



FCC Part 15, Subpart C, Section 15.247
Test Report

On

Outdoor XT2 Blink Camera Module
FCC ID: 2AF77-H1981653

Customer Name: Immedia Semiconductor, LLC

Customer P.O.: 2D-02586616

Date of Report: January 6, 2020

Test Report No.: R-6458N-1

Test Start Date: October 25, 2019

Test Finish Date: November 8, 2019

Test Engineer: T. Hannemann

Test Technician: M. Seamans

Approved By: S. Wentworth

Report Prepared By: P. Harris

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40 YEARS OF TESTING EXCELLENCE

Technical Information

Report Number: R-6458N-1

Customer: Immedia Semiconductor, LLC

Address: 100 Riverpark Drive
North Reading, MA 01864

Manufacturer: Immedia Semiconductor, LLC

Manufacturer Address: 100 Riverpark Drive
North Reading, MA 01864

Test Sample: Outdoor XT2 Blink Camera Module

Model Number: BCM00201U

Serial Number: 807-000-249 (Conducted Testing)
857-000-181 (Radiated Testing)

FCC ID: 2AF77-H1981653

Type: Frequency Hopping Spread Spectrum Transmitter

Power Requirements: 5 VDC via External 120 VAC power adapter or 3 VDC via internal batteries

Frequency of Operation: 902.4 MHz to 927.6 MHz

Equipment Class: DSS

Antenna Type: Internal PCB Antenna – 1.5 dBi Gain

Equipment Use: Used in a Home Monitoring System

Test Specification:

FCC Rules and Regulations Part 15, Subpart C, Section 15.247

Test Procedure:

ANSI C63.4:2014

ANSI C63.10:2013

FCC 558074 D01 15.247 Meas Guidance v05r02, April 2, 2019

Test Facility:

Retlif Testing Laboratories

101 New Boston Road

Goffstown, NH 03045

FCC Designation Number: US5327



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Tests Performed

FCC Part 15, Subpart C	Test Method
15.247(a)(1)	Channel Separation
15.247(a)(1)	20 dB Bandwidth
15.247(a)(1)(i)	Number of Channels and Occupancy Time
15.247(b)(2) and (4)	Peak Conducted Output Power
15.247(d)	Spurious Emissions, 30 MHz to 10 GHz
15.247(d)	Field Strength of Spurious Emissions
Section 15.207 (a)	Conducted Emissions

EUT Operation:

The EUT is an outdoor Wi-Fi connected home security camera. The camera has a passive infrared motion sensor that can be used to trigger recording of video clips that are sent by Wi-Fi to internet based servers that relay the clips to the users' mobile device. The EUT can also receive commands from the user to start transmission of video or update status.

Table 1 – Support Equipment

Description	Manufacturer	Model Number	Serial Number
Radiated Testing			
Long-Range USB Adapter	ALFA Network	AWUS036NHA	180636A0001785
Laptop PC	HP	Probook 450G5	5CD88466QTY
Sync Module	Immedia Semiconductor	BSM00200U	270-090-633
Barcode Scanner	Symbol	DS6708-SR	2460000ION
Camera Quiescent Current Tester	Immedia Semiconductor	SW Rev16	114
Conducted Testing			
Laptop PC	HP	Probook 450G5	5CD88466QTY
Sync Module	Immedia Semiconductor	BSM002000	280-885-766



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Certification and Signatures

We certify that this report is a true representation of the results obtained from the tests of the equipment stated. We further certify that the measurements shown in this report were made in accordance with the procedures indicated and vouch for the qualifications of all Retlif Testing Laboratories personnel taking them.



Scott Wentworth
Branch Manager



Todd Hannemann
EMC Test Engineer
iNARTE Certified Technician ATL-0255-T

Non-Warranty Provision

The testing services have been performed, findings obtained and reports prepared in accordance with generally accepted laboratory principles and practices. This warranty is in lieu of all others, either expressed or implied.

Non-Endorsement

This test report contains only findings and results arrived at after employing the specific test procedures and standards listed herein. It is not intended to constitute a recommendation, endorsement or certification of the product or material tested. This report must not be used by the client to claim product endorsement by ANSI National Accreditation Board (ANAB).



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Revision History

Revisions to this document are listed below; the latest revised document supersedes all previous issues of this document:

Revision	Date	Pages Affected
-	January 6, 2020	Original Release



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Requirements and Test Results

Requirement:

FCC Section 15.247 (a)(1)

Channel Separation and 20 dB Bandwidth

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. The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

- **Results:**

The carrier frequencies were separated by 401.8 kHz which exceeded the maximum 20 dB bandwidth of 114.01 kHz which complies with the requirements specified above.

FCC Section 15.247 (a)(1)(i)

Number of Channels and Occupancy Time

For frequency hopping systems operating in the 902-928 MHz band: if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period; if the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period. The maximum allowed 20 dB bandwidth of the hopping channel is 500 kHz.

- **Results:**

The number of hopping frequencies used was 64 and the average time of occupancy was 9.763 msec which complied with the above requirements.



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Requirements and Test Results (con't)

FCC Section 15.247 (b)(2) and (4) Peak Conducted Output Power

(1) For frequency hopping systems operating in the 902-928 MHz band employing at least 50 non-overlapping hopping channels: 1 watt. For systems employing less than 50 hopping channels, but at least 25 hopping channels: 0.25 watts.

(4) The conducted output power limit specified in Paragraph (b) of Section 15.247 is based on the use of antenna with directional gains that do not exceed 6 dBi. Except as shown in Paragraph (c) of Section 15.247, 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 Paragraph (b)(1), (b)(2) and (b)(3) of Section 15.247, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

- **Results:**

The frequency hopping system utilizes a transmitting antenna with a gain of 1.5 dBi. The maximum peak conducted output power was measured to be 17.1 milliwatts and the EIRP is less than 1W.

FCC Section 15.247 (d) Spurious Emissions

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under Paragraph (b)(3) of Section 15.247, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

- **Results:**

The antenna port conducted spurious emissions comply with the requirement that the radio frequency power be at least 20 dB below the highest in band level.

In addition, Harmonic and Spurious Emissions which were found to be within the restricted bands of operation, as defined in section 15.205 (a) were found to be in compliance with the general limits specified in section 15.209 (a).



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Requirements and Test Results (con't)

FCC Section 15.247 (a)

Field Strength of Spurious Radiation

Operation under the provisions of Section 15.247 is limited to frequency hopping and digitally modulated intentional radiators that comply with the provisions stated in Section 15.247(a)(1).

FCC Section 15.209(a)

Radiated Emission Limits, General Requirements

Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in Table 3.

Table 2 - Radiated Emission Limits

Frequency of Emission (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
30 to 88	100	3
88 to 216	150	3
216 to 960	200	3
Above 960	500	3

- **Results:**

The field strength of spurious radiated emissions did not exceed the limits specified in Table 3.



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Field Strength Calculation/Conversion:

The maximized field strength of the emission was obtained as follows:

$$C_R = M_R + C_F$$

Where:

C_R = Corrected Reading in dB μ V/m

M_R = Uncorrected Meter Reading in dB μ V

C_F = Correction Factor in dB (Antenna Factor, Pre-amp + Cable Loss)

Example:

$$M_R = 15.35 \text{ dB}\mu\text{V}$$

$$C_F = 16.85 \text{ dB}$$

$$C_R = 15.35 \text{ dB}\mu\text{V} + 16.85 = 32.2 \text{ dB}\mu\text{V/m}$$

dB μ V/M is converted to uV/M for comparison to the specified limit using the formula:

$$\text{invLog dB}\mu\text{V/M}/20$$

$$32.2 \text{ dB}\mu\text{V/m} = 40.74 \text{ uV/m}$$

RF Power Conversion:

Power readings in dBm may be converted to mW using the formula:

$$\text{InvLog dBm}/10$$

$$\text{Example: } 20\text{dBm} = 100\text{mW}$$



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Requirements and Test Results (con't)

FCC Section 15.247 (i)

RF Exposure Limits

Spread Spectrum Transmitters operating under 15.247 must be operated in a manner that ensures the public is not exposed to RF energy levels in excess of the commission's guidelines. Based on the transmitter power and maximum antenna gain (see calculation below) the minimum separation distance was calculated to determine the distance for acceptable MPE power density levels to meet both the Occupational/Controlled Exposure and the General Population/Uncontrolled Exposure requirements of FCC Part 1.1310. The calculation below uses the more stringent General Population MPE Limits.

$$S = \frac{PG}{4\pi D^2}$$

D = Minimum Separation Distance in cm

S = Max allowed Power Density in mW/cmsq

Per 1.1310 For the Frequency of 915 MHz S = 0.6 mW/cmsq

Power = Max Power Input to Antenna = 17.1mW

Gain = Max Power Gain of Antenna = 1.5 dBi = 1.41 numeric

$$0.61 \text{ mW/cmsq} = \frac{17.1 \times 1.41}{4 \times (3.14) \times D^2} = \frac{24.11}{12.56 \times D^2}$$

$$D^2 = \frac{24.11}{12.56 \times 0.61}$$

$$D = \sqrt{1.17} = 1.08 \text{ cm}$$

The test sample has an internal antenna and the minimum separation distance will always be maintained.



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Requirement:**FCC Section 15.207(a) - Conducted Limits**

For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits shown in Table 4, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of the paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Table 3 - Conducted Emission Limits

Frequency of Emission (MHz)	Conducted Limit (dB μ V)	
	Quasi-Peak	Average
0.15 to 0.5	66 to 56*	56 to 46*
0.5 to 5	56	46
5 to 30	60	50
*Decreases due to logarithm of the frequency		

- Results:**

The conducted emissions observed did not exceed the limits specified in Table 4.

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Equipment List

FCC Section 15.247(a)(1) Channel Separation

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
5135	NARDA MICROWAVE	ATTENUATOR, COAXIAL	10 dB, DC - 12.4 GHz, 2 W	757C-10	11/9/2018	11/30/2019
5231	AGILENT / HP	ANALYZER, SPECTRUM	3 Hz - 26.5 GHz	E4440A	5/14/2019	5/31/2020
5250	DIGI-SENSE	HYGROMETER	0 - 50 deg. c, 10 - 90 % RH	20250-30	10/7/2019	10/31/2020

FCC Section 15.247(a)(1) 20 dB Bandwidth

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
5135	NARDA MICROWAVE	ATTENUATOR, COAXIAL	10 dB, DC - 12.4 GHz, 2 W	757C-10	11/9/2018	11/30/2019
5231	AGILENT / HP	ANALYZER, SPECTRUM	3 Hz - 26.5 GHz	E4440A	5/14/2019	5/31/2020
5250	DIGI-SENSE	HYGROMETER	0 - 50 deg. c, 10 - 90 % RH	20250-30	10/7/2019	10/31/2020

FCC Section 15.247 (a)(1) (iii) Number of Channels and Occupancy Time

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
5135	NARDA MICROWAVE	ATTENUATOR, COAXIAL	10 dB, DC - 12.4 GHz, 2 W	757C-10	11/9/2018	11/30/2019
5231	AGILENT / HP	ANALYZER, SPECTRUM	3 Hz - 26.5 GHz	E4440A	5/14/2019	5/31/2020
5250	DIGI-SENSE	HYGROMETER	0 - 50 deg. c, 10 - 90 % RH	20250-30	10/7/2019	10/31/2020

FCC Section 15.247 (a)(1) Peak Conducted Output Power

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
5135	NARDA MICROWAVE	ATTENUATOR, COAXIAL	10 dB, DC - 12.4 GHz, 2 W	757C-10	11/9/2018	11/30/2019
5231	AGILENT / HP	ANALYZER, SPECTRUM	3 Hz - 26.5 GHz	E4440A	5/14/2019	5/31/2020
5250	DIGI-SENSE	HYGROMETER	0 - 50 deg. c, 10 - 90 % RH	20250-30	10/7/2019	10/31/2020

FCC Section 15.247 (d) Conducted Spurious Emissions, 30 MHz to 10 GHz

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
5135	NARDA MICROWAVE	ATTENUATOR, COAXIAL	10 dB, DC - 12.4 GHz, 2 W	757C-10	11/9/2018	11/30/2019
5231	AGILENT / HP	ANALYZER, SPECTRUM	3 Hz - 26.5 GHz	E4440A	5/14/2019	5/31/2020
5250	DIGI-SENSE	HYGROMETER	0 - 50 deg. c, 10 - 90 % RH	20250-30	10/7/2019	10/31/2020



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**FCC Section 15.247 (a) / 15.209(a)
Field Strength of Spurious Radiated Emissions**

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
1232	AGILENT / HP	PRE-AMPLIFIER	1 - 26.5 GHz	8449B	5/24/2019	5/31/2020
3258	ETS / EMCO	ANTENNA, DOUBLE RIDGED GUIDE	1 - 18 GHz	3115	5/10/2018	11/30/2019
4029B	RETLIF	OPEN AREA TEST SITE, ATTENUATION	3 / 10 Meters	RNH	9/30/2019	9/30/2021
5070	ROHDE & SCHWARZ	RECEIVER, EMI	20 Hz - 40 GHz	ESIB40	11/6/2018	11/30/2019
5234	PASTERNAK	CABLE, COAXIAL	10 kHz - 18 GHz	PE302-230	8/14/2019	8/31/2020
5242	TELEDYNE MICROWAVE	CABLE, COAXIAL	10 kHz - 6 GHz	PR90-195-1275, 106'	9/12/2019	9/30/2020
8549	EMCO	ANTENNA, LOG PERIODIC	200 MHz - 1 GHz	3146	6/29/2019	6/30/2022
8550	EMCO	ANTENNA, BICONICAL	30 - 300 MHz	3110B	6/29/2019	6/30/2022

