FCC Test Report

Product Name ： Full HD Ultra-Wide View Wi-Fi Camera

Model No. ： DCS-2630L, DCS-2630LH

FCC ID. ： KA2CS2630LA1

Applicant ： D-Link Corporation

Address ： No.289, Sinhu 3rd Rd., Neihu District, Taipei City 114, Taiwan, R.O.C.

Tested ： 2015/07/09~2015/07/23

Issued Date ： 2015/07/27

Report No. ： 1570078R-RFUSP63V00

Report Version ： V1.0

The test results relate only to the samples tested.
The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.

Test Report Certification

Issued Date : 2015/07/27
Report No. : 1570078R-RFUSP63V00

Product Name	:	Full HD Ultra-Wide View Wi-Fi Camera
Applicant	:	D-Link Corporation
Address	:	No.289, Sinhu 3rd Rd., Neihu District, Taipei City 114, Taiwan, R.O.C.
Model No.	:	DCS-2630L, DCS-2630LH
FCC ID.	:	KA2CS2630LA1
EUT Voltage	:	AC 100-240V, 50-60Hz
Trade Name	:	D-Link
Applicable Standard	:	FCC CFR Title 47 Part 15 Subpart E Section 15.407: 2014 ANSI C63.10: 2013
Test Result	:	Complied

The test results relate only to the samples tested.
The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.

Documented By : Carol Tsai

(Carol Tsai / Engineering Adm. Assistant)

Reviewed By : Ken Huang

(Ken Huang / Engineer)

Approved By : Roy Wang

(Roy Wang / Director)

Laboratory Information

We, **QuieTek Corporation**, are an independent RF consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted (audited or listed) by the following related bodies in compliance with ISO 17025 specified testing scopes:

Taiwan R.O.C.	**:**	**TAF, Accreditation Number: 3024**
USA	**:**	**FCC, Registration Number: 365520**
Canada	**:**	**IC, Submission No: 150981**

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site:http://www.quietek.com/english/about/certificates.aspx?bval=5
The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : http://www.quietek.com/index_en.aspx
If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

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1. General Information

1.1. EUT Description

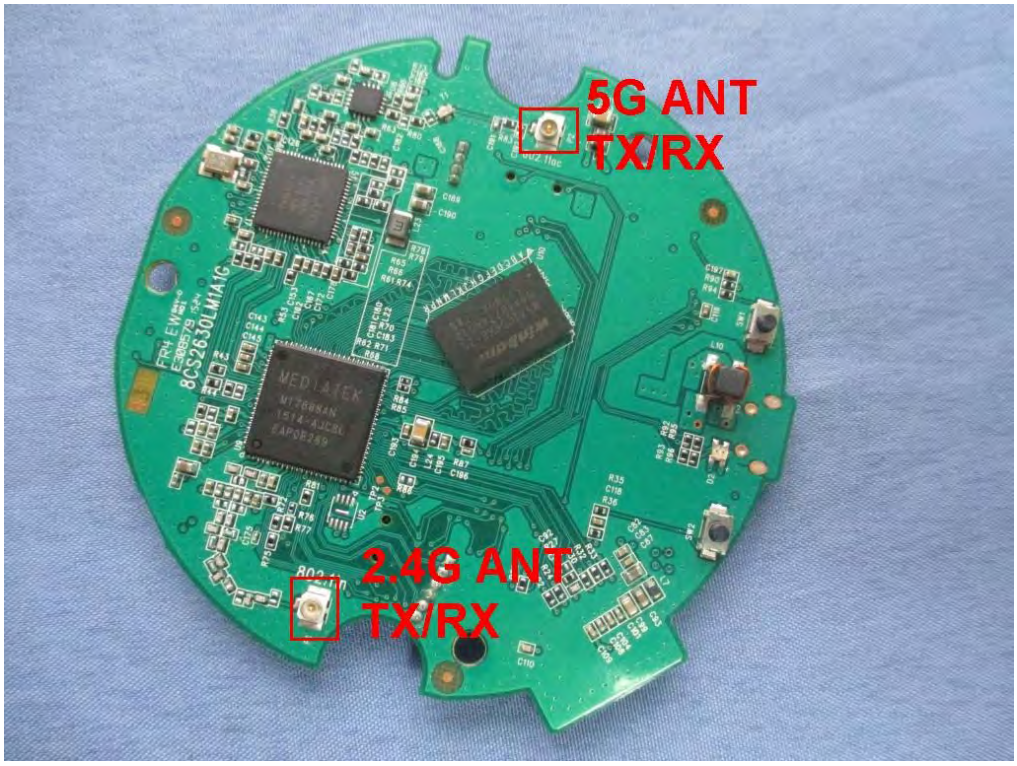
Product Name	Full HD Ultra-Wide View Wi-Fi Camera	
Trade Name	D-Link	
Model No.	DCS-2630L, DCS-2630LH	
Frequency Range/ Channel Number	IEEE 802.11a/ IEEE 802.11n	5180~5240MHz / 4 Channels 5260~5320MHz / 4 Channels 5500~5700MHz / 11 Channels 5745~5825MHz / 5 Channels
	IEEE 802.11n (40MHz)	5190~5230MHz / 2 Channels 5270~5310 MHz / 2 Channels 5510~5670 MHz / 5 Channels 5755~5795MHz / 2 Channels
	IEEE 802.11ac (80MHz)	5210~5210MHz / 1 Channel 5290~5290MHz / 1 Channel 5530~5610MHz / 2 Channel 5775~5775MHz / 1 Channels
Type of Modulation	IEEE 802.11a/n/ac	Orthogonal Frequency Division Multiplexing
Data Speed	IEEE 802.11a	6Mbps,9Mbps,12Mbps,18Mbps,24Mbps,36Mbps,48Mbps,54Mbps
	IEEE 802.11n	Support a subset of the combination of GI, MCS 0~MCS 7 and bandwidth defined in 802.11n
	IEEE 802.11ac	Support a subset of the combination of GI, MCS 0~MCS 9 and bandwidth defined in 802.11ac
Antenna Gain	4.5dBi	
Antenna Type	Omni-directional	

Component	
Power Adapter	Asian Power Devices Inc., WB-10E05R I/P: 100-240V~, 50-60Hz, 0.4A MAX. O/P: 5V⎓2A Cable Out: Shielded, 3m
Power Adapter	Asian Power Devices Inc., WB-10E05FU I/P: 100-240V~, 50-60Hz, 0.4A MAX. O/P: 5V⎓2A Cable Out: Shielded, 3m

ANT-TX / RX & Bandwidth

ANT-TX / RX	TX			RX		
Mode/ Channel Bandwidth	20MHz	40MHz	80MHz	20MHz	40MHz	80MHz
IEEE802.11a	✓			✓		
IEEE802.11n	✓	✓		✓	✓	
IEEE802.11ac	✓	✓	✓	✓	✓	✓

1TX /1RX



IEEE 802.11n

MCS Index	Modulation	R	N_{BPSCS}	N_{CBPS}		N_{DBPS}		Data Rate(Mb/s)			
								800ns GI		400ns GI	
				20MHz	40MHz	20MHz	40MHz	20MHz	40MHz	20MHz	40MHz
0	BPSK	1/2	1	52	108	26	54	6.5	13.5	7.2	15.0
1	QPSK	1/2	2	104	216	52	108	13.0	27.0	14.4	30.0
2	QPSK	3/4	2	104	216	78	162	19.5	40.5	21.7	45.0
3	16-QAM	1/2	4	208	432	104	216	26.0	54.0	28.9	60.0
4	16-QAM	3/4	4	208	432	156	324	39.0	81.0	43.3	90.0
5	64-QAM	2/3	6	312	648	208	432	52.0	108.0	57.8	120.0
6	64-QAM	3/4	6	312	648	234	486	58.5	121.5	65.0	135.0
7	64-QAM	5/6	6	312	648	260	540	65.0	135.0	72.2	150.0
Note 1: Support of 400ns GI is optional on transmit and receive.											

Table 1 – MCS parameters for TX Antenna number = 1

Symbol	Explanation
R	Code rate
N_{BPSC}	Number of coded bits per single carrier
N_{CBPS}	Number of coded bits per symbol
N_{DBPS}	Number of data bits per symbol
GI	guard interval

IEEE 802.11ac Data Rate

Spatial Streams (Note1)	MCS Index	Modulation type	Coding rate	Data Rate(Mb/s)					
				20 MHz		40 MHz		80 MHz	
				Guard Interval		Guard Interval		Guard Interval	
				800ns	400ns	800ns	400ns	800ns	400ns
1	0	BPSK	1/2	6.5	7.2	13.5	15	29.3	32.5
	1	QPSK	1/2	13	14.4	27	30	58.5	65
	2	QPSK	3/4	19.5	21.7	40.5	45	87.8	97.5
	3	16-QAM	1/2	26	28.9	54	60	117	130
	4	16-QAM	3/4	39	43.3	81	90	175.5	195
	5	64-QAM	2/3	52	57.8	108	120	234	260
	6	64-QAM	3/4	58.5	65	121.5	135	263.3	292.5
	7	64-QAM	5/6	65	72.2	135	150	292.5	325
	8	256-QAM	3/4	78	86.7	162	180	351	390
	9	256-QAM	5/6	N/A	N/A	180	200	390	433.3

Table 1 – MCS parameters

IEEE 802.11a & IEEE 802.11n (20MHz)

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180 MHz	40	5200 MHz	44	5220 MHz	48	5240 MHz
52	5260 MHz	56	5280 MHz	60	5300 MHz	64	5320 MHz
100	5500 MHz	104	5520 MHz	108	5540 MHz	112	5560 MHz
116	5580 MHz	120	5600 MHz	124	5620 MHz	128	5640 MHz
132	5660 MHz	136	5680 MHz	140	5700 MHz	149	5745 MHz
153	5765 MHz	157	5785 MHz	161	5805 MHz	165	5825 MHz

IEEE 802.11n (40MHz)

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz	54	5270MHz	62	5310 MHz
102	5510 MHz	110	5550 MHz	118	5590MHz	126	5630 MHz
134	5670 MHz	151	5755 MHz	159	5795 MHz		

IEEE 802.11ac (80MHz)

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
42	5210 MHz	58	5290 MHz	106	5530 MHz	122	5610 MHz
155	5775 MHz						

Note:

1. This device is the Full HD Ultra-Wide View Wi-Fi Camera including 2.4GHz b/g/n (1X1)/ 5GHz a/n/ac (1x1) transmitting and receiving function.
2. The variation of model number is for different strategy of marketing.
3. These test results on a sample of the device are for the purpose of demonstrating Compliance with Part 15 Subpart E Paragraph 15.407.
4. The power adapters, WB-10E05R and WB-10E05FU are equal in layout. Only one of them was tested and shown in the report
5. The function of the 2.4GHz transmitting is measured and makes a test report of the report number: 1570078R-RFUSP26V00.
6. The receiving function receiving was tested and its test report number is 1570078R-RFUSP01V00 under Declaration of Conformity.

1.2. Test Mode

QuieTek has verified the construction and function in typical operation. The preliminary tests were performed in different data rate, and to find the worst condition, which was shown in this test report. The following table is the final test mode.

TX	Mode 1: Transmit

Test Items	Modulation	Channel	Antenna	Result
Conducted Emission	11ac (80MHz)	42/58/106/155	0	Complies
99 % & 26dB Bandwidth	11a	36/44/48 52/60/64 100/116/140 149/157/165	0	Complies
	11n (20MHz)	36/44/48 52/60/64 100/116/140 149/157/165	0	Complies
	11n (40MHz)	38/46 54/62 102/134 151/159	0	Complies
	11ac (80MHz)	42/58/106/122/155	0	Complies
Peak Transmit Output	11a	36/44/48 52/60/64 100/116/140 149/157/165	0	Complies
	11n (20MHz)	36/44/48 52/60/64 100/116/140 149/157/165	0	Complies
	11n (40MHz)	38/46 54/62 102/134 151/159	0	Complies
	11ac (80MHz)	42/58/106/122/155	0	Complies

Test Items	Modulation	Channel	Antenna	Result
Peak Power Spectrum Density	11a	36/44/48 52/60/64 100/116/140 149/157/165	0	Complies
	11n (20MHz)	36/44/48 52/60/64 100/116/140 149/157/165	0	Complies
	11n (40MHz)	38/46 54/62 102/134 151/159	0	Complies
	11ac (80MHz)	42/58/106/122/155	0	Complies
Radiated Emission	11a	36/44/48 52/60/64 100/116/140 149/157/165	0	Complies
	11n (20MHz)	36/44/48 52/60/64 100/116/140 149/157/165	0	Complies
	11n (40MHz)	38/46 54/62 102/134 151/159	0	Complies
	11ac (80MHz)	42/58/106/122/155	0	Complies

Test Items	Modulation	Channel	Antenna	Result
Band Edge	11a	36/44/48 52/60/64 100/116/140 149/157/165	0	Complies
	11n (20MHz)	36/44/48 52/60/64 100/116/140 149/157/165	0	Complies
	11n (40MHz)	38/46 54/62 102/134 151/159	0	Complies
	11ac (80MHz)	42/58/106/122/155	0	Complies
Frequency Stability	11a	36/44/48 52/60/64 100/116/140 149/157/165	0	Complies
	11n (20MHz)	36/44/48 52/60/64 100/116/140 149/157/165	0	Complies
	11n (40MHz)	38/46 54/62 102/134 151/159	0	Complies
	11ac (80MHz)	42/58/106/122/155	0	Complies

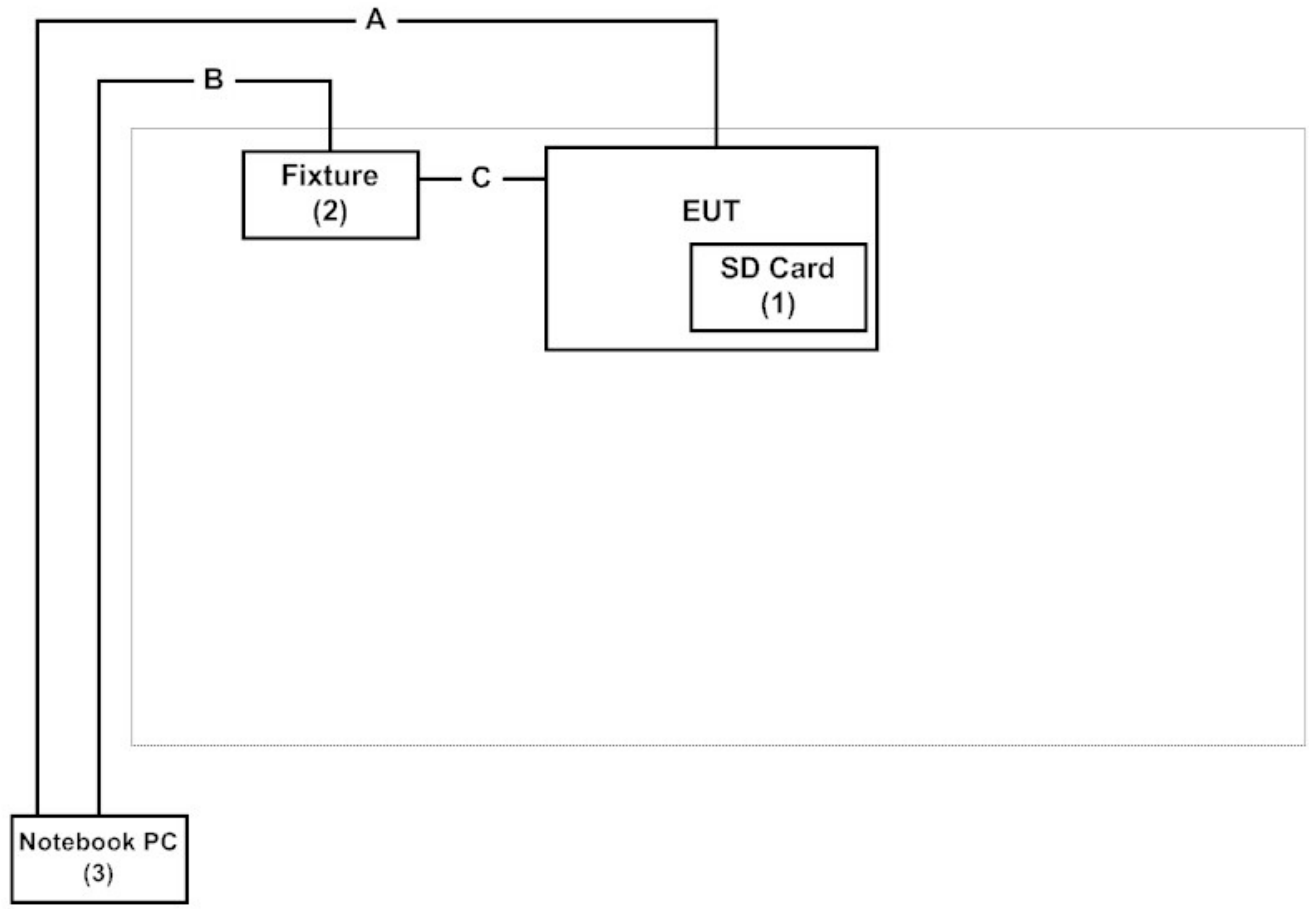
1.3. Tested System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	FCC ID	Power Cord
1	SD Card	Transcend	TS512MSD80	160073-4668	DoC	--
2	Fixture	Alpha	N/A	N/A	DoC	--
3	Notebook PC	ASUS	X522EP	E5N0CV04326 4197	DoC	Non-Shielded, 1.8m, one ferrite core bonded

1.4. Configuration of tested System

Connection Diagram



Signal Cable Type		Signal cable Description
A	LAN Cable	Non-Shielded, 3m
B	USB cable	Shielded, 2.5m
C	Signal cable	Non-Shielded, 0.15m

1.5. EUT Exercise Software

1	Test system is in accord with EUT user manual (refer to 1.4 configuration of tested system)
2	Execute the “Tera term command” on the Notebook.
3	Execute the “QA Tools-MT7688” with EUT.
4	Configure the test mode, the test channel, and the data rate.
5	Make the EUT to start the transmitting.
6	Verify that the EUT works properly.

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Test Item	Required (IEC 68-1)	Actual
Temperature (°C)	FCC PART 15 E 15.407 Conducted Emission	15 - 35	20
Humidity (%RH)		25 - 75	50
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 E 15.407 99 % & 26dB Bandwidth	15 - 35	25
Humidity (%RH)		25 - 75	45
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 E 15.407 Peak Transmit Power	15 - 35	25
Humidity (%RH)		25 - 75	45
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 E 15.407 Peak Power Spectrum Density	15 - 35	25
Humidity (%RH)		25 - 75	45
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 E 15.407 Radiated Emission	15 - 35	25
Humidity (%RH)		25 - 75	48
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 E 15.407 Band Edge	15 - 35	25
Humidity (%RH)		25 - 75	48
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 E 15.407 Frequency Stability	15 - 35	25
Humidity (%RH)		25 - 75	45
Barometric pressure (mbar)		860 - 1060	950-1000

2. Conducted Emission

2.1. Test Equipment

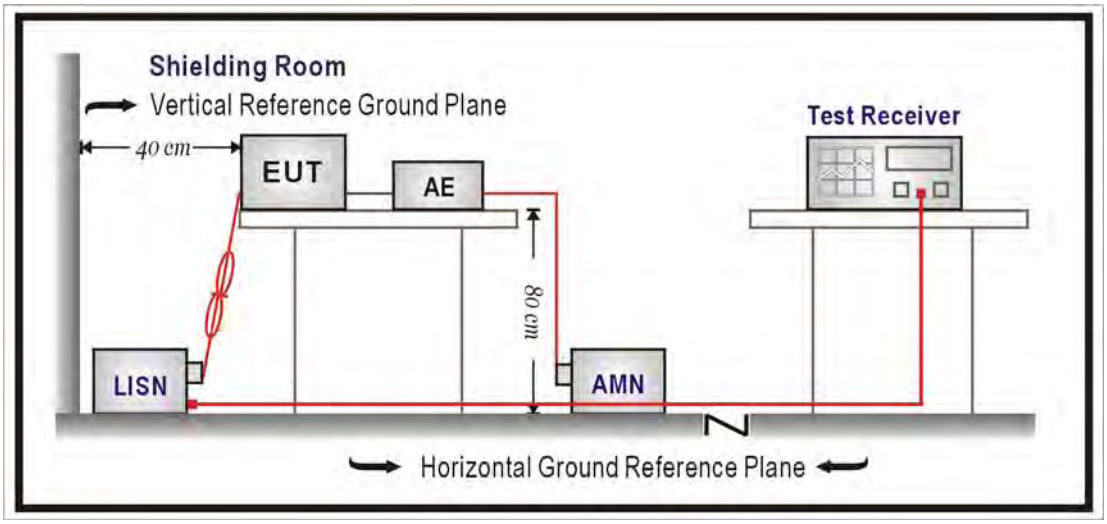
The following test equipments are used during the test:

Conducted Emission / SR3

Instrument	Manufacturer	Model No.	Serial No.	Next Cal. Date
Artificial Mains Network	R&S	ENV4200	848411/010	2016/01/25
LISN	R&S	ENV216	100092	2015/08/24
Test Receiver	R&S	ESCS 30	825442/014	2016/07/13

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

2.2. Test Setup



2.3. Limits

FCC Part 15 Subpart C Paragraph 15.207 Limits (dBuV)		
Frequency MHz	QP	AV
0.15 - 0.50	66-56	56-46
0.50 - 5.0	56	46
5.0 - 30	60	50

Remarks: In the above table, the tighter limit applies at the band edges.

2.4. Test Procedure

The EUT was setup according to ANSI C63.10. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs.)

Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.

Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

2.5. Test Specification

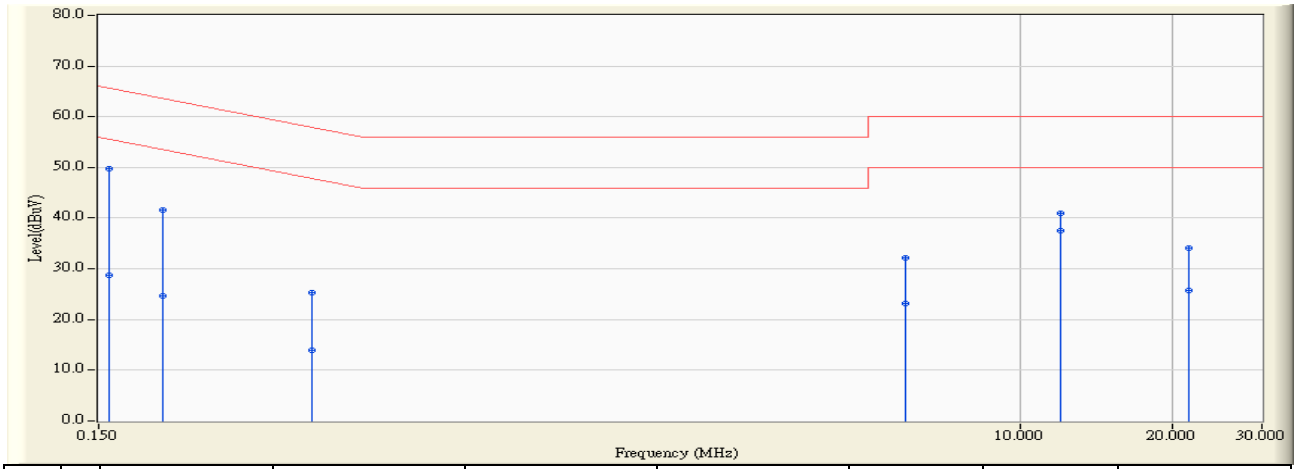
According to FCC Part 15 Subpart C Paragraph 15.207: 2014

2.6. Uncertainty

The measurement uncertainty is defined as ± 2.26 dB.

2.7. Test Result

Site : SR3	**Time : 2015/07/17 - 09:52**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR3_LISN(16A)-4_0811 - Line1	**Power : AC 120V/60Hz**
EUT : Full HD Ultra-Wide View Wi-Fi Camera	**Note : 802.11ac80_5210MHz**

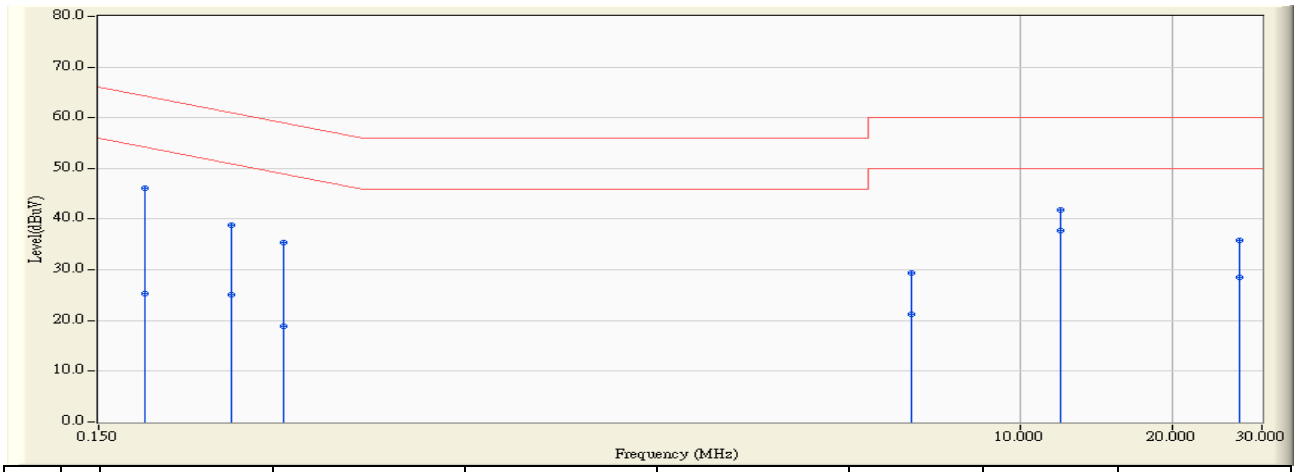


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.158	9.664	40.140	49.804	-15.774	65.578	QUASIPEAK
2		0.158	9.664	19.100	28.764	-26.814	55.578	AVERAGE
3		0.201	9.678	31.900	41.578	-22.000	63.578	QUASIPEAK
4		0.201	9.678	15.020	24.698	-28.880	53.578	AVERAGE
5		0.396	9.779	15.510	25.289	-32.646	57.935	QUASIPEAK
6		0.396	9.779	4.100	13.879	-34.056	47.935	AVERAGE
7		5.912	10.086	22.190	32.276	-27.724	60.000	QUASIPEAK
8		5.912	10.086	12.990	23.076	-26.924	50.000	AVERAGE
9		12.005	10.128	30.810	40.938	-19.062	60.000	QUASIPEAK
10	*	12.005	10.128	27.330	37.458	-12.542	50.000	AVERAGE
11		21.576	10.123	24.000	34.123	-25.877	60.000	QUASIPEAK
12		21.576	10.123	15.690	25.813	-24.187	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : SR3	**Time : 2015/07/17 - 09:55**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR3_LISN(16A)-4_0811 - Line2	**Power : AC 120V/60Hz**
EUT : Full HD Ultra-Wide View Wi-Fi Camera	**Note : 802.11ac80_5210MHz**

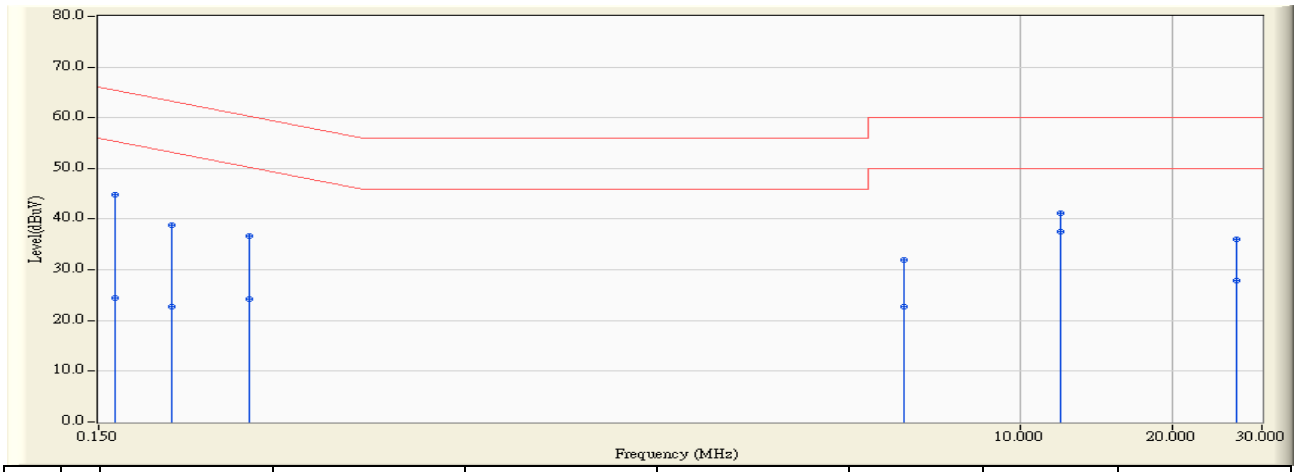


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.185	9.662	36.470	46.132	-18.119	64.251	QUASIPEAK
2		0.185	9.662	15.580	25.242	-29.009	54.251	AVERAGE
3		0.275	9.709	29.110	38.819	-22.147	60.966	QUASIPEAK
4		0.275	9.709	15.390	25.099	-25.867	50.966	AVERAGE
5		0.349	9.757	25.600	35.357	-23.624	58.981	QUASIPEAK
6		0.349	9.757	9.160	18.917	-30.064	48.981	AVERAGE
7		6.084	10.115	19.310	29.425	-30.575	60.000	QUASIPEAK
8		6.084	10.115	11.220	21.335	-28.665	50.000	AVERAGE
9		12.005	10.212	31.690	41.902	-18.098	60.000	QUASIPEAK
10	*	12.005	10.212	27.590	37.802	-12.198	50.000	AVERAGE
11		27.166	10.450	25.440	35.890	-24.110	60.000	QUASIPEAK
12		27.166	10.450	17.980	28.430	-21.570	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : SR3	**Time : 2015/07/17 - 10:32**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR3_LISN(16A)-4_0811 - Line1	**Power : AC 120V/60Hz**
EUT : Full HD Ultra-Wide View Wi-Fi Camera	**Note : 802.11ac80_5290MHz**

