



RADIO TEST REPORT

Test Report No.: 10096184S-A

Applicant : THE YOKOHAMA RUBBER CO., LTD.

Type of Equipment : HiTES Sensor

Model No. : CPTLSNSC-00

Test regulation : FCC Part15 Subpart C: 2013

FCC ID : UNK-Y001YUA1120

Test result : Complied

1. This test report shall not be reproduced in full or partial, without the written approval of UL Japan, Inc.
2. The results in this report apply only to the sample tested.
3. This sample tested is in compliance with the limits of the above regulation.
4. The test results in this test report are traceable to the national or international standards.
5. This test report must not be used by the customer to claim product certification, approval, or endorsement by any agency of the Federal Government.
6. The opinions and the interpretations to the result of the description in this report are outside scopes where UL Japan has been accredited.

Date of test: October 30, 2013

Tested by:



Akio Hayashi

Engineer

Consumer Technology Division

Approved by :



Toyokazu Imamura

Leader

Consumer Technology Division



JAB
Testing
RTL02610

- ☐ The testing in which "Non-accreditation" is displayed is outside the accreditation scopes in UL Japan.
- ☒ There is no testing item of "Non-accreditation".

UL Japan, Inc.

Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

13-EM-F0429

REVISION HISTORY

Original Test Report No.: 10096184S-A

[illegible]

UL Japan, Inc.

Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Contents

	<u>Page</u>
SECTION 1: Customer information	4
SECTION 2: Equipment under test (E.U.T.)	4
SECTION 3: Test specification, procedures & results	5
SECTION 4: Operation of E.U.T. during testing.....	7
SECTION 5: Automatically deactivate	8
SECTION 6: Radiated emission (Fundamental and Spurious emission)	9
SECTION 7: 20dB bandwidth & Occupied bandwidth (99%).....	11
Contents of APPENDIXES.....	12
APPENDIX 1: Data of radio tests.....	13
APPENDIX 2: Test instruments	17
APPENDIX 3: Photographs of test setup.....	18

UL Japan, Inc.

Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

SECTION 1: Customer information

Company Name : THE YOKOHAMA RUBBER CO.,LTD
Address : 2-1 Oiwake, Hiratsuka, Kanagawa 254-8601 Japan
Telephone Number : +81-463-35-9574
Facsimile Number : +81-463-35-9756
Contact Person : Yasuhiko Araki

SECTION 2: Equipment under test (E.U.T.)

2.1 Identification of E.U.T.

Type of Equipment : HiTES Sensor
Model No. : CPTLSNSC-00
Serial No. : Refer to 4.2 in this report.
Rating : DC3.0V
Receipt Date of Sample : October 29, 2013
Country of Mass-production : Japan
Condition of EUT : Production model
Modification of EUT : No modification by the test lab.

2.2 Product description

Model: CPTLSNSC-00 (referred to as the EUT in this report) is a. HiTES Sensor.

Clock frequency(ies) in the system : 9.84MHz, 2MHz

<Radio part>

Equipment type : Transmitter
Frequency of operation : 314.88MHz
Type of modulation : FSK
Antenna type : Magnetic field type loop antenna
Antenna Gain : -24.149dBi max
Operating temperature range : -20 to +70 deg.C
Emission designation : F1D

FCC 15.31 (e)

The test was performed with a new battery (DC3.0V) and the stable voltage was supplied to the EUT during the tests. Therefore, the EUT complies with the requirement.

FCC 15.203

The equipment and its antenna comply with this requirement since the antenna is mounted inside of the EUT.

UL Japan, Inc.

Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

SECTION 3: Test specification, procedures & results

3.1 Test specification

Test specification : Test specification: FCC Part 15 Subpart C: 2013, final revised on September 30, 2013 and effective October 30, 2013
Title : FCC 47CFR Part15 Radio Frequency Device Subpart C Intentional Radiators
Section 15.207 Conducted limits
Section 15.209 Radiated emission limits, general requirements
Section 15.231 Periodic operation in the band 40.66 - 40.70 MHz and above 70 MHz

3.2 Procedures & Results

Item	Test Procedure	Specification	Remarks	Deviation	Worst Margin	Results
Conducted emission	ANSI C63.4:2009 7. AC powerline conducted emission measurements	FCC 15.207	-	N/A *1)	N/A	N/A
Automatically deactivate	ANSI C63.4:2009 13. Measurement of intentional radiators	FCC 15.231 (e)	Radiated	N/A	-	Complied
Electric field strength of Fundamental emission	ANSI C63.4:2009 13. Measurement of intentional radiators	FCC 15.231(e)	Radiated	N/A	13.2dB Freq.: 314.885MHz Polarization: Horizontal	Complied
Electric field strength of Spurious emission	ANSI C63.4:2009 13. Measurement of intentional radiators	FCC 15.205 FCC 15.209 FCC 15.231 (e)	Radiated	N/A	12.8dB Freq.: 944.655MHz Polarization: Horizontal Detector: Peak with Duty Factor	Complied
20dB bandwidth	ANSI C63.4:2009 13. Measurement of intentional radiators	FCC 15.231 (c)	Radiated	N/A	-	-

Note: UL Japan's Work Procedures No. 13-EM-W0420 and 13-EM-W0422

*1) The test is not applicable since the EUT does not have AC Mains.

3.3 Addition to standard

Item	Test Procedure	Specification	Remarks	Worst Margin	Results
Occupied Bandwidth (99%)	ANSI C63.4:2009 13. Measurement of intentional radiators, RSS-Gen 4.6.1	RSS-210 A1.1.3 RSS-Gen 4.6.1	Radiated	-	-

Note: UL Japan's Work Procedures No. 13-EM-W0420 and 13-EM-W0422

* Other than above, no addition, exclusion nor deviation has been made from the standard.

UL Japan, Inc.

Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

3.4 Uncertainty

The following uncertainties have been calculated to provide a confidence level of 95% using a coverage factor k=2.

Item	Frequency range	No.1 SAC ^{*1} (±)	No.2 SAC (±)	No.3 SAC (±)
Radiated emission (Measurement distance: 3m)	9kHz-30MHz	3.7 dB	3.7 dB	3.6 dB
	30MHz-300MHz	4.8 dB	5.0 dB	4.8 dB
	300MHz-1GHz	5.0 dB	5.0 dB	4.8 dB
	1GHz-18GHz	4.9 dB	4.9 dB	4.9 dB

*1: SAC=Semi-Anechoic Chamber

The data listed in this test report has enough margin, more than site margin.

Bandwidth Measurement:

Uncertainty for this test was: (±) 5.4%

3.5 Test location

UL Japan, Inc. Shonan EMC Lab.

1-22-3, Megumigaoka, Hiratsuka-shi, Kanagawa-ken 259-1220 JAPAN

Telephone number : +81 463 50 6400

Facsimile number : +81 463 50 6401

JAB Accreditation No. : RTL02610

	FCC Registration No.	IC Registration No.	Width x Depth x Height (m)	Size of reference ground plane (m) / horizontal conducting plane	Maximum measurement distance
<input type="checkbox"/> No.1 Semi-anechoic chamber	697847	2973D-1	20.6 x 11.3 x 7.65	20.6 x 11.3	10m
<input type="checkbox"/> No.2 Semi-anechoic chamber	697847	2973D-2	20.6 x 11.3 x 7.65	20.6 x 11.3	10m
<input checked="" type="checkbox"/> No.3 Semi-anechoic chamber	697847	2973D-3	12.7 x 7.7 x 5.35	12.7 x 7.7	5m
<input type="checkbox"/> No.4 Semi-anechoic chamber	-	-	8.1 x 5.1 x 3.55	8.1 x 5.1	-
<input type="checkbox"/> No.1 Shielded room	-	-	6.8 x 4.1 x 2.7	6.8 x 4.1	-
<input type="checkbox"/> No.2 Shielded room	-	-	6.8 x 4.1 x 2.7	6.8 x 4.1	-
<input type="checkbox"/> No.3 Shielded room	-	-	6.3 x 4.7 x 2.7	6.3 x 4.7	-
<input type="checkbox"/> No.4 Shielded room	-	-	4.4 x 4.7 x 2.7	4.4 x 4.7	-
<input type="checkbox"/> No.5 Shielded room	-	-	7.8 x 6.4 x 2.7	7.8 x 6.4	-
<input type="checkbox"/> No.6 Shielded room	-	-	7.8 x 6.4 x 2.7	7.8 x 6.4	-

3.6 Test setup, Data of test & Test instruments

Refer to APPENDIX 1 to 3.