**FCC Section 15.207(a)
Conducted Limit**

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
5070	ROHDE & SCHWARZ	RECEIVER, EMI	20 Hz - 40 GHz	ESIB40	11/6/2018	11/30/2019
5133	NARDA MICROWAVE	ATTENUATOR, COAXIAL	10 dB, DC - 12.4 GHz, 2 W	757C-10	11/9/2018	11/30/2019
5209	SOLAR ELECTRONICS	LISN	50 uH, 150 kHz - 30 MHz	21106-50-BP-25-BNC	5/16/2019	5/31/2020
5210	SOLAR ELECTRONICS	LISN	50 uH, 150 kHz - 30 MHz	21106-50-BP-25-BNC	5/16/2019	5/31/2020
5218	COM-POWER	GENERATOR, COMB	100 kHz - 400 MHz	CGC-510E	8/20/2019	8/31/2020
5250	DIGI-SENSE	HYGROMETER	0 - 50 deg. c, 10 - 90 % RH	20250-30	10/7/2019	10/31/2020



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Test Photographs Channel Separation



Test Setup



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**FCC Section 15.247(a)(1)
Channel Separation
Test Data**



Retlif Testing Laboratories

Report No. R-6458N-1

EMISSIONS TEST DATA SHEET

Method:	Channel Separation
Test Specification:	FCC Part 15, Subpart C Paragraph: 15.247 (a)(1)
Job Number:	R-6458N-1
Customer:	Immedia Semiconductor LLC
Test Sample:	Outdoor XT2 Blink Camera Module
Model Number:	BCM00201U
Serial Number:	807-000-249
Operating Mode:	Transmitting modulated signal
Technician:	M.Seamans
Date(s):	October 25, 2019
Temp/ Relative Humidity:	21.2 °C / 40.0 %
Result:	Channel Separation: 401.89 kHz

Agilent

Ref 20 dBm

#Atten 20 dB

Δ Mkr1 401.89 kHz

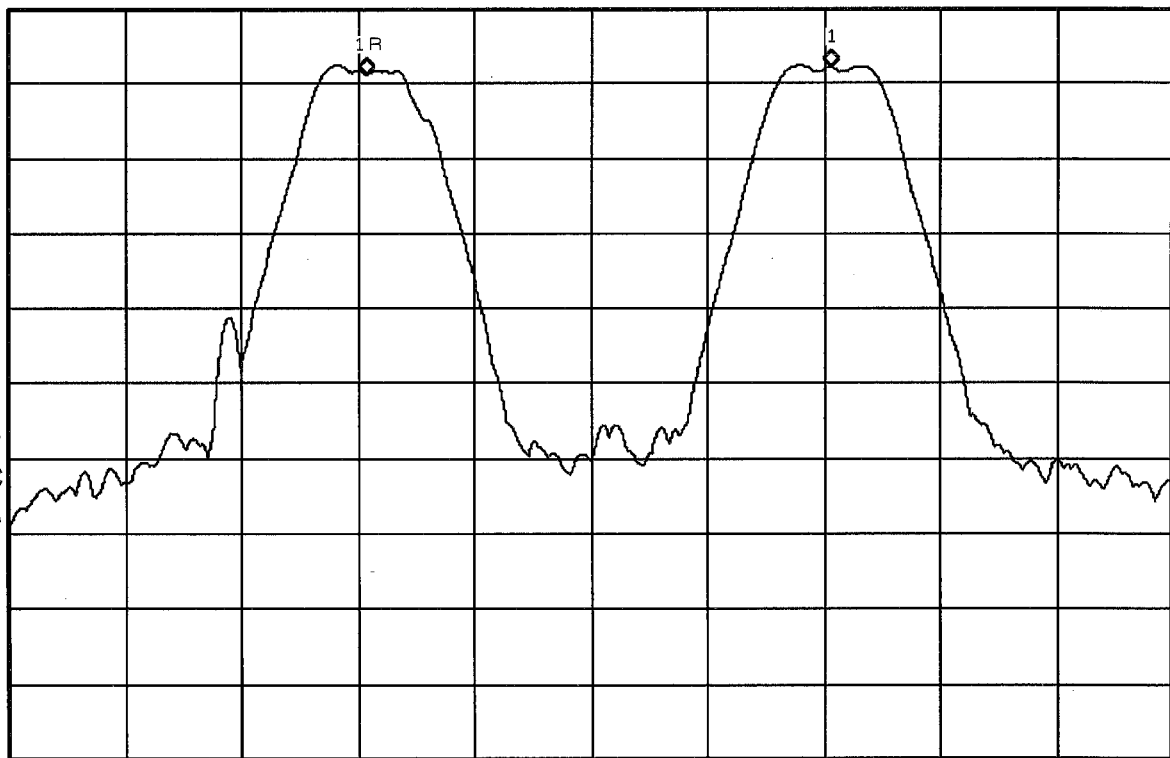
0.93 dB

#Peak
Log
10
dB/
Offst
10.4
dB

LgAv

V1 S2
S3 FC
AA

$\hat{E}(f)$:
f>50k
Swp



Center 902.991 94 MHz

Span 1 MHz

#Res BW 30 kHz

#VBW 100 kHz

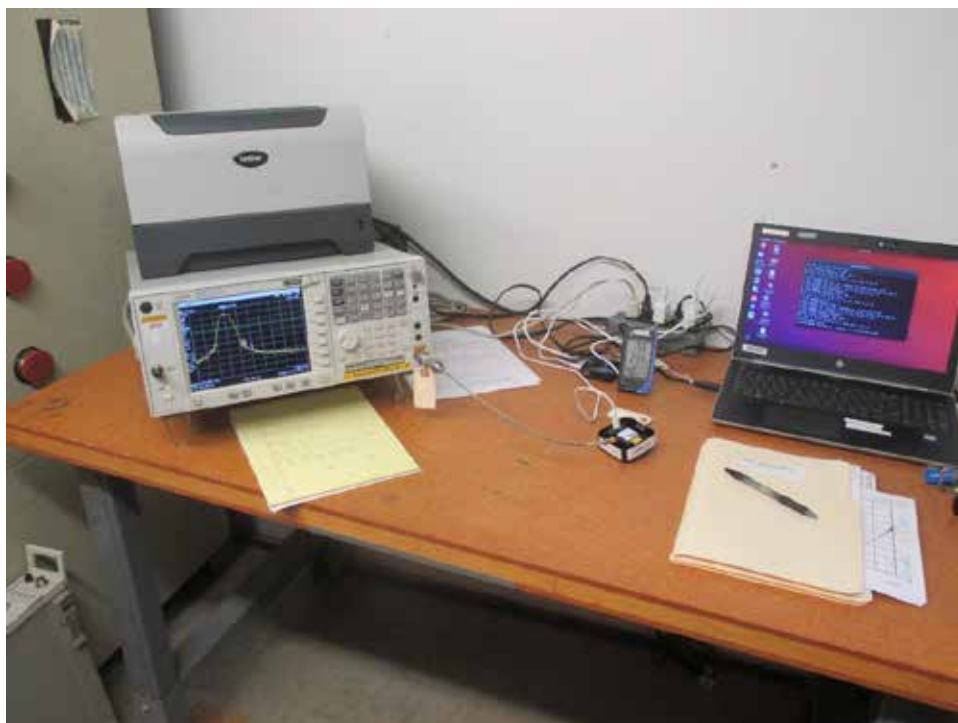
Sweep 1.092 ms (8192 pts)



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Test Photographs 20 dB Bandwidth



Test Setup



Retlif Testing Laboratories

Report No. R-6458N-1

**FCC Section 15.247(a)(1)
20 dB Bandwidth
Test Data**



Retlif Testing Laboratories

Report No. R-6458N-1

EMISSIONS TEST DATA SHEET

Method:	Occupied Bandwidth
Test Specification:	FCC Part 15, Subpart C Paragraph: 15.247 (a)(i)
Job Number:	R-6458N-1
Customer:	Immedia Semiconductor LLC
Test Sample:	Outdoor XT2 Blink Camera Module
Model Number:	BCM00201U
Serial Number:	807-000-249
Operating Mode:	Transmitting modulated signal
Technician:	M.Seamans
Date(s):	October 25, 2019
Temp/ Relative Humidity:	19.2 °C / 47.0 %
Result:	20dB Bandwidth: 113.27 kHz

Agilent

Δ Mkr1 113.27 kHz

0.01 dB

Ref 20 dBm

#Atten 20 dB

#Peak

Log

10

dB/

Offst

10.4

dB

DI

-7.8

dBm

LgAv

V1 S2

S3 FC

AA

Ê(f):

f>50k

Swp

Center 902.805 08 MHz

Span 300 kHz

#Res BW 10 kHz

#VBW 30 kHz

Sweep 3.276 ms (8192 pts)



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EMISSIONS TEST DATA SHEET

Method:	Occupied Bandwidth
Test Specification:	FCC Part 15, Subpart C Paragraph: 15.247 (a)(i)
Job Number:	R-6458N-1
Customer:	Immedia Semiconductor LLC
Test Sample:	Outdoor XT2 Blink Camera Module
Model Number:	BCM00201U
Serial Number:	807-000-249
Operating Mode:	Transmitting modulated signal
Technician:	M.Seamans
Date(s):	October 25, 2019
Temp/ Relative Humidity:	19.2 °C / 47.0 %
Result:	20dB Bandwidth: 113.62 kHz

Agilent

Δ Mkr1 113.62 kHz

0.01 dB

Ref 20 dBm

#Atten 20 dB

#Peak

Log

10

dB/

Offst

10.4

dB

DI

-8.2

dBm

LgAv

V1 S2

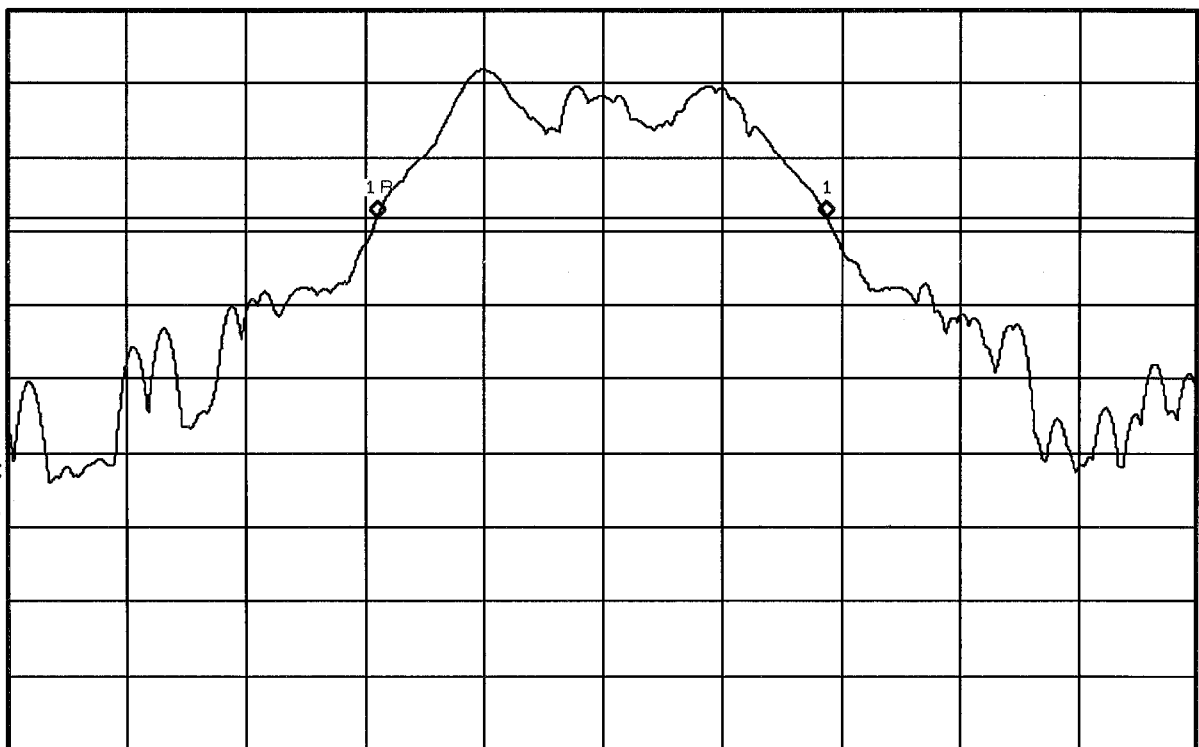
S3 FC

AA

$\hat{E}(f)$:

f>50k

Swp



Center 915.199 76 MHz

Span 300 kHz

#Res BW 10 kHz

#VBW 30 kHz

Sweep 3.276 ms (8192 pts)



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EMISSIONS TEST DATA SHEET

Method:	Occupied Bandwidth
Test Specification:	FCC Part 15, Subpart C Paragraph: 15.247 (a)(i)
Job Number:	R-6458N-1
Customer:	Immedia Semiconductor LLC
Test Sample:	Outdoor XT2 Blink Camera Module
Model Number:	BCM00201U
Serial Number:	807-000-249
Operating Mode:	Transmitting modulated signal
Technician:	M.Seamans
Date(s):	October 25, 2019
Temp/ Relative Humidity:	19.2 °C / 47.0 %
Result:	20dB Bandwidth: 114.01 kHz

