Exhibit Q: Spurious Radiated Emissions

FCC ID: P6I-COPYCAM

Spurious Radiated Emissions

Justification

The individuals and/or the organization requesting the test provided the modes, configurations and settings available to evaluate. While scanning the radiated emissions, all of the EUT parameters listed below were investigated. This includes, but may not be limited to, antennas, tuned transmit frequency ranges, operating modes, and data rates.

Channels in Specified Band Investigated:
Low
Mid
High

Operating Modes Investigated:
No Hop

Antennas Investigated:
gigaAnt Titanis

Data Rates Investigated:
Maximum

Output Power Setting(s) Investigated:
Maximum

Power Input Settings Investigated:
120 VAC, 60 Hz.

Frequency Range Investigated			
Start Frequency	30 MHz	Stop Frequency	25Ghz

Software\Firmware Applied During Test			
Exercise software	Special Test Software	Version	Unknown
Description			
The system was tested using special software developed to test all functions of the device during the test. Ths software allowe the unit to be placed in a no hop mode and set to the low, mid, and high transmit channel			

Equipment Modifications

No EMI suppression devices were added or modified. The EUT was tested as delivered.

Spurious Radiated Emissions

EUT and Peripherals

Description	Manufacturer	Model/Part Number	Serial Number
EUT	Polyvision	CopyCam	E0200066
Control Pad	Polyvision	N/A	N/A
AC Power Adapter	Ault, Inc	P48151000A000G	N/A

Cables

Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
Ethernet	No	3.6	No	Control Pad	EUT
DC Power	No	4.4	No	EUT	AC Adapter

PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.

Measurement Equipment

Description	Manufacturer	Model	Identifier	Last Cal	Interval
Spectrum Analyzer	Hewlett-Packard	8566B	AAL	03/23/2001	12 mo
Spectrum Analyzer	Tektronix	2784	AAO	03/08/2001	24 mo
Antenna, Horn	EMCO	3115	AHC	08/24/2001	12 mo
Pre-Amplifier	Miteq	AMF-4D-005180-24-10P	APC	11/26/2001	12 mo
Antenna, Horn	EMCO	3160-09	AHG	01/15/2000	36 mo
Pre-Amplifier	Miteq	JSD4-18002600-26-8P	APU	01/17/2000	36 mo
Pre-Amplifier 0.5-18 GHz	Miteq	AMF-4D-005180-24-10P	APQ	07/29/2001	12 mo
High Pass Filter	RLC Electronics	F-100-4000-5-R (HPF>	HFD	02/04/2002	12 mo

Test Description

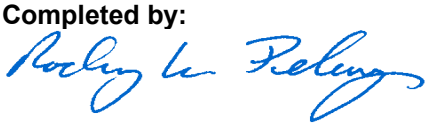
Requirement: Per 47 CFR 15.247(c), the field strength of any spurious emissions or modulation products that fall in a restricted band, as defined in 47 CFR 15.205, is measured. The peak level must comply with the limits specified in 47 CFR 15.35(b). The average level (taken with a 10Hz VBW) must comply with the limits specified in 15.209.

Configuration: The antenna to be used with the EUT was tested. The EUT was configured for low, mid, and high band transmit frequencies. The EUT was transmitting at its maximum data rate in a no hop mode. For each configuration, the spectrum was scanned from 1000 MHz to 25 GHz. In addition, measurements were made in the restricted band of 2.4835 to 2.5 GHz to verify compliance. While scanning, emissions from the EUT were maximized by rotating the EUT, adjusting the measurement antenna height and polarization, and manipulating the EUT antenna in 3 orthogonal planes (per ANSI C63.4:1992). A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

Bandwidths Used for Measurements

Frequency Range (MHz)	Peak Data (kHz)	Quasi-Peak Data (kHz)	Average Data (kHz)
0.01 – 0.15	1.0	0.2	0.2
0.15 – 30.0	10.0	9.0	9.0
30.0 – 1000	100.0	120.0	120.0
Above 1000	1000.0	N/A	1000.0
Measurements were made using the bandwidths and detectors specified. No video filter was used.			