UL Japan, Inc.

Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

SECTION 4: Operation of E.U.T. during testing

4.1 Operating mode

The EUT exercise program used during testing was designed to exercise the various system components in a manner similar to typical use.

Test item	Operating mode	Tested frequency
Automatically deactivate, Duty Cycle	Normal use mode *1)	314.880MHz
Other items	Transmitting *2)	314.880MHz

*1) The software of this mode is the same as one of normal product.

*2) The software of this mode is prepared by manufacturer only for the test.

End users cannot change the settings of the mode and output power of the product.

Power settings : Setting is controlled by the firmware and cannot be changed.

Software : V000001 (00A/00A)

Justification: The system was configured in typical fashion (as customer would normally use it) for testing.

4.2 Configuration and peripherals

A: EUT

* Test data was taken under worse case conditions.

Description of EUT and support equipment

No.	Item	Model number	Serial number	Manufacturer	Remark
A	HiTES Sensor	CPTLSNSC-00	*1)	YOKOHAMA	EUT

*1) Duty and Automatically deactivate: 024E7, other items: 0245D

UL Japan, Inc.

Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

SECTION 5: Automatically deactivate

Test procedure

The time was measured with a spectrum analyzer and a search coil placed by the EUT.

Limit: A manually transmitter shall employ a switch that will automatically deactivate the transmitter within not more than 5 seconds of being released.

Summary of the test results: Pass
Refer to APPENDIX 2.

UL Japan, Inc.

Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

SECTION 6: Radiated emission (Fundamental and Spurious emission)

6.1 Operating environment

The test was carried out in a semi-anechoic chamber.

Temperature : Refer to APPENDIX 2.

Humidity : Refer to APPENDIX 2.

6.2 Test configuration

EUT was placed on a polyethylene platform of nominal size, 0.5m by 0.5m, raised 0.8m above the conducting ground plane. Photographs of the set up are shown in Appendix 1.

6.3 Test conditions

Frequency range : 9kHz – 3.2GHz

EUT position : Table top

6.4 Test procedure

The Radiated Electric Field Strength intensity has been measured with a ground plane and at a distance of 3m
Frequency: From 9kHz to 30MHz at distance 3m

The EUT was rotated a full revolution in order to obtain the maximum value of the electric field intensity.

The measurements were performed for vertical polarization (antenna angle: 0deg.to 360deg.) and horizontal polarization. Drawing of the antenna direction is shown in Figure 2.

Frequency: From 30MHz to 5GHz at distance 3m (Refer to Figure 1).

The measuring antenna height was varied between 1 and 4m and EUT was rotated a full revolution in order to obtain the maximum value of the electric field intensity.

The measurements were performed for both vertical and horizontal antenna polarization.

Measurements were performed with QP, PK (Peak), and AV (Average) detector.

The radiated emission measurements were made with the following detector function.

<9kHz to 30MHz>

	9kHz to 90kHz & 110kHz to 150kHz	90kHz to 110kHz	150kHz to 490kHz	490kHz to 30MHz
Detector type	PK/AV	QP	PK/AV	QP
IF Bandwidth	200Hz	200Hz	9kHz	9kHz
Measuring antenna	Loop			

* FCC 15 Section 15.31 (f)(2) (9kHz-30MHz)

9kHz – 490kHz [Limit at 3m]= [Limit at 300m]-40log (3[m]/300[m])

490kHz – 30MHz [Limit at 3m]= [Limit at 30m]-40log (3[m]/30[m])

<30MHz to 3.2GHz>

	30MHz to 1GHz	Above 1GHz	
Detector type	QP	PK	AV
IF Bandwidth	120kHz	RBW 1MHz, VBW:3MHz	RBW 1MHz, VBW:10Hz
Measuring antenna	Biconical (30-299.99MHz) Logperiodic (300MHz-1GHz)	Horn	

UL Japan, Inc.

Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

The noise levels were measured at each position of all three axes X, Y and Z, and the position that has the maximum noise was determined. With the position, the noise levels of all the frequencies were measured.

Combinations of the worst case

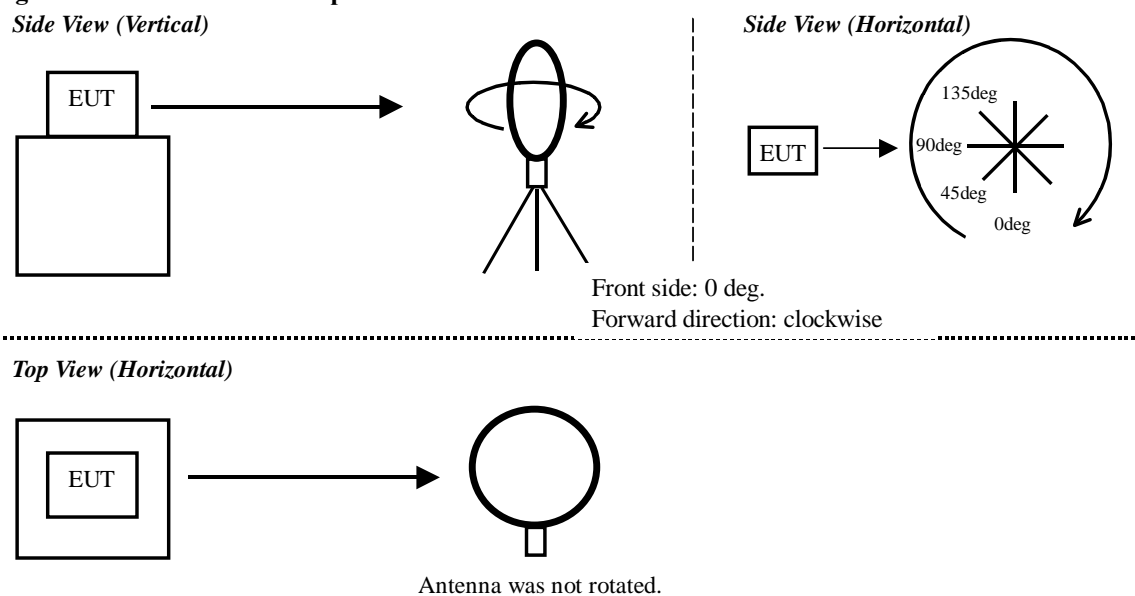
Antenna polarization \ Frequency	Carrier	Spurious	
		Below 1GHz	Above 1GHz
Horizontal	Y	X	X
Vertical	Z	Z	Z

6.5 Results

Summary of the test results : Pass

Refer to APPENDIX 2.

Figure 1. Direction of the Loop Antenna



UL Japan, Inc.