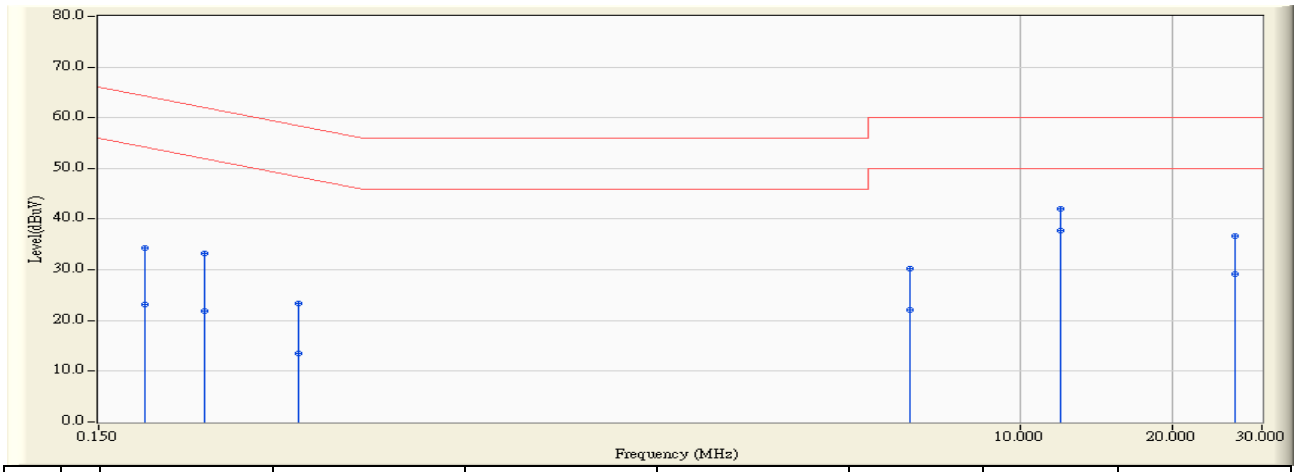


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.162	9.665	35.090	44.755	-20.620	65.375	QUASIPEAK
2		0.162	9.665	14.800	24.465	-30.910	55.375	AVERAGE
3		0.209	9.683	29.080	38.763	-24.498	63.261	QUASIPEAK
4		0.209	9.683	12.990	22.673	-30.588	53.261	AVERAGE
5		0.298	9.728	26.950	36.678	-23.608	60.286	QUASIPEAK
6		0.298	9.728	14.570	24.298	-25.988	50.286	AVERAGE
7		5.896	10.086	21.840	31.926	-28.074	60.000	QUASIPEAK
8		5.896	10.086	12.610	22.696	-27.304	50.000	AVERAGE
9		12.005	10.128	30.950	41.078	-18.922	60.000	QUASIPEAK
10	*	12.005	10.128	27.470	37.598	-12.402	50.000	AVERAGE
11		26.638	10.117	26.010	36.127	-23.873	60.000	QUASIPEAK
12		26.638	10.117	17.850	27.967	-22.033	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : SR3	**Time : 2015/07/17 - 10:36**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR3_LISN(16A)-4_0811 - Line2	**Power : AC 120V/60Hz**
EUT : Full HD Ultra-Wide View Wi-Fi Camera	**Note : 802.11ac80_5290MHz**

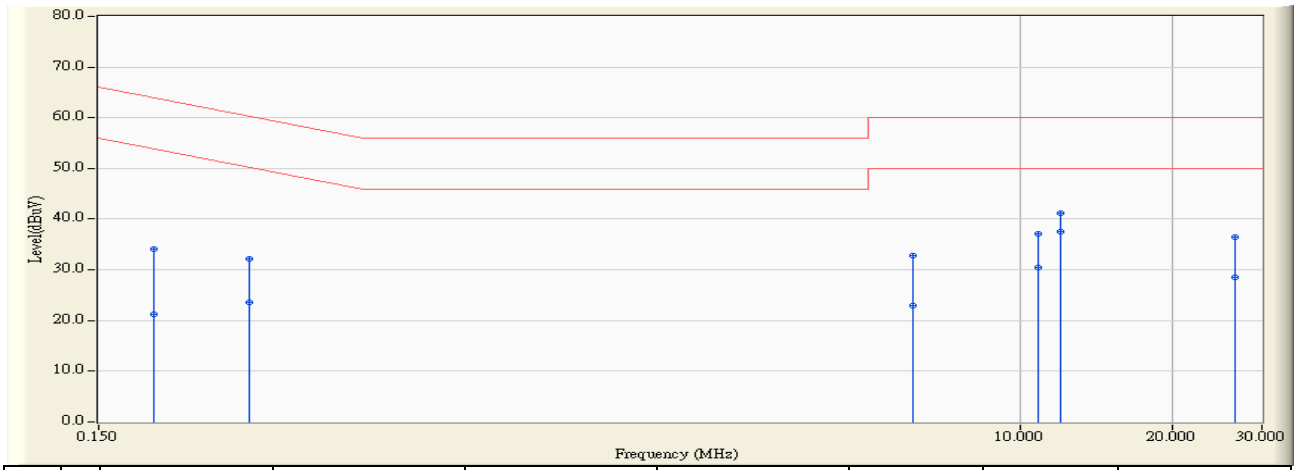


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.185	9.662	24.750	34.412	-29.839	64.251	QUASIPEAK
2		0.185	9.662	13.530	23.192	-31.059	54.251	AVERAGE
3		0.244	9.697	23.600	33.297	-28.671	61.967	QUASIPEAK
4		0.244	9.697	12.090	21.787	-30.181	51.967	AVERAGE
5		0.373	9.771	13.510	23.281	-35.160	58.442	QUASIPEAK
6		0.373	9.771	3.660	13.431	-35.010	48.442	AVERAGE
7		6.045	10.114	20.160	30.274	-29.726	60.000	QUASIPEAK
8		6.045	10.114	11.880	21.994	-28.006	50.000	AVERAGE
9		12.005	10.212	31.810	42.022	-17.978	60.000	QUASIPEAK
10	*	12.005	10.212	27.590	37.802	-12.198	50.000	AVERAGE
11		26.560	10.442	26.220	36.662	-23.338	60.000	QUASIPEAK
12		26.560	10.442	18.710	29.152	-20.848	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : SR3	**Time : 2015/07/17 - 11:02**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR3_LISN(16A)-4_0811 - Line1	**Power : AC 120V/60Hz**
EUT : Full HD Ultra-Wide View Wi-Fi Camera	**Note : 802.11ac80_5530MHz**

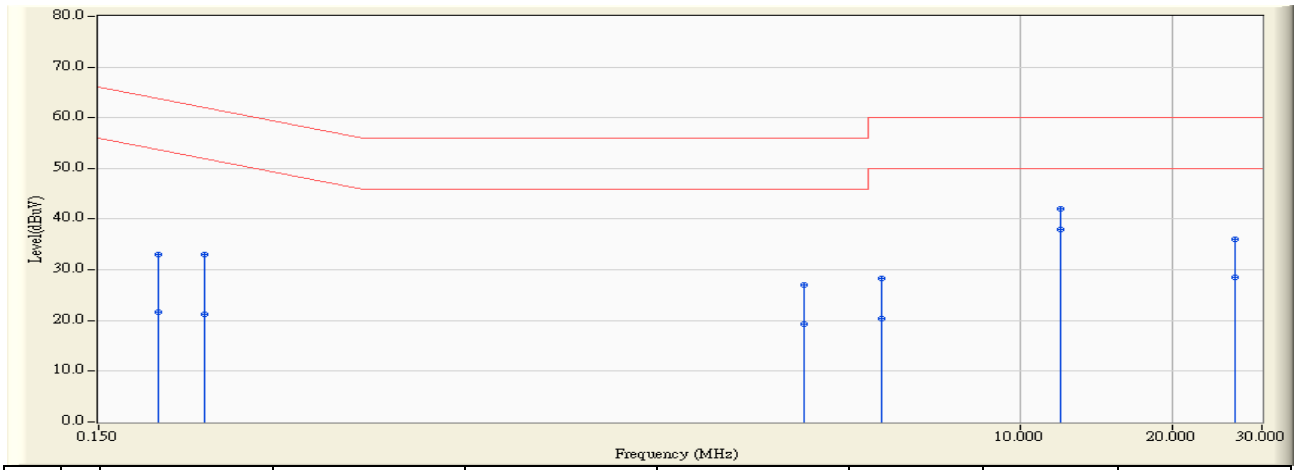


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.193	9.674	24.410	34.083	-29.824	63.908	QUASIPEAK
2		0.193	9.674	11.560	21.233	-32.674	53.908	AVERAGE
3		0.298	9.728	22.420	32.148	-28.138	60.286	QUASIPEAK
4		0.298	9.728	13.930	23.658	-26.628	50.286	AVERAGE
5		6.107	10.088	22.670	32.758	-27.242	60.000	QUASIPEAK
6		6.107	10.088	12.840	22.928	-27.072	50.000	AVERAGE
7		10.795	10.123	26.900	37.023	-22.977	60.000	QUASIPEAK
8		10.795	10.123	20.420	30.543	-19.457	50.000	AVERAGE
9		12.005	10.128	30.970	41.098	-18.902	60.000	QUASIPEAK
10	*	12.005	10.128	27.470	37.598	-12.402	50.000	AVERAGE
11		26.560	10.118	26.340	36.458	-23.542	60.000	QUASIPEAK
12		26.560	10.118	18.320	28.438	-21.562	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : SR3	**Time : 2015/07/17 - 11:07**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR3_LISN(16A)-4_0811 - Line2	**Power : AC 120V/60Hz**
EUT : Full HD Ultra-Wide View Wi-Fi Camera	**Note : 802.11ac80_5530MHz**

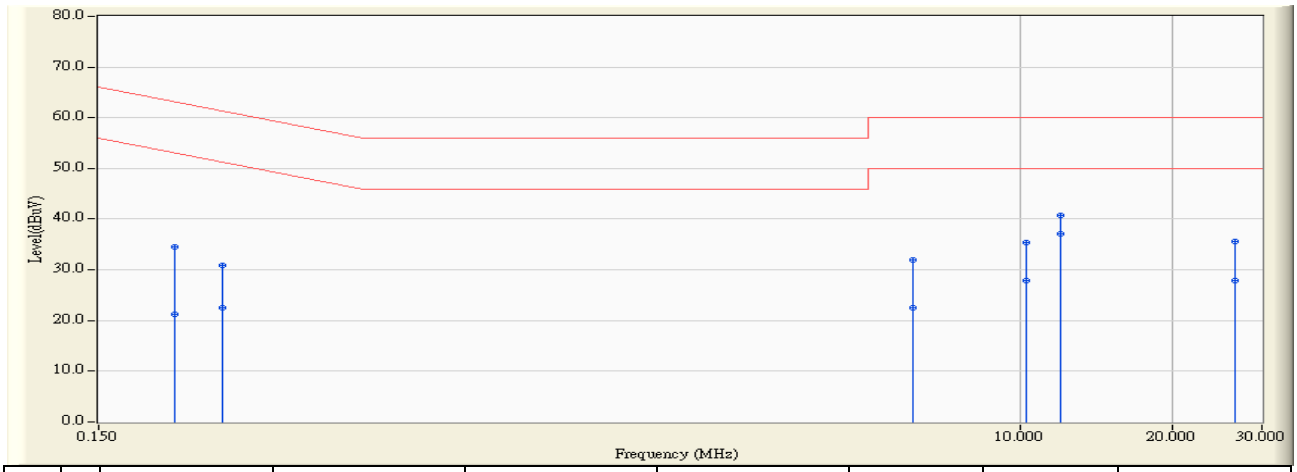


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.197	9.667	23.440	33.107	-30.635	63.741	QUASIPEAK
2		0.197	9.667	11.950	21.617	-32.125	53.741	AVERAGE
3		0.244	9.697	23.260	32.957	-29.011	61.967	QUASIPEAK
4		0.244	9.697	11.620	21.317	-30.651	51.967	AVERAGE
5		3.724	10.037	16.880	26.917	-29.083	56.000	QUASIPEAK
6		3.724	10.037	9.260	19.297	-26.703	46.000	AVERAGE
7		5.310	10.102	18.240	28.342	-31.658	60.000	QUASIPEAK
8		5.310	10.102	10.270	20.372	-29.628	50.000	AVERAGE
9		12.005	10.212	31.890	42.102	-17.898	60.000	QUASIPEAK
10	*	12.005	10.212	27.760	37.972	-12.028	50.000	AVERAGE
11		26.611	10.443	25.510	35.953	-24.047	60.000	QUASIPEAK
12		26.611	10.443	17.990	28.433	-21.567	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : SR3	**Time : 2015/07/17 - 11:29**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR3_LISN(16A)-4_0811 - Line1	**Power : AC 120V/60Hz**
EUT : Full HD Ultra-Wide View Wi-Fi Camera	**Note : 802.11ac80_5775MHz**

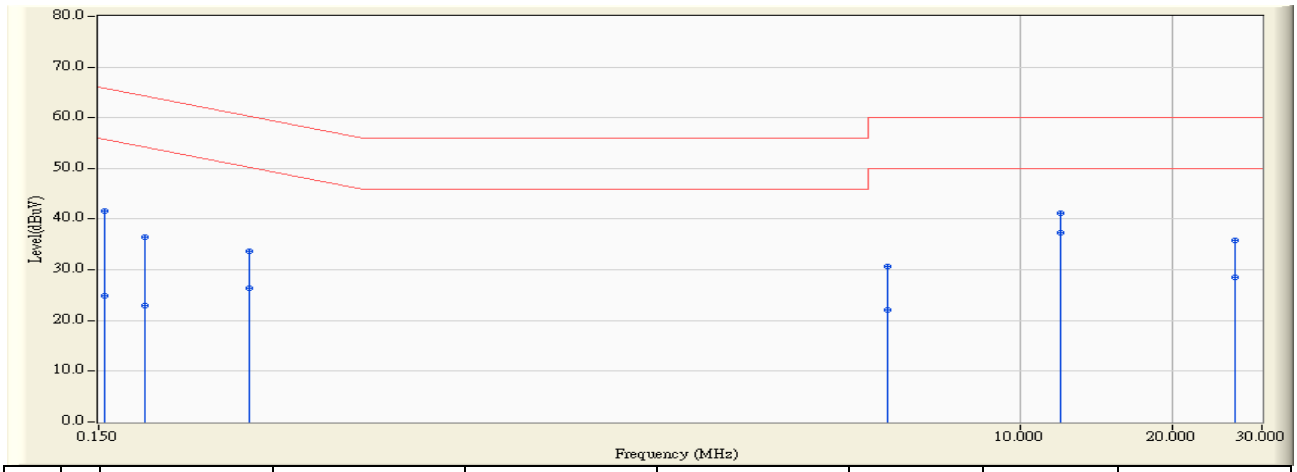


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.212	9.685	24.750	34.435	-28.672	63.107	QUASIPEAK
2		0.212	9.685	11.640	21.325	-31.782	53.107	AVERAGE
3		0.263	9.712	21.140	30.852	-30.476	61.327	QUASIPEAK
4		0.263	9.712	12.820	22.532	-28.796	51.327	AVERAGE
5		6.107	10.088	21.810	31.898	-28.102	60.000	QUASIPEAK
6		6.107	10.088	12.330	22.418	-27.582	50.000	AVERAGE
7		10.244	10.121	25.180	35.301	-24.699	60.000	QUASIPEAK
8		10.244	10.121	17.740	27.861	-22.139	50.000	AVERAGE
9		12.005	10.128	30.550	40.678	-19.322	60.000	QUASIPEAK
10	*	12.005	10.128	26.960	37.088	-12.912	50.000	AVERAGE
11		26.560	10.118	25.570	35.688	-24.312	60.000	QUASIPEAK
12		26.560	10.118	17.840	27.958	-22.042	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : SR3	**Time : 2015/07/17 - 11:32**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR3_LISN(16A)-4_0811 - Line2	**Power : AC 120V/60Hz**
EUT : Full HD Ultra-Wide View Wi-Fi Camera	**Note : 802.11ac80_5775MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.154	9.657	32.010	41.668	-24.119	65.786	QUASIPEAK
2		0.154	9.657	15.230	24.888	-30.899	55.786	AVERAGE
3		0.185	9.662	26.800	36.462	-27.789	64.251	QUASIPEAK
4		0.185	9.662	13.260	22.922	-31.329	54.251	AVERAGE
5		0.298	9.723	24.030	33.753	-26.533	60.286	QUASIPEAK
6		0.298	9.723	16.650	26.373	-23.913	50.286	AVERAGE
7		5.459	10.104	20.630	30.734	-29.266	60.000	QUASIPEAK
8		5.459	10.104	12.020	22.124	-27.876	50.000	AVERAGE
9		12.005	10.212	31.030	41.242	-18.758	60.000	QUASIPEAK
10	*	12.005	10.212	27.080	37.292	-12.708	50.000	AVERAGE
11		26.545	10.442	25.330	35.772	-24.228	60.000	QUASIPEAK
12		26.545	10.442	18.070	28.512	-21.488	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

3. 99% & 26dB & DTS Bandwidth

3.1. Test Equipment

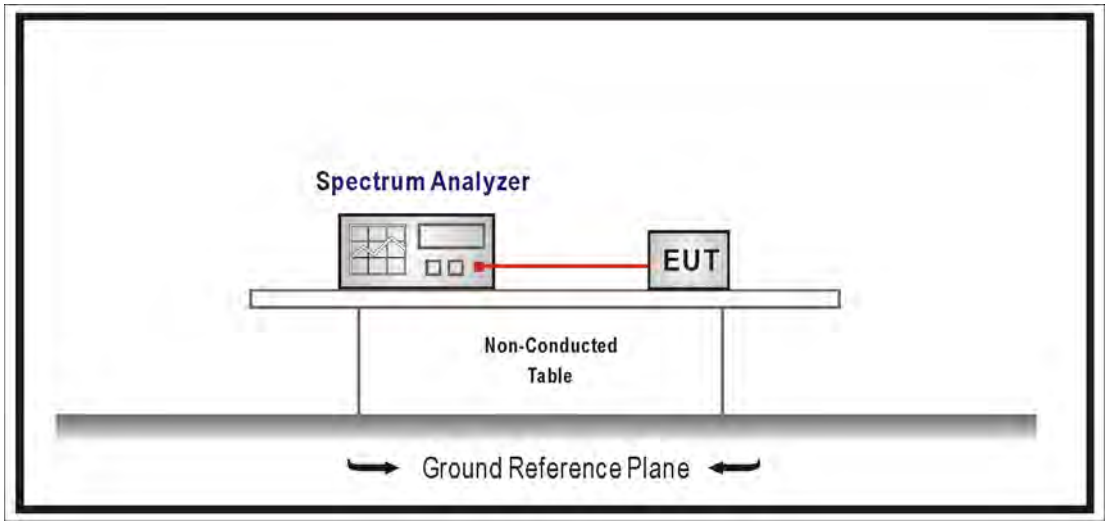
The following test equipments are used during the radiated emission tests:

99% & 26dB & DTS Bandwidth / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A-EXA	US47140172	2016/07/13

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

3.2. Test Setup



3.3. Limits

99% & 26dB Bandwidth : No Required
DTS Bandwidth : ≧500KHz

3.4. Test Procedure

99% & 26dB Bandwidth :
The EUT was tested according to U-NII test procedure of KDB 789033 and KDB 644545.
Set RBW 1% of the emission bandwidth, VBW equal to 3 times the RBW.
DTS Bandwidth :
Set RBW = 100KHz, VBW≧3xRBW, Sweep time=Auto, Set Peak detector.

3.5. Uncertainty

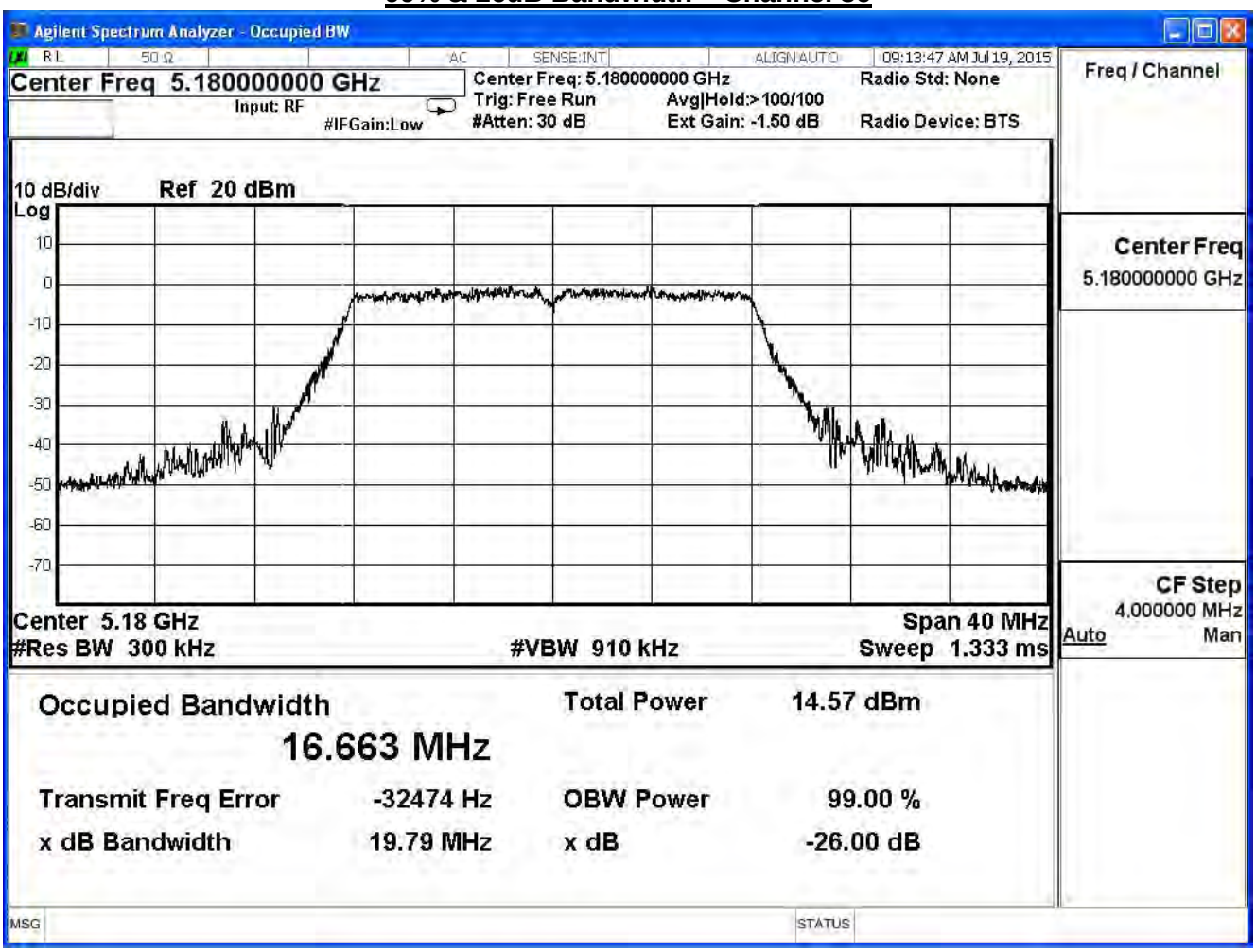
The measurement uncertainty is defined as ±150Hz

3.6. Test Result

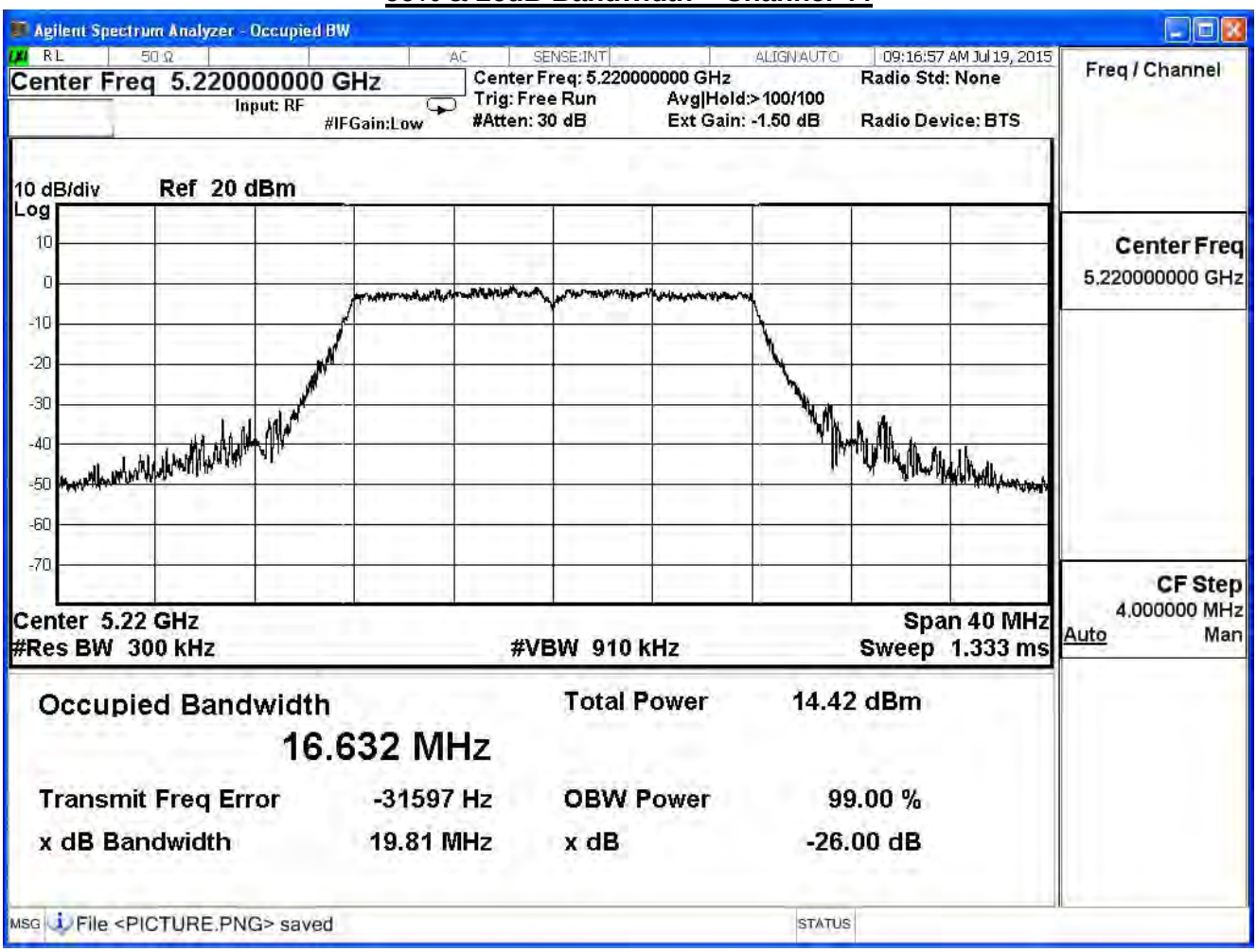
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

802.11a					
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
36	5180	19.790	16.663	--	Pass
44	5220	19.810	16.632	--	Pass
48	5240	19.880	16.642	--	Pass

