UNCLASSIFIED	
SECURITY SUMMARY & SPECIAL HANDLING REQUIRE	EMENTS
The title of this application is: TRUEPOINT 5215G	
The overall classification of this application is : UNCLASSIFIED	
Refer to your Security Manual for further guidance.	
The Application Level Special Handling is: A  Approved for public release; distribution is unlimited (DoD Directive 52)	30.24)
11 1	,
DOWNGRADING INSTRUCTIONS	
Special Handling Instruction : A	
CLASSIFICATION UNCLASSIFIED	

CLASSIFICATION

UNCLASSIFIED

# **FULL RECORD PRINT FOR TRuepoint 5215G**

PAGE 1

**Selected Frequencies** 

(U) 14500 MHz - (U) 14715 MHz (U) 15137 MHz - (U) 15350 MHz

System Name : (U) TRuepoint 5215G

(Nomenclature)

Stage : (U) 4 - Operational

**Agency** : (U) DHS - Department of Homeland Security

NTIA Certified : (U) No
Overall Security : Unclassified

<u>Date/Time Last Mod.</u> : 4/29/2008 11:57:06 AM (GMT)

System Description : (U) Fixed Point-to-Point Microwave Radio

Target Date(s)

**System Activation** : (U) 5/2/2008 **System Termination** : (U) 5/2/2010

NSEP Use : (U) No ITU Waiver : (U) No

**Control Numbers** 

**SPS-** SPS-16473/1

References

Type : Previous Certification

Ref. To Cert.: Yes

Ref. Title: DHS - TRuepoint 5207G - 4 - Unapproved - J/F 12

 Ref. Org.
 : (U) DHS

 Ref. Date
 : 3/19/2008

Ref. Is Class: No

**Source Documents** 

• (U) SPS - SPS-16473/1 TRuepoint 5215G Certification Application 4/29/2008

**Geographic Areas for Stage 4** 

City, State/Country : (U) USP (US & POSS)
Location Type : (U) Polygon of 12868 points

Number Of Units : (U) 18

**Estimated Initial Cost of the System** : (U) \$25000

Information Transfer Requirement

(U) Bidirectional1MBPS to 154.4

**System Essentiality** 

(U) This system is part of the SBI Network that secures the borders of the USA.

**Replacement Information** 

(U) Not Applicable

**Stations** 

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# **FULL RECORD PRINT FOR TRuepoint 5215G**

Station Name : (U) DHS 15GHz Transmit Backhaul

**Transmitters** 

(U) 15GHz Transmit Backhaul

**Receivers** 

(U) TRuepoint 5215G

<u>Antenn</u>as

(U) DHS 15 GHz Backhaul Antenna

Station Name : (U) DHS 15 GHz Receive Backhaul - Generic

#### **Links - Selected Modes**

Link

<u>Transmitting Station</u> <u>Receiving Station</u>

(U) DHS 15GHz Transmit Backhaul (U) DHS 15 GHz Receive Backhaul

Radio Service : Fixed Station Class : FX

Equipment Combination

Transmitter : (U) 15GHz Transmit Backhaul
Tx Antenna : (U) DHS 15 GHz Backhaul Antenna

Receiver : Generic Rx Antenna : Generic

**Selected Modes** 

 Frequency
 Em. Des
 Power
 Notes

 (U) 14500 MHz - (U) 14715 MHz
 (U) 30M0D7W
 Mean (U) 0.141 W
 PRI

 (U) 15137 MHz - (U) 15350 MHz
 (U) 30M0D7W
 Mean (U) 0.141 W
 PRI

# TRANSMITTER 15GHz Transmit Backhaul

Nomenclature : (U) 15GHz Transmit Backhaul

Manufacturer : (U) HARRIS CORP
Model Name : (U) TRuepoint 5215G
NTIA Approval Status : (U) Unapproved

**Date/Time Last Mod.** : 4/3/2008 11:23:40 AM (GMT)

Coordination ID : (U) J/F 12
Freq. Stability : (U) 5 ppm
Output Device : (U) Other
Tuning Method : (U) Synthesizer
Radar/Comm : (U) Communications

Supp. of Harmonics : (U) No

Figure 1 - 2nd Harmonic Curve (U)

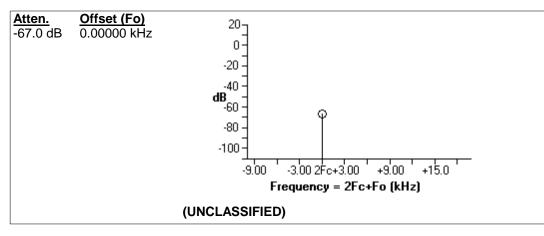


Figure 2 - 3rd Harmonic Curve (U)