Agilent

Ref 20 dBm

#Atten 20 dB

Δ Mkr1 114.01 kHz

-0.02 dB

#Peak

Log

10

dB/

Offst

10.4

dB

DI

-8.7

dBm

LgAv

V1 S2

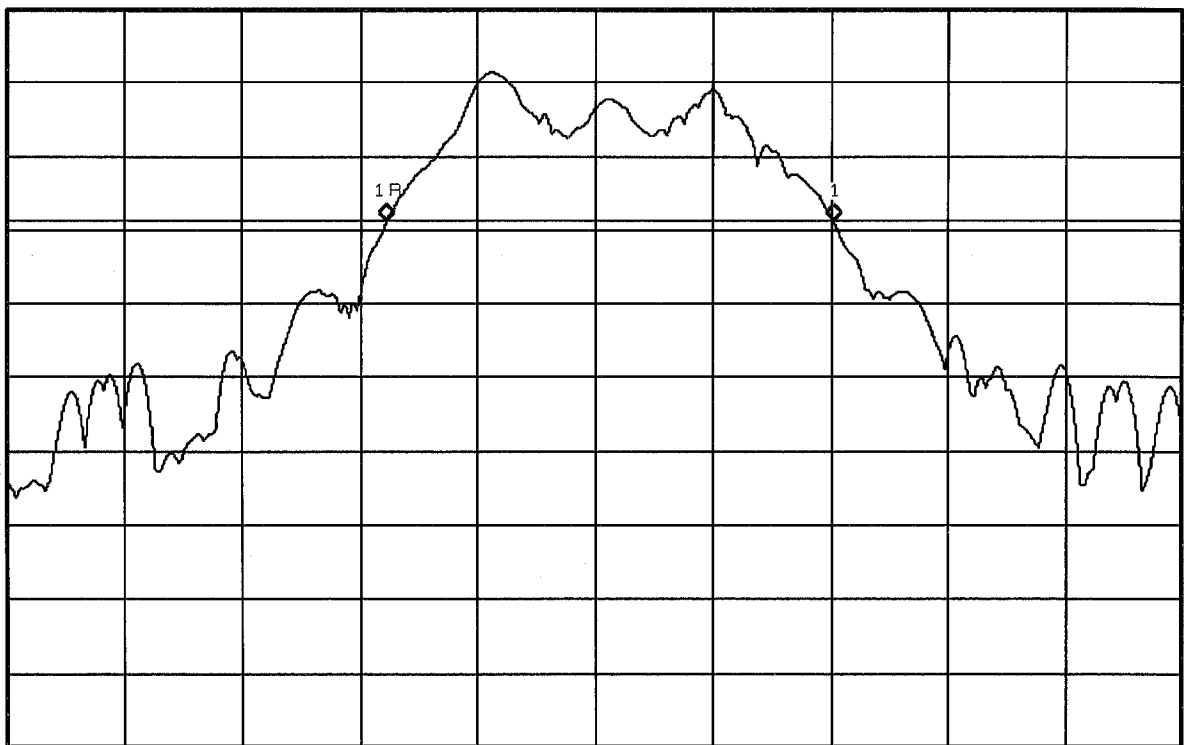
S3 FC

AA

$\hat{E}(f)$:

f>50k

Swp



Center 927.5967 MHz

Span 300 kHz

#Res BW 10 kHz

#VBW 30 kHz

Sweep 3.276 ms (8192 pts)



Retlif Testing Laboratories

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Test Photographs
Number of Channels and Occupancy Time



Test Setup



Retlif Testing Laboratories

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FCC Section 15.247 (a)(1)(i)
Number of Channels and Occupancy Time
Test Data



Retlif Testing Laboratories

Report No. R-6458N-1

EMISSIONS TEST DATA SHEET

Method:	Time of Occupancy
Test Specification:	FCC Part 15, Subpart C Paragraph: 15.247 (a)(iii)
Job Number:	R-6458N-1
Customer:	Immedia Semiconductor LLC
Test Sample:	Outdoor XT2 Blink Camera Module
Model Number:	BCM00201U
Serial Number:	807-000-249
Operating Mode:	Transmitting modulated signal
Technician:	M.Seamans
Date(s):	October 25, 2019
Temp/ Relative Humidity:	22.3 °C / 39.0 %
Result:	Time of Occupancy: (1 pulse in 20 second window)

Agilent

Ref 20 dBm

#Atten 20 dB

Mkr1 1.452 s

12.19 dBm

#Peak

Log

10

dB/

Offst

10.4

dB

LgAv

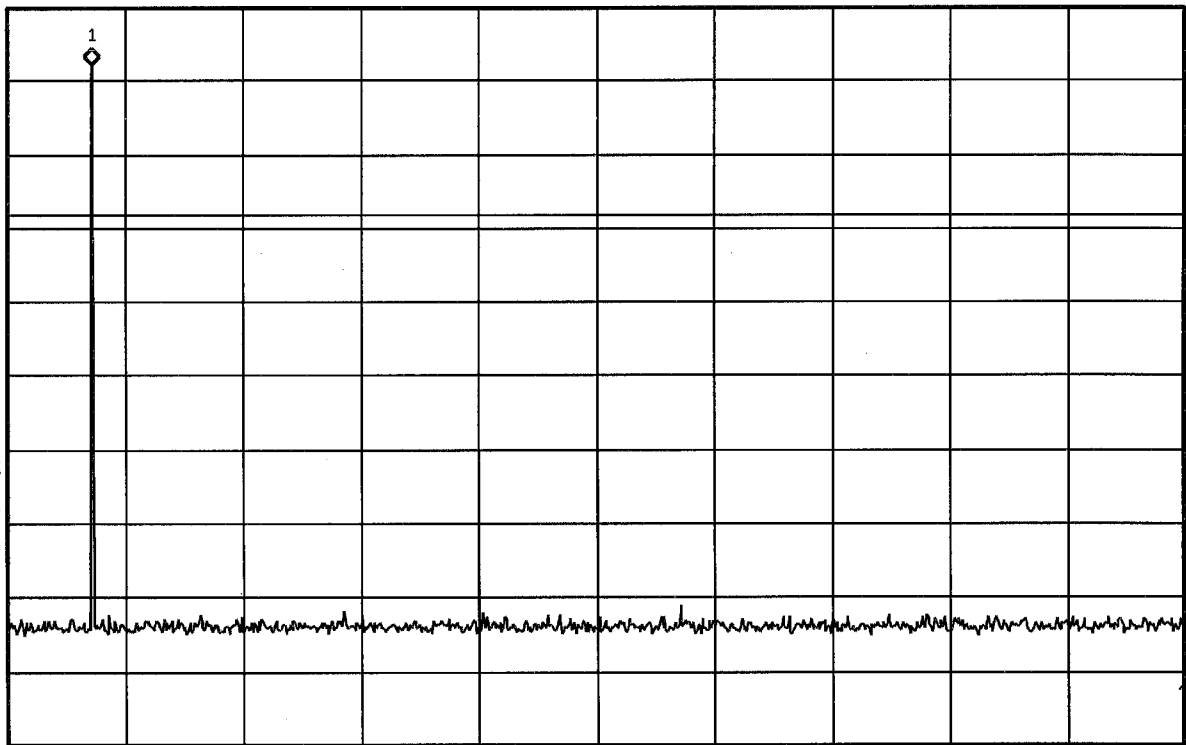
V1 S2

S3 VS

AA

$\hat{E}(f)$:

f>50k



Center 902.797 MHz

Span 0 Hz

Res BW 100 kHz

#VBW 300 kHz

Sweep 20 s (800 pts)



Retlif Testing Laboratories

Report No. R-6458N-1

EMISSIONS TEST DATA SHEET

Method:	Time of Occupancy
Test Specification:	FCC Part 15, Subpart C Paragraph: 15.247 (a)(iii)
Job Number:	R-6458N-1
Customer:	Immedia Semiconductor LLC
Test Sample:	Outdoor XT2 Blink Camera Module
Model Number:	BCM00201U
Serial Number:	807-000-249
Operating Mode:	Transmitting modulated signal
Technician:	M.Seamans
Date(s):	October 25, 2019
Temp/ Relative Humidity:	22.3 °C / 39.0 %
Result:	Time of Occupancy: 9.763ms (1 pulse in 20 second window)

Agilent

Δ Mkr1 9.763 ms
0.02 dB

Ref 20 dBm

#Atten 20 dB

#Peak

Log

10

dB/

Offst

10.4

dB

LgAv

V1 S2

S3 VC

AA

Ê(f):

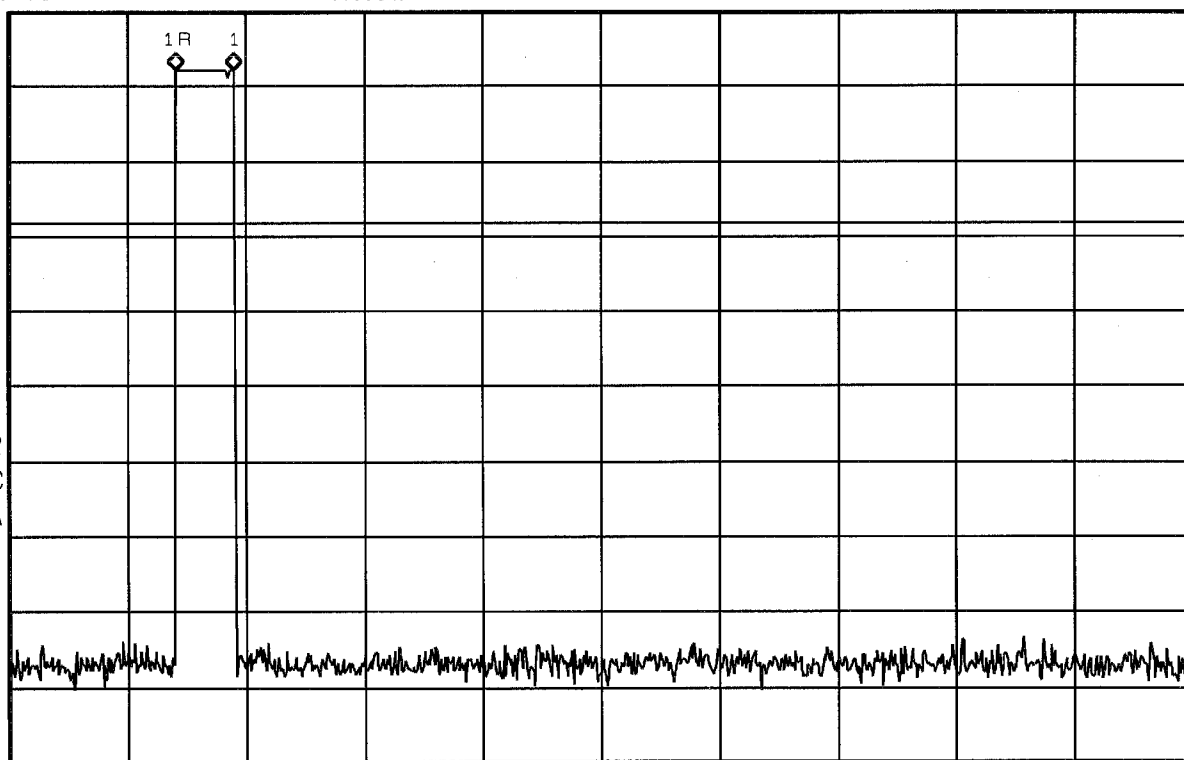
f>50k

Center 902.797 MHz

Res BW 100 kHz

#VBW 300 kHz

Span 0 Hz
Sweep 200 ms (800 pts)



Retlif Testing Laboratories

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Test Photographs
Number of Hopping Frequencies



Test Setup



Retlif Testing Laboratories

Report No. R-6458N-1

**Number of Hopping Frequencies
Test Data**



Retlif Testing Laboratories

Report No. R-6458N-1

EMISSIONS TEST DATA SHEET

Method:	Number of Hopping Channels
Test Specification:	FCC Part 15, Subpart C Paragraph: 15.247 (a)(iii)
Job Number:	R-6458N-1
Customer:	Immedia Semiconductor LLC
Test Sample:	Outdoor XT2 Blink Camera Module
Model Number:	BCM00201U
Serial Number:	807-000-249
Operating Mode:	Transmitting modulated signal
Technician:	M.Seamans
Date(s):	October 25, 2019
Temp/ Relative Humidity:	21.4 °C / 40.0 %
Result:	Number of Hopping Channels: 64