Completed by:



NORTHWEST EMC

OATS DATA SHEET

REV df1.83 02/04/2002

EUT:	CopyCam			Work Order:	POLV0012
Serial Number:	E0200066			Date:	2/22/02 8:19
Customer:	Polyvision Corp.			Temperature:	72
Attendees:	Guy Williams	Tested by:	Rod Peloquin	Humidity:	30%
Cust. Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV01

TEST SPECIFICATIONS

Specification:	47 CFR 15.247(c), 15.209, 15.205	Year:	2000
Method:	ANSI C63.4	Year:	1992

SAMPLE CALCULATIONS

Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation

Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator

COMMENTS

No hop mode, low frequency

EUT OPERATING MODES

Maximum data rate. Maximum output power

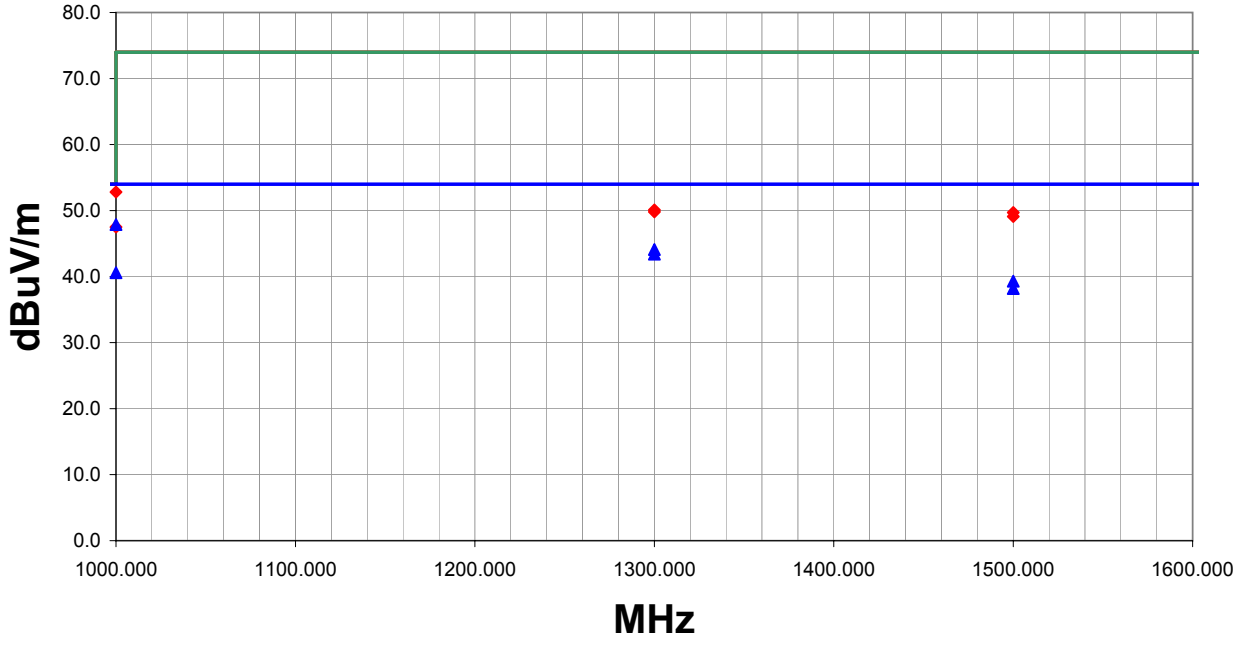
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Test Distance (m)	Run #
Pass	3	1

Other

Tested By:



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Distance (meters)	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
1000.009	45.4	-7.5	350.0	1.2	3.0	10.0	V-Horn	AV	0.0	47.9	54.0	-6.1
1300.016	40.0	-5.9	137.0	1.7	3.0	10.0	H-Horn	AV	0.0	44.1	54.0	-9.9
1300.016	39.3	-5.9	158.0	1.3	3.0	10.0	V-Horn	AV	0.0	43.4	54.0	-10.6
1000.009	38.1	-7.5	248.0	1.2	3.0	10.0	H-Horn	AV	0.0	40.6	54.0	-13.4
1500.025	34.3	-5.0	261.0	1.5	3.0	10.0	V-Horn	AV	0.0	39.3	54.0	-14.7
1500.025	33.2	-5.0	144.0	1.4	3.0	10.0	H-Horn	AV	0.0	38.2	54.0	-15.8
1000.009	50.3	-7.5	350.0	1.2	3.0	10.0	V-Horn	PK	0.0	52.8	74.0	-21.2
1300.016	46.0	-5.9	137.0	1.7	3.0	10.0	H-Horn	PK	0.0	50.1	74.0	-23.9
1300.016	45.7	-5.9	158.0	1.3	3.0	10.0	V-Horn	PK	0.0	49.8	74.0	-24.2
1500.025	44.7	-5.0	261.0	1.5	3.0	10.0	V-Horn	PK	0.0	49.7	74.0	-24.3
1500.025	44.1	-5.0	144.0	1.4	3.0	10.0	H-Horn	PK	0.0	49.1	74.0	-24.9
1000.009	45.0	-7.5	248.0	1.2	3.0	10.0	H-Horn	PK	0.0	47.5	74.0	-26.5

NORTHWEST
EMC

OATS DATA SHEET

REV
df1.83
02/04/2002

EUT:	CopyCam			Work Order:	POLV0012
Serial Number:	E0200066			Date:	2/22/02 9:23
Customer:	Polyvision Corp.			Temperature:	72
Attendees:	Guy Williams	Tested by:	Rod Peloquin	Humidity:	30%
Cust. Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV01

TEST SPECIFICATIONS

Specification:	47 CFR 15.247(c), 15.209, 15.205	Year:	2000
Method:	ANSI C63.4	Year:	1992

SAMPLE CALCULATIONS

Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation

Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator

COMMENTS

No hop mode, high frequency

EUT OPERATING MODES

Maximum data rate. Maximum output power

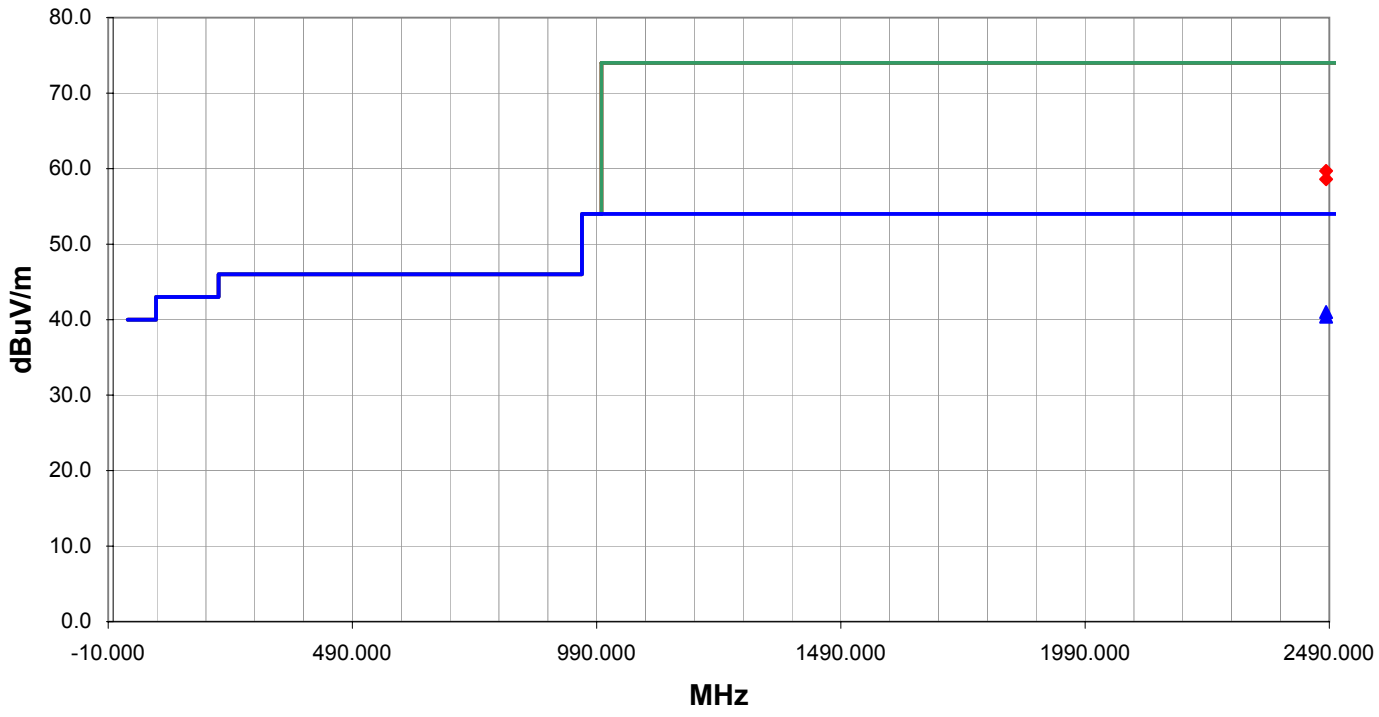
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Test Distance (m)	Run #
Pass	3	2