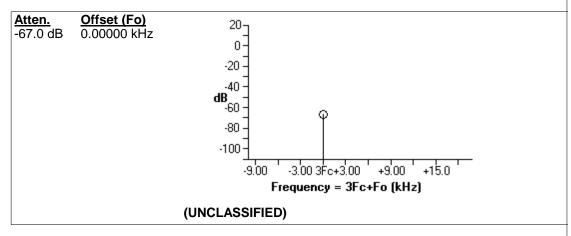
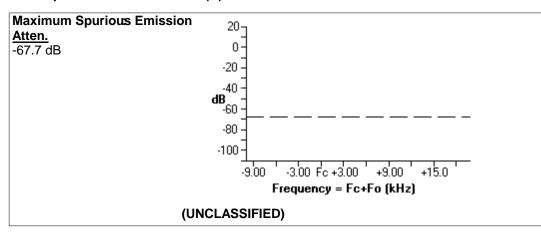


Figure 3 - Spurious Emission Curve (U)



## **Frequencies**

Tuned Frequency : (U) 14400 MHz - 15350 MHz

 Tuning Increment
 : (U) 5.0000 kHz

 Min. Separation
 : (U) 30.000 MHz

 Em. Designator
 : (U) 30M0D7W

 Neccessary BW
 : (U) 30000 kHz

# **Modulation - 30M0D7W**

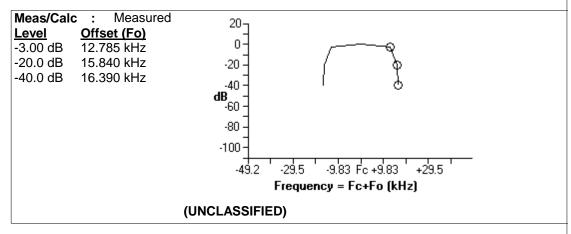
Radar/Communications : (U) Communications
Modulation Type : (U) Digital Modulation

Spread Spectrum : No

**Dig. Modulation Type** : (U) QAM - Quadrature Amplitude Modulation

Digital Bit Rate : (U) 178787000 bps

Figure 4 - Fundamental Curve (U)



# **Powers**

Power Type: Mean Upper Limit: (U) 0.141 W

EL-CID ver. 5.1 rev 80

# **RECEIVER TRuepoint 5215G**

Nomenclature : (U) TRuepoint 5215G
Manufacturer : (U) HARRIS CORP
Model Name : (U) TRuepoint 5215G
NTIA Approval Status : (U) Unapproved

**Date/Time Last Mod.** : 4/3/2008 11:26:54 AM (GMT)

Coordination ID : (U) J/F 12 Freq. Stability : (U) 5 ppm Image Reject : (U) 85.0dB

Tuning Method : (U) Digital Synthesizer

Cond. Undesired Em. : (U) 60.0dBm

**Frequencies** 

Tuned Frequency: (U) 14400 MHz - 15350 MHz

Tuning Increment: (U) 5.0000 kHz

**Sensitivities** 

Em. Designator : (U) 30M0D7W

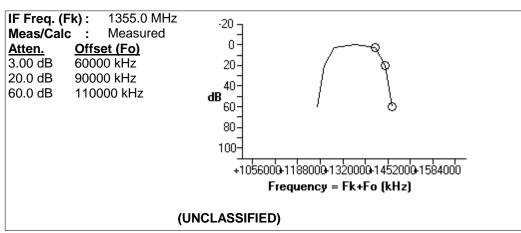
Necessary BW : (U) 30000 kHz

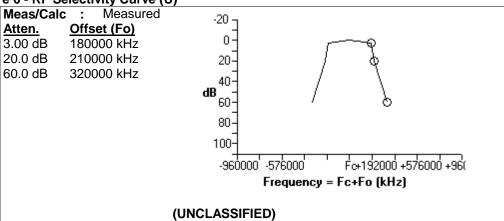
Perf. Crit. : (U) BER - Bit Error Rate

Perf. Value : (U) 10 Sensitivity : (U) -68.0 dBm

Noise Fig. : (U) 5.20 dB Noise Temp. : (U) 670 K Spur. Reject : (U) 60.0 dB

Figure 5 - IF Selectivity Curve (U)





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# ANTENNA DHS 15 GHz Backhaul Antenna

Nomenclature : (U) DHS 15 GHz Backhaul Antenna

Antenna Code : Linear

Manufacturer:(U) ANDREW CORPModel Name:(U) VHLPX4-15NTIA Approval Status:(U) Unapproved

**Date/Time Last Mod.** : 4/3/2008 11:37:44 AM (GMT)

 Coordination ID
 : (U) J/F 12

 Lower Freq. Limit
 : (U) 14250 MHz

 Upper Freq. Limit
 : (U) 15350 MHz

Polarization : (U) Horizontal and Vertical

Main Beam Gain: (U) 43.1 dBiAtten. Rel/Act: (U) Relative dBHorz. Beamwidth: (U) 1.20 degreesVert. Beamwidth: (U) 1.20 degrees

# **UNCLASSIFIED**