Agilent

Ref 20 dBm

#Atten 20 dB

#Peak

Log

10

dB/

Offst

10.4

dB

LgAv

V1 S2

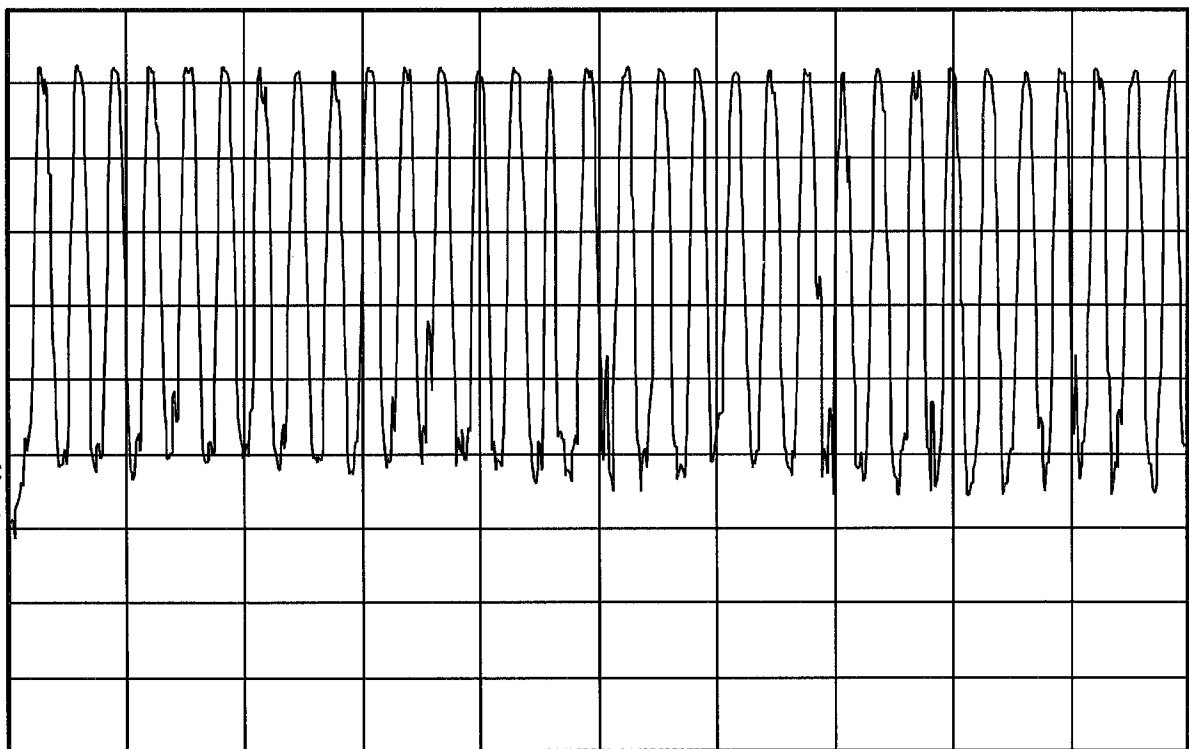
S3 FC

AA

$\hat{E}(f)$:

FTun

Swp



Start 902.000 0 MHz

Stop 915.000 0 MHz

#Res BW 30 kHz

#VBW 100 kHz

Sweep 13.74 ms (800 pts)



Retlif Testing Laboratories

Report No. R-6458N-1

EMISSIONS TEST DATA SHEET

Method:	Number of Hopping Channels
Test Specification:	FCC Part 15, Subpart C Paragraph: 15.247 (a)(iii)
Job Number:	R-6458N-1
Customer:	Immedia Semiconductor LLC
Test Sample:	Outdoor XT2 Blink Camera Module
Model Number:	BCM00201U
Serial Number:	807-000-249
Operating Mode:	Transmitting modulated signal
Technician:	M.Seamans
Date(s):	October 25, 2019
Temp/ Relative Humidity:	21.4 °C / 40.0 %
Result:	Number of Hopping Channels: 64

Agilent

Ref 20 dBm

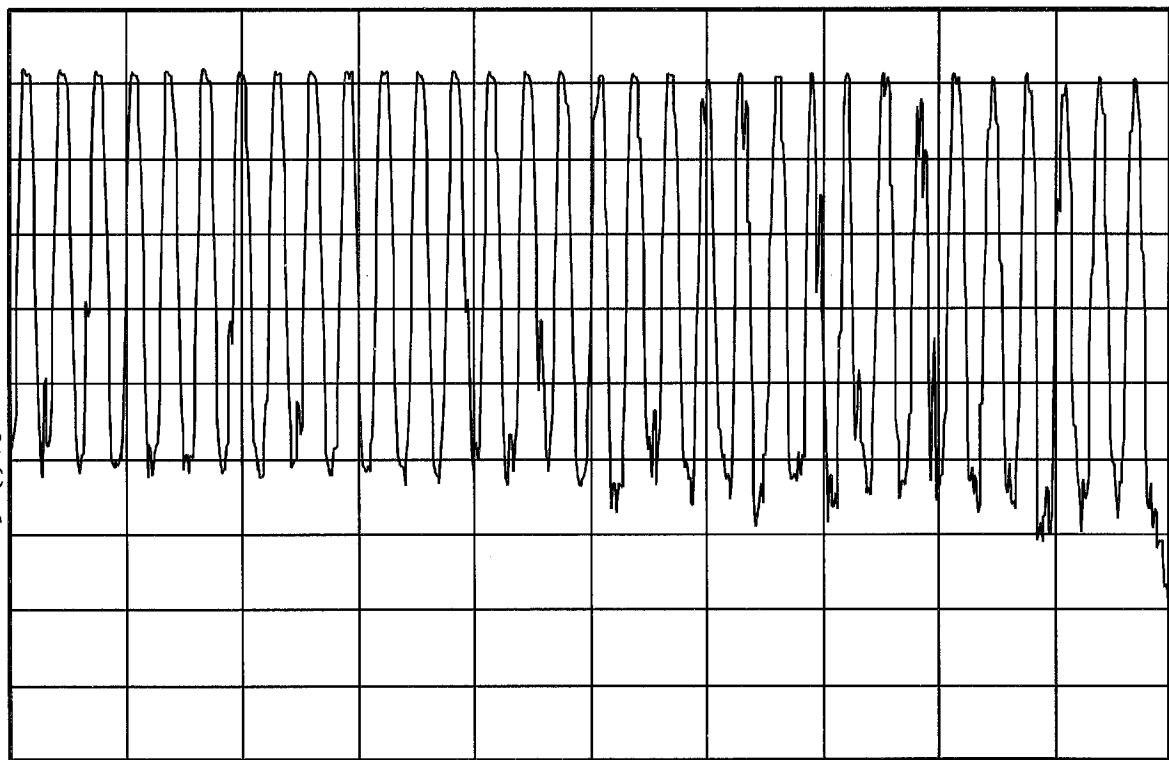
#Atten 20 dB

#Peak
Log
10
dB/
Offst
10.4
dB

LgAv

V1 S2
S3 FC
AA

$\hat{E}(f)$:
FTun
Swp



Start 915.000 MHz

Stop 928.000 MHz

#Res BW 30 kHz

#VBW 100 kHz

Sweep 13.74 ms (800 pts)



Retlif Testing Laboratories

Report No. R-6458N-1

Test Photographs

Peak Conducted Output Power



Test Setup



Retlif Testing Laboratories

Report No. R-6458N-1

**FCC Section 15.247 (a)(1)
Peak Conducted Output Power
Test Data**



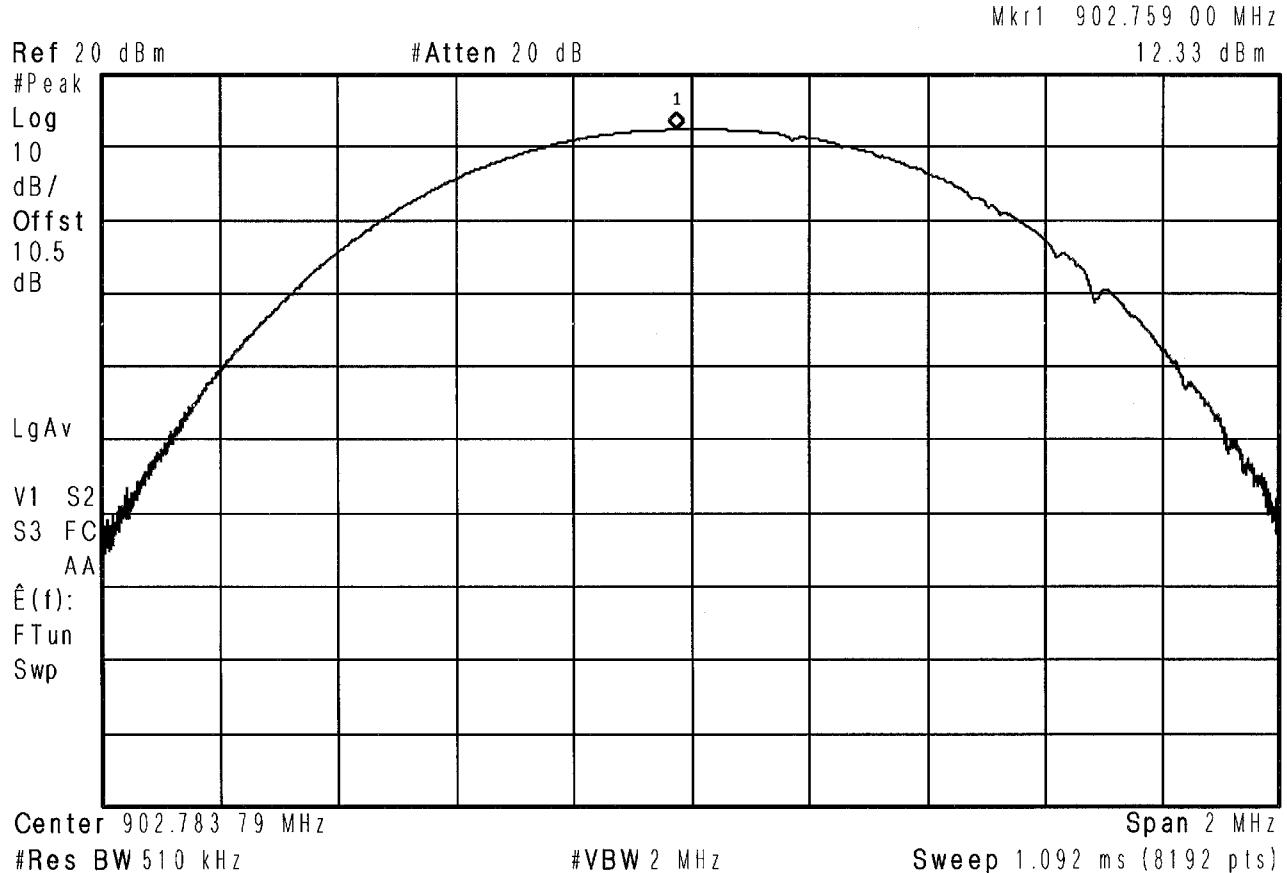
Retlif Testing Laboratories

Report No. R-6458N-1

EMISSIONS TEST DATA SHEET

Method:	Power Output
Test Specification:	FCC Part 15, Subpart C Paragraph: 15.247 (b)(1)
Job Number:	R-6458N-1
Customer:	Immedia Semiconductor LLC
Test Sample:	Outdoor XT2 Blink Camera Module
Model Number:	BCM00201U
Serial Number:	807-000-249
Operating Mode:	Transmitting modulated signal
Technician:	M.Seamans
Date(s):	October 25, 2019
Temp/ Relative Humidity:	22.7 °C / 39.0 %
Result:	Power Output: 12.33 dBm

Agilent



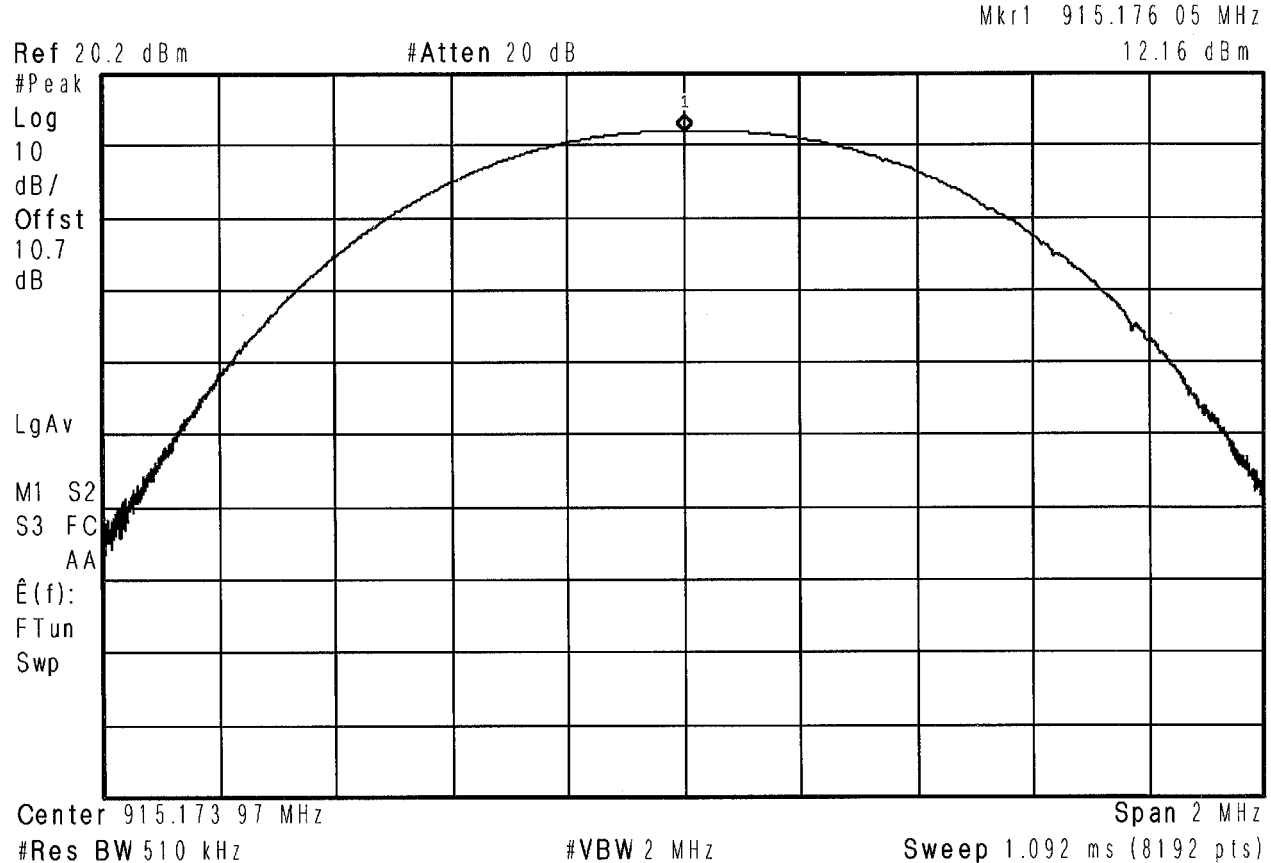
Retlif Testing Laboratories

Report No. R-6458N-1

EMISSIONS TEST DATA SHEET

Method:	Power Output
Test Specification:	FCC Part 15, Subpart C Paragraph: 15.247 (b)(1)
Job Number:	R-6458N-1
Customer:	Immedia Semiconductor LLC
Test Sample:	Outdoor XT2 Blink Camera Module
Model Number:	BCM00201U
Serial Number:	807-000-249
Operating Mode:	Transmitting modulated signal
Technician:	M.Seamans
Date(s):	October 25, 2019
Temp/ Relative Humidity:	22.7 °C / 39.0 %
Result:	Power Output: 12.16 dBm