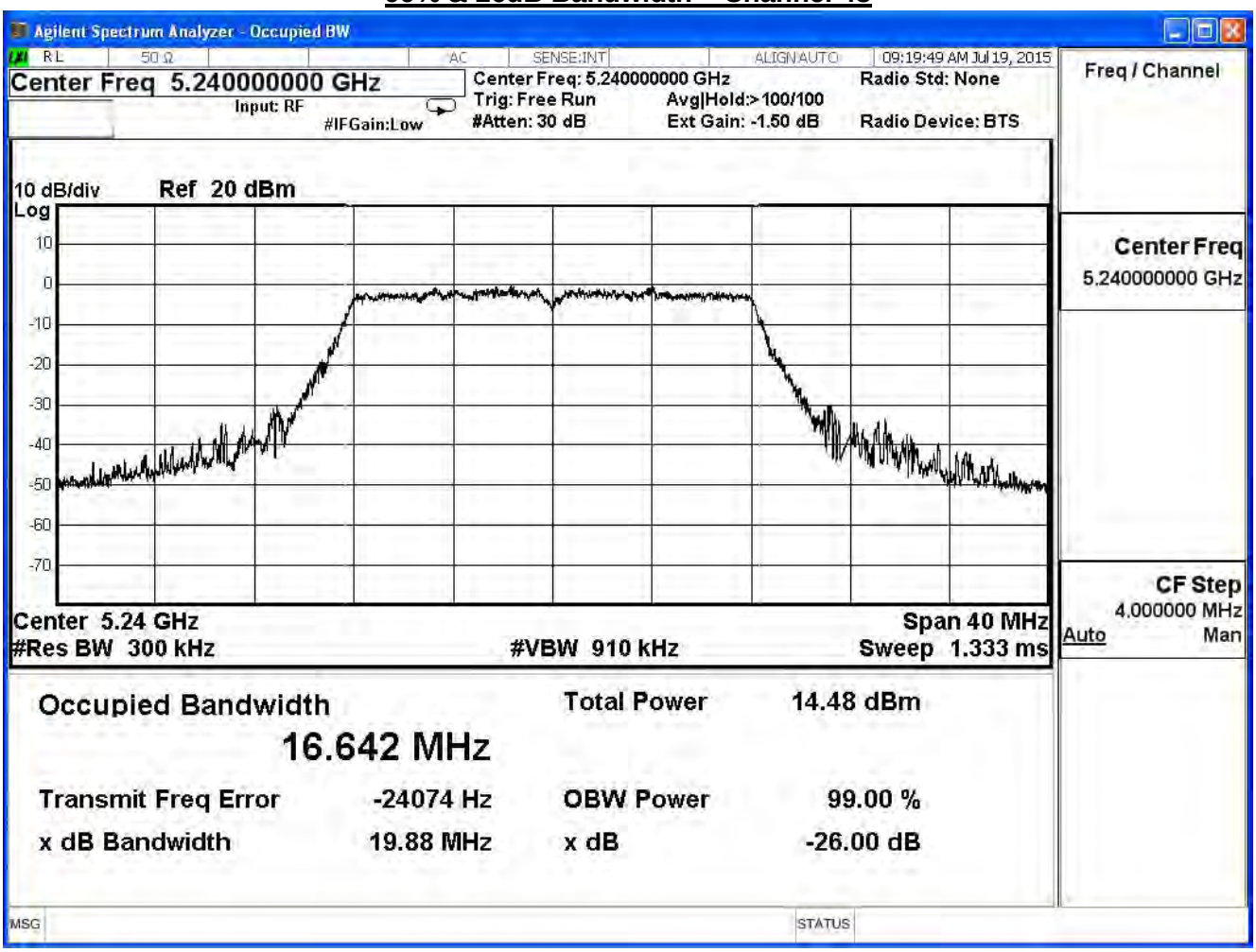
99% & 26dB Bandwidth – Channel 36



99% & 26dB Bandwidth – Channel 44



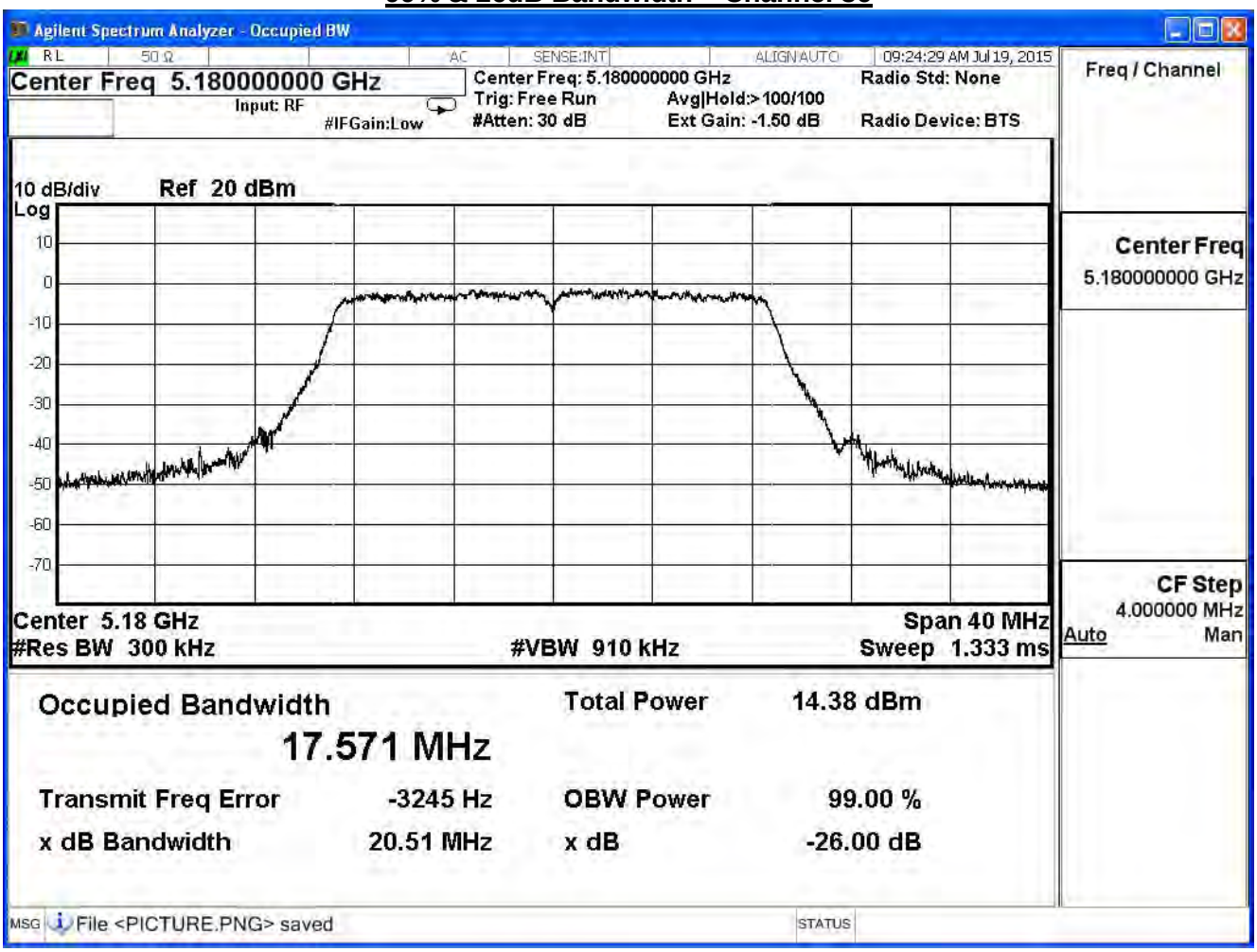
99% & 26dB Bandwidth – Channel 48



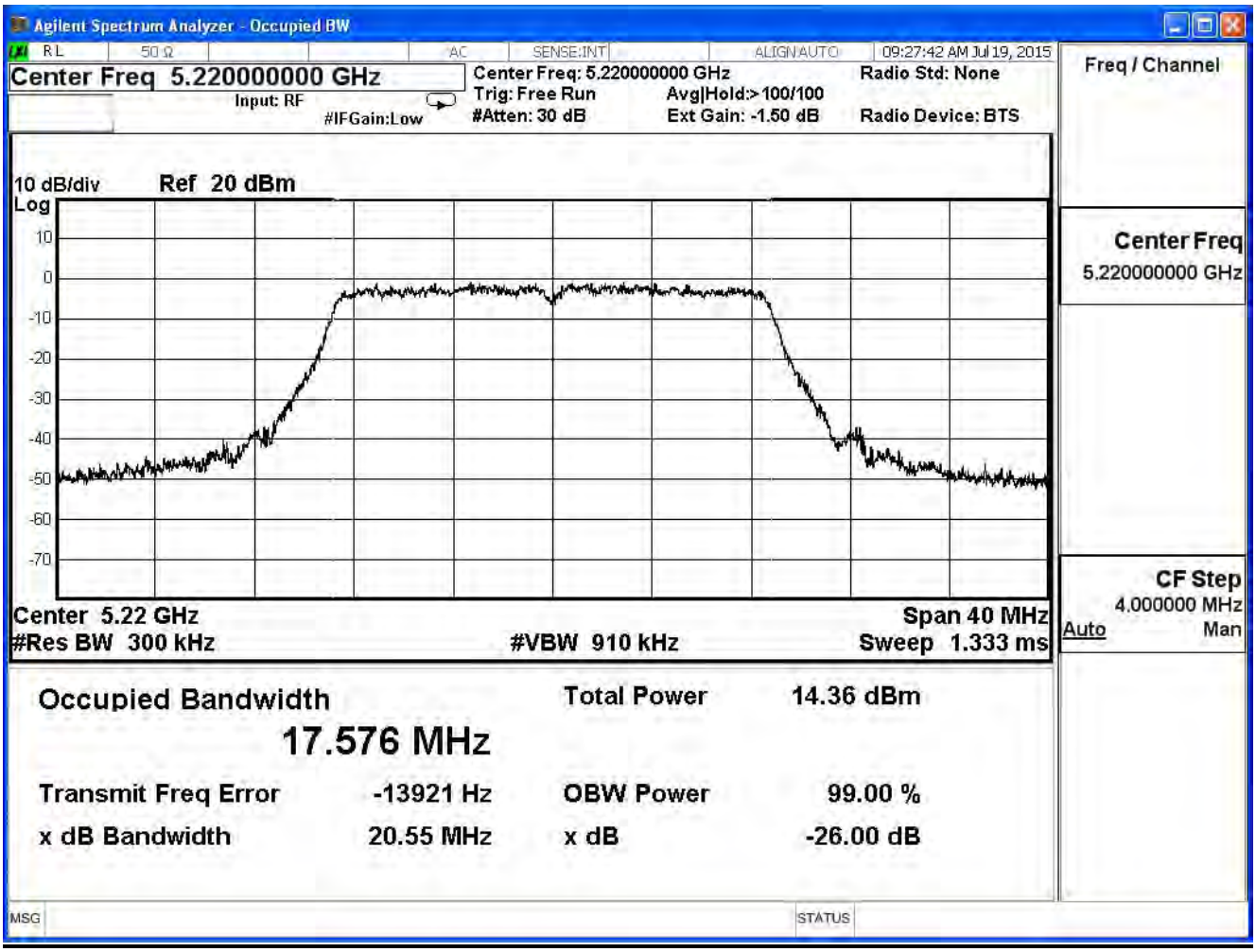
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

802.11n_20M(ANT 0)					
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
36	5180	20.510	17.571	--	Pass
44	5220	20.550	17.576	--	Pass
48	5240	20.490	17.572	--	Pass

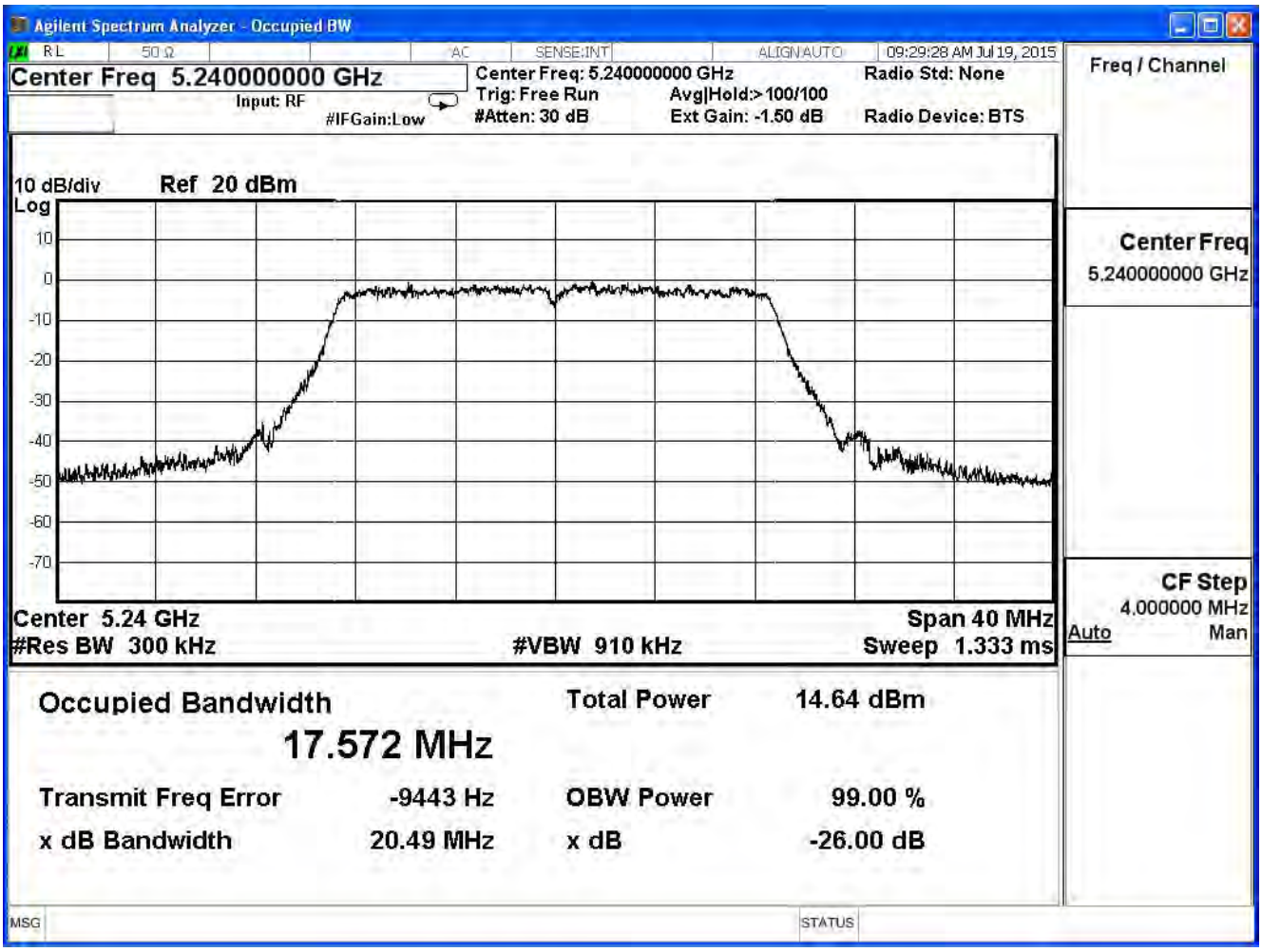
99% & 26dB Bandwidth – Channel 36



99% & 26dB Bandwidth – Channel 44



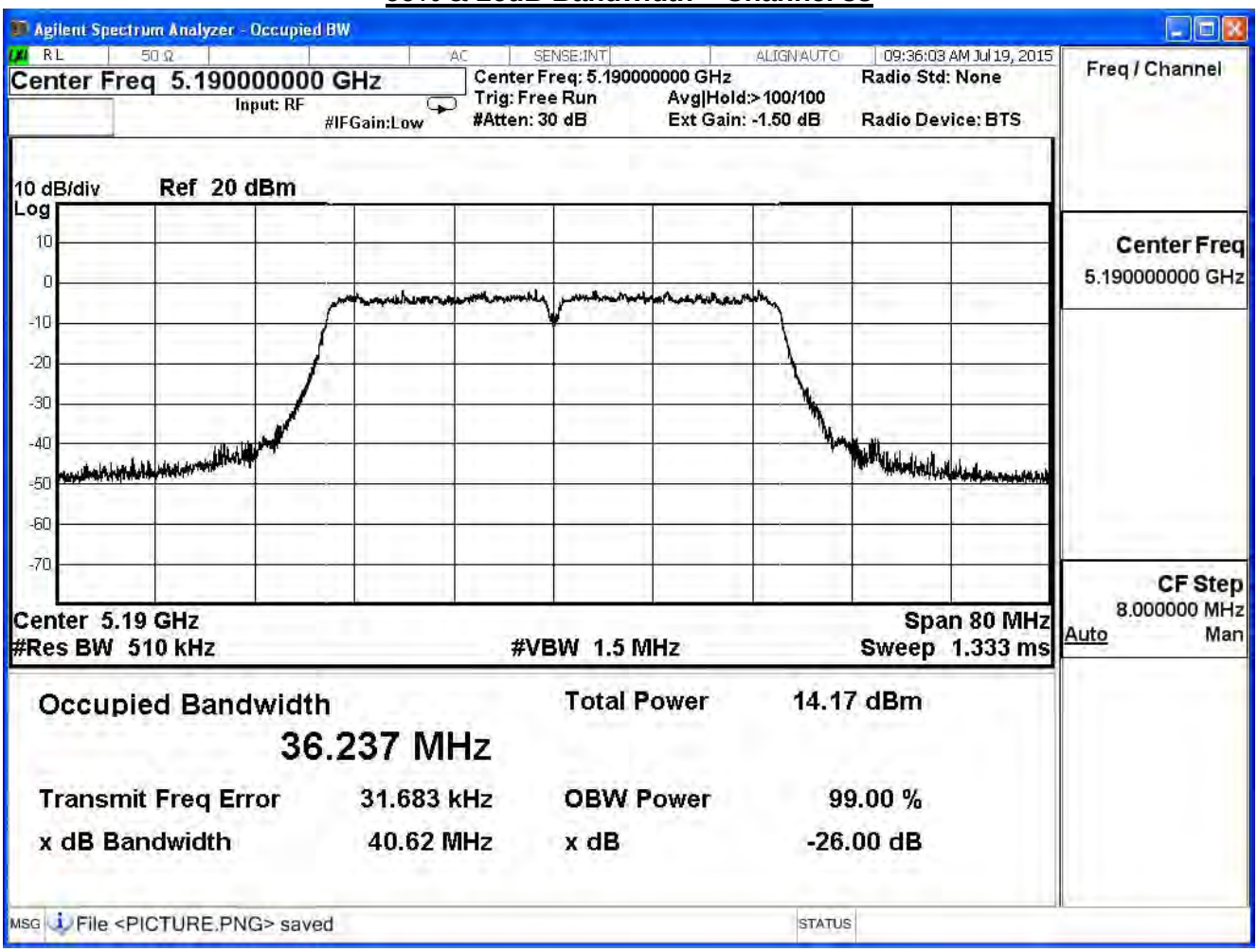
99% & 26dB Bandwidth – Channel 48



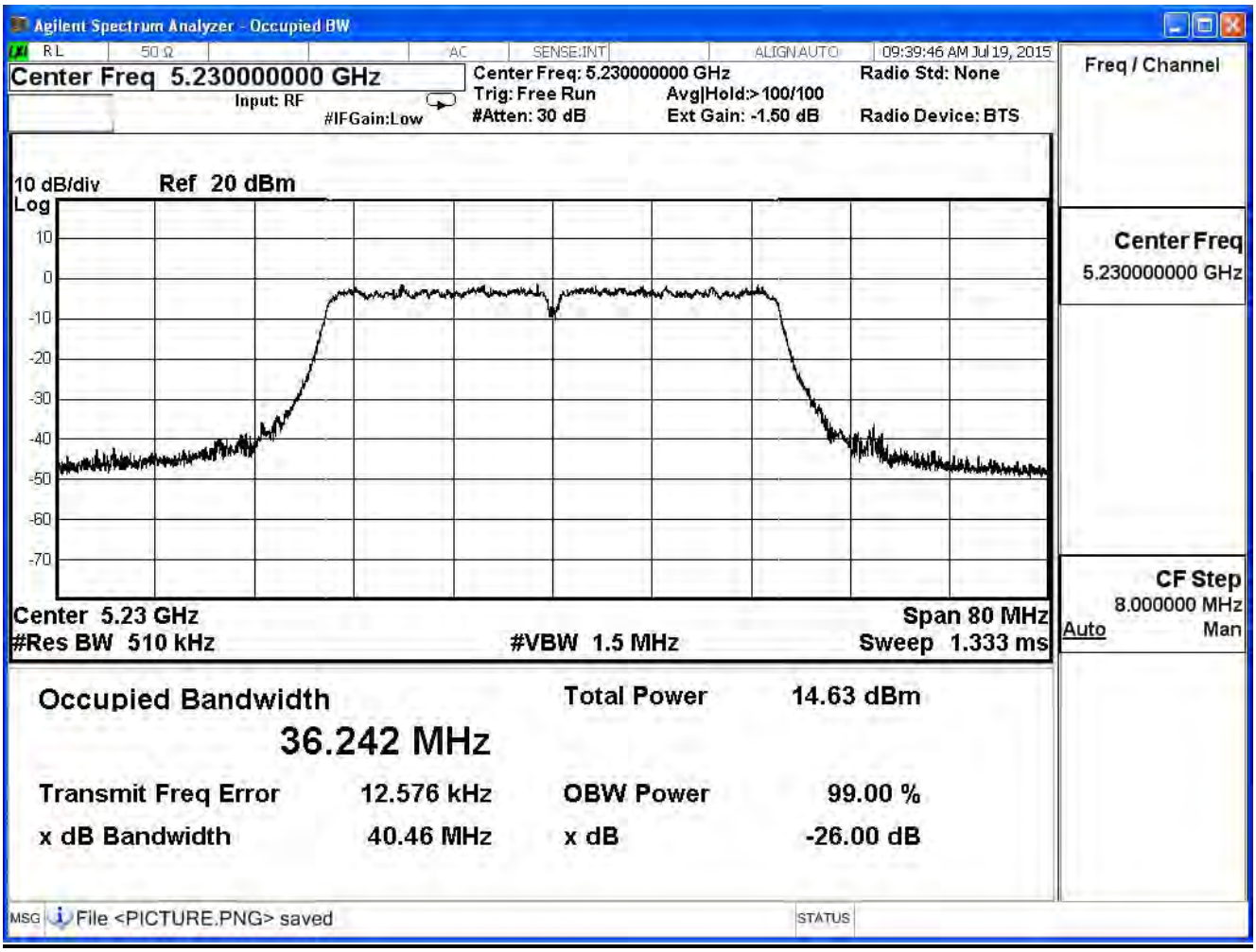
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

802.11n_40M(ANT 0)					
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
38	5190	40.620	36.237	--	Pass
46	5230	40.460	36.242	--	Pass

99% & 26dB Bandwidth – Channel 38



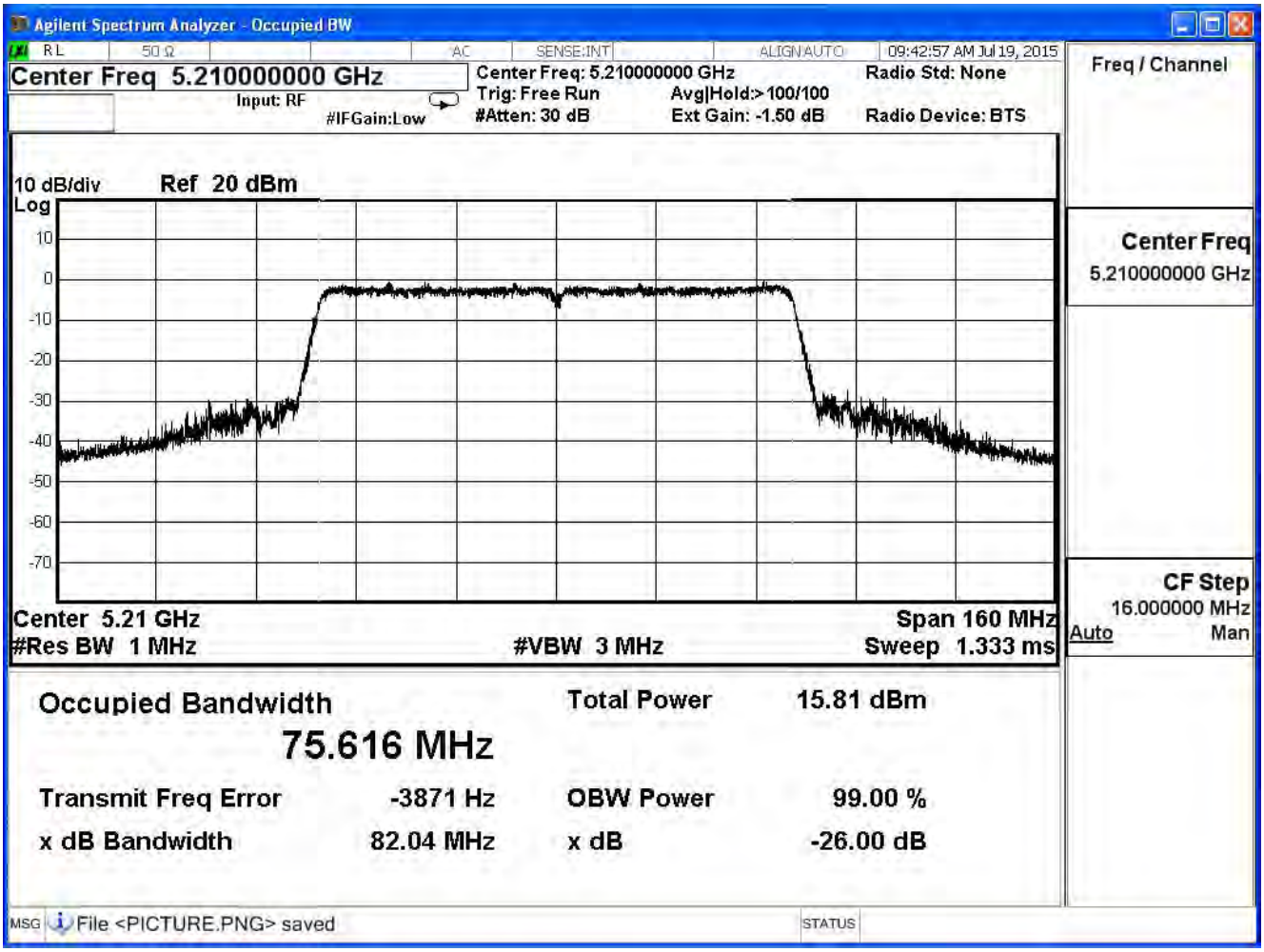
99% & 26dB Bandwidth – Channel 46



Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

802.11ac_80M(ANT 0)					
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
42	5210	82.040	75.616	--	Pass

