3DH5



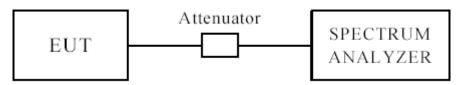
Report No.: TW2011121-02E Page 58 of 78

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12 Out of Band Measurement

12.1 Test Setup



The restricted band requirement based on radiated emission test; please see the clause 6 for the test setup

12.2 Limits of Out of Band Emissions Measurement

- 1. Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).
- 2. Fall in the restricted bands listed in section 15.205. The maximum permitted average field strength is listed in section 15.209.

12.3 Test Procedure

For signals in the restricted bands above and below the 2.4-2.483GHz allocated band a measurement was made of radiated emission test. Peak values with RBW=VBW=1MHz and PK detector.

For bandage test, the spectrum set as follows: RBW=100 kHz, VBW=300 kHz. A conducted measurement used

Note: 1. For band-edge measurement, the frequency from 30MHz-25GHz was tested. And It met the FCC rule.

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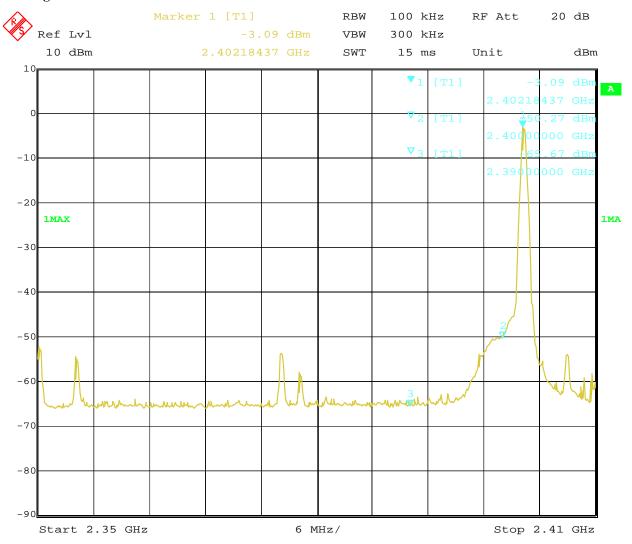


Type of Modulation: GFSK

Band Edge Test Result 12.4

Product:	Commercial Kiosk Tablet	Test Mode:	Low Channel
Mode	Keeping Transmitting	Input Voltage	120V~
Temperature	24 deg. C	Humidity	56% RH
Test Result:	Pass	Detector	PK

Test Figure:



Date: 8.DEC.2020 10:06:52

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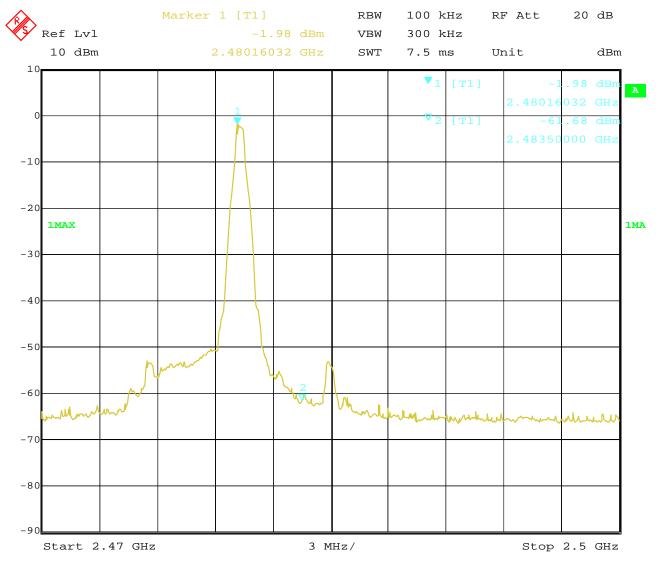


Type of Modulation: GFSK

Band Edge Test Result 12.4

Product:	Commercial Kiosk Tablet	Test Mode:	High Channel
Mode	Keeping Transmitting	Input Voltage	120V~
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK

Test Figure:



8.DEC.2020 Date: 10:01:00

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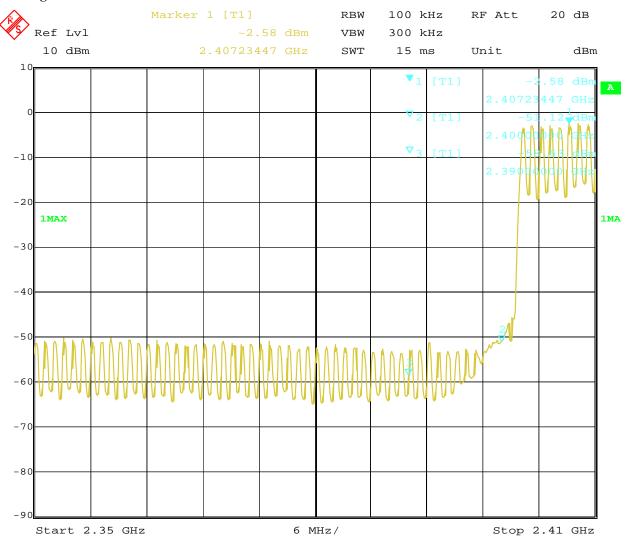


Type of Modulation: GFSK

Band Edge Test Result

Product:	Commercial Kiosk Tablet	Test Mode:	Hopping mode
Mode	Hopping On	Input Voltage	120V~
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK

Test Figure:



Date: 8.DEC.2020 09:39:54

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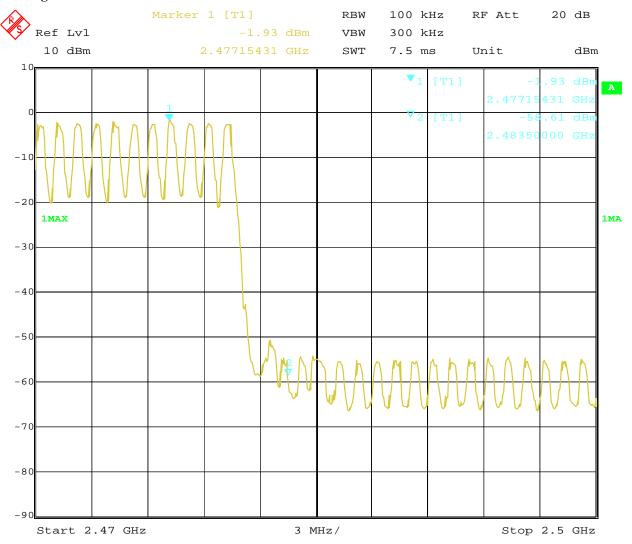


Type of Modulation: GFSK

Band Edge Test Result

Product:	Commercial Kiosk Tablet	Test Mode:	Hopping mode
Mode	Hopping On	Input Voltage	120V~
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK

Test Figure:



Date: 8.DEC.2020 09:43:24

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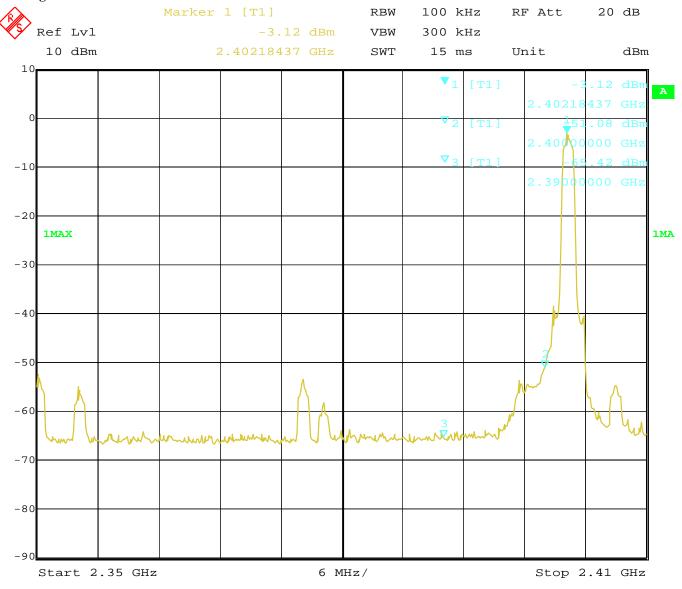