Other

Tested By:



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Distance (meters)	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
2483.500	31.9	-0.9	211.0	1.6	3.0	10.0	V-Horn	AV	0.0	41.0	54.0	-13.0
2483.500	31.3	-0.9	157.0	1.2	3.0	10.0	H-Horn	AV	0.0	40.4	54.0	-13.6
2483.500	50.6	-0.9	157.0	1.2	3.0	10.0	H-Horn	PK	0.0	59.7	74.0	-14.3
2483.500	49.5	-0.9	211.0	1.6	3.0	10.0	V-Horn	PK	0.0	58.6	74.0	-15.4

NORTHWEST EMC

Radiated and Conducted Emissions

Rev 4.10
07/06/01

EUT:	CopyCam			Work Order:	POLV0012
Serial Number:	E0200066			Date:	02/22/02
Customer:	PolyVision			Temperature:	20
Attendees:	N/A	Tester:	Rod Peloquin	Humidity:	38%
Customer Ref. No.:	N/A	Power:	N/A	Job Site:	EV01

TEST SPECIFICATIONS

Specification:	47 CFR 15.247(c)	Year:	2000	Method:	ANSI C63.4	Year:	1992

SAMPLE CALCULATIONS

Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Attenuation Factor - Amplifier Gain

Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator

COMMENTS

no hop, low frequency

EUT OPERATING MODES

Maximum data rate. Maximum output power

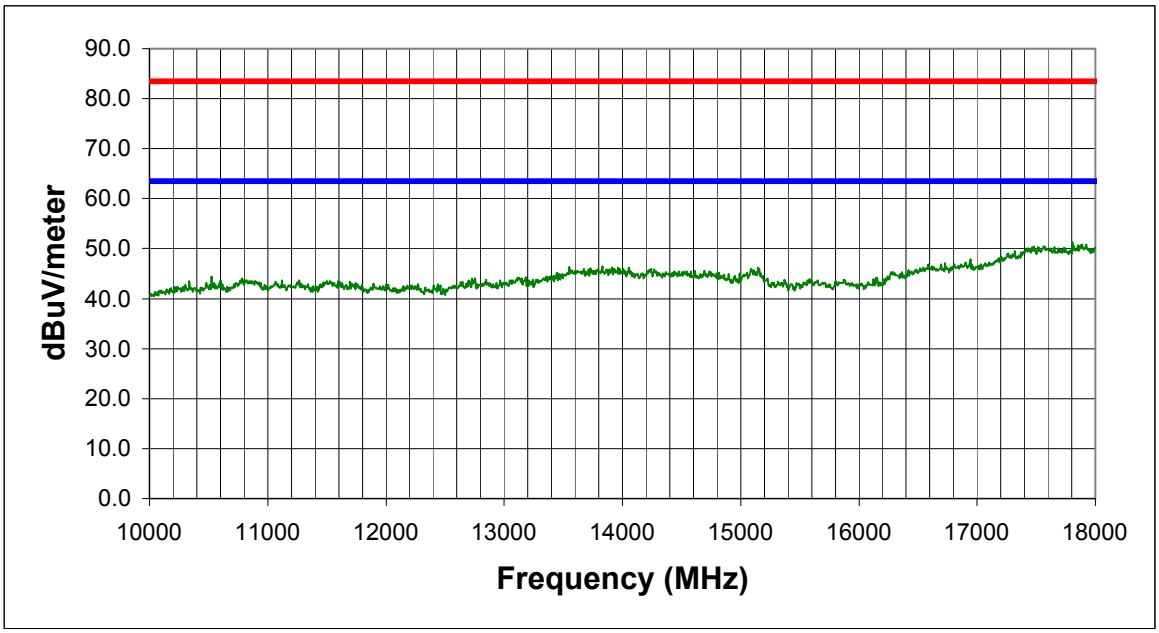
DEVIATIONS FROM TEST STANDARD

None

RESULTS	DISTANCE (m)	LINE	RUN
N/A	1		Run #06

OTHER

Tested By



Frequency (MHz)	Meter Reading (dBuV)	Antenna Polarity	Correction Factor (dB/m)	Adjusted Level (dBuV/meter)	Specification Limit (dBuV/meter)	Margin (dB)