Agilent



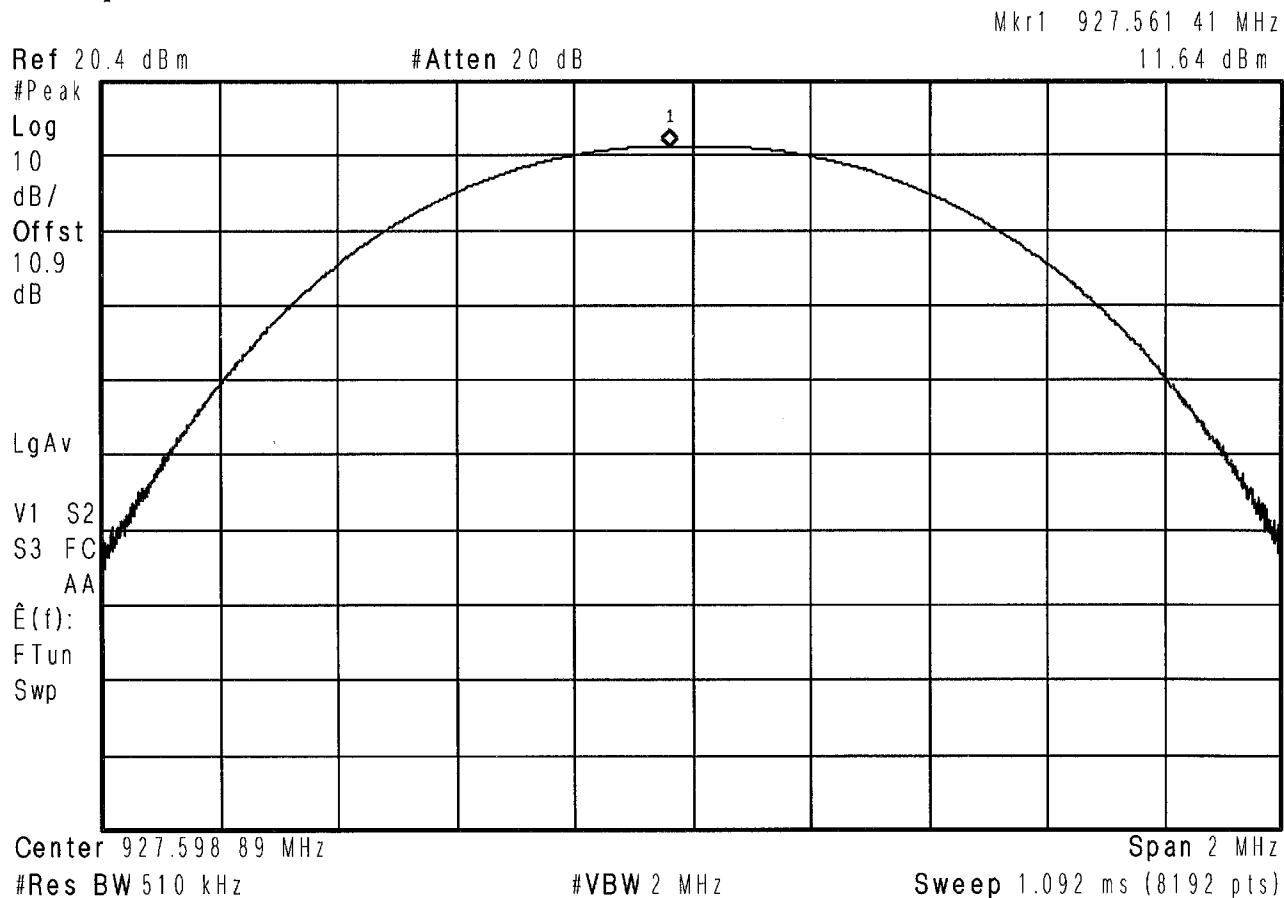
Retlif Testing Laboratories

Report No. R-6458N-1

EMISSIONS TEST DATA SHEET

Method:	Power Output
Test Specification:	FCC Part 15, Subpart C Paragraph: 15.247 (b)(1)
Job Number:	R-6458N-1
Customer:	Immedia Semiconductor LLC
Test Sample:	Outdoor XT2 Blink Camera Module
Model Number:	BCM00201U
Serial Number:	807-000-249
Operating Mode:	Transmitting modulated signal
Technician:	M.Seamans
Date(s):	October 25, 2019
Temp/ Relative Humidity:	22.7 °C / 39.0 %
Result:	Power Output: 11.64 dBm

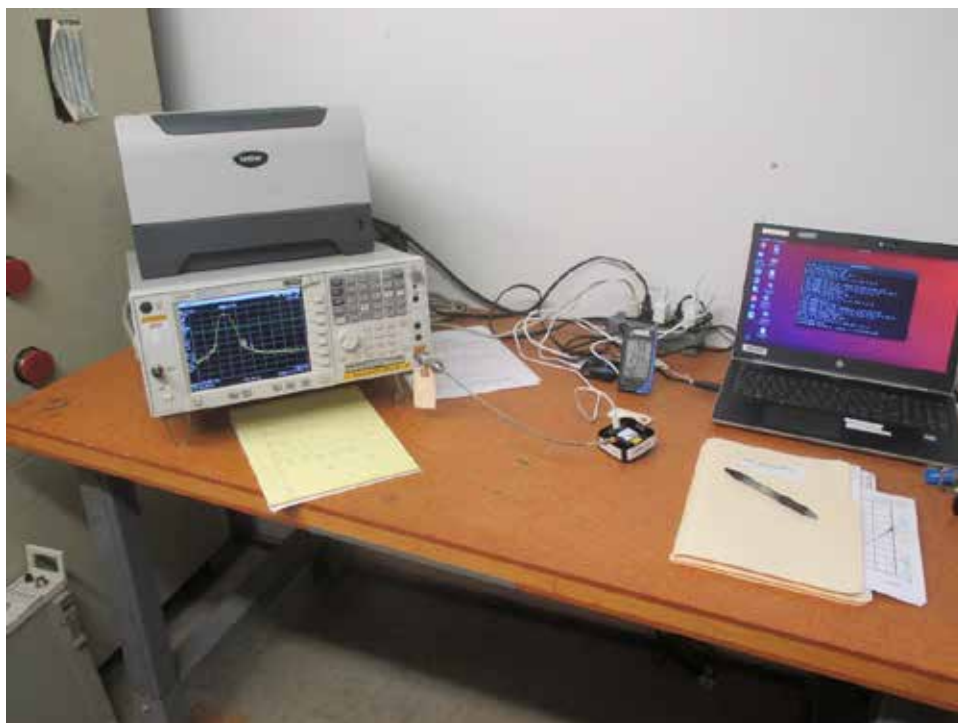
Agilent



Retlif Testing Laboratories

Report No. R-6458N-1

Test Photographs
Conducted Spurious Emissions, 30 MHz to 10 GHz



Test Setup



Retlif Testing Laboratories

Report No. R-6458N-1

FCC Section 15.247 (d)
Conducted Spurious Emissions, 30 MHz to 10 GHz
Test Data



Retlif Testing Laboratories

Report No. R-6458N-1

EMISSIONS TEST DATA SHEET

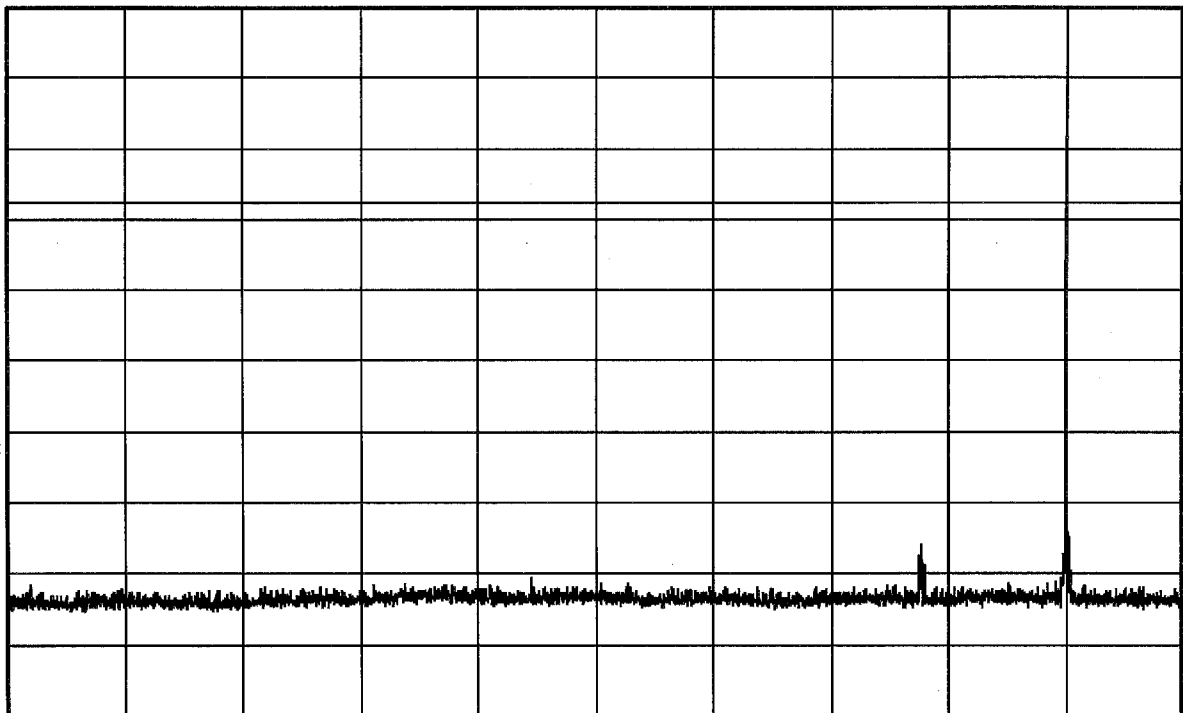
Method:	Conducted Out of Band
Test Specification:	FCC Part 15, Subpart C Paragraph: 15.247 (d)
Job Number:	R-6458N-1
Customer:	Immedia Semiconductor LLC
Test Sample:	Outdoor XT2 Blink Camera Module
Model Number:	BCM00201U
Serial Number:	807-000-249
Operating Mode:	Transmitting modulated signal
Technician:	M.Seamans
Date(s):	October 25, 2019
Temp/ Relative Humidity:	23.5 °C / 39.0 %
Notes:	Limit: -7.75 dBm

Agilent

Ref 20 dBm

#Atten 20 dB

#Peak
Log
10
dB/
Offst
10.5
dB
DI
-7.8
dBm
LgAv
V1 S2
S3 FC
AA
Ê(f):
FTun
Swp



Start 25.00 MHz

Stop 1.000 00 GHz

#Res BW 100 kHz

#VBW 300 kHz

Sweep 93.28 ms (4500 pts)

25 MHz to 1 GHz



Retlif Testing Laboratories

Report No. R-6458N-1

EMISSIONS TEST DATA SHEET

Method:	Conducted Out of Band
Test Specification:	FCC Part 15, Subpart C Paragraph: 15.247 (d)
Job Number:	R-6458N-1
Customer:	Immedia Semiconductor LLC
Test Sample:	Outdoor XT2 Blink Camera Module
Model Number:	BCM00201U
Serial Number:	807-000-249
Operating Mode:	Transmitting modulated signal
Technician:	M.Seamans
Date(s):	October 25, 2019
Temp/ Relative Humidity:	23.5 °C / 39.0 %
Notes:	Limit: -7.75 dBm