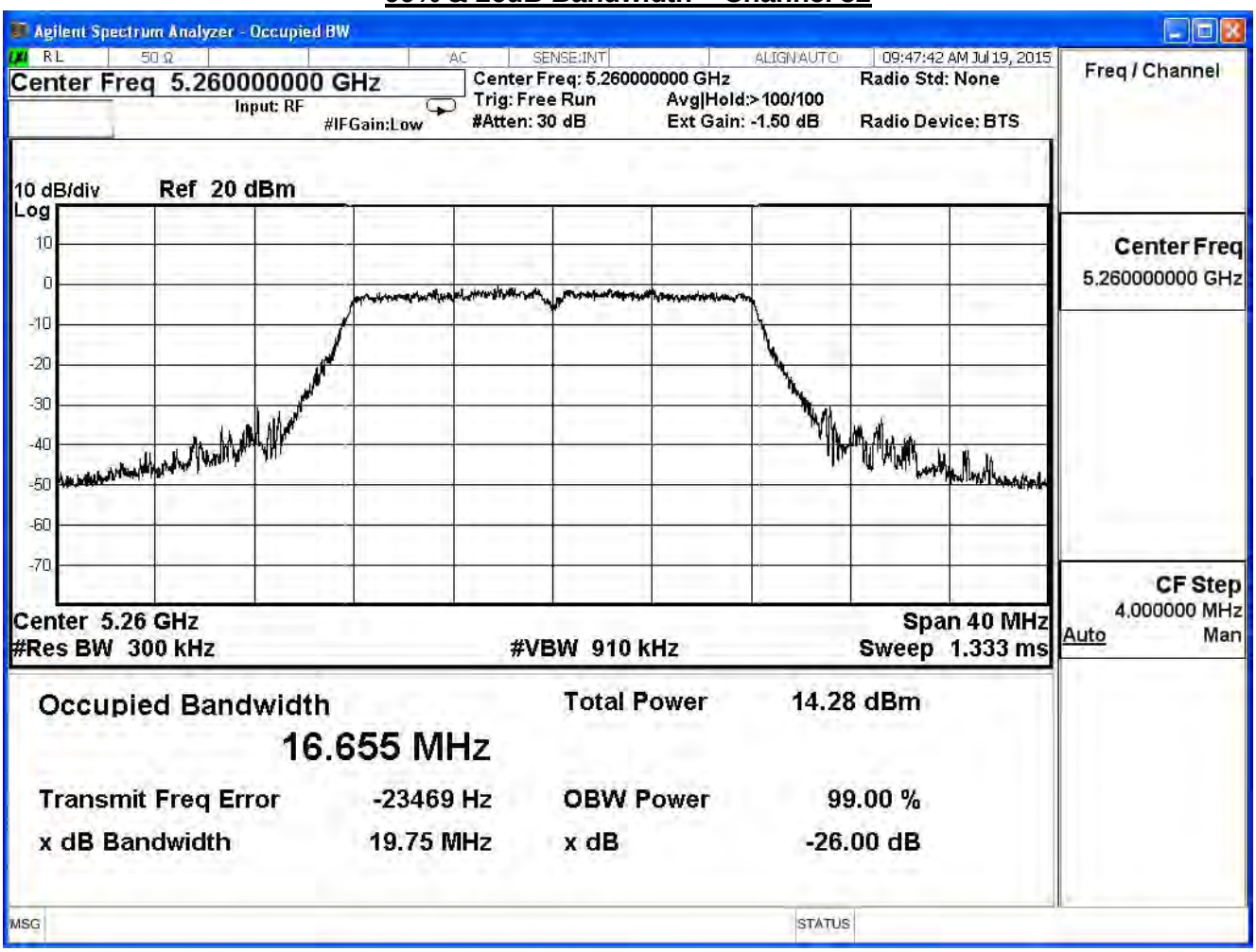
99% & 26dB Bandwidth – Channel 42



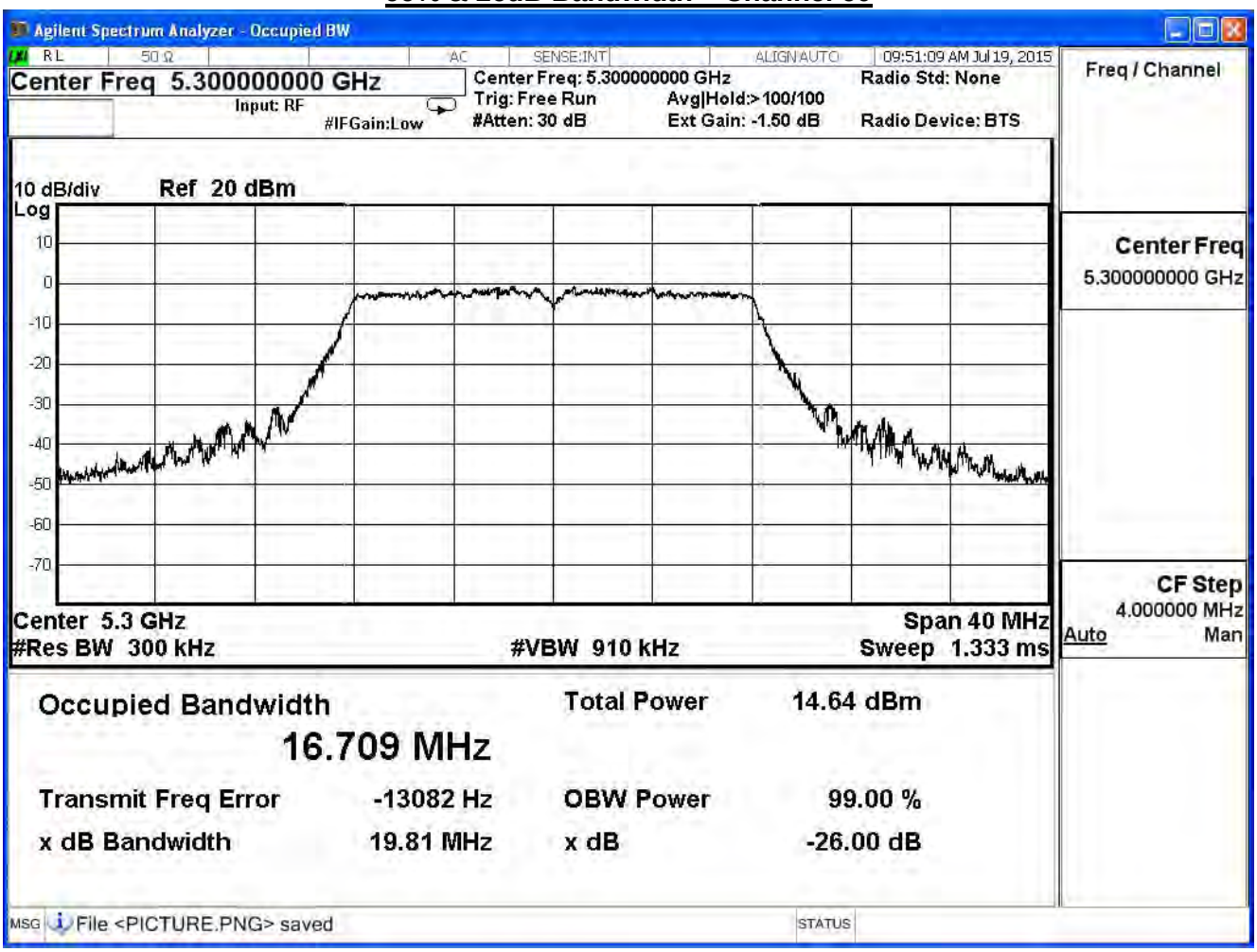
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

802.11a					
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
52	5260	19.750	16.655	--	Pass
60	5300	19.810	16.709	--	Pass
64	5320	19.740	16.665	--	Pass

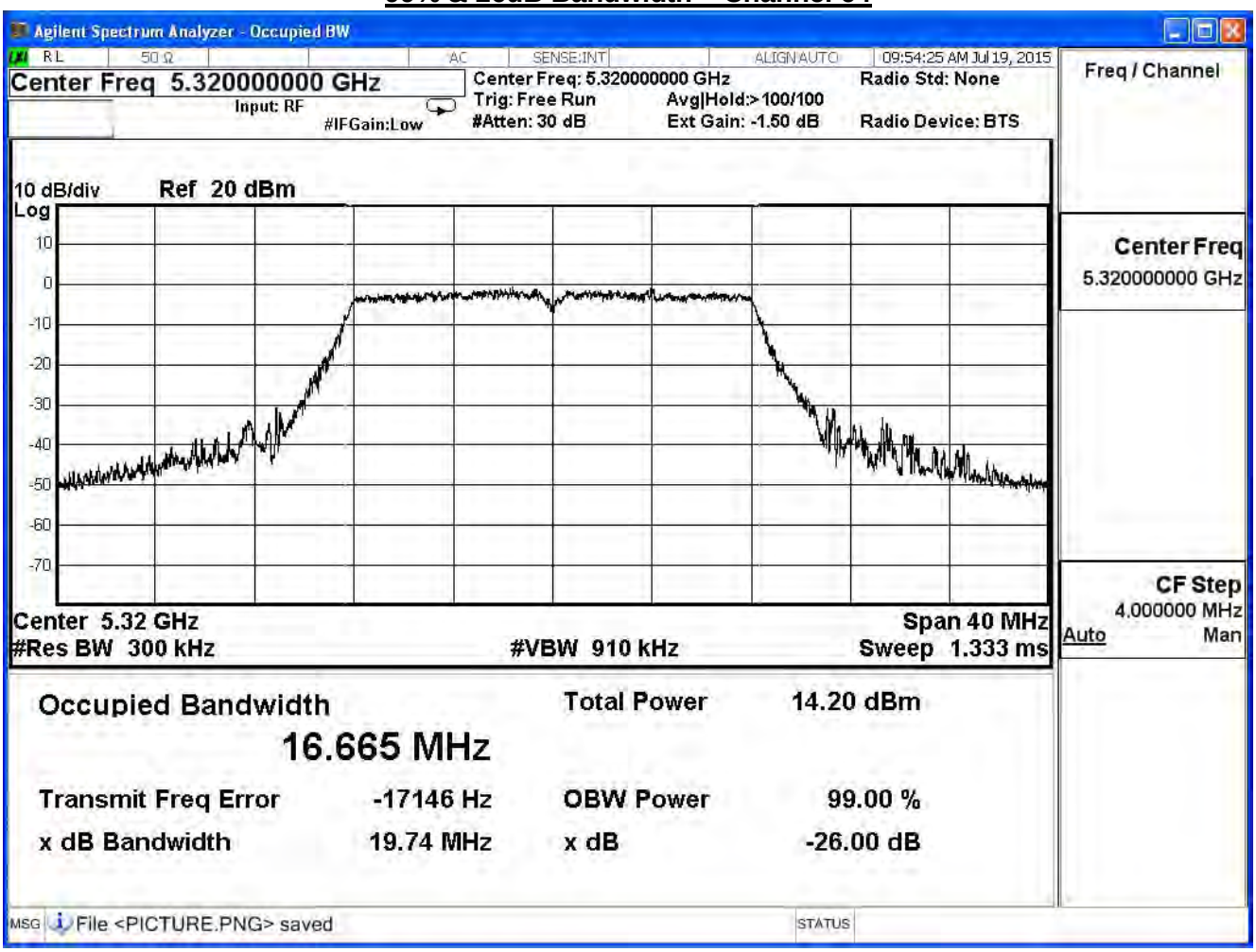
99% & 26dB Bandwidth – Channel 52



99% & 26dB Bandwidth – Channel 60



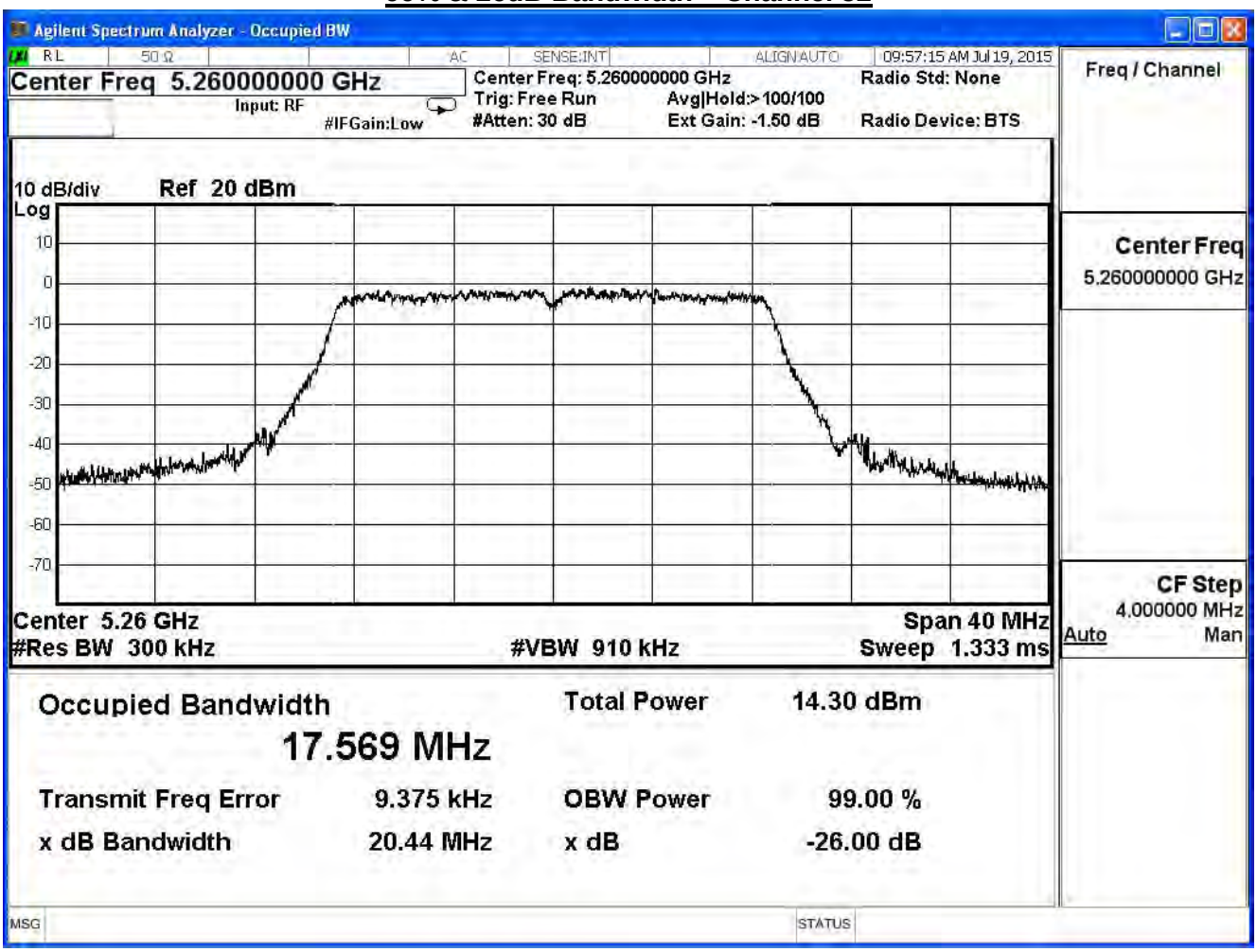
99% & 26dB Bandwidth – Channel 64



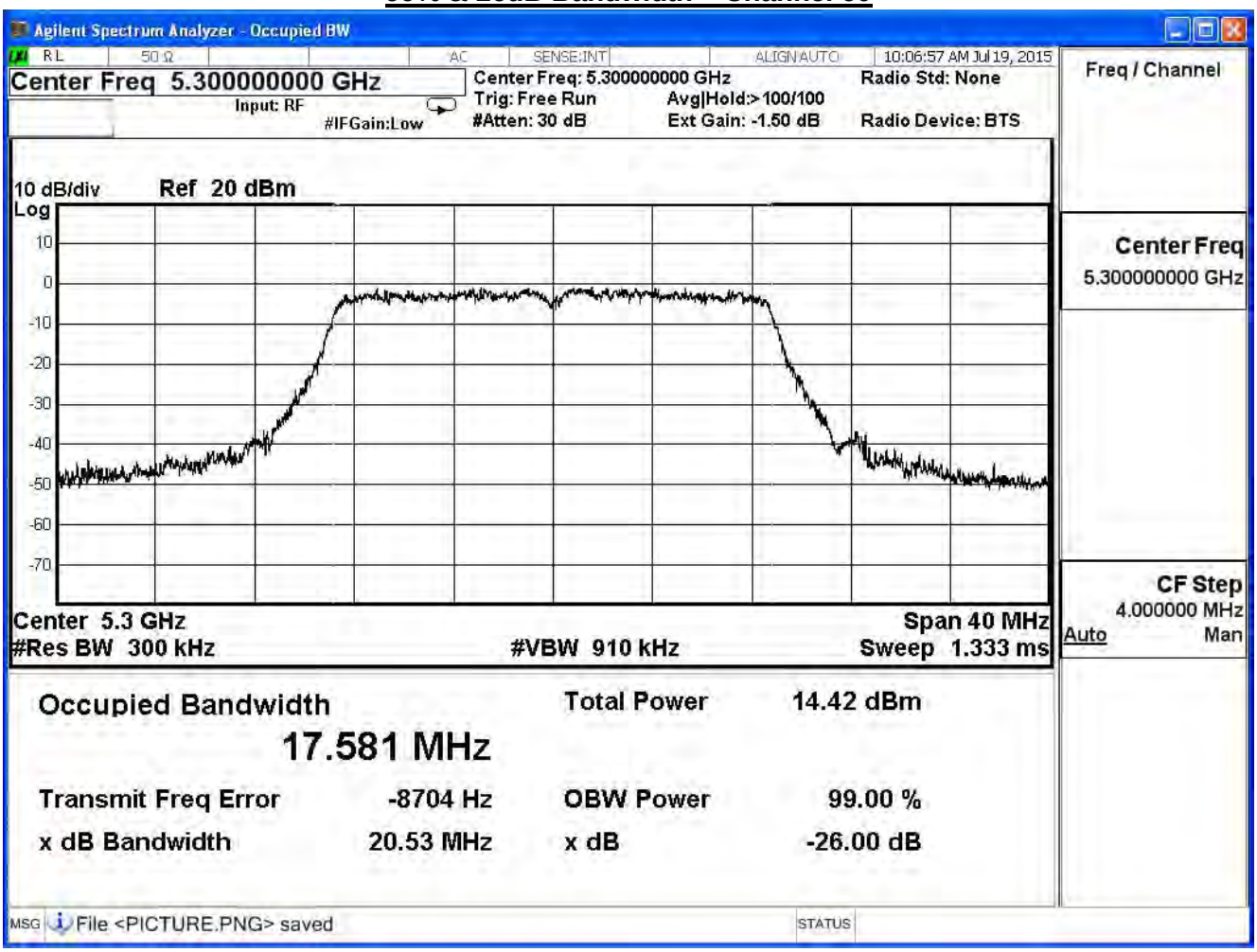
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

802.11n_20M(ANT 0)					
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
52	5260	20.440	17.569	--	Pass
60	5300	20.530	17.581	--	Pass
64	5320	20.380	17.564	--	Pass

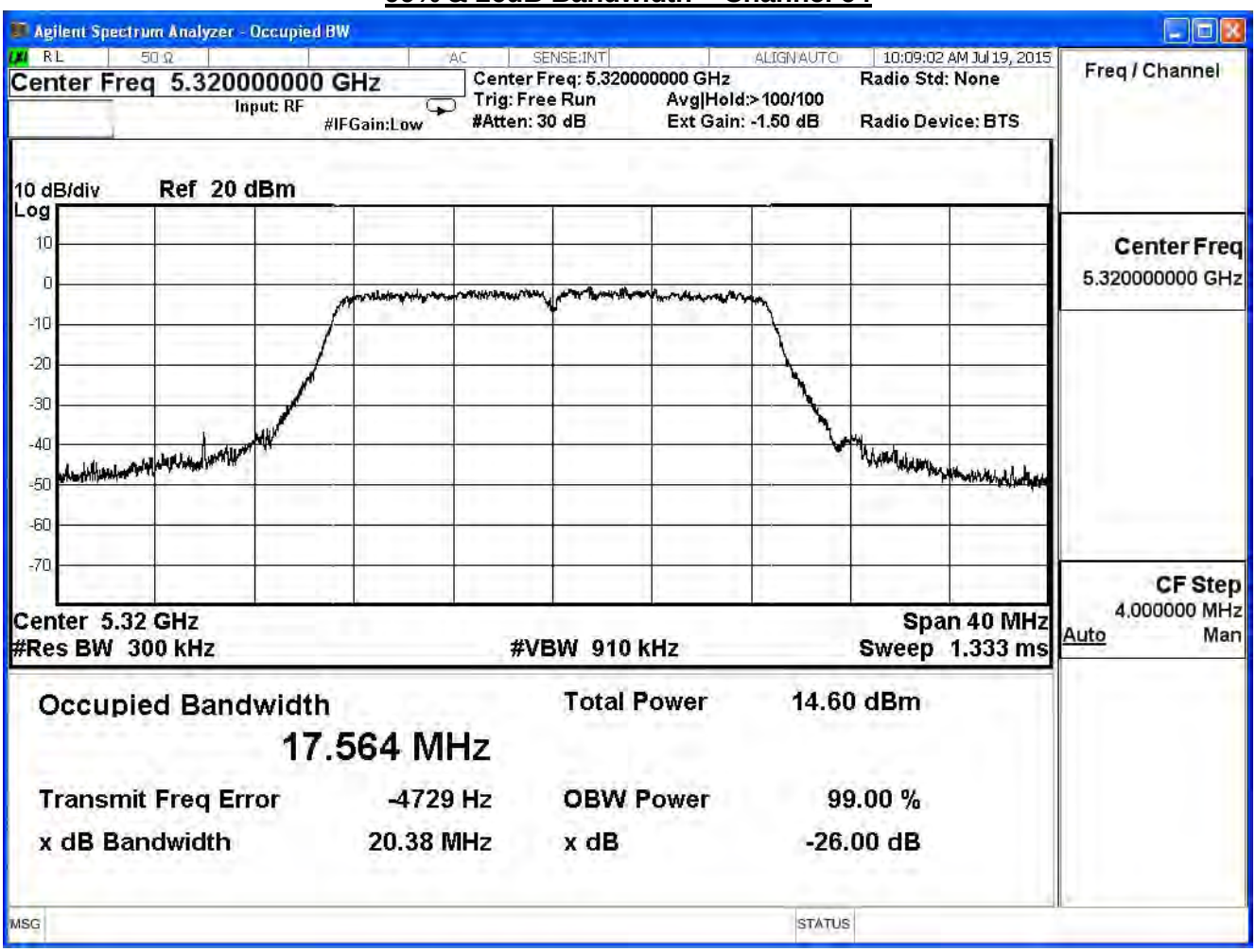
99% & 26dB Bandwidth – Channel 52



99% & 26dB Bandwidth – Channel 60



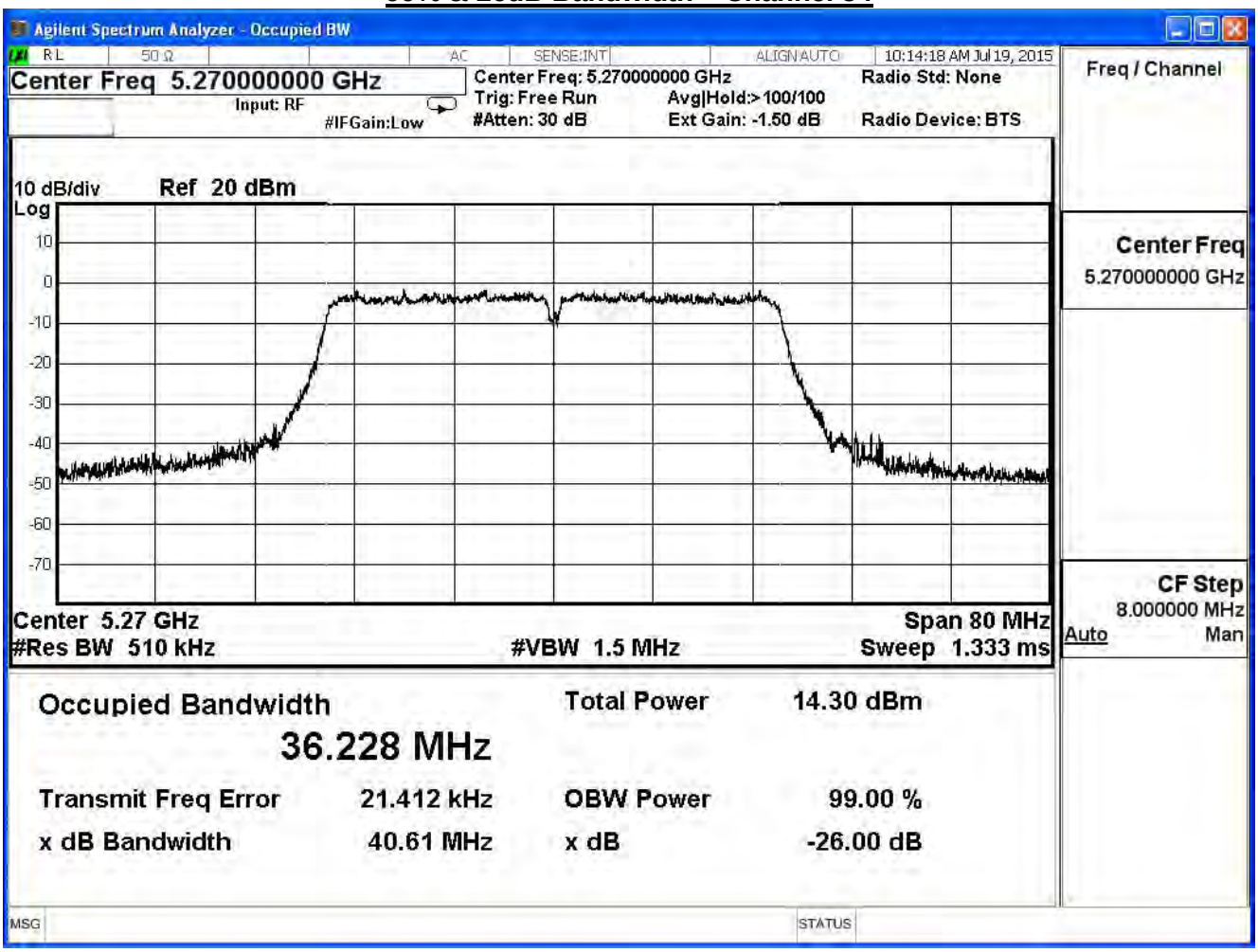
99% & 26dB Bandwidth – Channel 64



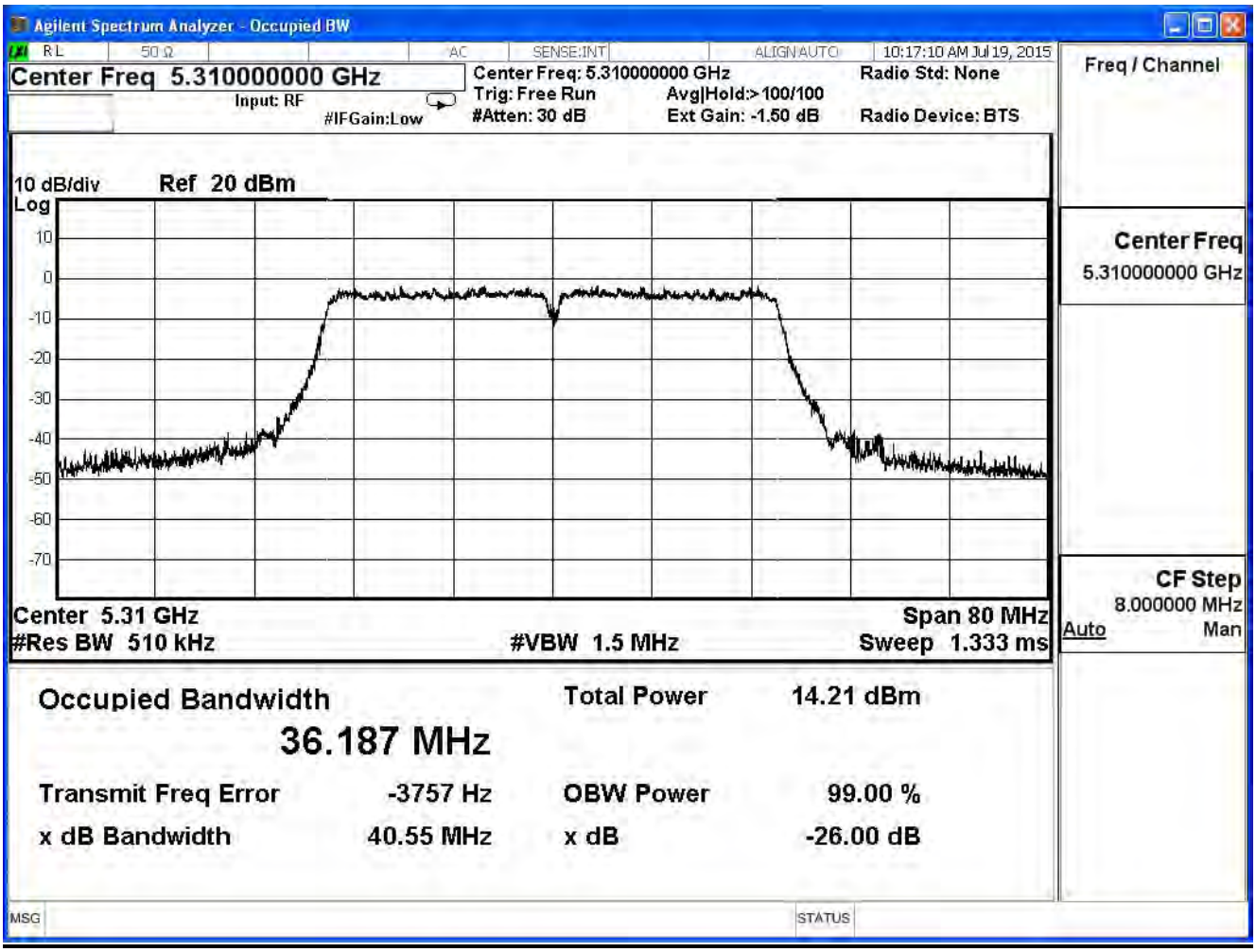
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

802.11n_40M(ANT 0)					
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
54	5270	40.610	36.228	--	Pass
62	5310	40.550	36.187	--	Pass