17804.789	33.2	Ver.	18.1	51.3	63.5	-12.2
17888.689	32.5	Ver.	18.3	50.8	63.5	-12.7
17921.641	32.3	Ver.	18.5	50.8	63.5	-12.7
17873.711	32.4	Ver.	18.3	50.7	63.5	-12.8
17852.730	32.5	Hor.	18.2	50.7	63.5	-12.8
17819.779	32.4	Ver.	18.1	50.5	63.5	-13.0
17568.100	33.2	Hor.	17.2	50.4	63.5	-13.1
17481.221	33.6	Ver.	16.8	50.4	63.5	-13.1
17559.119	33.3	Hor.	17.1	50.4	63.5	-13.1
17654.990	32.9	Ver.	17.4	50.3	63.5	-13.2
17514.170	33.4	Ver.	16.9	50.3	63.5	-13.2
17466.240	33.6	Hor.	16.7	50.3	63.5	-13.2
17526.160	33.2	Ver.	17.0	50.2	63.5	-13.3
17735.881	32.5	Hor.	17.7	50.2	63.5	-13.3
17993.551	31.5	Hor.	18.7	50.2	63.5	-13.3
17915.650	31.7	Hor.	18.5	50.2	63.5	-13.3
17936.619	31.6	Hor.	18.5	50.1	63.5	-13.4
17583.080	32.9	Ver.	17.2	50.1	63.5	-13.4
17439.270	33.5	Ver.	16.6	50.1	63.5	-13.4
17622.029	32.8	Ver.	17.3	50.1	63.5	-13.4

NORTHWEST EMC

Radiated and Conducted Emissions

Rev 4.10
07/06/01

EUT:	CopyCam			Work Order:	POLV0012
Serial Number:	E0200066			Date:	02/22/02
Customer:	PolyVision			Temperature:	20
Attendees:	N/A	Tester:	Rod Peloquin	Humidity:	38%
Customer Ref. No.:	N/A	Power:	N/A	Job Site:	EV01

TEST SPECIFICATIONS

Specification:	47 CFR 15.247(c)	Year:	2000	Method:	ANSI C63.4	Year:	1992

SAMPLE CALCULATIONS

Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Attenuation Factor - Amplifier Gain

Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator

COMMENTS

no hop, low frequency

EUT OPERATING MODES

Maximum data rate. Maximum output power

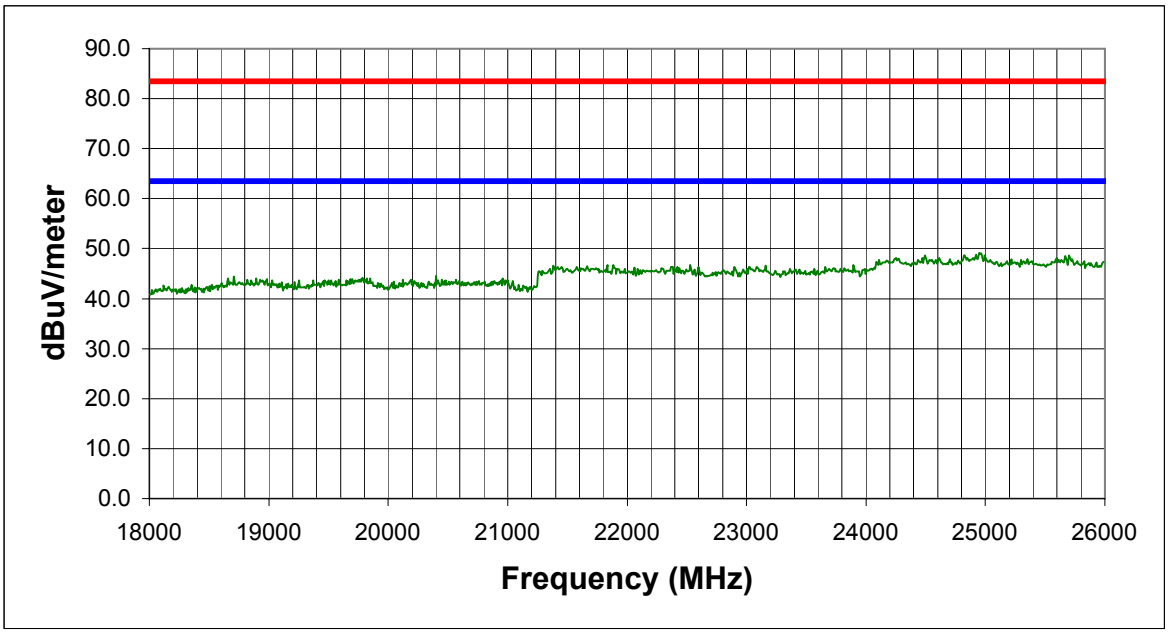
DEVIATIONS FROM TEST STANDARD

None

RESULTS	DISTANCE (m)	LINE	RUN
N/A	1		Run #07

OTHER

Tested By



Frequency (MHz)	Meter Reading (dBuV)	Antenna Polarity	Correction Factor (dB/m)	Adjusted Level (dBuV/meter)	Specification Limit (dBuV/meter)	Margin (dB)
24950.369	37.3	Ver.	11.8	49.1	63.5	-14.4
24920.400	37.1	Hor.	11.7	48.8	63.5	-14.7
24820.520	37.1	Ver.	11.6	48.7	63.5	-14.8
24495.900	37.2	Ver.	11.4	48.6	63.5	-14.9
24995.311	36.8	Hor.	11.8	48.6	63.5	-14.9
25699.490	36.3	Hor.	12.3	48.6	63.5	-14.9
25669.520	36.2	Ver.	12.3	48.5	63.5	-15.0
24470.930	36.8	Ver.	11.4	48.2	63.5	-15.3
24895.430	36.6	Hor.	11.6	48.2	63.5	-15.3
24610.760	36.7	Ver.	11.5	48.2	63.5	-15.3
24850.480	36.5	Hor.	11.6	48.1	63.5	-15.4
24251.189	36.9	Hor.	11.2	48.1	63.5	-15.4
25599.600	35.8	Ver.	12.3	48.1	63.5	-15.4
24276.160	36.8	Hor.	11.2	48.0	63.5	-15.5
24700.660	36.4	Ver.	11.5	47.9	63.5	-15.6
25215.051	36.0	Hor.	11.9	47.9	63.5	-15.6
24236.199	36.8	Hor.	11.1	47.9	63.5	-15.6
25724.461	35.5	Ver.	12.4	47.9	63.5	-15.6
25349.900	35.8	Ver.	12.1	47.9	63.5	-15.6
24106.359	36.7	Hor.	11.1	47.8	63.5	-15.7