Agilent

Mkr1 1.806 2 GHz
-55.67 dBm

Ref 20 dBm

#Atten 20 dB

#Peak

Log

10

dB/

Offst

10.5

dB

DI

-7.8

dBm

LgAv

V1 S2

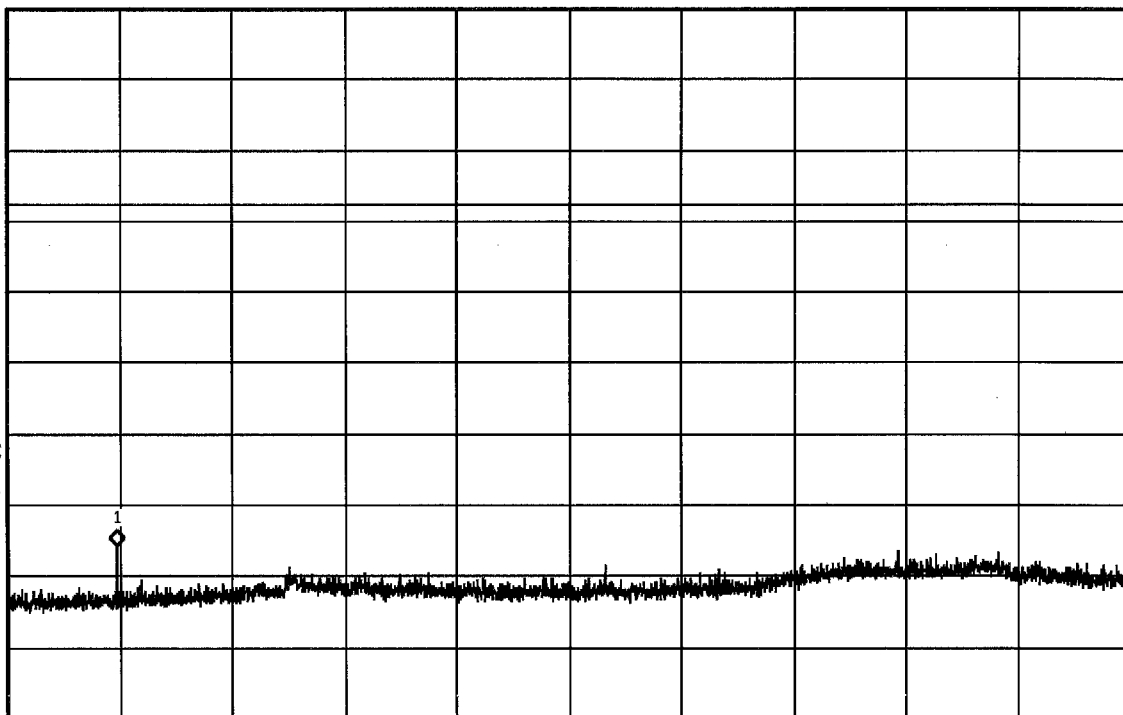
S3 FC

AA

$\hat{E}(f)$:

FTun

Swp



Start 1.000 0 GHz

Stop 9.300 0 GHz

#Res BW 100 kHz

#VBW 300 kHz

Sweep 793.3 ms (4500 pts)

1 GHz to 9.3 GHz



Retlif Testing Laboratories

Report No. R-6458N-1

EMISSIONS TEST DATA SHEET

Method:	Conducted Out of Band
Test Specification:	FCC Part 15, Subpart C Paragraph: 15.247 (d)
Job Number:	R-6458N-1
Customer:	Immedia Semiconductor LLC
Test Sample:	Outdoor XT2 Blink Camera Module
Model Number:	BCM00201U
Serial Number:	807-000-249
Operating Mode:	Transmitting modulated signal
Technician:	M.Seamans
Date(s):	October 25, 2019
Temp/ Relative Humidity:	23.5 °C / 39.0 %
Notes:	Limit: -7.75 dBm

Agilent

Ref 20 dBm

#Atten 20 dB

#Peak

Log

10

dB/

Offst

10.5

dB

DI

-7.8

dBm

LgAv

V1 S2

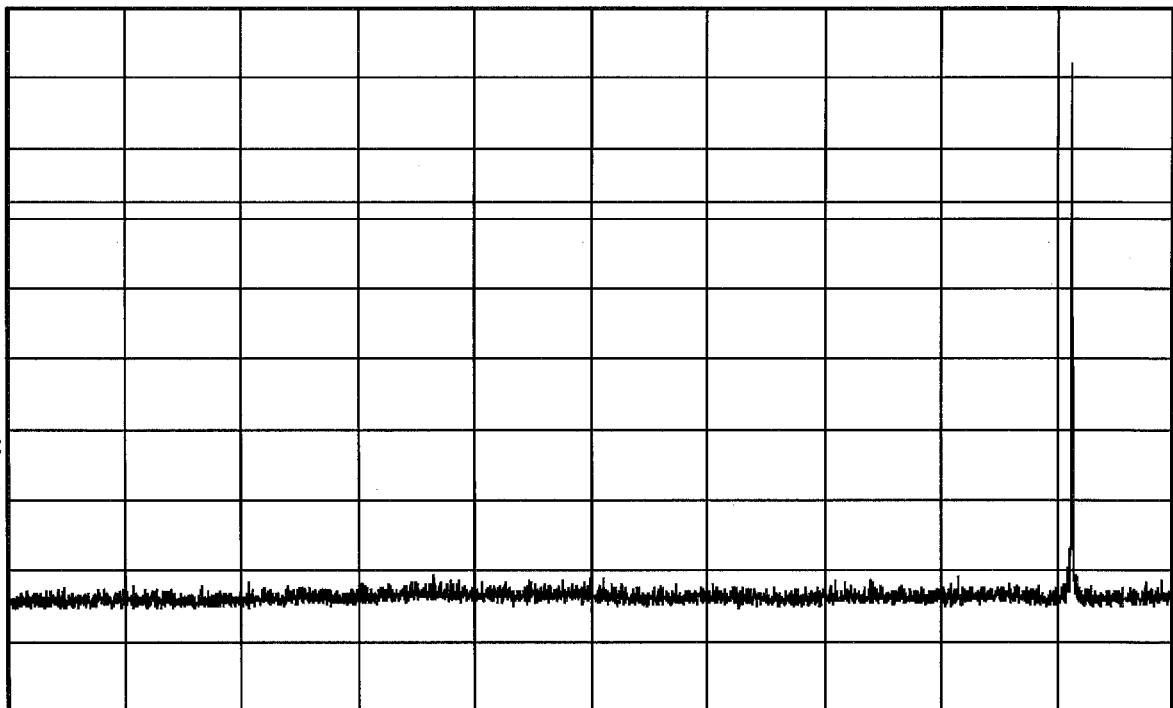
S3 FC

AA

E(f):

FTun

Swp



Start 25.00 MHz

Stop 1.000 00 GHz

#Res BW 100 kHz

#VBW 300 kHz

Sweep 93.28 ms (4500 pts)

25 MHz to 1 GHz



Retlif Testing Laboratories

Report No. R-6458N-1

EMISSIONS TEST DATA SHEET

Method:	Conducted Out of Band
Test Specification:	FCC Part 15, Subpart C Paragraph: 15.247 (d)
Job Number:	R-6458N-1
Customer:	Immedia Semiconductor LLC
Test Sample:	Outdoor XT2 Blink Camera Module
Model Number:	BCM00201U
Serial Number:	807-000-249
Operating Mode:	Transmitting modulated signal
Technician:	M.Seamans
Date(s):	October 25, 2019
Temp/ Relative Humidity:	23.5 °C / 39.0 %
Notes:	Limit: -7.75 dBm

Agilent

Ref 20 dBm

#Atten 20 dB

#Peak

Log

10

dB/

Offst

10.5

dB

DI

-7.8

dBm

LgAv

V1 S2

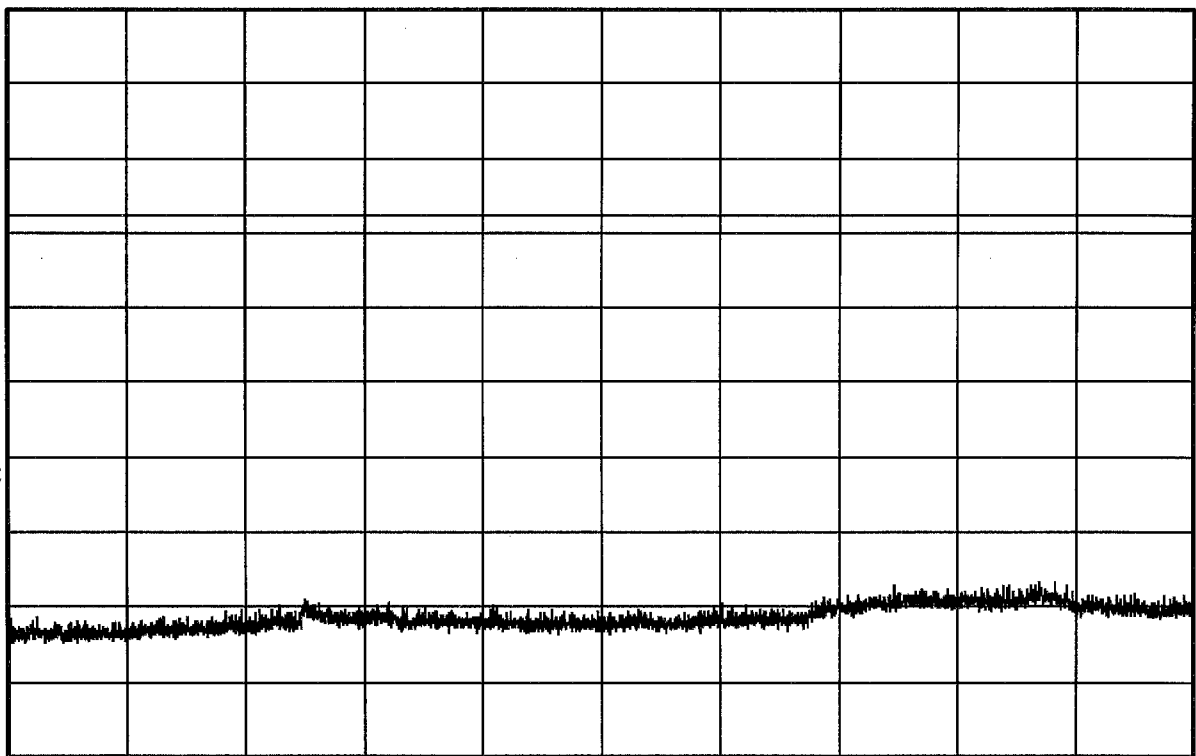
S3 FC

AA

$\hat{E}(f)$:

FTun

Swp



Start 1.000 0 GHz

Stop 9.300 0 GHz

#Res BW 100 kHz

#VBW 300 kHz

Sweep 793.3 ms (4500 pts)

1 GHz to 9.3 GHz



Retlif Testing Laboratories

Report No. R-6458N-1

EMISSIONS TEST DATA SHEET

Method:	Conducted Out of Band
Test Specification:	FCC Part 15, Subpart C Paragraph: 15.247 (d)
Job Number:	R-6458N-1
Customer:	Immedia Semiconductor LLC
Test Sample:	Outdoor XT2 Blink Camera Module
Model Number:	BCM00201U
Serial Number:	807-000-249
Operating Mode:	Transmitting modulated signal
Technician:	M.Seamans
Date(s):	October 25, 2019
Temp/ Relative Humidity:	23.5 °C / 39.0 %
Notes:	Limit: -7.75 dBm

Agilent

Ref 20 dBm

#Atten 20 dB

#Peak

Log

10

dB/

Offst

10.5

dB

DI

-7.8

dBm

LgAv

V1 S2

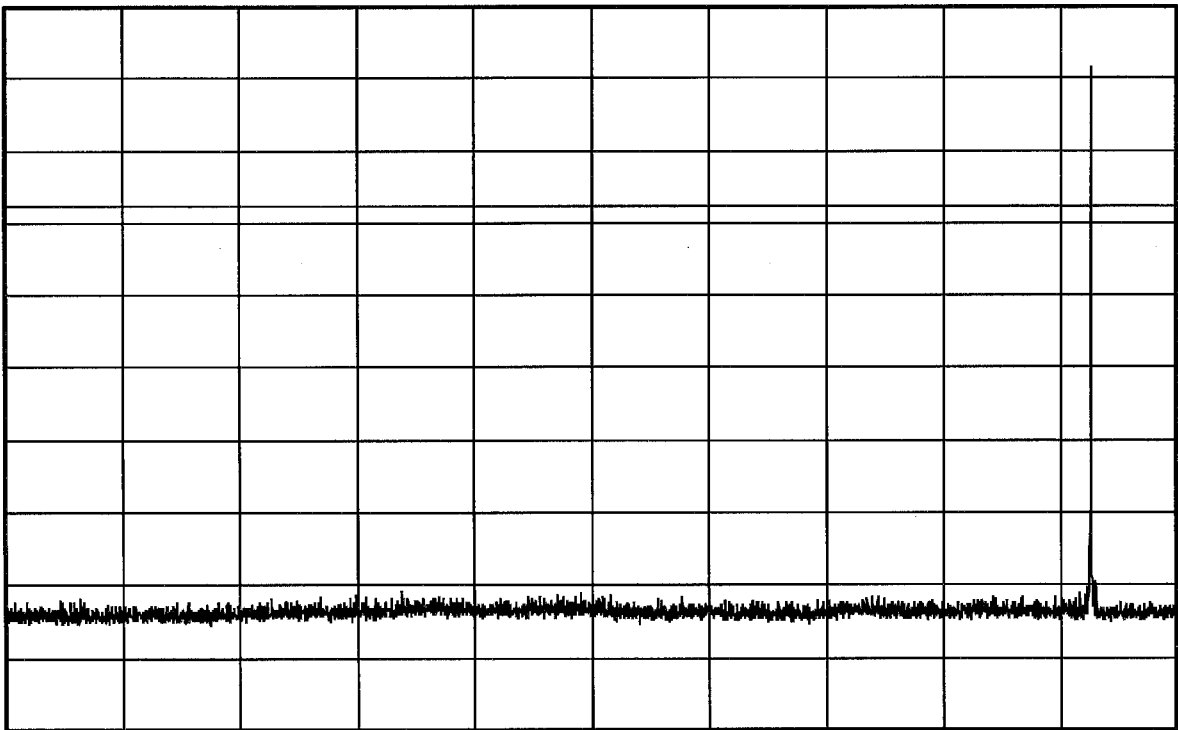
S3 FC

AA

$\hat{E}(f)$:

FTun

Swp



Start 25.00 MHz

Stop 1.000 00 GHz

#Res BW 100 kHz

#VBW 300 kHz

Sweep 93.28 ms (4500 pts)

25 MHz to 1 GHz



Retlif Testing Laboratories

Report No. R-6458N-1

EMISSIONS TEST DATA SHEET

Method:	Conducted Out of Band
Test Specification:	FCC Part 15, Subpart C Paragraph: 15.247 (d)
Job Number:	R-6458N-1
Customer:	Immedia Semiconductor LLC
Test Sample:	Outdoor XT2 Blink Camera Module
Model Number:	BCM00201U
Serial Number:	807-000-249
Operating Mode:	Transmitting modulated signal
Technician:	M.Seamans
Date(s):	October 25, 2019
Temp/ Relative Humidity:	23.5 °C / 39.0 %
Notes:	Limit: -7.75 dBm

Agilent

Ref 20 dBm

#Atten 20 dB

#Peak

Log

10

dB/

Offst

10.5

dB

DI

-7.8

dBm

LgAv

V1 S2

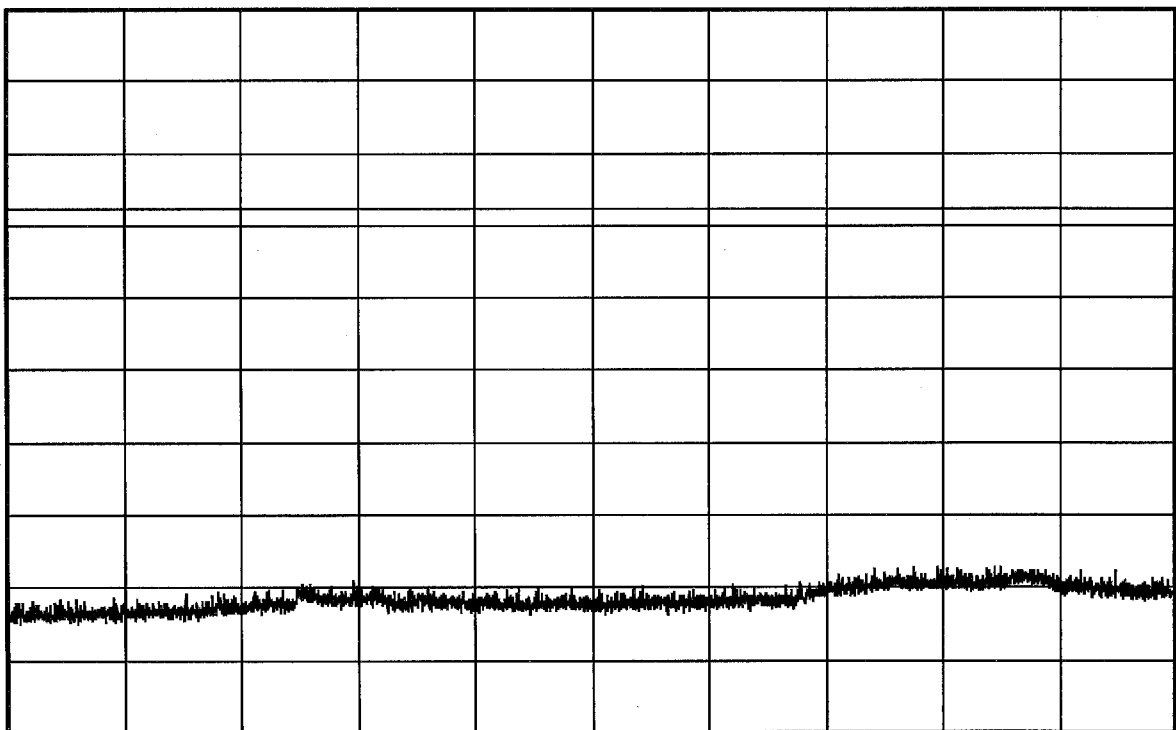
S3 FC

AA

$\hat{E}(f)$:

FTun

Swp



Start 1.000 0 GHz

Stop 9.300 0 GHz

#Res BW 100 kHz

#VBW 300 kHz

Sweep 793.3 ms (4500 pts)

1 GHz to 9.3 GHz



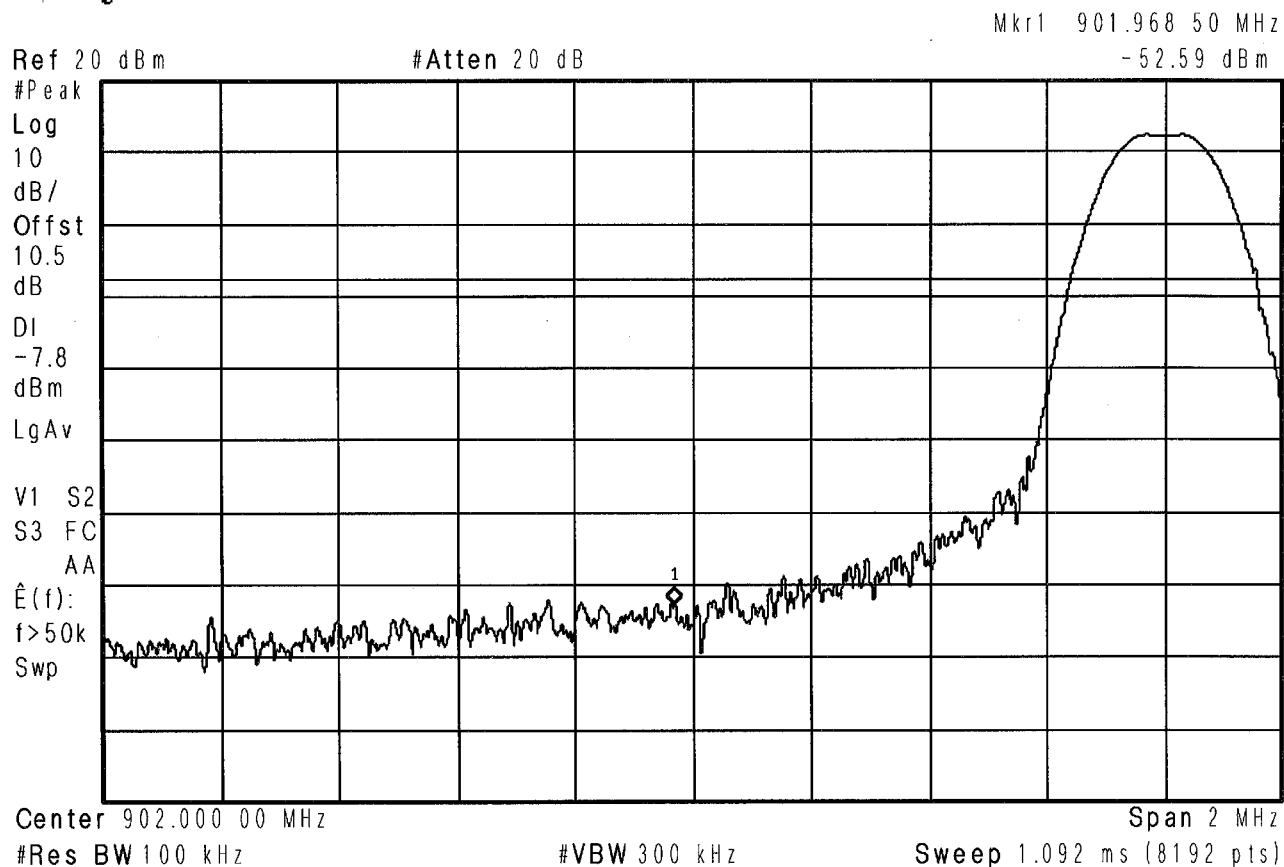
Retlif Testing Laboratories

Report No. R-6458N-1

EMISSIONS TEST DATA SHEET

Method:	Band Edge
Test Specification:	FCC Part 15, Subpart C Paragraph: 15.247 (d)
Job Number:	R-6458N-1
Customer:	Immedia Semiconductor LLC
Test Sample:	Outdoor XT2 Blink Camera Module
Model Number:	BCM00201U
Serial Number:	807-000-249
Operating Mode:	Transmitting modulated signal
Technician:	M.Seamans
Date(s):	October 25, 2019
Temp/ Relative Humidity:	23.5 °C / 39.0 %
Notes:	Limit: -7.75 dBm

Agilent



Retlif Testing Laboratories

Report No. R-6458N-1

EMISSIONS TEST DATA SHEET

Method:	Band Edge
Test Specification:	FCC Part 15, Subpart C Paragraph: 15.247 (d)
Job Number:	R-6458N-1
Customer:	Immedia Semiconductor LLC
Test Sample:	Outdoor XT2 Blink Camera Module
Model Number:	BCM00201U
Serial Number:	807-000-249
Operating Mode:	Transmitting modulated signal
Technician:	M.Seamans
Date(s):	October 25 th , 2019
Temp/ Relative Humidity:	23.5 °C / 39.0 %
Notes:	Limit: -7.75 dBm

Agilent

Ref 20 dBm

#Atten 20 dB

Mkr1 928.006 7 MHz

-40.13 dBm

#Peak

Log

10

dB /

Offst

10.5

dB

DI

-7.8

dBm

LgAv

M1 S2

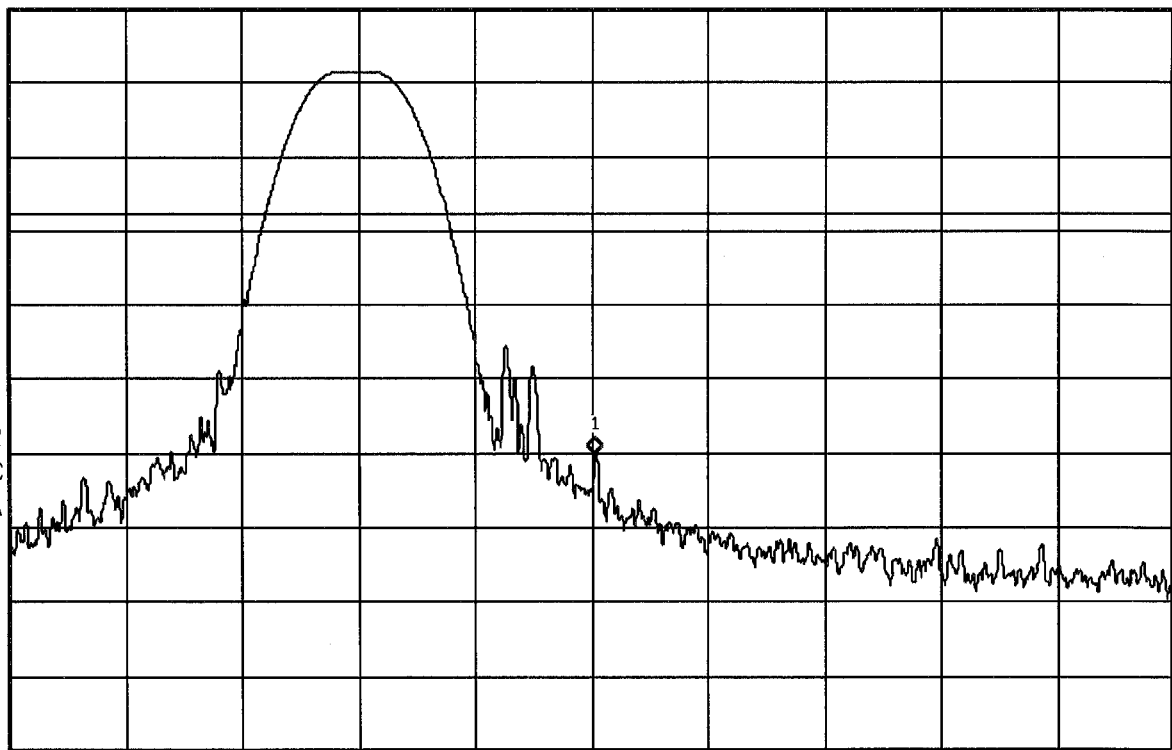
S3 FC

AA

$\hat{E}(f)$:

f>50k

Swp



Center 928.000 0 MHz

Span 2 MHz

#Res BW 100 kHz

#VBW 300 kHz

Sweep 1.2 ms (4500 pts)