Type of Modulation: Л/4DQPSK

12.4 Out of Band Test Result

Product:	Commercial Kiosk Tablet	Test Mode:	Low Channel
Mode	Keeping Transmitting	Input Voltage	120V~
Temperature	24 deg. C	Humidity	56% RH
Test Result:	Pass	Detector	PK

Test Figure:



Date: 8.DEC.2020 10:08:39

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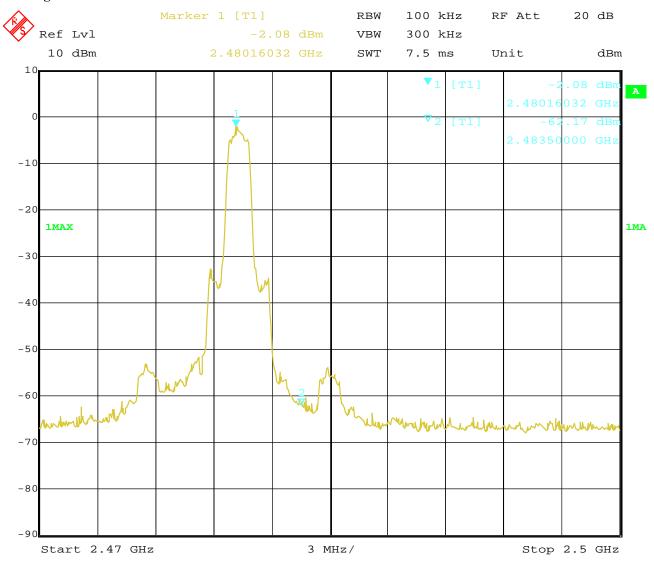


Type of Modulation: Л/4DQPSK

Band Edge Test Result 12.4

Product:	Commercial Kiosk Tablet	Test Mode:	High Channel
Mode	Keeping Transmitting	Input Voltage	120V~
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK

Test Figure:



Date: 8.DEC.2020 09:56:40

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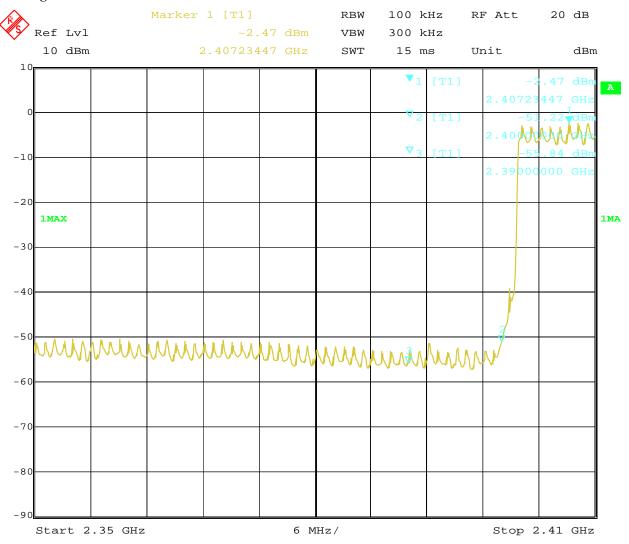


Type of Modulation: Л/4DQPSK

Out of Band Test Result

Product:	Commercial Kiosk Tablet	Test Mode:	Hopping mode
Mode	Hopping On	Input Voltage	120V~
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK

Test Figure:



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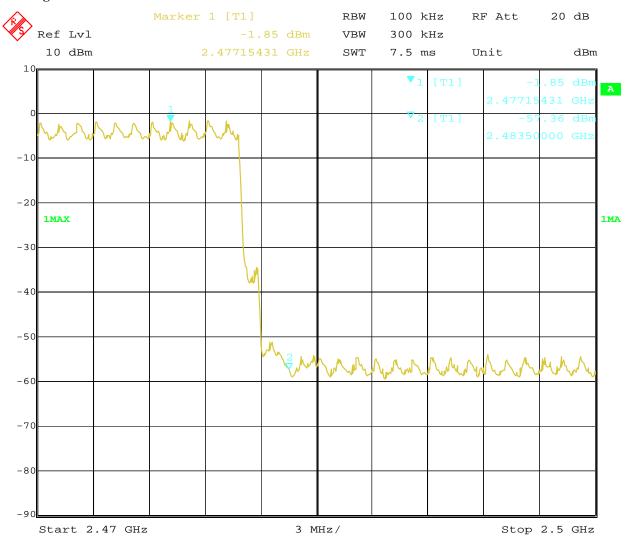


Type of Modulation: Л/4DQPSK

Out of Band Test Result

Product:	Commercial Kiosk Tablet	Test Mode:	Hopping mode
Mode	Hopping On	Input Voltage	120V~
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK

Test Figure:



Date: 8.DEC.2020 09:55:33

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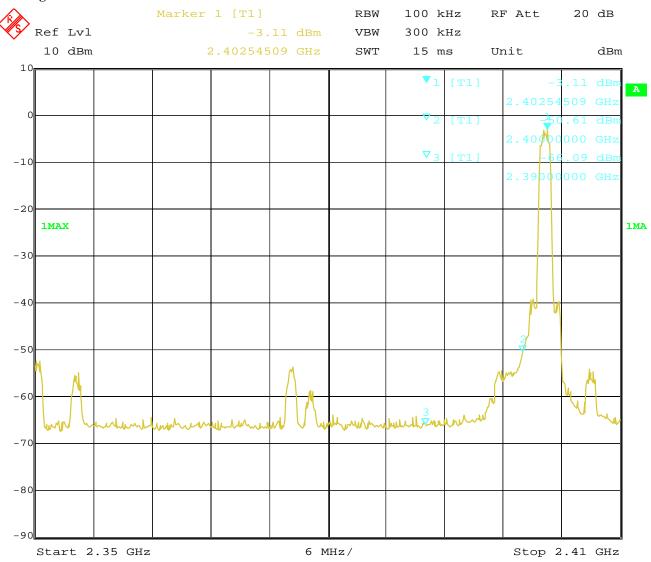


Type of Modulation: 8DPSK

12.4 Band Edge Test Result

Product:	Commercial Kiosk Tablet	Test Mode:	Low Channel
Mode	Keeping Transmitting	Input Voltage	120V~
Temperature	24 deg. C	Humidity	56% RH
Test Result:	Pass	Detector	PK

Test Figure:



8.DEC.2020 10:10:44 Date:

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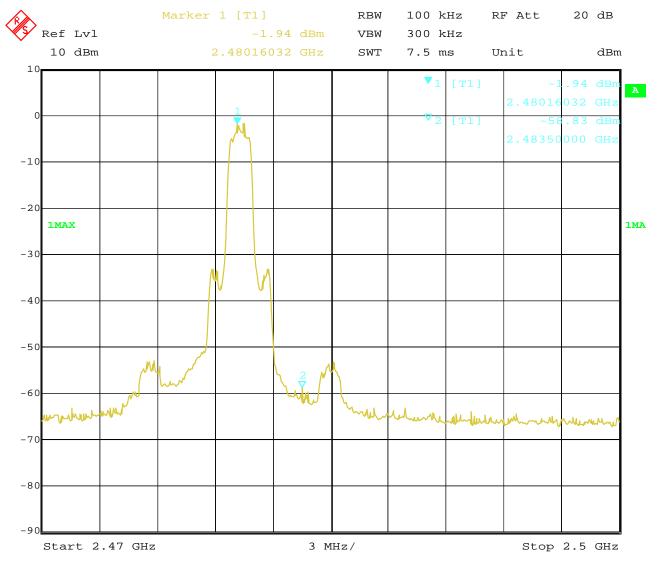