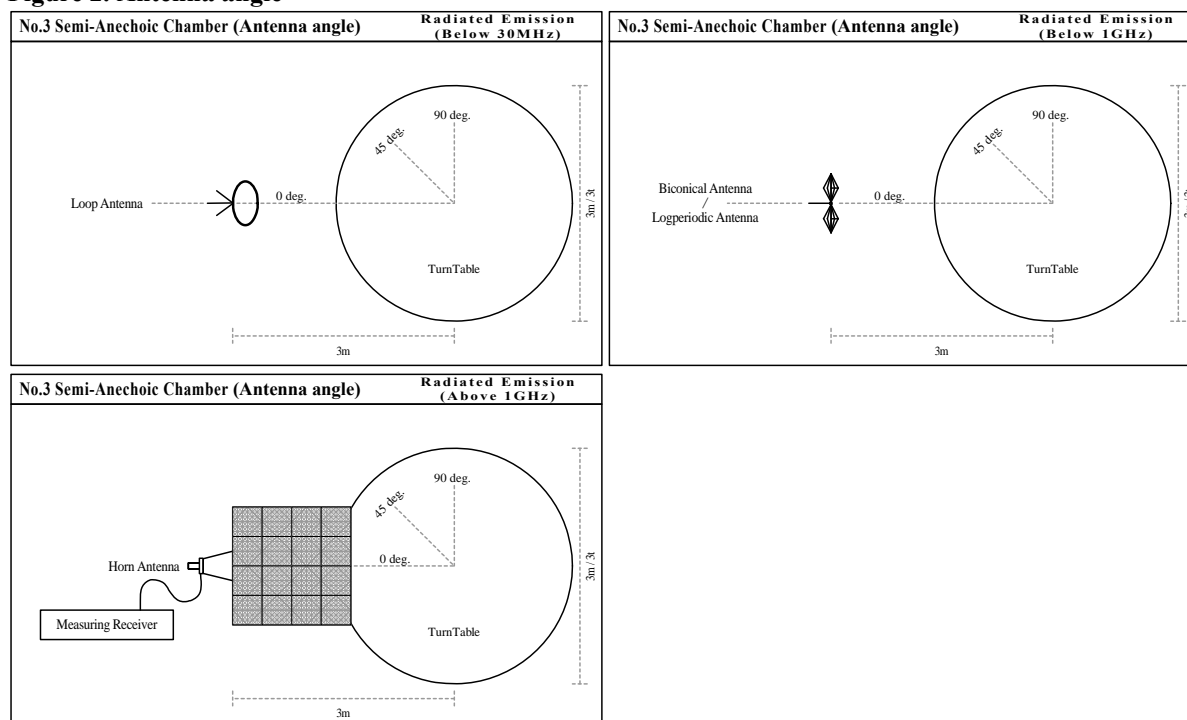
Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Figure 2. Antenna angle



SECTION 7: 20dB bandwidth & Occupied bandwidth (99%)

Test procedure

The bandwidth was measured with a spectrum analyzer.

Summary of the test results: Pass
Refer to APPENDIX 2.

UL Japan, Inc.

Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Contents of APPENDIXES

APPENDIX 1: Data of Radio tests

Automatically deactivate
Radiated emission
Bandwidth

APPENDIX 2: Test instruments

Test instruments

APPENDIX 3: Photographs of test setup

Radiated emission
Pre-check of the worst case

UL Japan, Inc.

Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Radiated Emission (Electric Field Strength of Fundamental and Spurious Emission)

UL Japan, Inc.
SHONAN EMC Lab. No.3 Semi-Anechoic Chamber

Company : THE YOKOHAMA RUBBER CO., LTD.	Regulation : FCC Part15C Section 15.231(e), 15.209
Equipment : HiTES Sensor	Test Distance : 3m
Model : CPTLSNSC-00	Date : 2013/10/30
Sample No. : 0245D	Temperature : 24deg.C
Power : DC 3.0V (Battery)	Humidity : 50%RH
Mode : Transmitting	

ENGINEER : Akio Hayashi

Peak with Duty factor

Frequency [MHz]	Reading [dBuV]		Antenna Factor [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]		Limit [dBuV/m]	Margin [dB]		Remark Inside or Outside of Restricted Bands
	Hor	Ver					Hor	Ver		Hor	Ver	
314.885	82.6	79.3	14.3	8.6	31.9	-19.2	54.4	51.1	67.6	13.2	16.5	Carrier
629.770	42.8	41.5	19.3	9.9	32.0	-19.2	20.8	19.5	53.9	33.1	34.4	Outside
944.655	57.4	54.3	22.6	10.9	30.6	-19.2	41.1	38.0	53.9	12.8	15.9	Outside
1259.540	53.8	54.5	24.7	4.6	40.8	-19.2	23.1	23.8	53.9	30.8	30.1	Outside
1574.425	63.3	63.8	25.8	4.4	40.9	-19.2	33.4	33.9	53.9	20.5	20.0	Inside
1889.310	65.2	64.9	26.4	4.7	41.2	-19.2	35.9	35.6	53.9	18.0	18.3	Outside
2204.195	60.9	65.4	26.7	5.0	41.2	-19.2	32.2	36.7	53.9	21.7	17.2	Inside
2519.080	60.9	59.2	26.9	5.6	41.1	-19.2	33.1	31.4	53.9	20.8	22.5	Outside
2833.965	58.7	57.6	27.8	5.8	41.4	-19.2	31.7	30.6	53.9	22.2	23.3	Inside
3148.850	61.3	60.7	28.2	6.1	41.6	-19.2	34.8	34.2	53.9	19.1	19.7	Outside