99% & 26dB Bandwidth – Channel 54



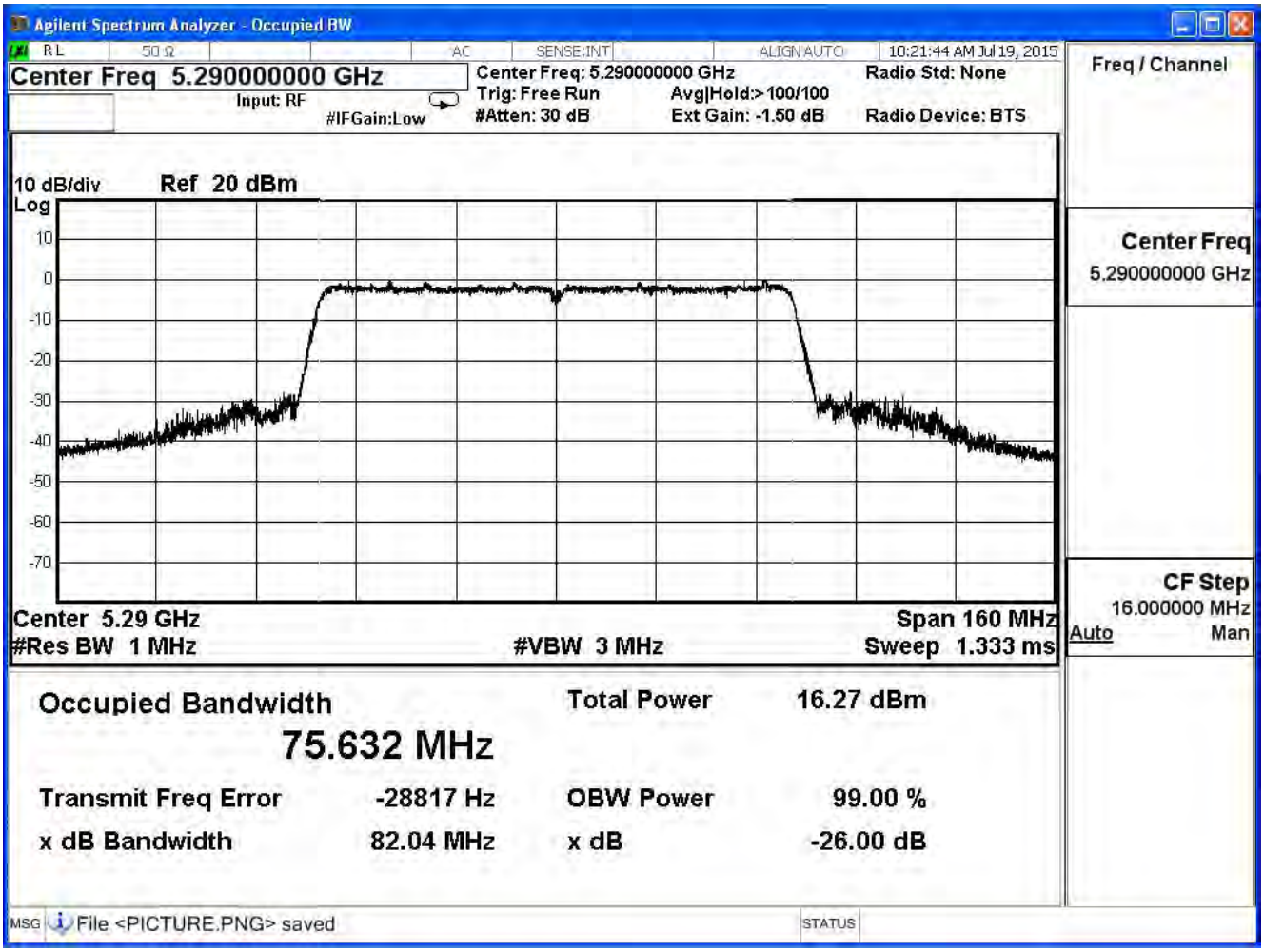
99% & 26dB Bandwidth – Channel 62



Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

802.11ac_80M(ANT 0)					
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
58	5290	82.040	75.632	--	Pass

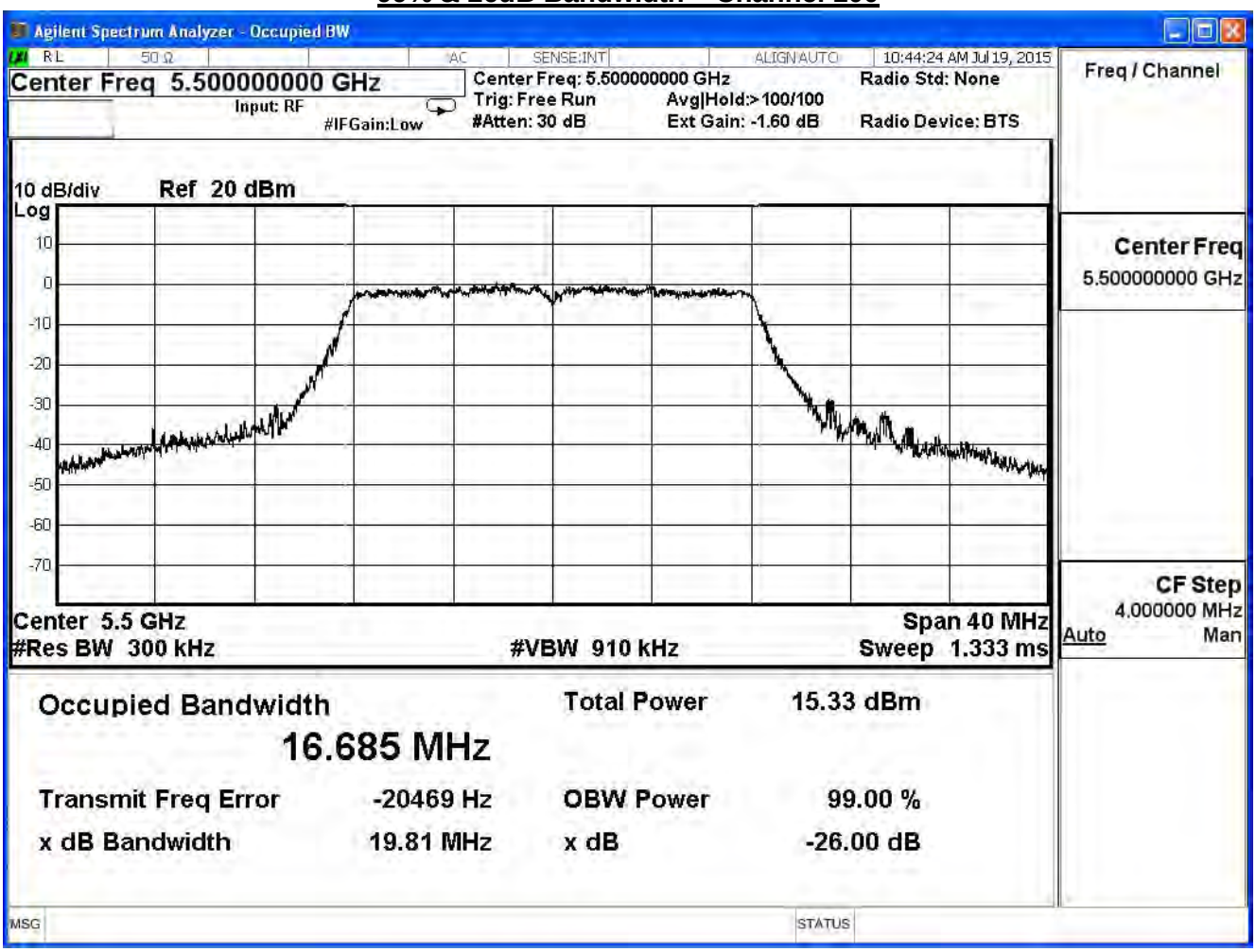
99% & 26dB Bandwidth – Channel 58



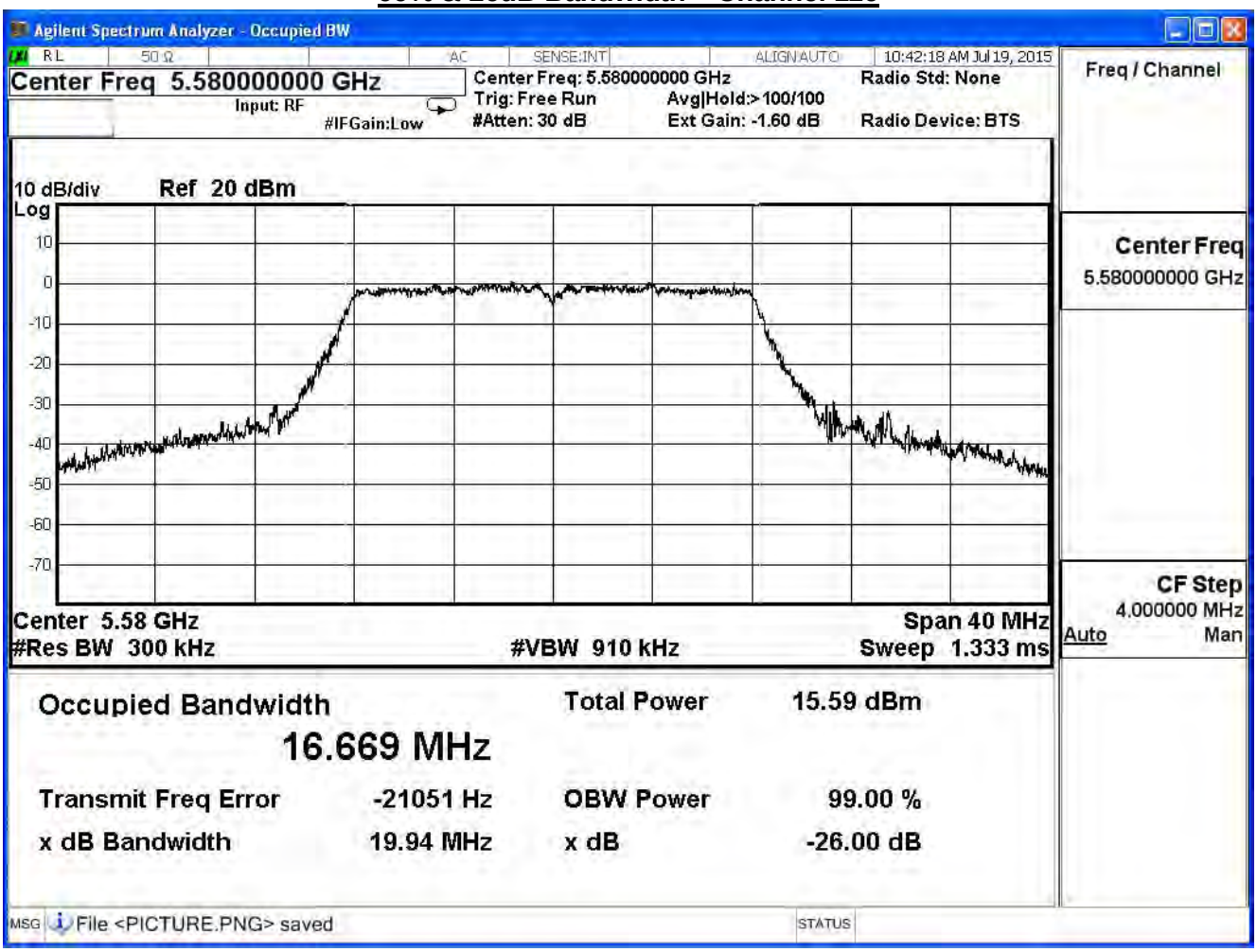
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

802.11a					
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
100	5500	19.810	16.685	--	Pass
116	5580	19.940	16.669	--	Pass
140	5700	19.980	16.658	--	Pass

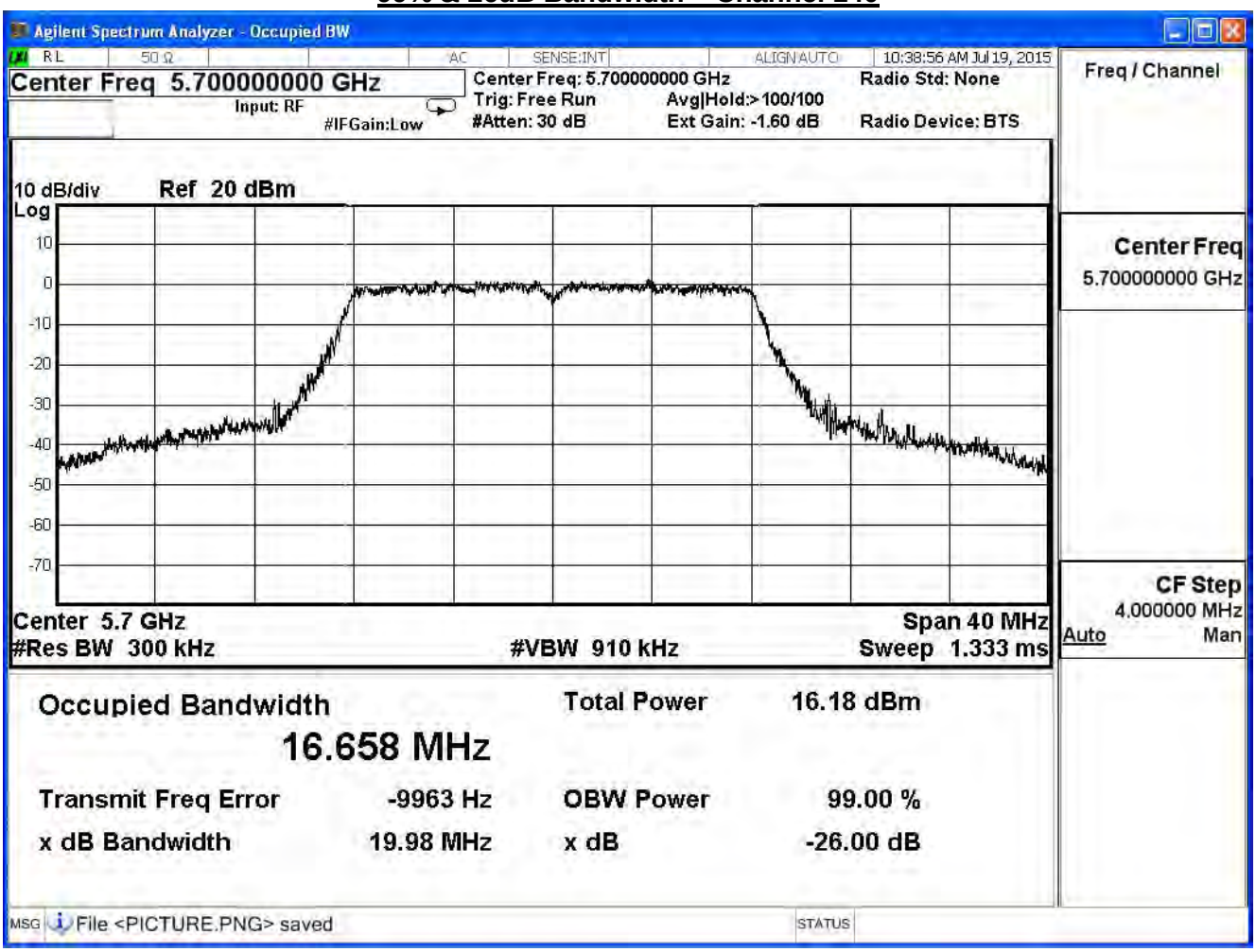
99% & 26dB Bandwidth – Channel 100



99% & 26dB Bandwidth – Channel 116



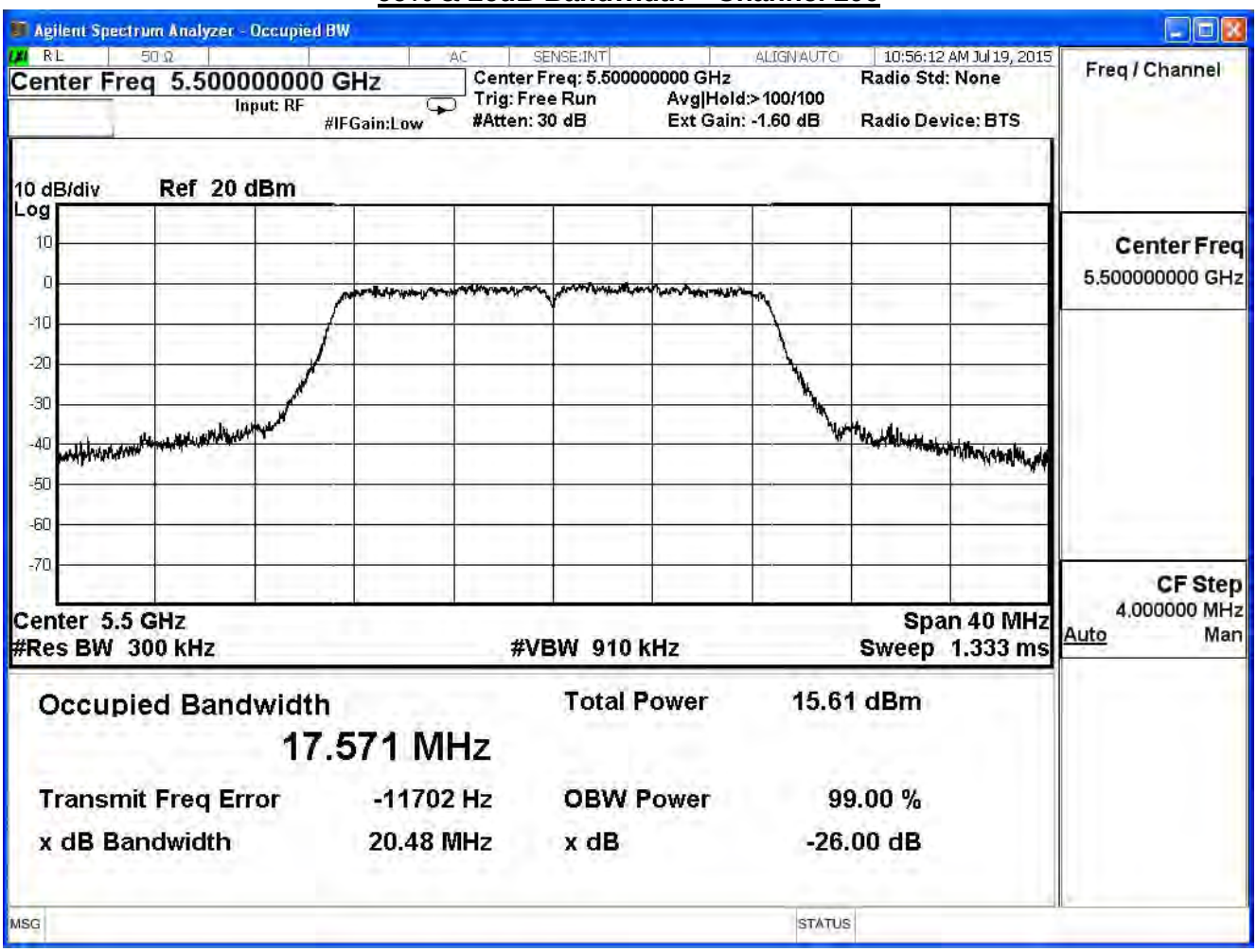
99% & 26dB Bandwidth – Channel 140



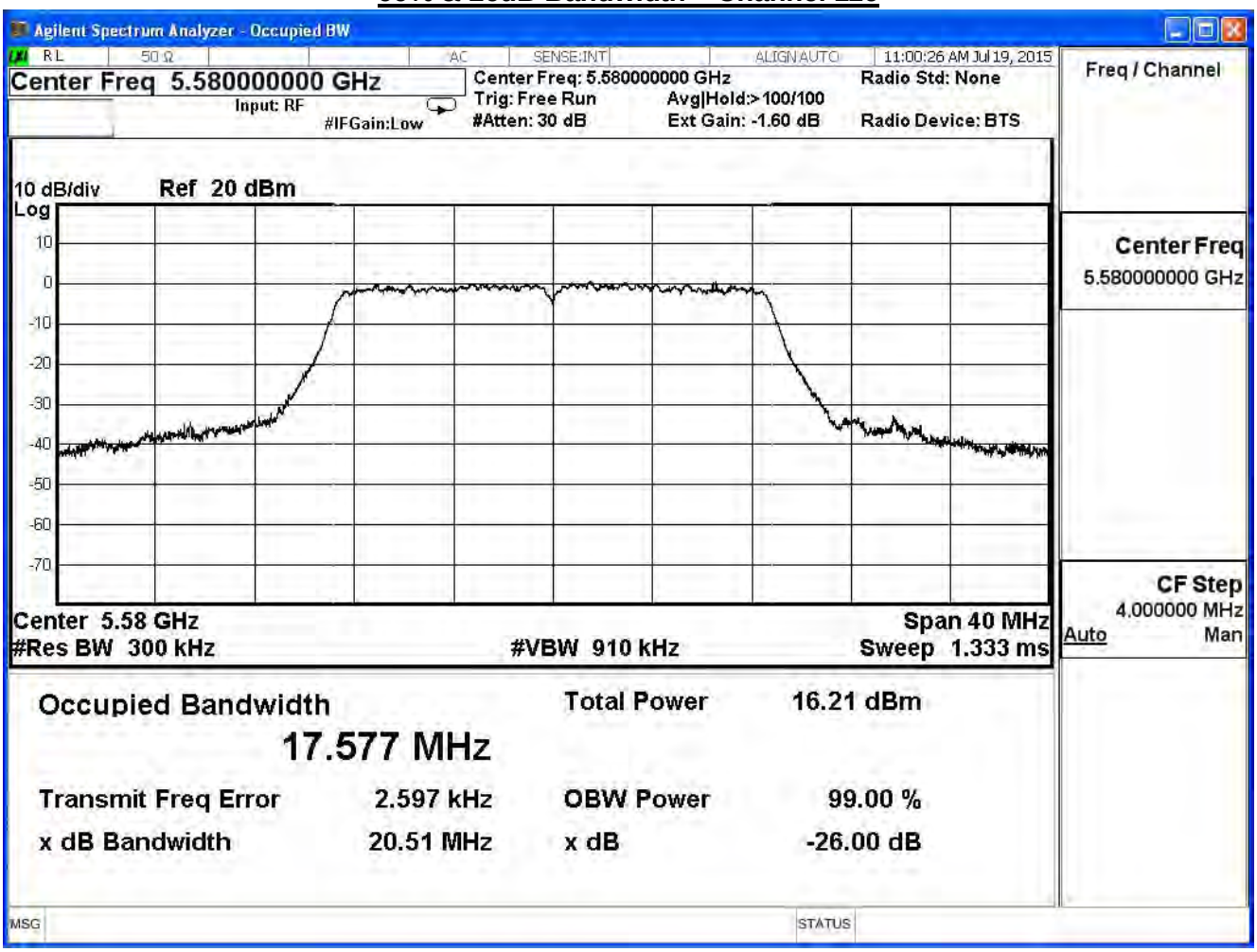
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

802.11n_20M(ANT 0)					
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
100	5500	20.480	17.571	--	Pass
116	5580	20.510	17.577	--	Pass
140	5700	20.470	17.577	--	Pass

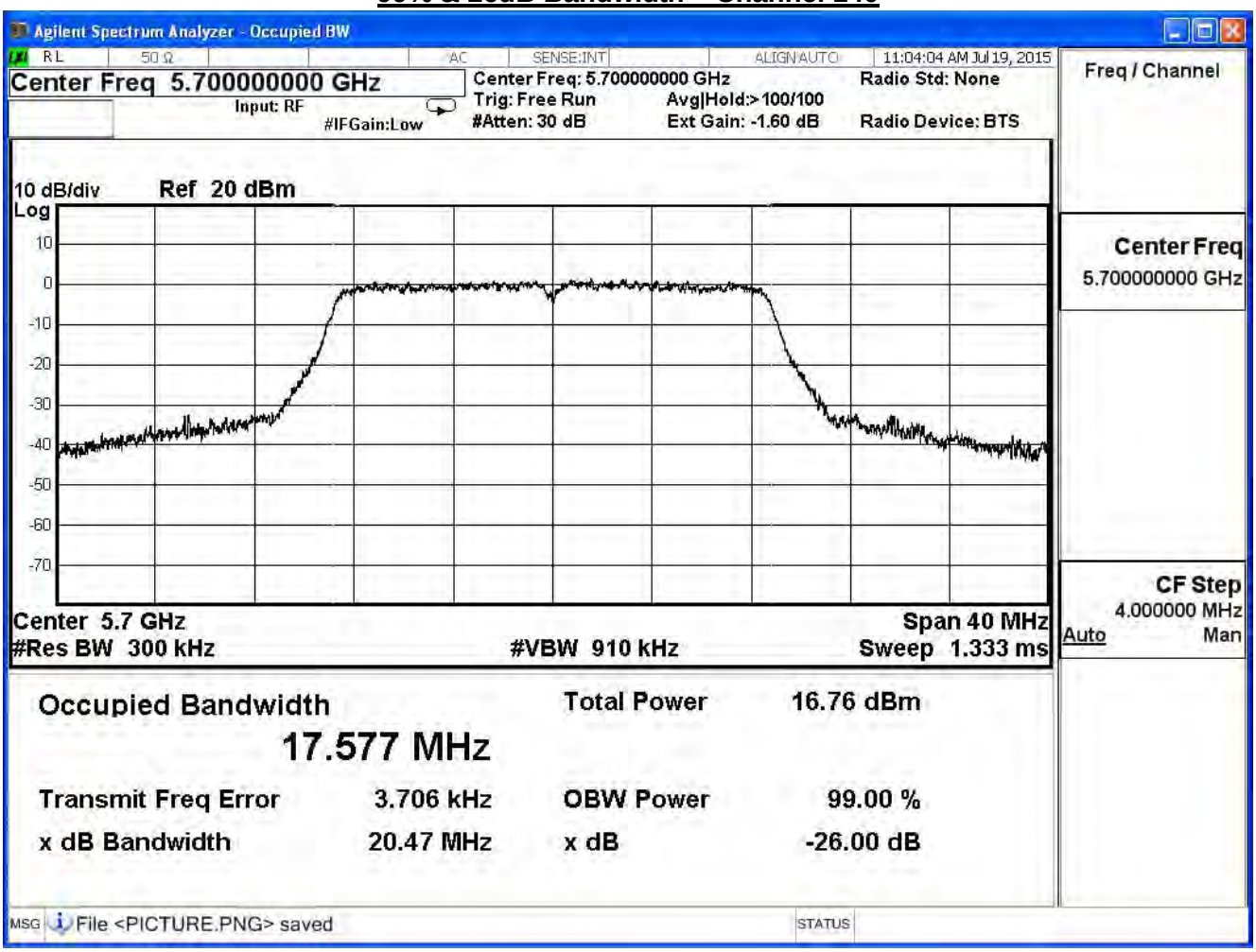
99% & 26dB Bandwidth – Channel 100



99% & 26dB Bandwidth – Channel 116



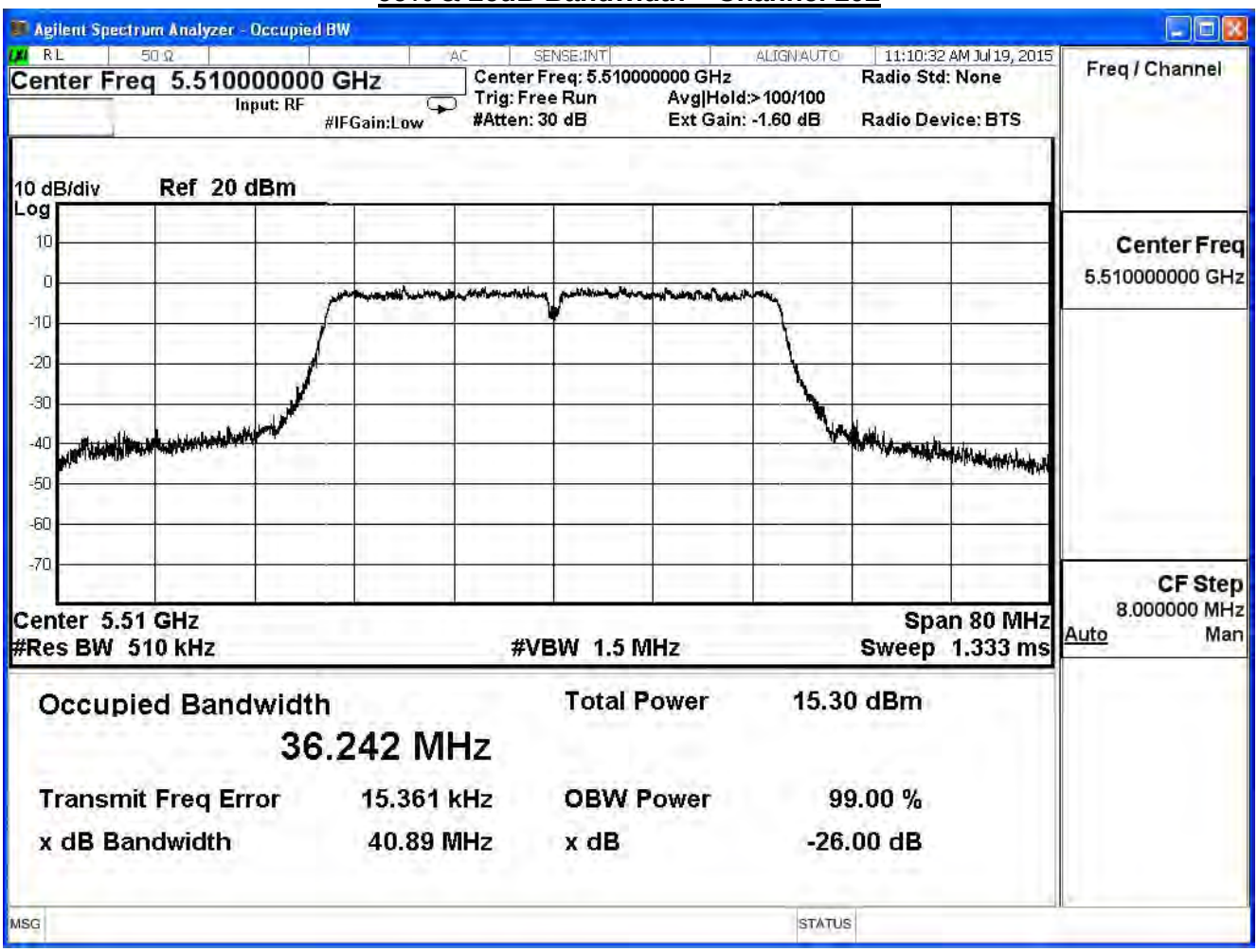
99% & 26dB Bandwidth – Channel 140



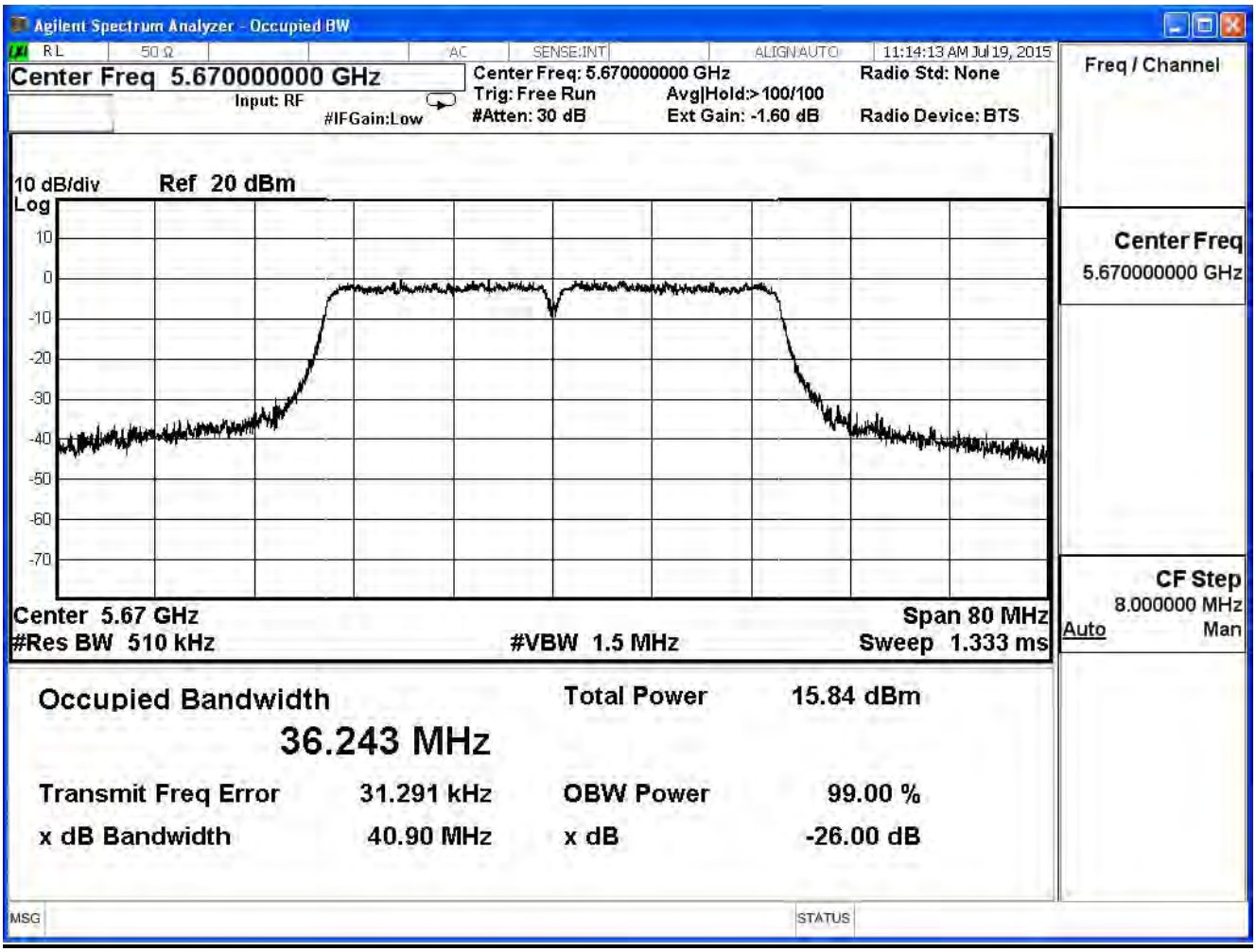
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