Retlif Testing Laboratories

Report No. R-6458N-1

Test Photographs
Field Strength of Spurious Emissions



Test Configuration



Retlif Testing Laboratories

Report No. R-6458N-1

Test Photographs
Field Strength of Spurious Emissions



Horizontal Antenna Polarization, 30 to 200 MHz



Vertical Antenna Polarization, 30 to 200 MHz



Retlif Testing Laboratories

Report No. R-6458N-1

Test Photographs
Field Strength of Spurious Emissions



Horizontal Antenna Polarization, 200 MHz to 1 GHz



Vertical Antenna Polarization, 200 MHz to 1 GHz



Retlif Testing Laboratories

Report No. R-6458N-1

Test Photographs
Field Strength of Spurious Emissions



Horizontal Antenna Polarization, 1 GHz to 10 GHz



Vertical Antenna Polarization, 1 GHz to 10 GHz



Retlif Testing Laboratories

Report No. R-6458N-1

FCC Section 15.247 (d)
Field Strength of Spurious Emissions
Test Data



Retlif Testing Laboratories

Report No. R-6458N-1

RETLIF TESTING LABORATORIES

EMISSIONS TEST DATA SHEET

Test Method	Unwanted Emissions into Restricted Frequency Bands	
Customer	Immedia Semiconductor LLC	
Job Number	R-6458N-1	
Test Sample	Outdoor XT2 Blink Camera Module	
Model Number	BCM00201U	
Serial Number	857-000-181	
Test Specification	FCC Part 15 Subpart C	Paragraph: 15.247(d)
Operating Mode	Streaming video to laptop	
Technician	M. Seamans	
Date	November 8, 2019	

Notes: Antenna Test Distance: 3 meters Detector: Quasi-Peak <1GHz, Average >1GHz

TEST PARAMETERS

Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading		Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m		uV/m	uV/m
37.50	-	-	-	-		-	100.00
	38.00	7.75	12.35	20.10	*	10.12	
38.25	-	-	-	-		-	100.00
73.00	-	-	-	-		-	100.00
	74.00	14.87	8.63	23.50	*	14.96	
74.60	-	-	-	-		-	100.00
74.80	-	-	-	-		-	100.00
	75.00	11.61	8.60	20.20	*	10.23	
75.20	-	-	-	-		-	100.00
108.00	-	-	-	-		-	150.00
	115.00	6.44	14.56	21.00	*	11.22	
	-	-	-	-		-	
121.94	-	-	-	-		-	150.00
123.00	-	-	-	-		-	150.00
	130.00	7.33	14.67	22.00	*	15.59	
	-	-	-	-		-	
138.00	-	-	-	-		-	150.00

No EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum. * This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).



Retlif Testing Laboratories

Report No. R-6458N-1

RETLIF TESTING LABORATORIES

EMISSIONS TEST DATA SHEET

Test Method	Unwanted Emissions into Restricted Frequency Bands	
Customer	Immedia Semiconductor LLC	
Job Number	R-6458N-1	
Test Sample	Outdoor XT2 Blink Camera Module	
Model Number	BCM00201U	
Serial Number	857-000-181	
Test Specification	FCC Part 15 Subpart C	Paragraph: 15.247(d)
Operating Mode	Streaming video to laptop	
Technician	M. Seamans	
Date	November 8, 2019	

Notes: Antenna Test Distance: 3 meters Detector: Quasi-Peak <1GHz, Average >1GHz

TEST PARAMETERS

Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading			Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m			uV/m	uV/m
149.90	-	-	-	-			-	150.00
	150.00	8.73	14.37	23.10	*		14.29	
150.05	-	-	-	-			-	150.00
156.52	-	-	-	-			-	150.00
	156.52	8.33	15.27	23.60	*		15.14	
156.52	-	-	-	-			-	150.00
156.70	-	-	-	-			-	150.00
	156.80	8.29	15.31	23.60	*		15.14	
156.90	-	-	-	-			-	150.00
162.01	-	-	-	-			-	150.00
	165.00	7.30	16.50	23.80	*		15.49	
167.17	-	-	-	-			-	150.00
167.72	-	-	-	-			-	150.00
	170.00	6.94	17.26	24.20	*		16.22	
173.20	-	-	-	-			-	150.00

No EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum. * This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).



Retlif Testing Laboratories

Report No. R-6458N-1

RETLIF TESTING LABORATORIES

EMISSIONS TEST DATA SHEET

Test Method	Unwanted Emissions into Restricted Frequency Bands	
Customer	Immedia Semiconductor LLC	
Job Number	R-6458N-1	
Test Sample	Outdoor XT2 Blink Camera Module	
Model Number	BCM00201U	
Serial Number	857-000-181	
Test Specification	FCC Part 15 Subpart C	Paragraph: 15.247(d)
Operating Mode	Streaming video to laptop	
Technician	M. Seamans	
Date	November 8, 2019	

Notes: Antenna Test Distance: 3 meters Detector: Quasi-Peak <1GHz, Average >1GHz

TEST PARAMETERS

Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading			Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m			uV/m	uV/m
240.00	-	-	-	-			-	200.00
	260.00	7.18	15.42	22.60	*		13.49	
285.00	-	-	-	-			-	200.00
322.80	-	-	-	-			-	200.00
	330.00	7.57	17.63	25.20	*		18.20	
335.40	-	-	-	-			-	200.00
399.90	-	-	-	-			-	200.00
	405.00	8.30	19.20	27.50	*		23.71	
410.00	-	-	-	-			-	200.00
608.00	-	-	-	-			-	200.00
	611.00	8.35	23.65	32.00	*		39.81	
614.00	-	-	-	-			-	200.00
960.00	-	-	-	-			-	500.00
	975.00	9.27	29.83	39.10	*		90.16	
1240.00	-	-	-	-			-	500.00
1300.00	-	-	-	-			-	500.00
	1350.00	33.37	-7.69	25.68			19.23	
1427.00	-	-	-	-			-	500.00

No EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum. * This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).



Retlif Testing Laboratories

Report No. R-6458N-1

RETLIF TESTING LABORATORIES

EMISSIONS TEST DATA SHEET

Test Method	Unwanted Emissions into Restricted Frequency Bands	
Customer	Immedia Semiconductor LLC	
Job Number	R-6458N-1	
Test Sample	Outdoor XT2 Blink Camera Module	
Model Number	BCM00201U	
Serial Number	857-000-181	
Test Specification	FCC Part 15 Subpart C	Paragraph: 15.247(d)
Operating Mode	Streaming video to laptop	
Technician	M. Seamans	
Date	November 8, 2019	

Notes: Antenna Test Distance: 3 meters

Detector: Quasi-Peak <1GHz, Average >1GHz

TEST PARAMETERS

Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading			Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m			uV/m	uV/m
1435.00	-	-	-	-			-	500.00
	1500.00	33.53	-6.84	26.69	*		21.60	
1646.50	-	-	-	-			-	500.00
1660.00	-	-	-	-			-	500.00
	1680.00	33.05	-5.92	27.13	*		22.72	
1710.00	-	-	-	-			-	500.00
1718.80	-	-	-	-			-	500.00
	1720.00	32.75	-5.73	27.02	*		22.44	
1722.20	-	-	-	-			-	500.00
2200.00	-	-	-	-			-	500.00
	2250.00	32.86	-3.64	29.22	*		28.91	
2300.00	-	-	-	-			-	500.00
2310.00	-	-	-	-			-	500.00
	2390.00	33.07	-3.19	29.88	*		31.19	
2390.00	-	-	-	-			-	500.00
2483.50	-	-	-	-			-	500.00
	2490.00	32.90	-2.90	30.00	*		31.62	
2500.00	-	-	-	-			-	500.00

EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum. * This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).



Retlif Testing Laboratories

Report No. R-6458N-1

RETLIF TESTING LABORATORIES

EMISSIONS TEST DATA SHEET

Test Method	Unwanted Emissions into Restricted Frequency Bands	
Customer	Immedia Semiconductor LLC	
Job Number	R-6458N-1	
Test Sample	Outdoor XT2 Blink Camera Module	
Model Number	BCM00201U	
Serial Number	857-000-181	
Test Specification	FCC Part 15 Subpart C	Paragraph: 15.247(d)
Operating Mode	Streaming video to laptop	
Technician	M. Seamans	
Date	November 8, 2019	

Notes: Antenna Test Distance: 3 meters Detector: Quasi-Peak <1GHz, Average >1GHz

TEST PARAMETERS

Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading			Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m			uV/m	uV/m
2690.00	-	-	-	-			-	500.00
	-	-	-	-			-	
	2750.00	32.68	-2.15	30.53	*		33.61	
	-	-	-	-			-	
2900.00	-	-	-	-			-	500.00
3260.00	-	-	-	-			-	500.00
	3263.00	32.63	-0.38	32.25	*		40.97	
3267.00	-	-	-	-			-	500.00
3332.00	-	-	-	-			-	500.00
	3336.00	32.58	-0.09	32.49	*		42.12	
3339.00	-	-	-	-			-	500.00
3345.00	-	-	-	-			-	500.00
	3350.00	32.63	-0.03	32.60	*		42.66	
3358.00	-	-	-	-			-	500.00
3600.00	-	-	-	-			-	500.00
	-	-	-	-			-	
	3700.00	31.58	1.28	32.86	*		43.95	
	-	-	-	-			-	

No EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum. * This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).



Retlif Testing Laboratories

Report No. R-6458N-1

RETLIF TESTING LABORATORIES

EMISSIONS TEST DATA SHEET

Test Method	Unwanted Emissions into Restricted Frequency Bands	
Customer	Immedia Semiconductor LLC	
Job Number	R-6458N-1	
Test Sample	Outdoor XT2 Blink Camera Module	
Model Number	BCM00201U	
Serial Number	857-000-181	
Test Specification	FCC Part 15 Subpart C	Paragraph: 15.247(d)
Operating Mode	Streaming video to laptop	
Technician	M. Seamans	
Date	November 8, 2019	

Notes: Antenna Test Distance: 3 meters Detector: Quasi-Peak <1GHz, Average >1GHz

TEST PARAMETERS

Restricted Band MHz	Measured Frequency MHz	Meter Reading dBuV	Correction Factor dB	Corrected Reading dBuV/m		Converted Reading uV/m	Limit at 3M uV/m
	-	-	-	-		-	
4400.00	-	-	-	-		-	500.00
4500.00	-	-	-	-		-	500.00
	4800.00	32.01	3.43	35.44	*	59.16	
5150.00	-	-	-	-		-	500.00
5350.00	-	-	-	-		-	500.00
	5400.00	31.36	4.37	35.73	*	61.16	
5460.00	-	-	-	-		-	500.00
7250.00	-	-	-	-		-	500.00
	7440.00	33.40	7.69	41.09	*	113.37	
7750.00	-	-	-	-		-	500.00
8025.00	-	-	-	-		-	500.00
	8300.00	33.40	8.98	42.38	*	131.52	
8500.00	-	-	-	-		-	500.00
9000.00	-	-	-	-		-	500.00
	9100.00	33.96	10.00	43.96	*	157.76	
9200.00	-	-	-	-		-	500.00

No EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum. * This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).



Retlif Testing Laboratories

Report No. R-6458N-1

RETLIF TESTING LABORATORIES

EMISSIONS TEST DATA SHEET

Test Method	Unwanted Emissions into Restricted Frequency Bands	
Customer	Immedia Semiconductor LLC	
Job Number	R-6458N-1	
Test Sample	Outdoor XT2 Blink Camera Module	
Model Number	BCM00201U	
Serial Number	857-000-181	
Test Specification	FCC Part 15 Subpart C	Paragraph: 15.247(d)
Operating Mode	Streaming video to laptop	
Technician	M. Seamans	
Date	November 8, 2019	

Notes: Antenna Test Distance: 3 meters Detector: Quasi-Peak <1GHz, Average >1GHz

TEST PARAMETERS

[illegible]

No EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum. * This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).



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Test Photographs Conducted Limits



EUT Configuration



Test Setup



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FCC Part 15, Subpart B, Section 15.207 (a)
Conducted Emissions
150 kHz to 30 MHz
Test Data



Retlif Testing Laboratories

Report No. R-6458N-1

EMISSIONS TEST DATA SHEET

Test Specification:	FCC Part 15, Subpart B, Section 15.207(a), Conducted Emissions
Method:	ANSI C63.4, Section 7., AC power-line conducted emission measurements
Job Number/Customer:	R-6458N-1 / Immedia Semiconductor LLC
Test Sample:	Outdoor XT2 Blink Camera Module
Model Number:	BCM00201U
Serial Number:	807-000-249
Operating Mode:	Transmitting modulated signal
Technician:	M. Seamans
Date(s):	October 28, 2019
Temp/ Relative Humidity:	19.1 °C / 48.0 %
Lead Tested:	120 VAC 60 Hz

Frequency	Lead Tested	Peak Meter Reading	Quasi-Peak Meter Reading	Average Meter Reading	Quasi-Peak Limit	Average Limit
MHz		dBuV	dBuV	dBuV	dBuV	dBuV
0.376	Hot	29.88	24.20	12.40	58.37	48.37
0.368	Neutral	28.80	23.50	14.20	58.55	48.55
0.454	Hot	32.28	28.30	14.90	56.80	46.80
0.452	Neutral	31.18	28.50	17.60	56.84	46.84
0.610	Hot	26.57	19.70	12.60	56	46
0.783	Neutral	23.50	17.10	7.90	56	46
0.781	Hot	25.61	19.10	7.70	56	46
1.594	Neutral	20.88	13.40	5.70	56	46
2.863	Hot	23.36	15.10	6.00	56	46
2.219	Neutral	20.08	13.40	5.80	56	46
4.807	Hot	22.56	15.30	6.10	56	46
6.080	Neutral	22.30	13.70	6.70	60	50

The frequency range was scanned from 0.15 MHz to 30 MHz.

The six highest emissions relative to the limit are presented.

The emissions observed from the EUT do not exceed the specified limits.



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