Result(below1GHz) = Reading + Ant Factor + Loss (Cable+Attenuator) - Gain(Amplifier) + Duty factor (Refer to Duty factor data sheet)

Result(above1GHz) = Reading + Ant Factor + Loss (Cable+High Pass Filter) - Gain(Amplifier) + Duty factor (Refer to Duty factor data sheet)

Peak

Frequency [MHz]	Reading [dBuV]		Antenna Factor [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]		Limit [dBuV/m]	Margin [dB]		Remark Inside or Outside of Restricted Bands
	Hor	Ver					Hor	Ver		Hor	Ver	
1259.540	53.8	54.5	24.7	4.6	40.8	-	42.3	43.0	73.9	31.6	30.9	Outside
1574.425	63.3	63.8	25.8	4.4	40.9	-	52.6	53.1	73.9	21.3	20.8	Inside
1889.310	65.2	64.9	26.4	4.7	41.2	-	55.1	54.8	73.9	18.8	19.1	Outside
2204.195	60.9	65.4	26.7	5.0	41.2	-	51.4	55.9	73.9	22.5	18.0	Inside
2519.080	60.9	59.2	26.9	5.6	41.1	-	52.3	50.6	73.9	21.6	23.3	Outside
2833.965	58.7	57.6	27.8	5.8	41.4	-	50.9	49.8	73.9	23.0	24.1	Inside
3148.850	61.3	60.7	28.2	6.1	41.6	-	54.0	53.4	73.9	19.9	20.5	Outside

Result(below1GHz) = Reading + Ant Factor + Loss (Cable+Attenuator) - Gain(Amplifier) + Duty factor (Refer to Duty factor data sheet)

Result(above1GHz) = Reading + Ant Factor + Loss (Cable+High Pass Filter) - Gain(Amplifier) + Duty factor (Refer to Duty factor data sheet)

REMARKS

ANTENNA TYPE: 9k-30MHz Loop / 30-300MHz Biconical / 300-1000MHz Logperiodic / 1-3.2GHz DRG Horn

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

Duty Cycle (Fundamental)

UL Japan, Inc.

SHONAN EMC Lab. No.3 Semi-Anechoic Chamber

Company : THE YOKOHAMA RUBBER CO., LTD.
 Equipment : HiTES Sensor
 Model : CPTLSNSC-00
 Sample No. : 024E7
 Power : DC 3.0V (Battery)
 Mode : Transmitting (Normal Use mode)

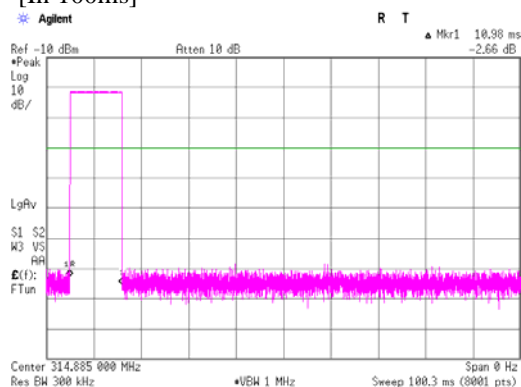
Regulation : FCC Part15C Section 15.231(e), 15.35(c)
 Test Distance : 3m
 Date : 2013/10/30
 Temperature : 24deg.C
 Humidity : 50%RH

ENGINEER : Akio Hayashi

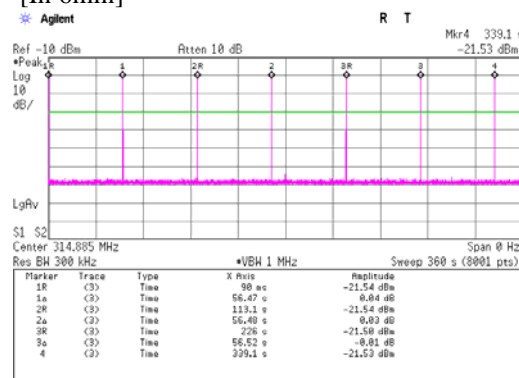
ON time [msec]	Cycle [msec]	Duty (On time / Cycle)	Duty [dB]
10.98	100	0.11	-19.19

*Duty = 20log (On time / Cycle)

[In 100ms]



[In 6min]



[Manufacture's specification]

Normal state: Transmitting once in 60 seconds

Disorder state: Transmitting once in 30 seconds

*Disorder state: The state when it detected the difference more than 30kPa between the last and the present pressure data.