802.11n_40M(ANT 0)					
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
102	5510	40.890	36.242	--	Pass
134	5670	40.900	36.243	--	Pass

99% & 26dB Bandwidth – Channel 102



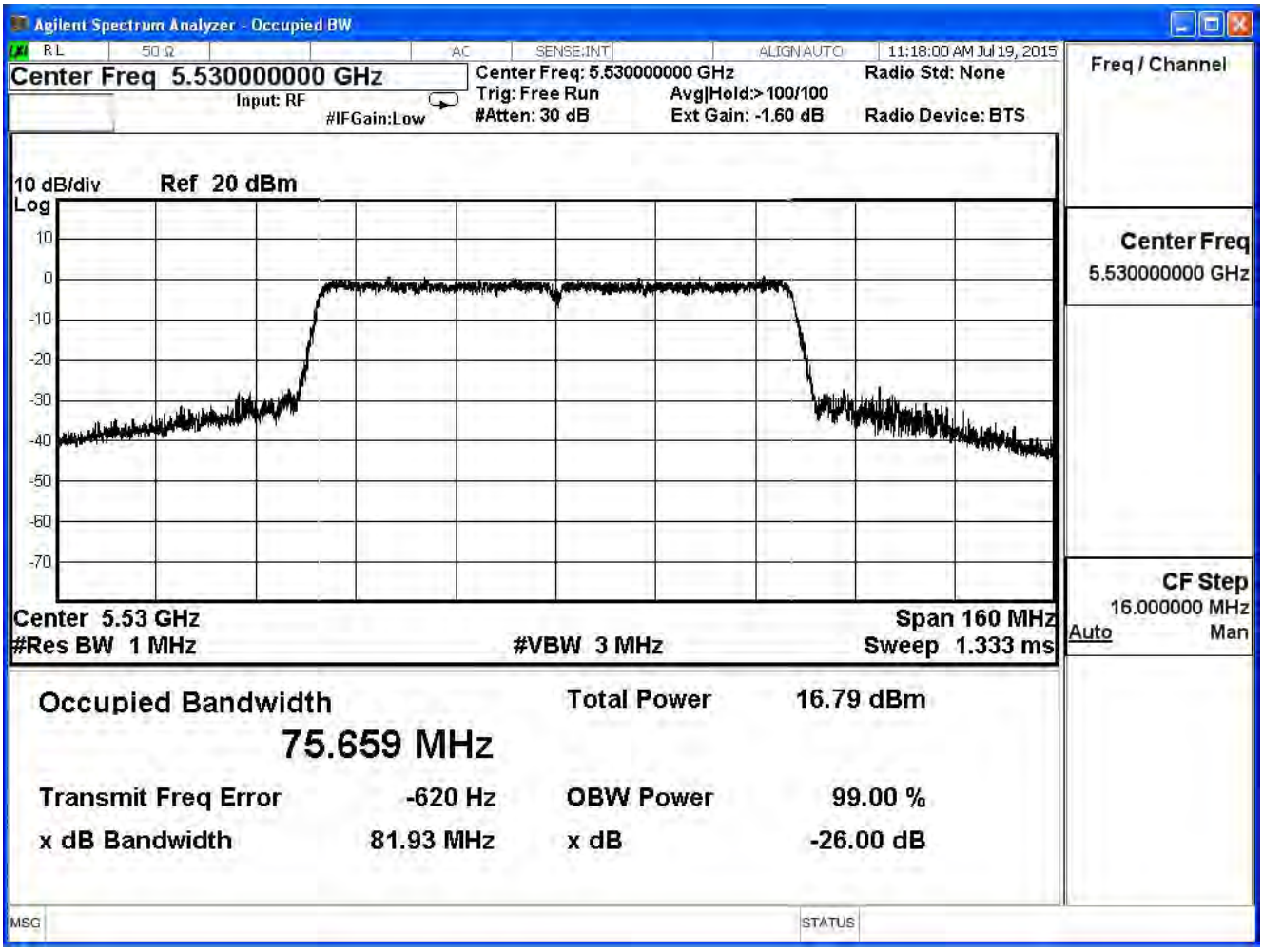
99% & 26dB Bandwidth – Channel 134



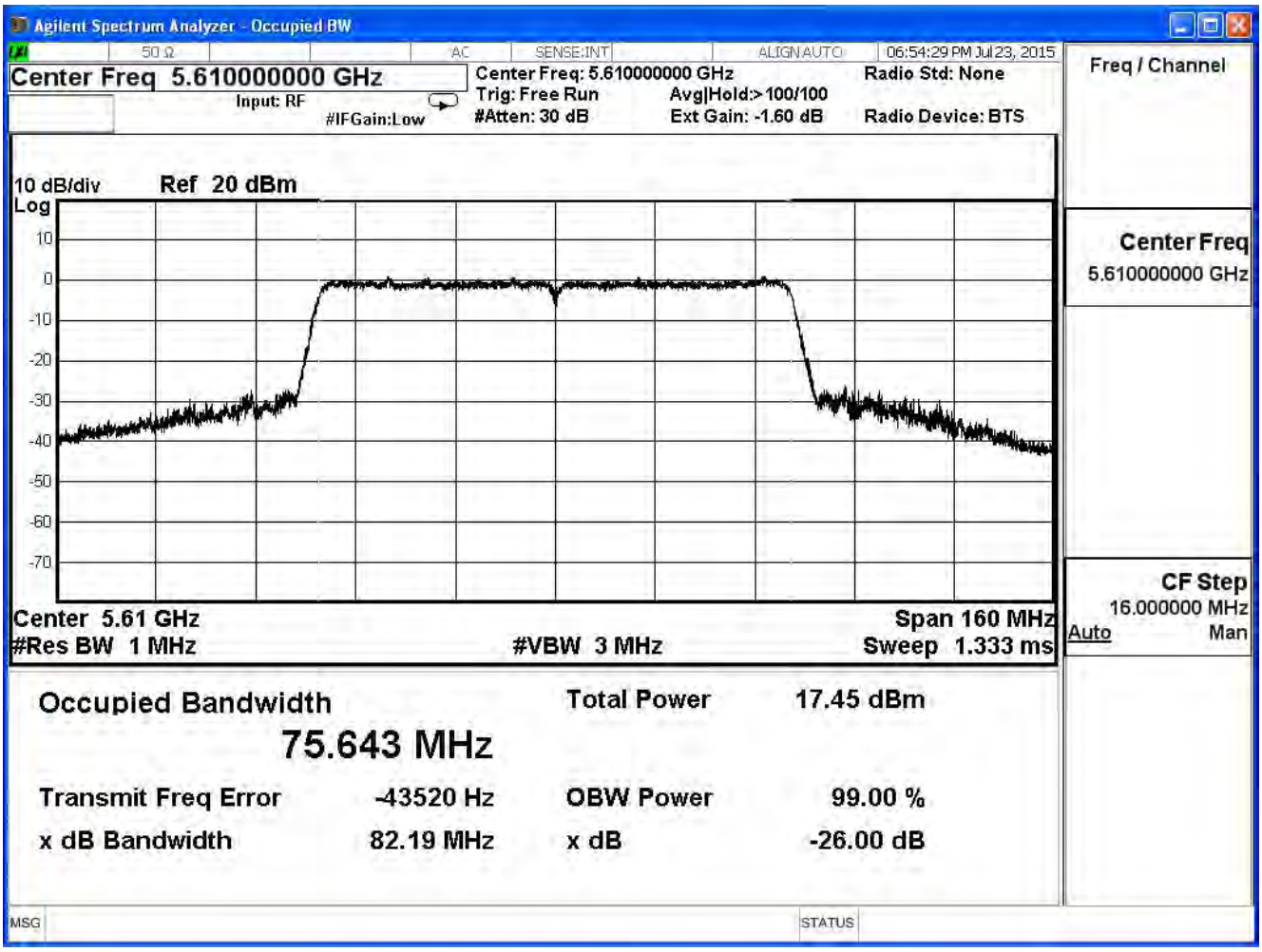
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/23	Test Site	SR7

802.11ac_80M(ANT 0)					
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
106	5530	81.930	75.659	--	Pass
122	5610	82.190	75.643	--	Pass

99% & 26dB Bandwidth – Channel 106



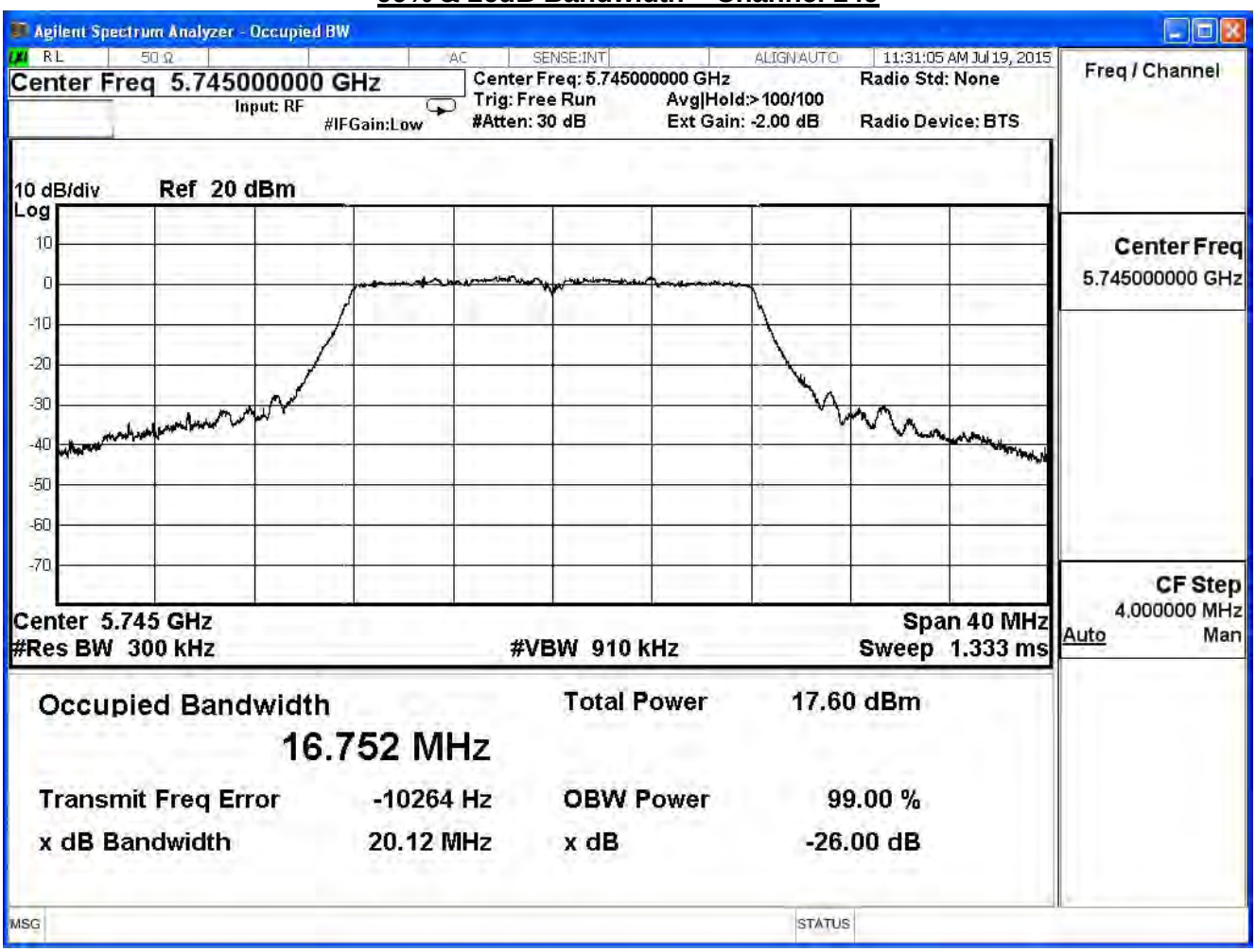
99% & 26dB Bandwidth – Channel 122



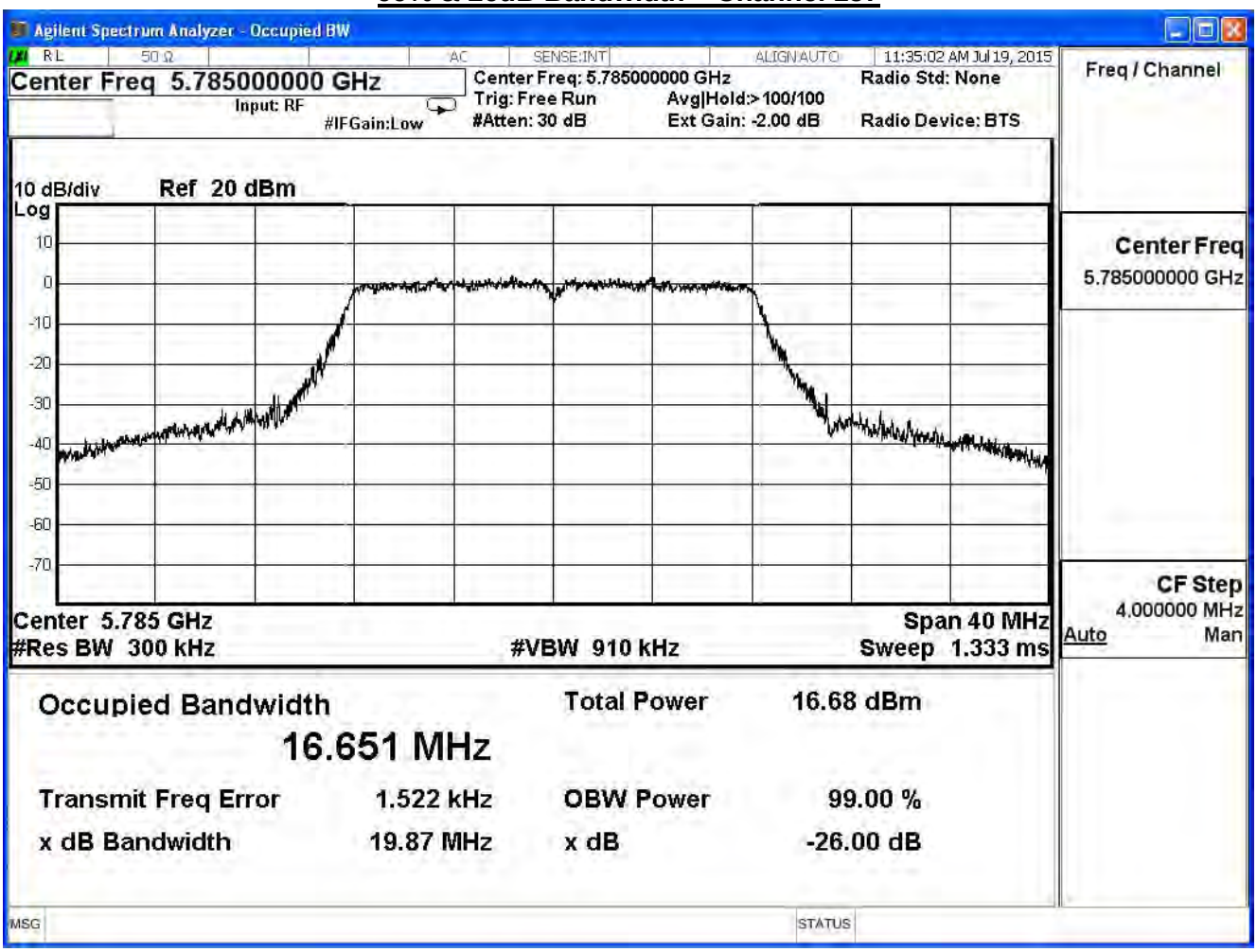
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

802.11a					
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
149	5745	20.120	16.752	--	Pass
157	5785	19.870	16.651	--	Pass
165	5825	19.700	16.655	--	Pass

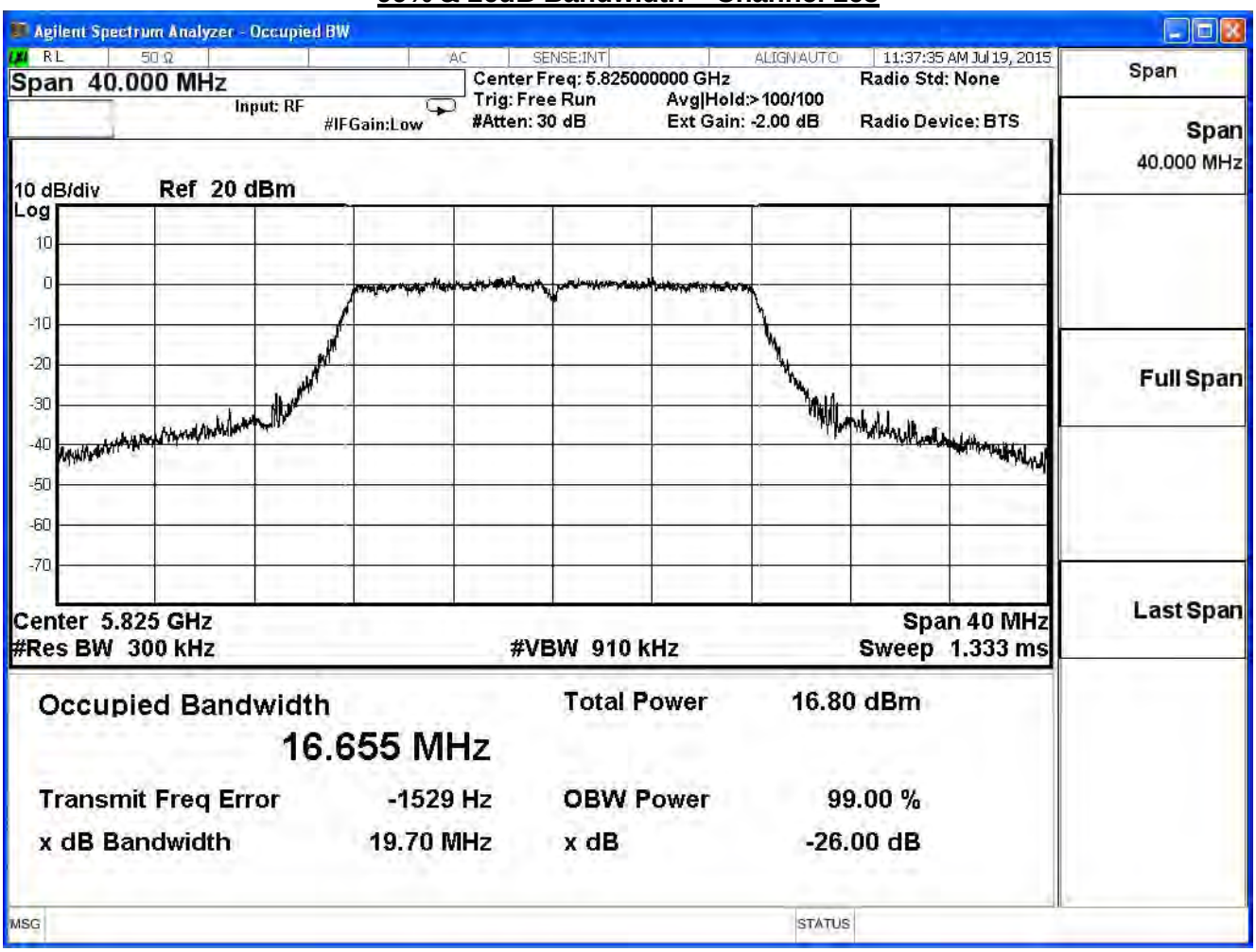
99% & 26dB Bandwidth – Channel 149



99% & 26dB Bandwidth – Channel 157



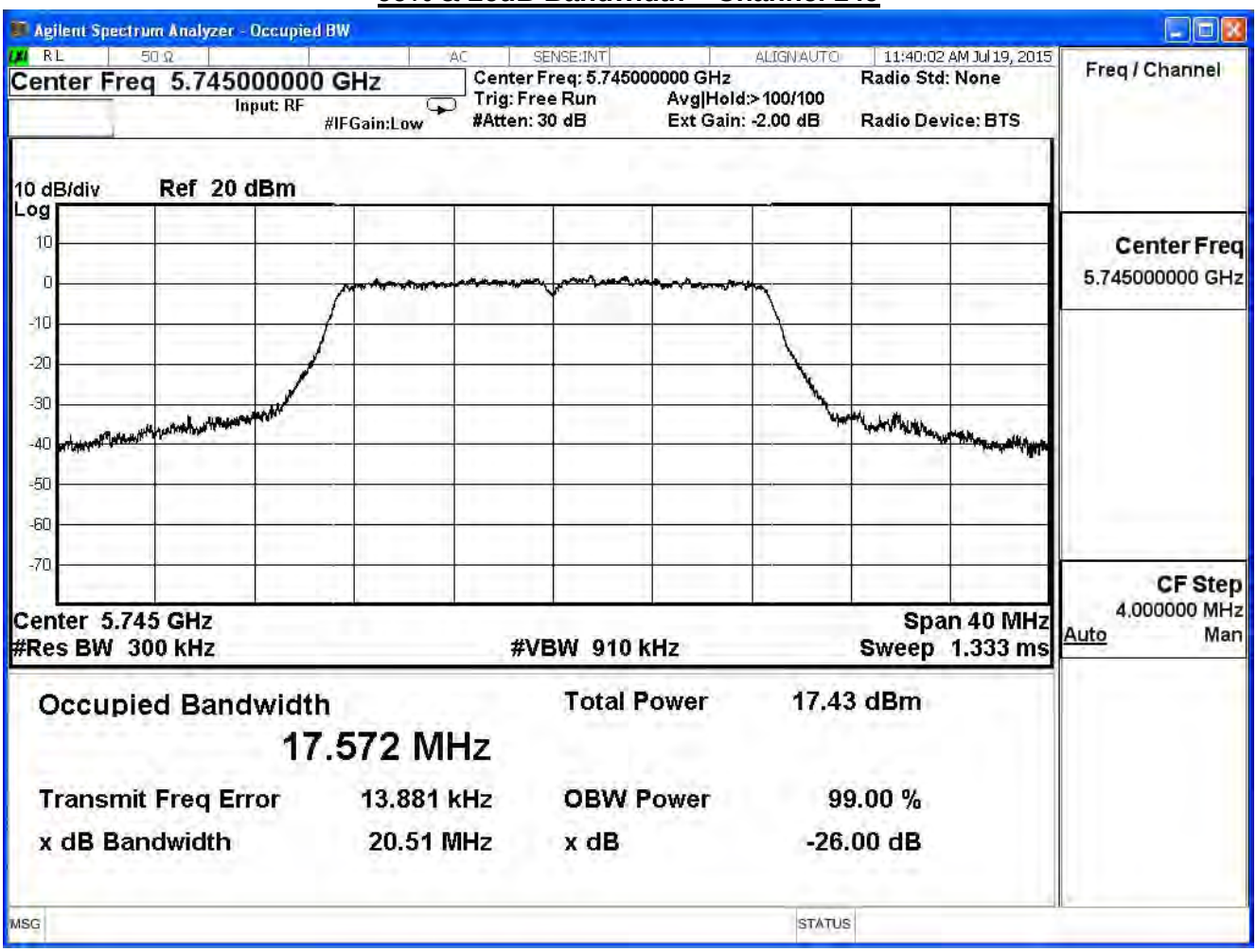
99% & 26dB Bandwidth – Channel 165



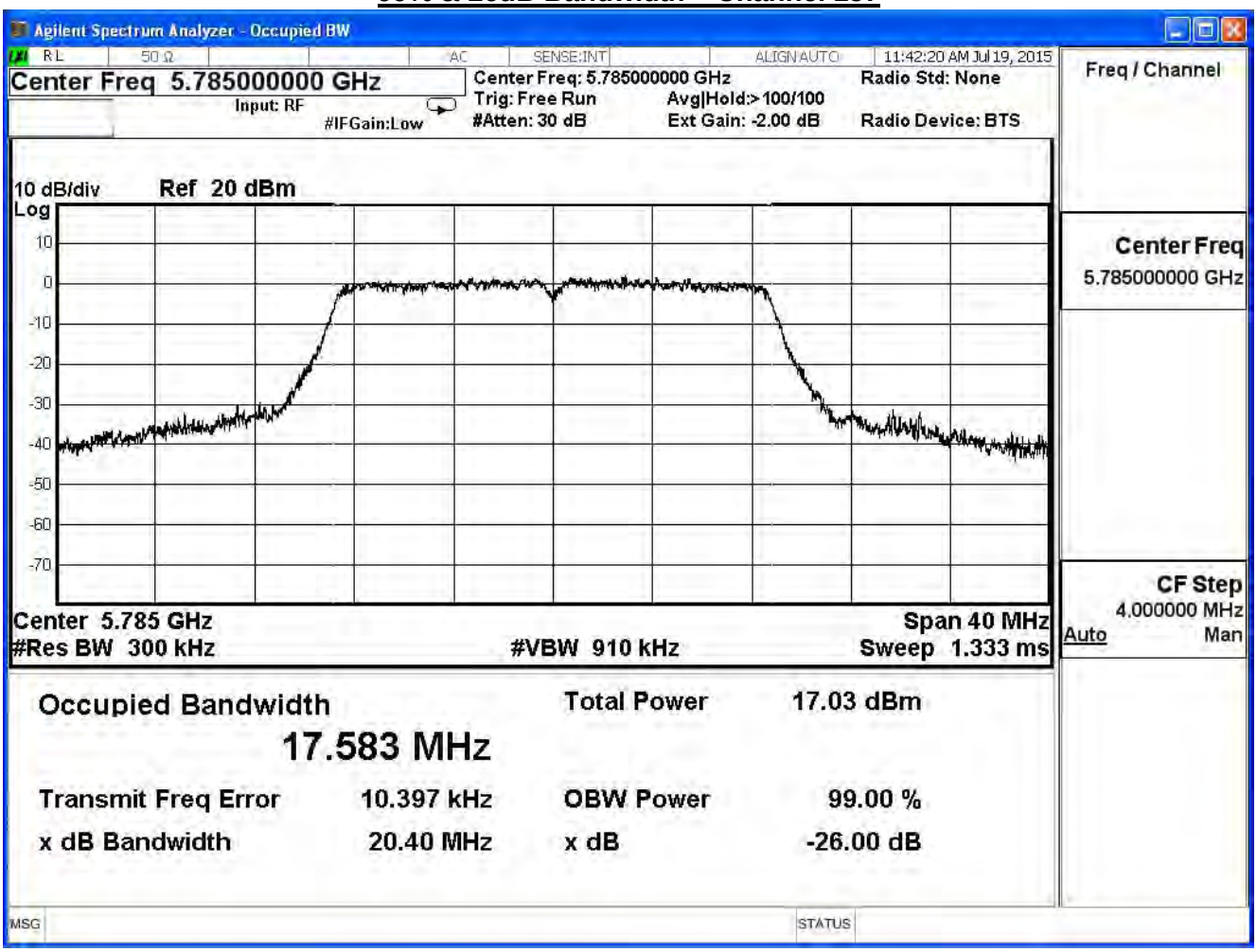
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