Type of Modulation: 8DPSK

Band Edge Test Result 12.4

Product:	Commercial Kiosk Tablet	Test Mode:	High Channel
Mode	Keeping Transmitting	Input Voltage	120V~
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK

Test Figure:



8.DEC.2020 Date: 09:58:16

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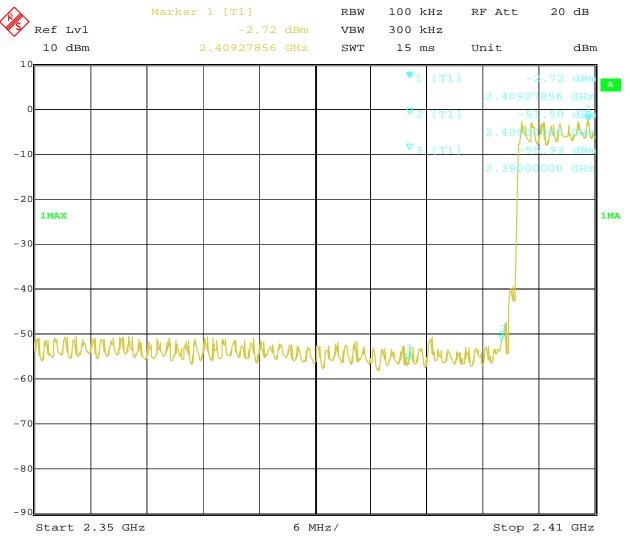


Type of Modulation: 8DPSK

Band Edge Test Result

Product:	Commercial Kiosk Tablet	Test Mode:	Hopping mode
Mode	Hopping On	Input Voltage	120V~
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK

Test Figure:



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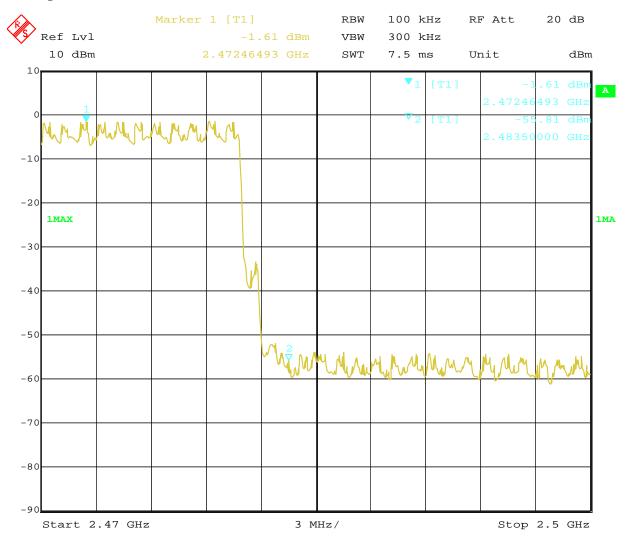


Type of Modulation: 8DPSK

Band Edge Test Result

Product:	Commercial Kiosk Tablet	Test Mode:	Hopping mode
Mode	Hopping On	Input Voltage	120V~
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK

Test Figure:



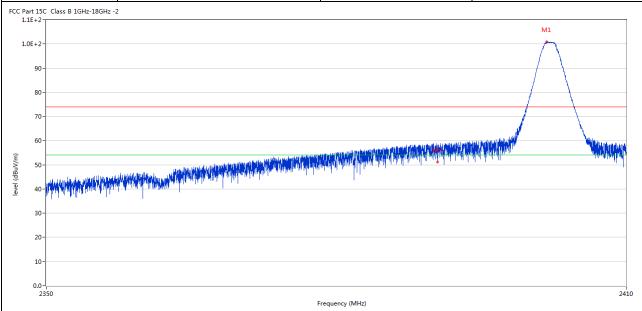
Date: 8.DEC.2020 09:21:54 Report No.: TW2011121-02E Page 71 of 78