Transmitting time: 10.94ms

20dB Bandwidth: FCC 15.231(c)

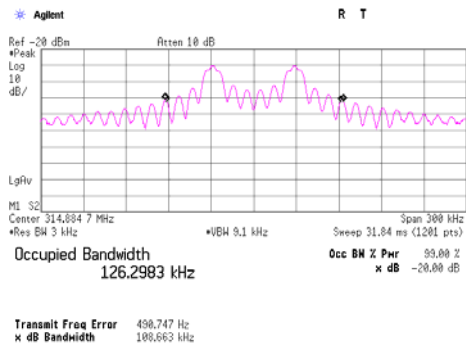
UL Japan, Inc.
SHONAN EMC Lab. No.3 Semi-Anechoic Chamber

Company	: THE YOKOHAMA RUBBER CO., LTD.	Regulation	: FCC Part15C Section 15.231(c)
Equipment	: HiTES Sensor	Test Distance	: 3m
Model	: CPTLSNSC-00	Date	: 2013/10/30
Sample No.	: 0245D	Temperature	: 24deg.C
Power	: DC 3.0V (Battery)	Humidity	: 50%RH
Mode	: Transmitting (Normal Use mode)		

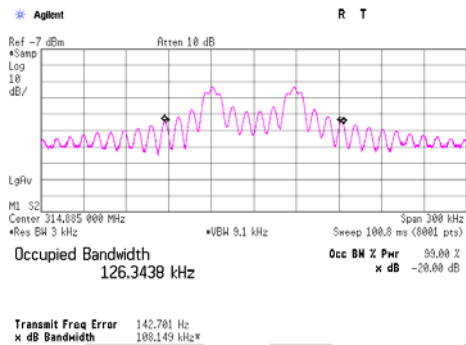
ENGINEER : Akio Hayashi

Bandwidth Limi : Fundamental frequency 314.89 *0.25% = 787.213 kHz

20dB Bandwidth [kHz]	Bandwidth Limit [kHz]	Result
108.663	787.2125	PASS



99% Occupied Bandwidth [kHz]
126.3438



Automatically deactivate

UL Japan, Inc.
SHONAN EMC Lab. No.3 Semi-Anechoic Chamber

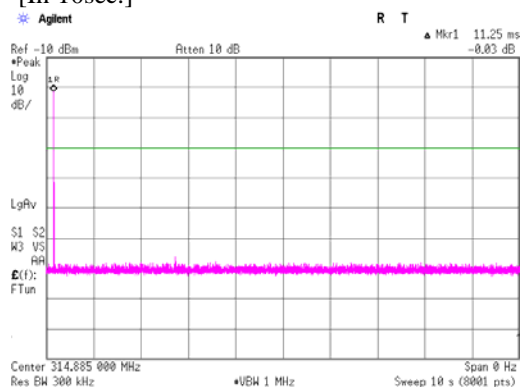
Company : THE YOKOHAMA RUBBER CO., LTD.
Equipment : HiTES Sensor
Model : CPTLSNSC-00
Sample No. : 024E7
Power : DC 3.0V (Battery)
Mode : Transmitting (Normal Use mode)

Regulation : FCC Part15C Section 15.231(e)
Test Distance : 3m
Date : 2013/10/30
Temperature : 24deg.C
Humidity : 50%RH

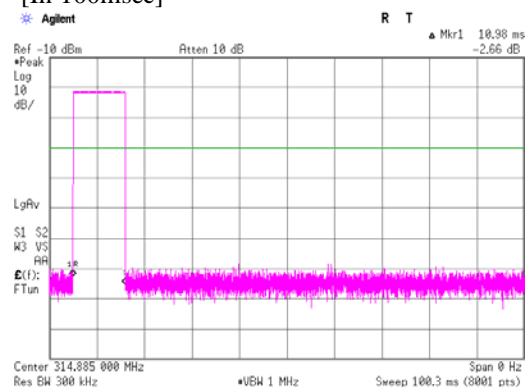
ENGINEER : Akio Hayashi

Time of Transmitting [sec]	Limit [sec]	Result
0.01098	1	PASS

[In 10sec.]