802.11n_20M(ANT 0)					
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
149	5745	20.510	17.572	--	Pass
157	5785	20.400	17.583	--	Pass
165	5825	20.480	17.574	--	Pass

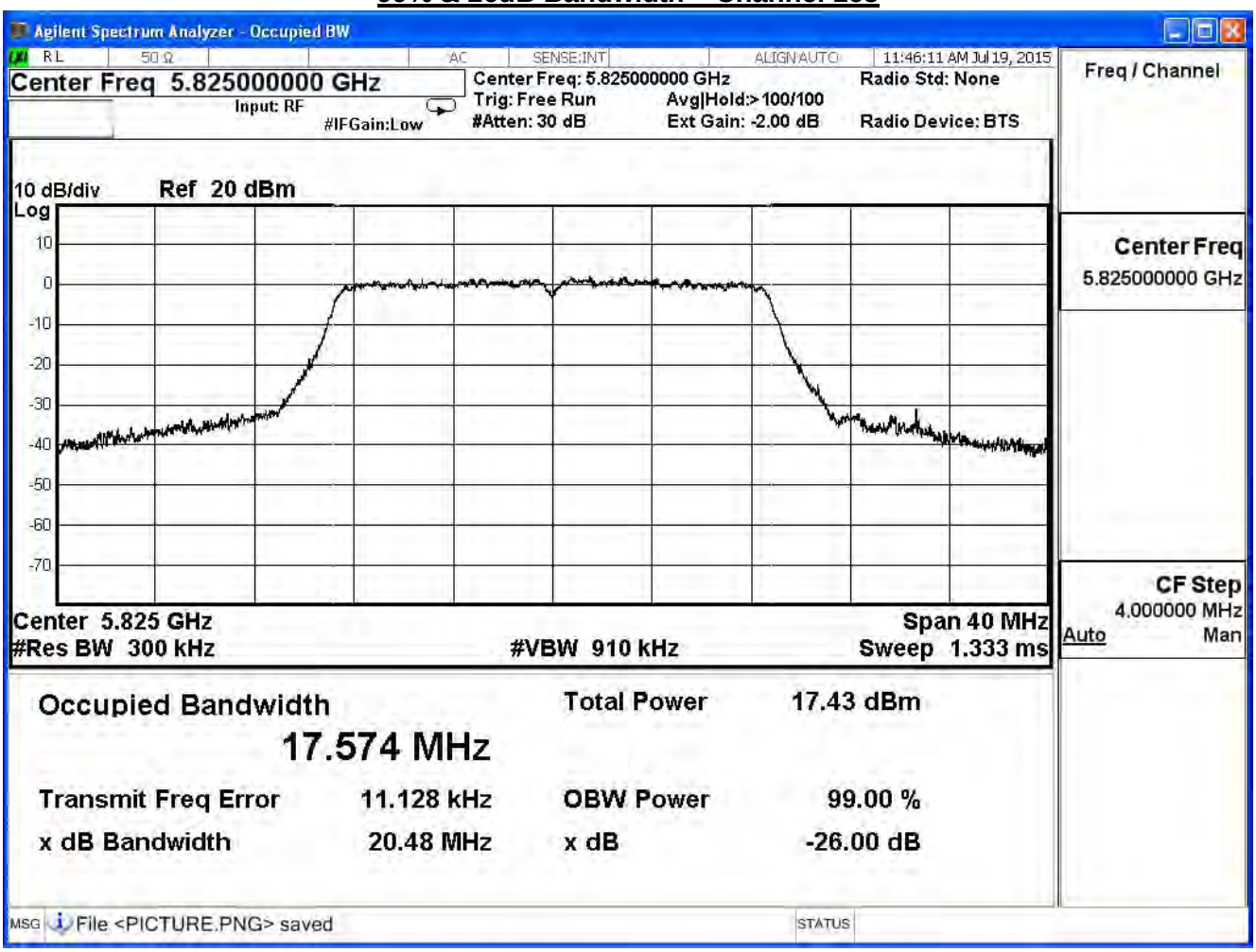
99% & 26dB Bandwidth – Channel 149



99% & 26dB Bandwidth – Channel 157



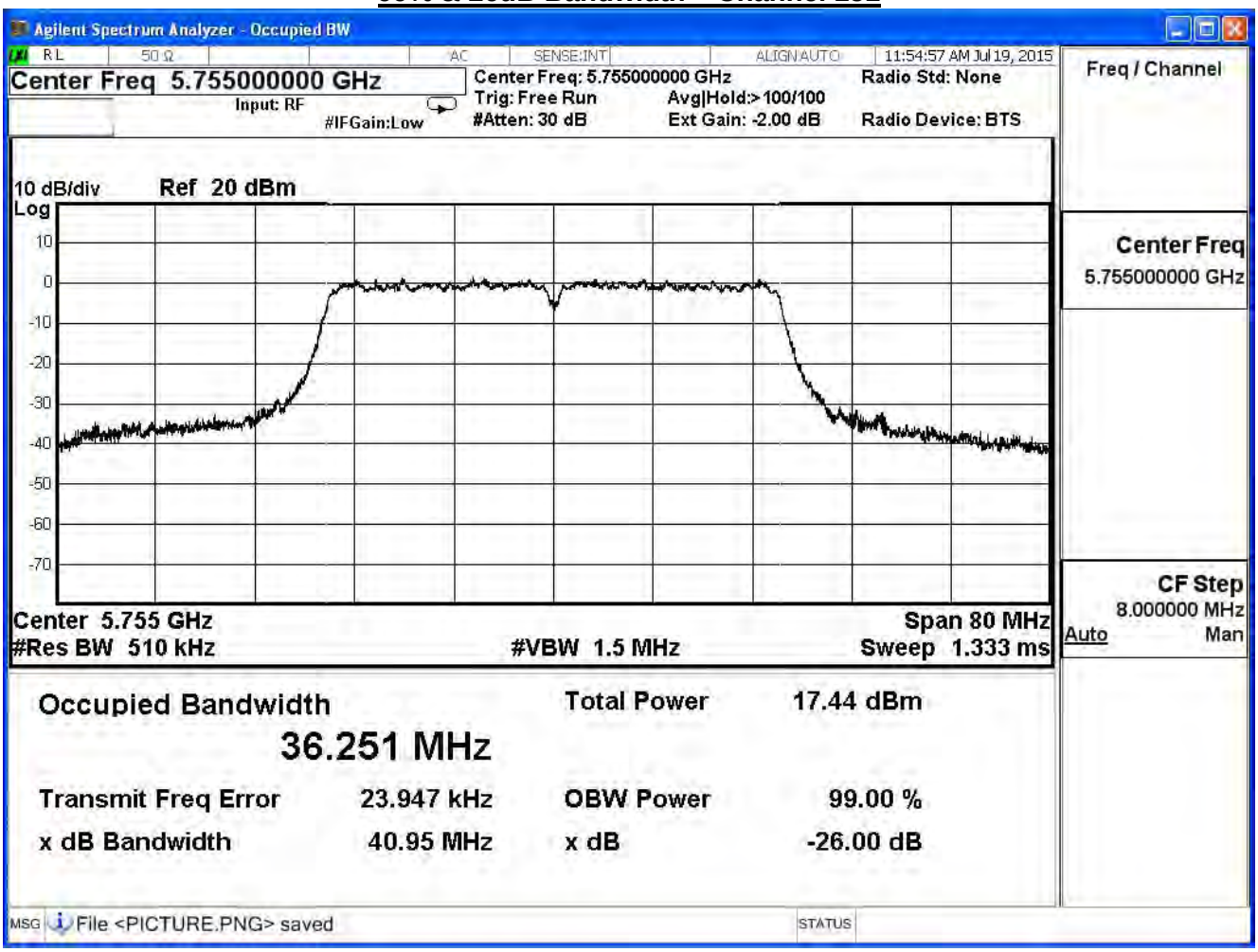
99% & 26dB Bandwidth – Channel 165



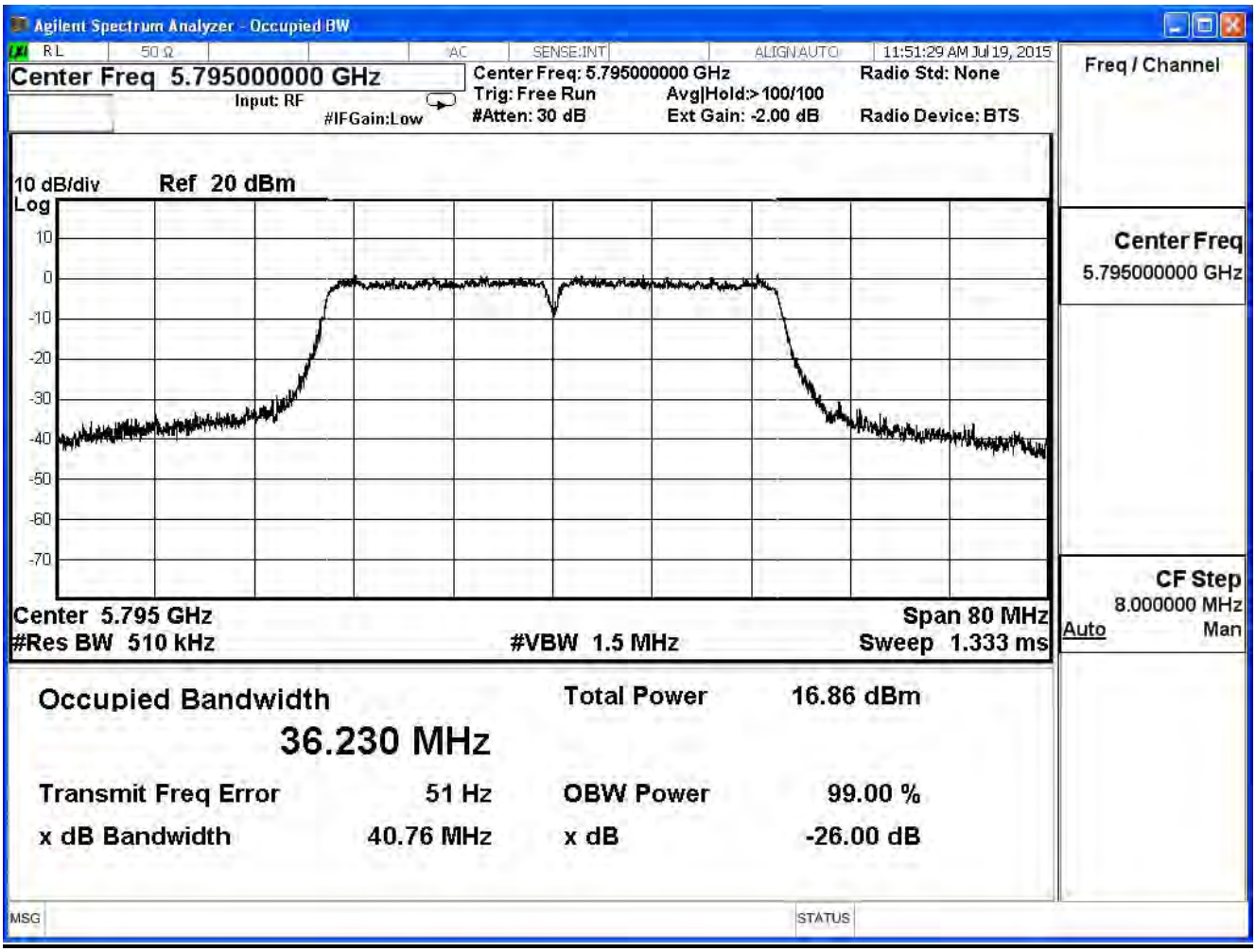
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

802.11n_40M(ANT 0)					
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
151	5755	40.950	36.251	--	Pass
159	5795	40.760	36.230	--	Pass

99% & 26dB Bandwidth – Channel 151



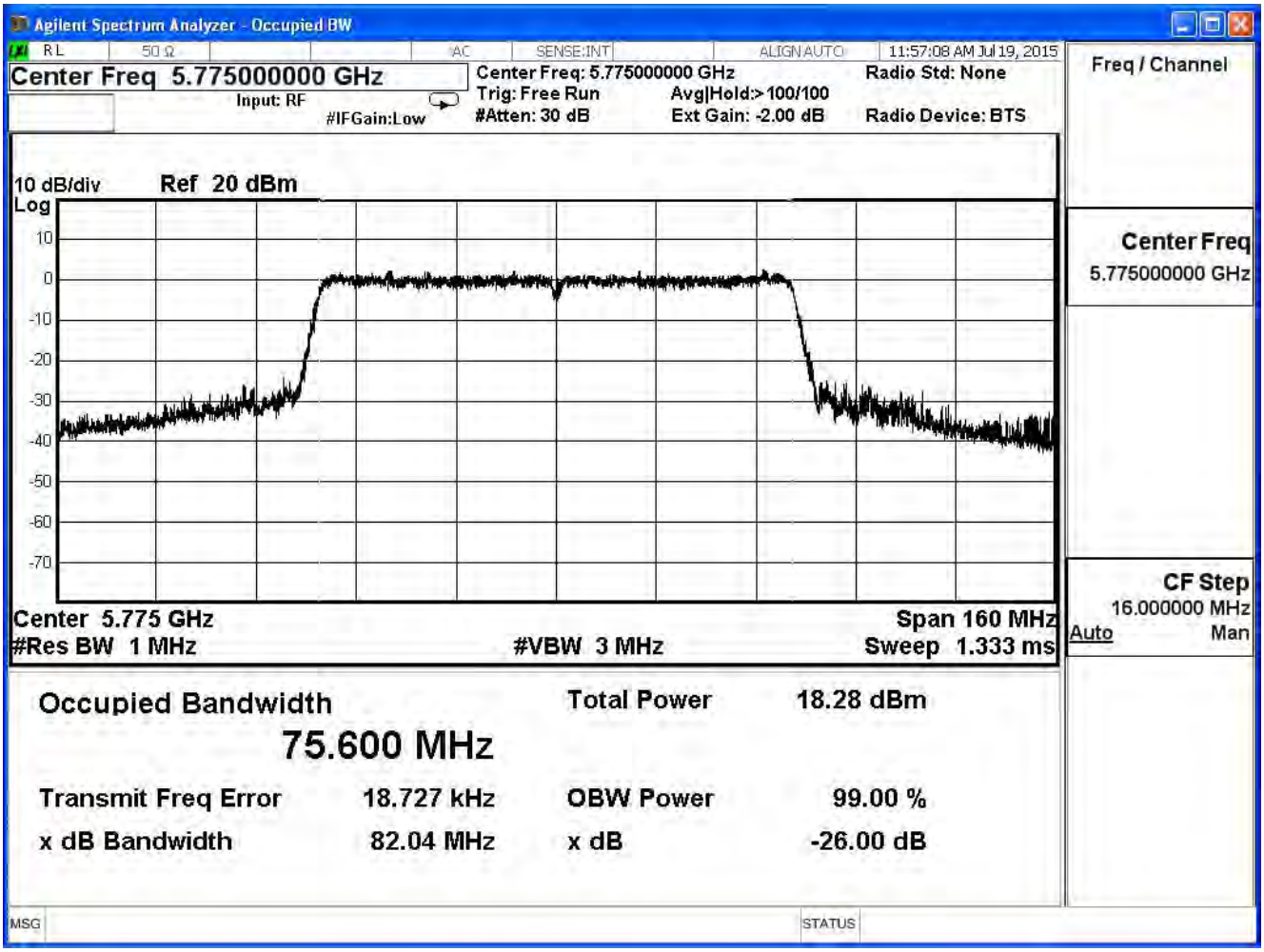
99% & 26dB Bandwidth – Channel 159



Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

802.11ac_80M(ANT 0)					
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
155	5775	82.040	75.600	--	Pass

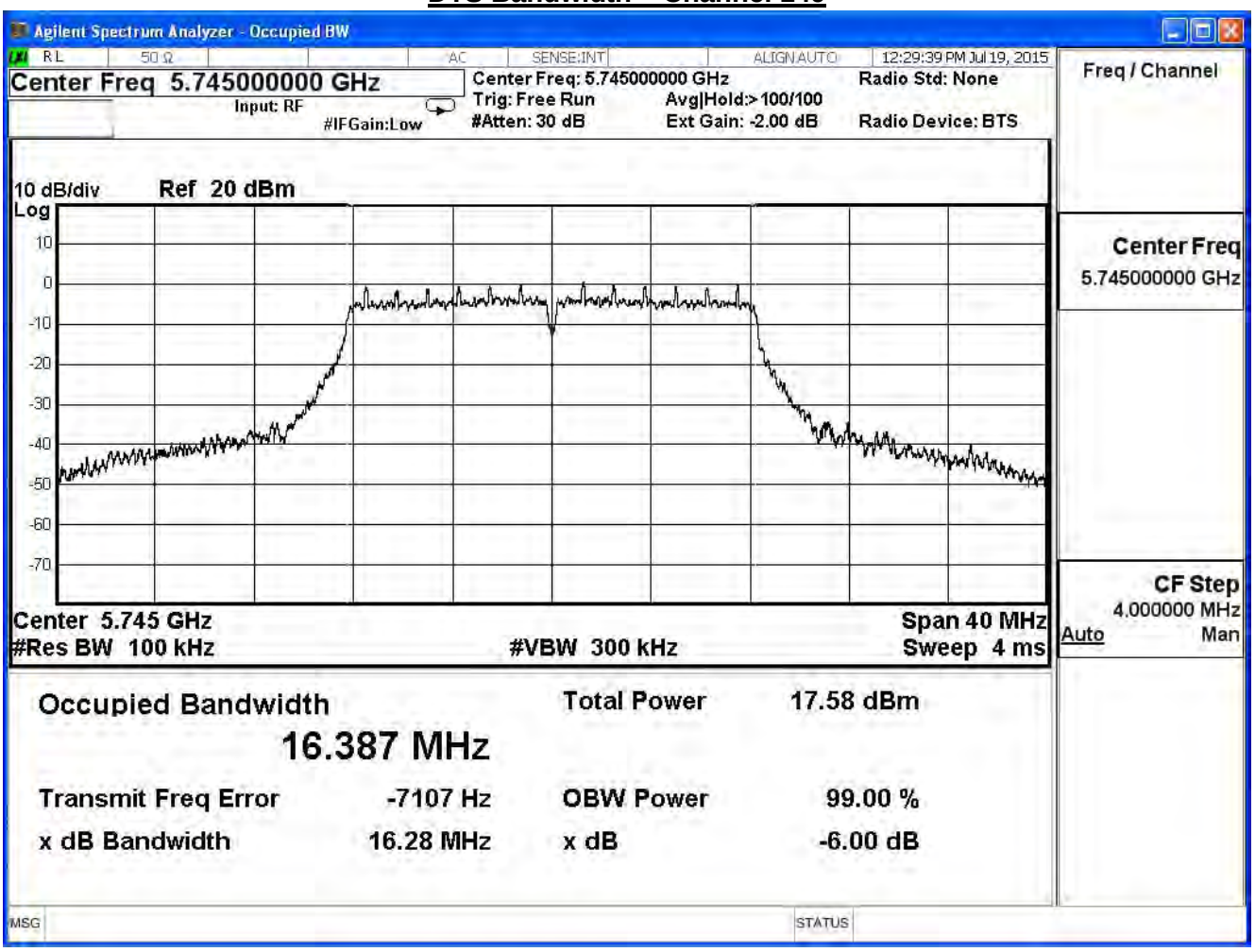
99% & 26dB Bandwidth – Channel 155



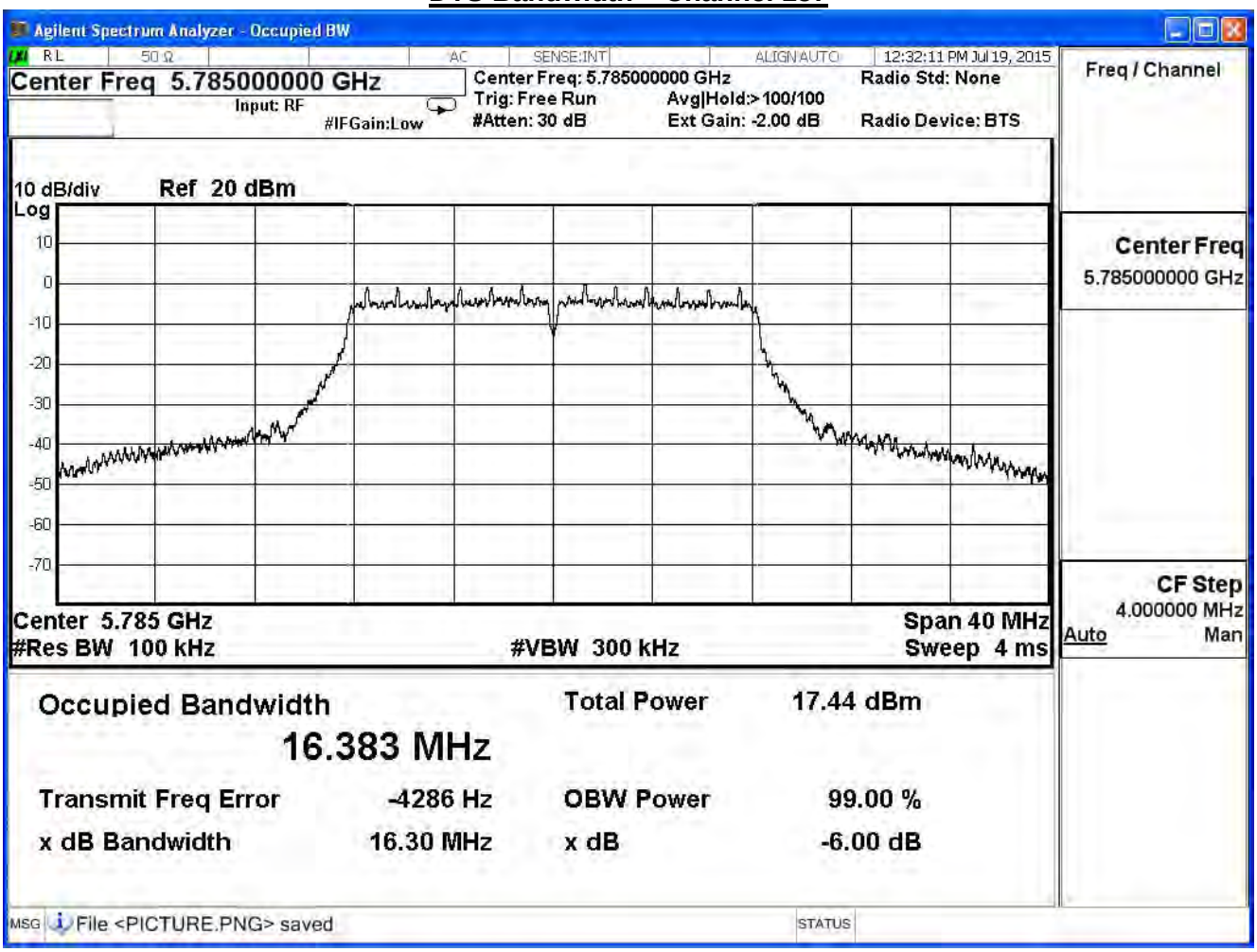
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	DTS Bandwidth		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

802.11a				
Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
149	5745	16.280	≧0.5	Pass
157	5785	16.300	≧0.5	Pass
165	5825	16.290	≧0.5	Pass