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12.4 Restrict Band Measurement

EUT	Commercial Kiosk Tablet	Model	NEB215
Mode	Keep Transmitting	Input Voltage	120V∼
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Modulation Type	8DPSK



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
2	2390.050	58.98	-3.53	74.0	-15.02	Peak	310.00	100	Horizontal	Pass
2*	2390.050	50.73	-3.53	54.0	-3.27	AV	310.00	100	Horizontal	Pass

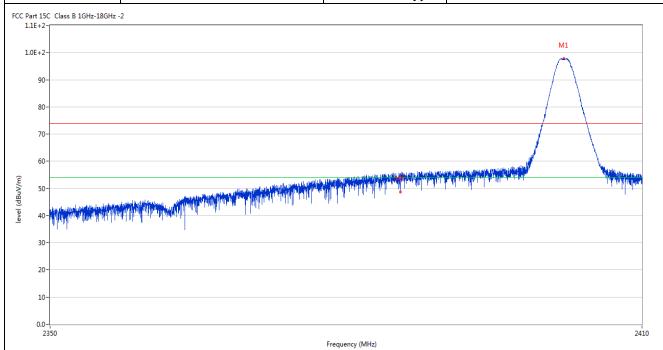
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12.4 Restrict Band Measurement

EUT	Commercial Kiosk Tablet	Model	NEB215
Mode	Keep Transmitting	Input Voltage	120V~
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Modulation Type	8DPSK

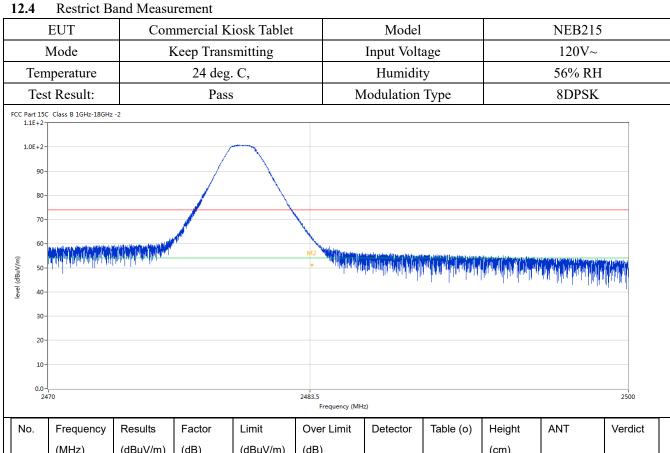


No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict	
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)			
2	2390.065	57.32	-3.53	74.0	-16.68	Peak	154.00	100	Vertical	Pass	
2*	2390.065	50.83	-3.53	54.0	-3.17	AV	154.00	100	Vertical	Pass	

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No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
2	2483.505	64.50	-3.57	74.0	-9.50	Peak	316.00	100	Horizontal	Pass
2*	2483.505	51.09	-3.57	54.0	-2.91	AV	316.00	100	Horizontal	Pass

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Restrict Band Measurement 12.4

	EUT	Comm	ercial Ki	osk Tablet		Model			NEB215	5
	Mode	Ke	ep Transı	mitting		Input Volta	ige		120V~	
Ter	nperature		24 deg.	C,		Humidity	У		56% RF	I
Tes	st Result:		Pass		M	odulation	Гуре		8DPSK	-
CC Part 15 1.1E+2	6C Class B 1GHz-18GHz -2	2								
1.0E+2	_									
90				~						
80										
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(Eu/nngp) 50 40 30 20 10					o	<u> </u>	Luly ur Jan ur Jan ur	A PART OF THE PROPERTY OF THE	and the special state of the s	all part with law-
(a) 50 50 10 10 10 10 10 10 10 10 10 10 10 10 10				2	483.5 Frequency (Mi		Marie de Mala	A PARTY OF THE PAR	malife of algernment from a	2500
(a) 50 50 30 30 30 30 30 30 30 30 30 30 30 30 30				2	483.5			The second secon	THE PERSON NAMED IN THE PE	2500
(a) 50 50 30 30 30 30 30 30 30 30 30 30 30 30 30		Results	Factor	2.	483.5		Table (o)	Height	ANT	2500 Verdict
(W/ngp) 900 40 30 20 10 0.0 2	470		Factor (dB)		483.5 Frequency (MI	łz)		Height (cm)	ANT	1
(W/ngp) java 40 30 20 10 0.0 2	Frequency	Results		Limit	483.5 Frequency (MI	łz)		_	ANT	1
(W/ngp) 900 40 30 20 10 0.0 2	Frequency	Results		Limit	483.5 Frequency (MH	łz)		_	ANT	1