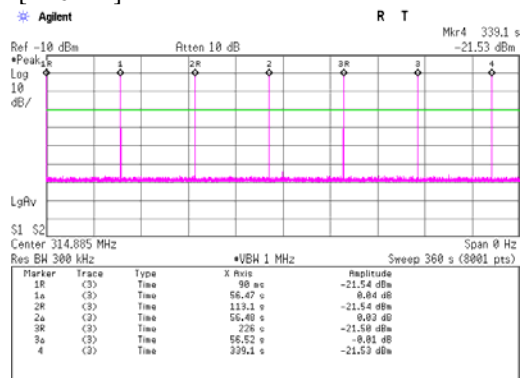
[In 100msec]



Time of the duration of each transmission [sec]	Limit *1) [sec]	Result
56.47	10	PASS

*1) At least 30 times the duration of the transmission but in no case less than 10 seconds.

[In 6min]



APPENDIX 2

Test Instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
SAF-03	Pre Amplifier	SONOMA	310N	290213	RE	2013/02/12 * 12
SAT6-06	Attenuator	JFW	50HF-006N	-	RE	2013/02/12 * 12
SBA-03	Biconical Antenna	Schwarzbeck	BBA9106	91032666	RE	2012/10/08 * 12
SCC-C1/C2/C3/C4/C5/C10/SRSE-03	Coaxial Cable&RF Selector	Fujikura/Fujikura/Suhner/Suhner/Suhner/Suhner/TOYO	8D2W/12DSFA/141PE/141PE/141PE/141PE/NS4906	-/0901-271 (RF Selector)	RE	2013/04/03 * 12
SLA-03	Logperiodic Antenna	Schwarzbeck	UHALP9108A	UHALP 9108-A 0901	RE	2012/10/08 * 12
SOS-05	Humidity Indicator	A&D	AD-5681	4062518	RE	2013/02/27 * 12
STR-06	Test Receiver	Rohde & Schwarz	ESCI	101259	RE	2013/02/27 * 12
SJM-11	Measure	PROMART	SEN1935	-	RE	-
SAEC-03(NSA)	Semi-Anechoic Chamber	TDK	SAEC-03(NSA)	3	RE	2013/07/09 * 12
COTS-SEMI-1	EMI Software	TSJ	TEPTO-DV(RE,CE,RFI,MF)	-	RE	-
SAF-06	Pre Amplifier	TOYO Corporation	TPA0118-36	1440491	RE	2013/07/22 * 12
SCC-G03	Coaxial Cable	Suhner	SUCOFLEX 104A	46499/4A	RE	2013/04/11 * 12
SCC-G23	Coaxial Cable	Suhner	SUCOFLEX 104	297342/4	RE	2013/05/22 * 12
SHA-03	Horn Antenna	Schwarzbeck	BBHA9120D	9120D-739	RE	2013/08/19 * 12
SFL-01	Highpass Filter	MICRO-TRONICS	HPM50115	001		2012/12/18 * 12
SSA-02	Spectrum Analyzer	Agilent	E4448A	MY48250106	RE	2013/03/28 * 12
SLP-02	Loop Antenna	Rohde & Schwarz	HFH2-Z2	100218	RE	2012/10/31 * 12
SAT6-07	Attenuator	JFW	50HF-006N	-	RE	2013/02/12 * 12

The expiration date of the calibration is the end of the expired month .

As for some calibrations performed after the tested dates , those test equipment have been controlled by means of an unbroken chains of calibrations .

All equipment is calibrated with valid calibrations . Each measurement data is traceable to the national or international standards .

Test Item :

RE: Radiated emission