Note: 1. For Restricted band test, All modulation mode was tested and only the worst case was reported. 8DPSK was the worst case.

2. The measured PK value less than the AV limit, no necessary to take down the AV measurement result.

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13.0 Antenna Requirement

13.1 Standard Applicable

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 transmitter antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the mount in dB that the directional gain of the antenna exceeds 6 dBi.

13.2 Antenna Connected constructions

FPC antenna used. The gain of the antennas is 2.0dBi.

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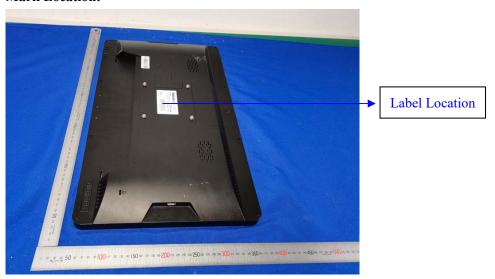
14.0 FCC ID Label

FCC ID: 2AACS-NEB15-21FOR99

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The label must not be a stick-on paper label. The label on these products must be permanently affixed to the product and readily visible at the time of purchase and must last the expected lifetime of the equipment not be readily detachable.

Mark Location:



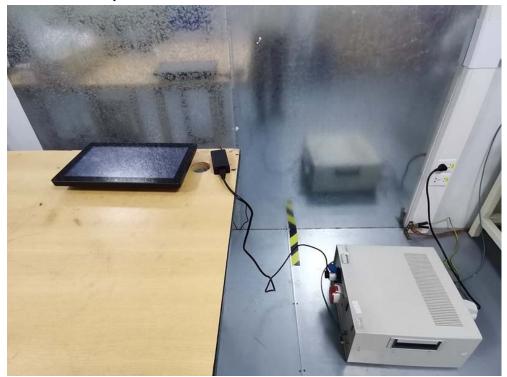
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15.0 **Photo of testing**

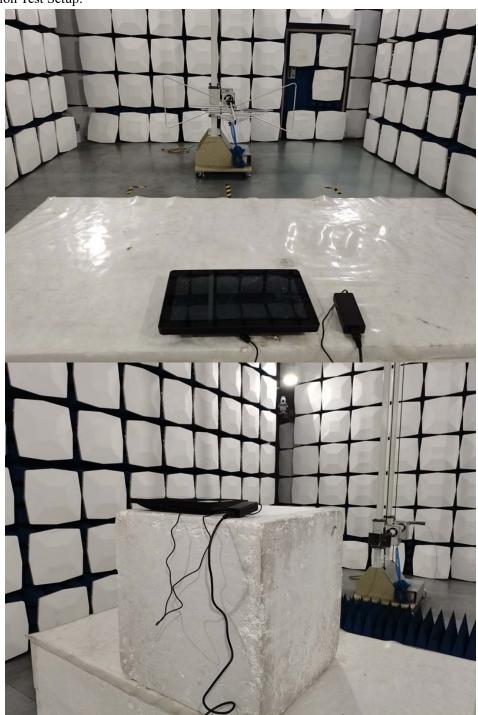
Conducted Emission Test Setup:



Date: 2020-12-15



Radiated Emission Test Setup:



Photographs - EUT

Please refer test report TW2011121-01E

-- End of Report--

The report refers only to the sample tested and does not apply to the bulk.

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