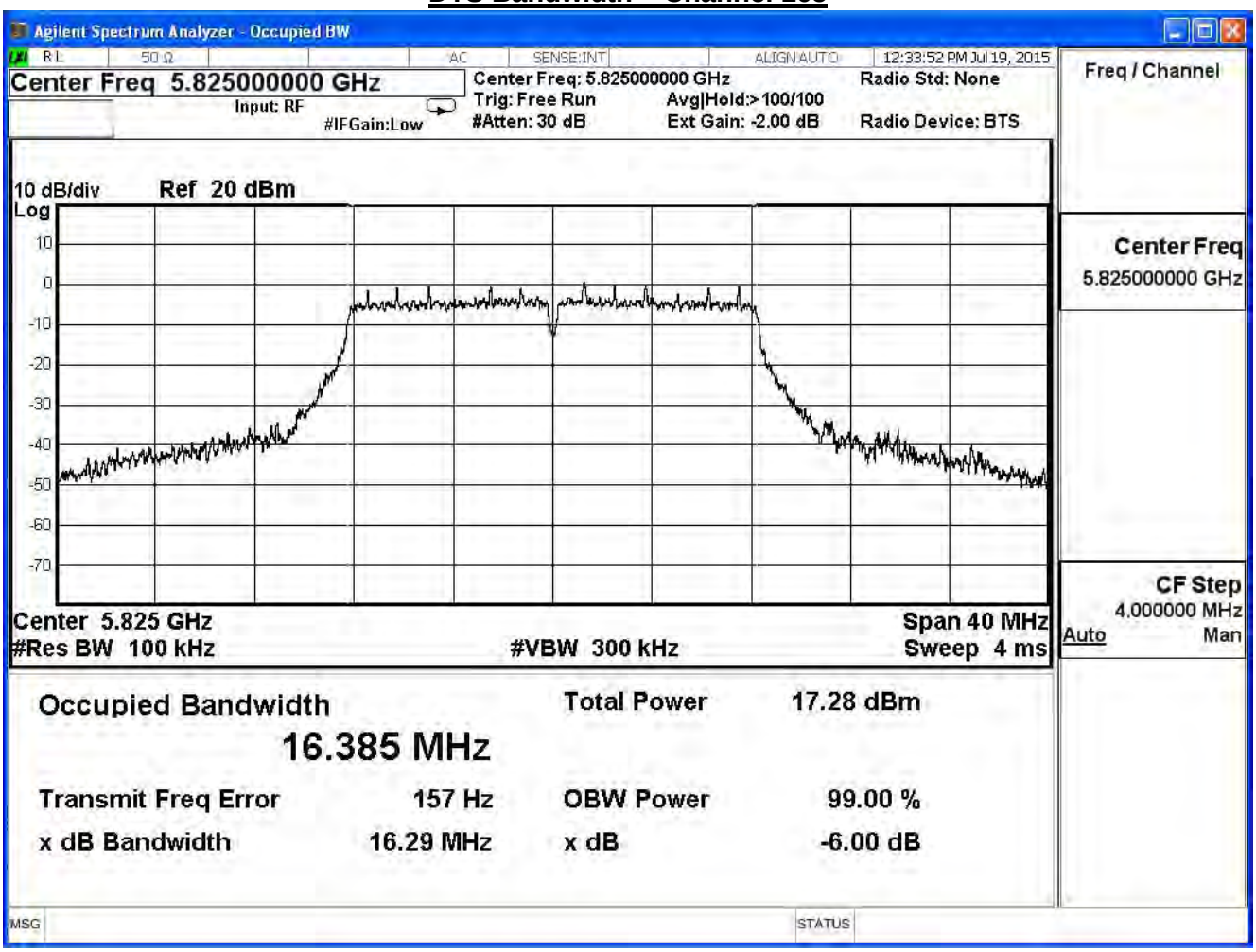
DTS Bandwidth – Channel 149



DTS Bandwidth – Channel 157



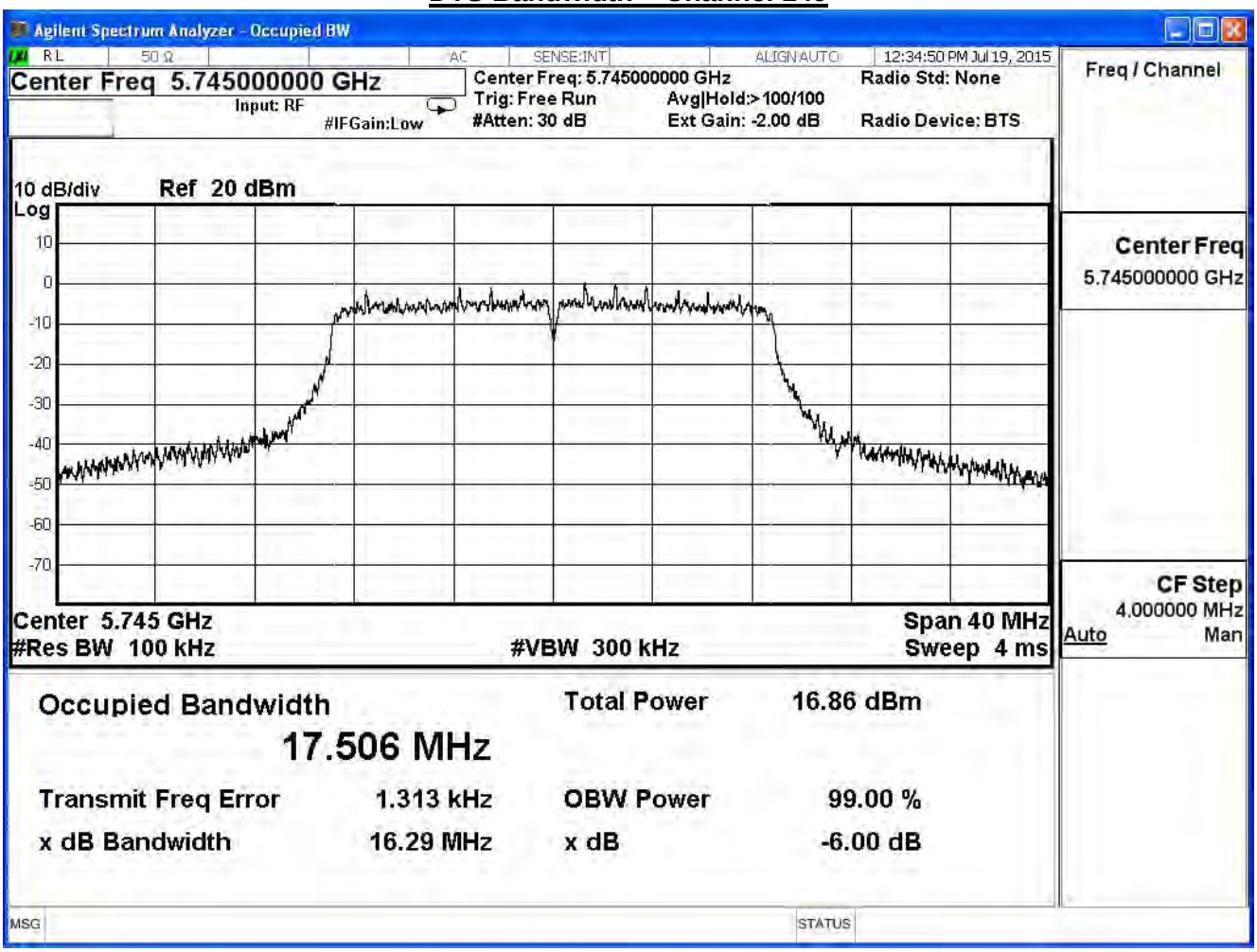
DTS Bandwidth – Channel 165



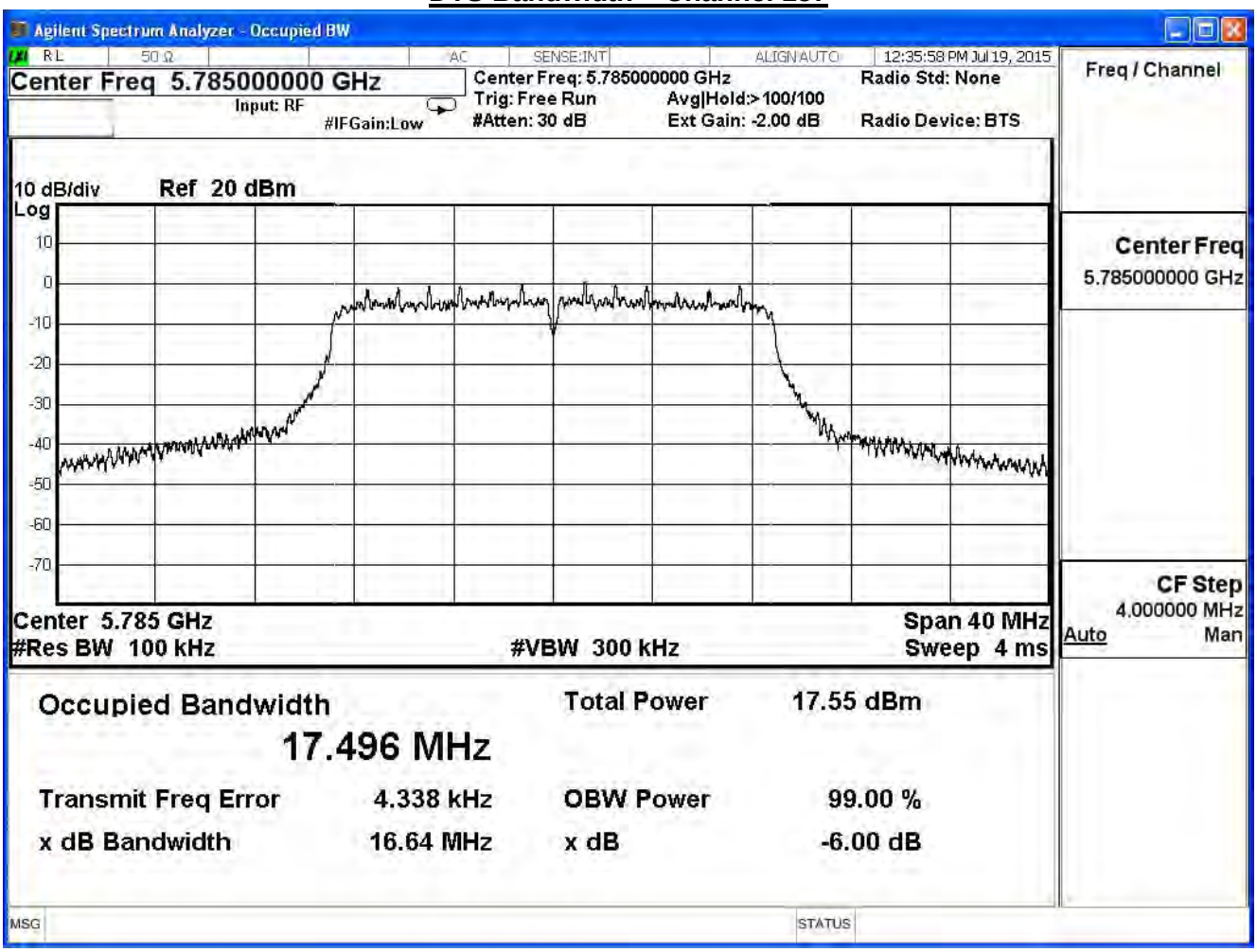
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	DTS Bandwidth		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

802.11n_20M(ANT 0)				
Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
149	5745	16.290	≧0.5	Pass
157	5785	16.640	≧0.5	Pass
165	5825	16.280	≧0.5	Pass

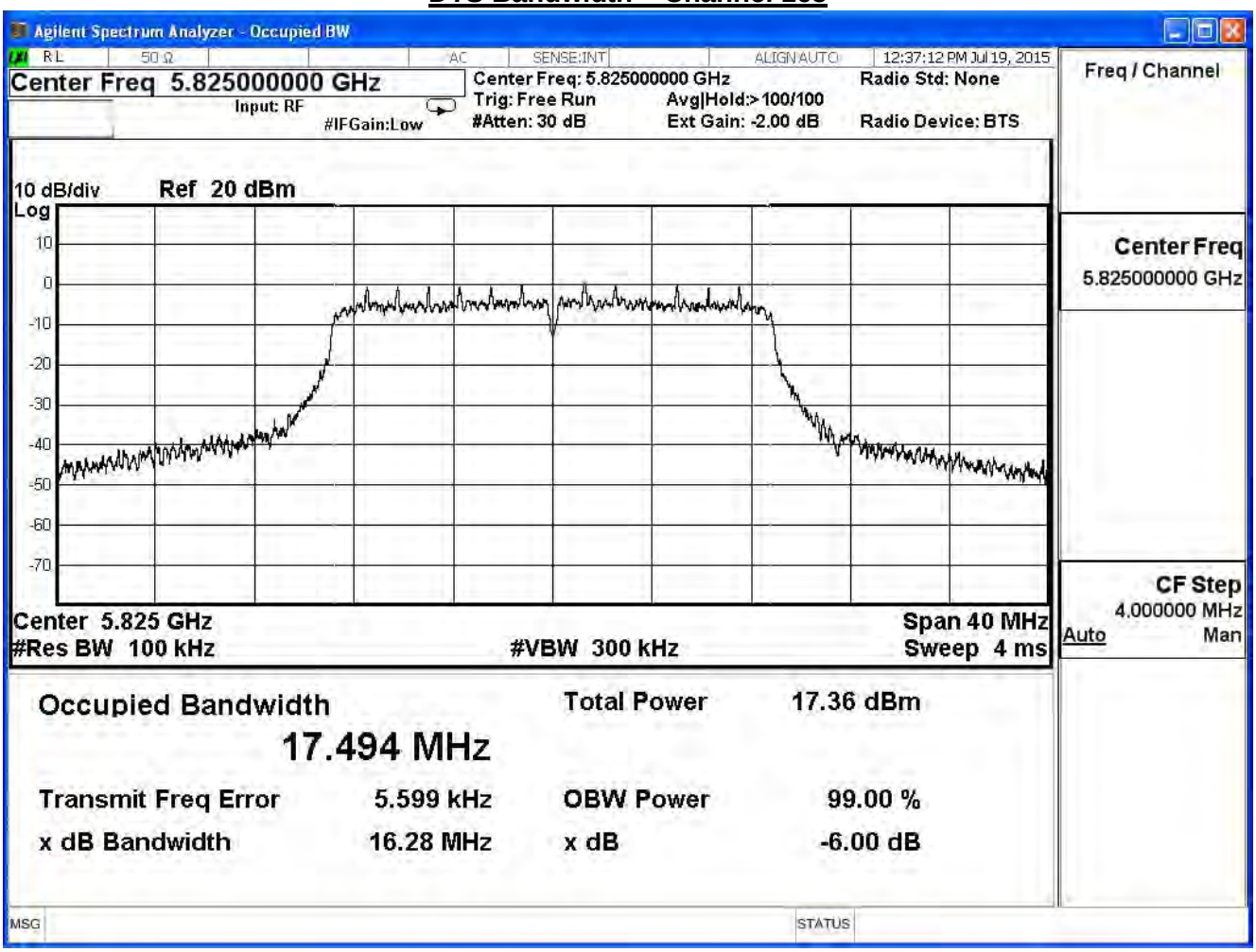
DTS Bandwidth – Channel 149



DTS Bandwidth – Channel 157



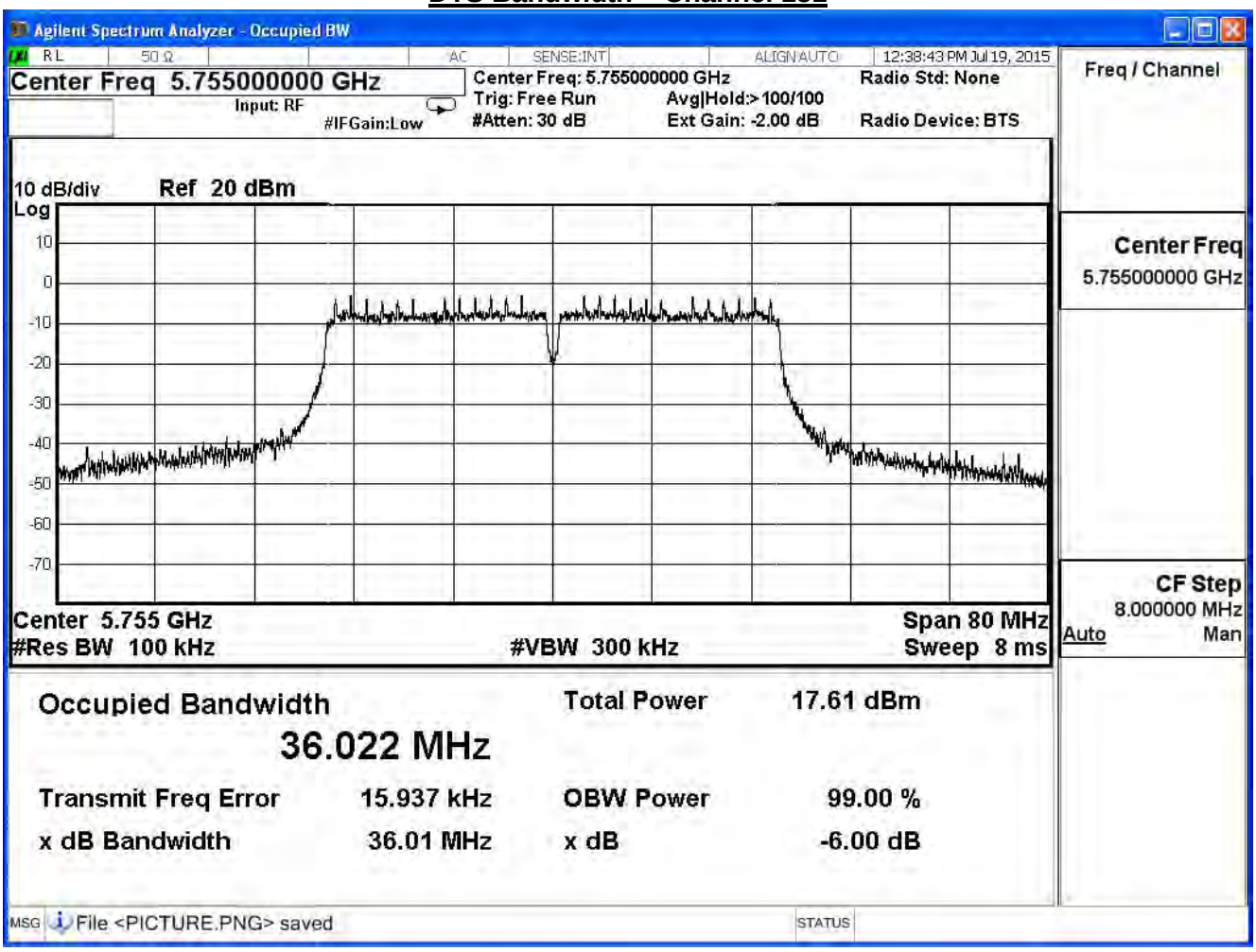
DTS Bandwidth – Channel 165



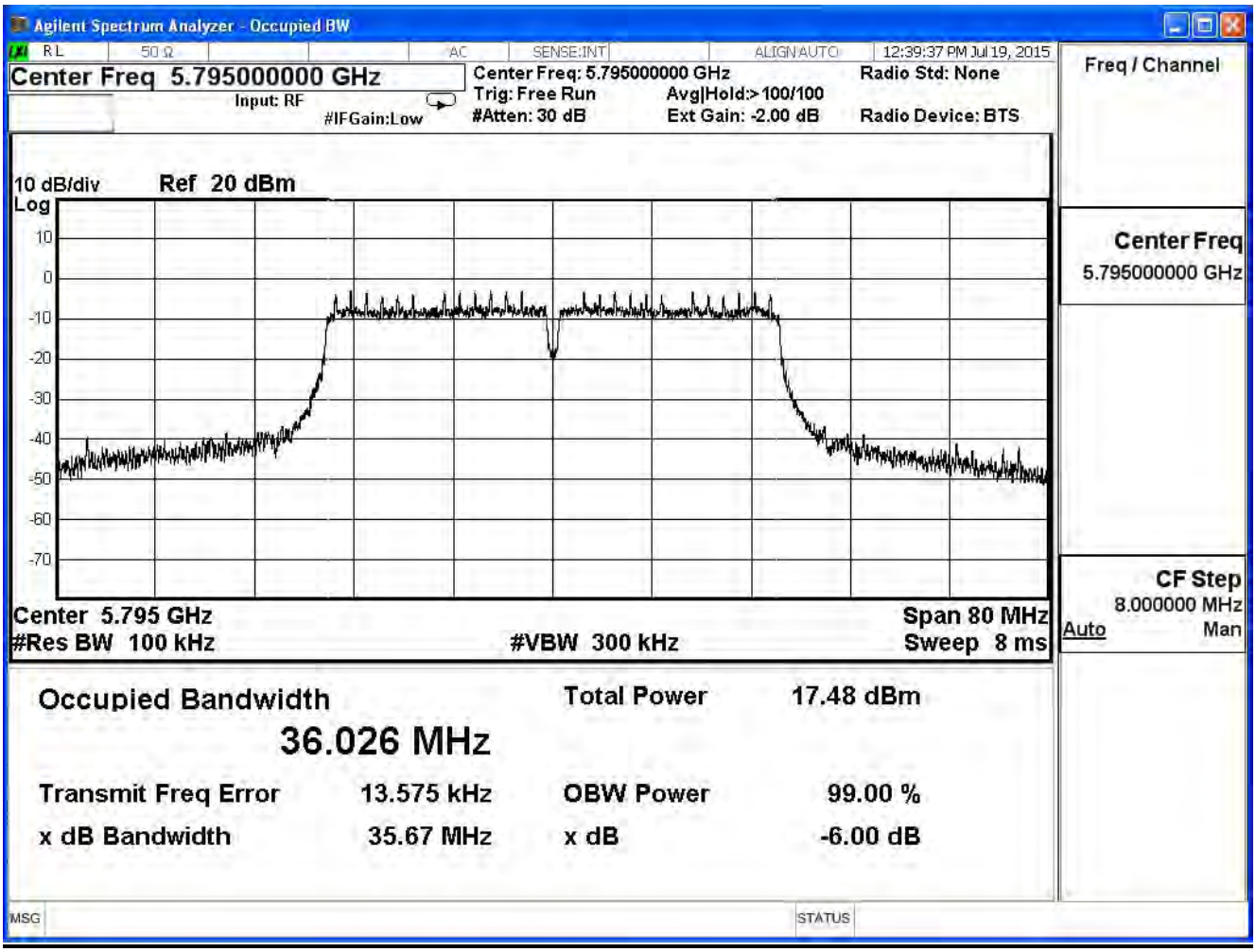
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	DTS Bandwidth		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

802.11n_40M(ANT 0)				
Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
151	5755	36.010	≧0.5	Pass
159	5795	35.670	≧0.5	Pass

DTS Bandwidth – Channel 151



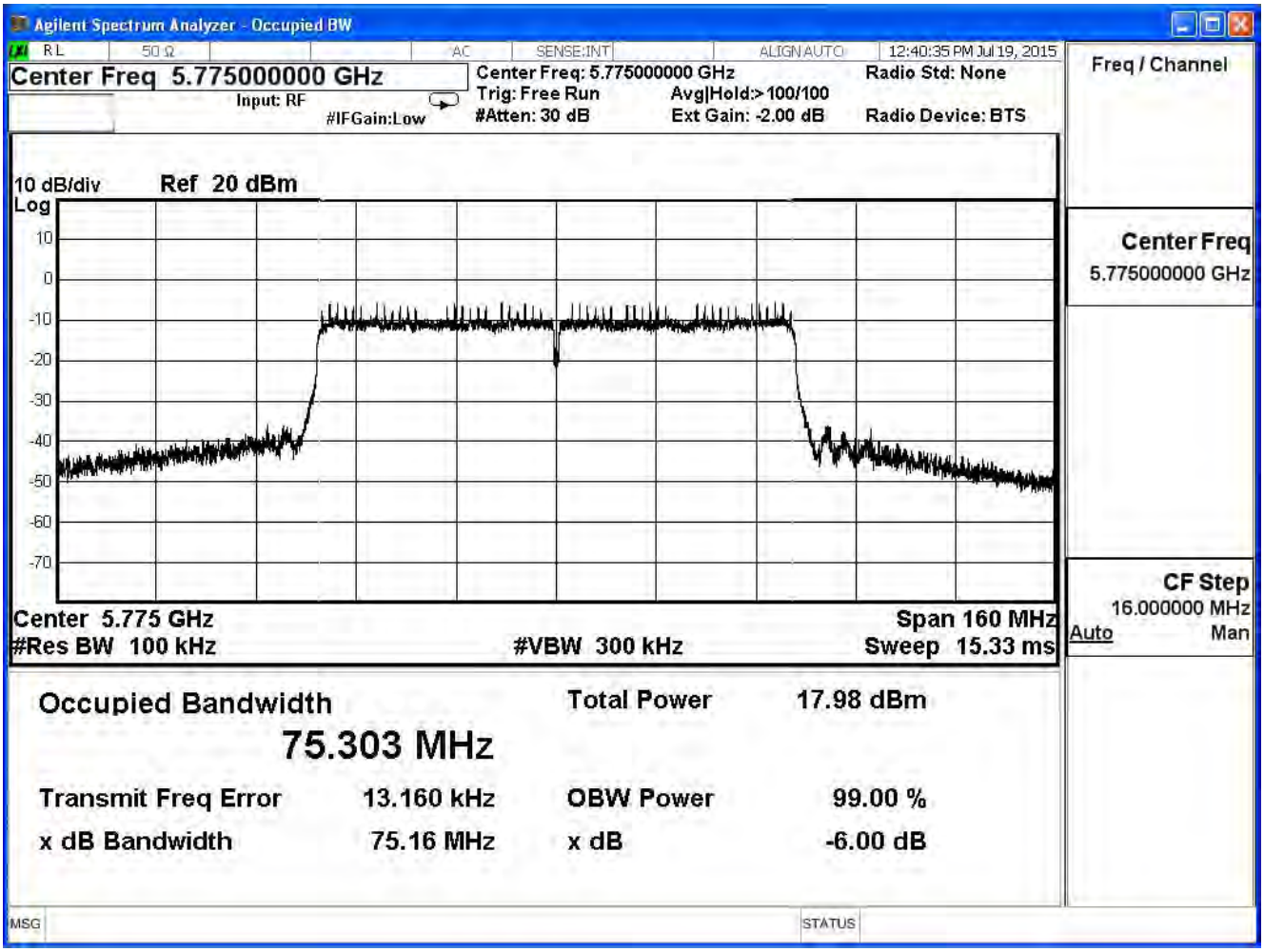
DTS Bandwidth – Channel 159



Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	DTS Bandwidth		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

802.11ac_80M(ANT 0)				
Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
155	5775	75.160	≧0.5	Pass

DTS Bandwidth – Channel 155



4. Peak Transmit Output

4.1. Test Equipment

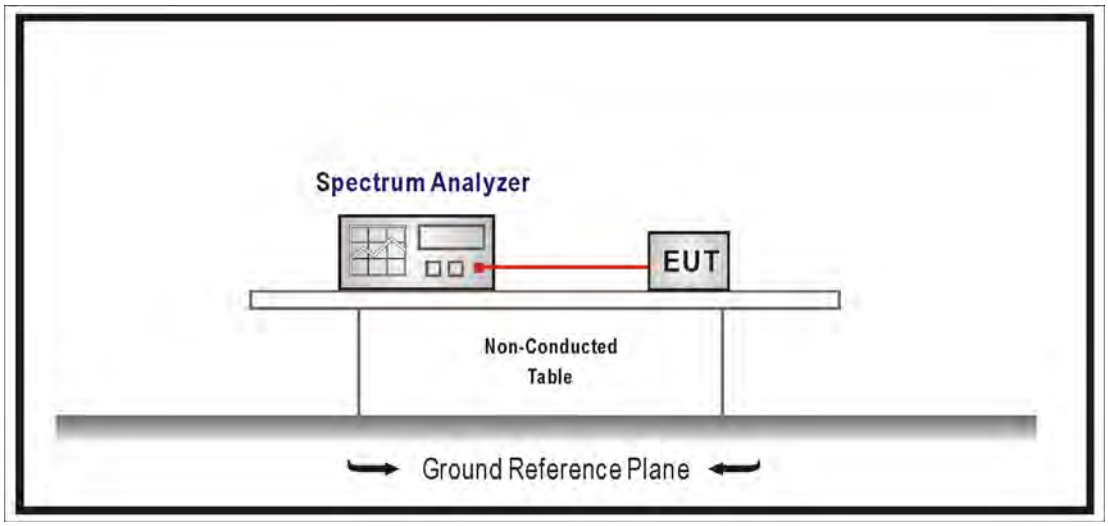
The following test equipments are used during the radiated emission tests:

Peak Transmit Output / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A-EXA	US47140172	2016/07/13

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

4.2. Test Setup



4.3. Limits

(1) For the band 5.15–5.25 GHz.

(i) For an outdoor access point operating in the band 5.15–5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(ii) For an indoor access point operating in the band 5.15–5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15–5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point to-point U–NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omni directional applications, and multiple collocated transmitters transmitting the same information. The operator of the U–NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(2) For the 5.25–5.35 GHz and 5.47–5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(3) For the band 5.725–5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U–NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omni directional applications, and multiple collocated transmitters transmitting the same information. The operator of the U–NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

4.4. Test Procedure

The EUT was setup to ANSI C63.10; tested to U-NII test procedure of KDB 789033 and KDB 644545 for compliance to FCC 47CFR Subpart E requirements. The Method SA-1 of the Maximum conducted output power was used.

Set RBW=1MHz, VBW=3MHz with RMS detector and trace average 100 traces in power averaging mode. Set span to encompass the entire emission bandwidth (EBW) of the signal. Compute power by integrating the spectrum across the 26 dB EBW of the signal.

4.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

4.6. Test Result

Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

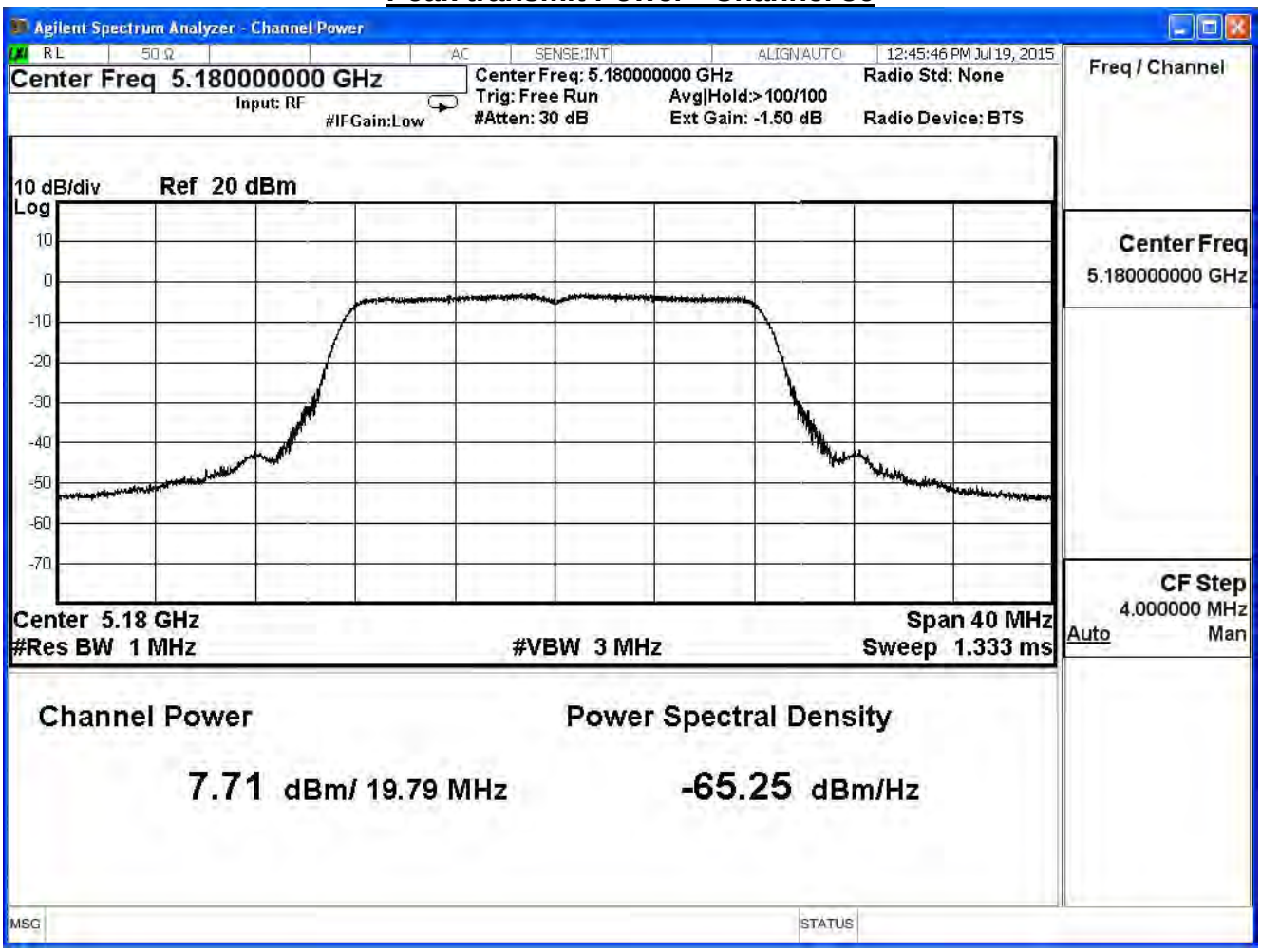
IEEE 802.11a_ANT 0

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Required Limit (dBm)	Result
36	5180	19.790	7.710	≤24	Pass
44	5220	19.810	7.870	≤24	Pass
48	5240	19.880	8.390	≤24	Pass

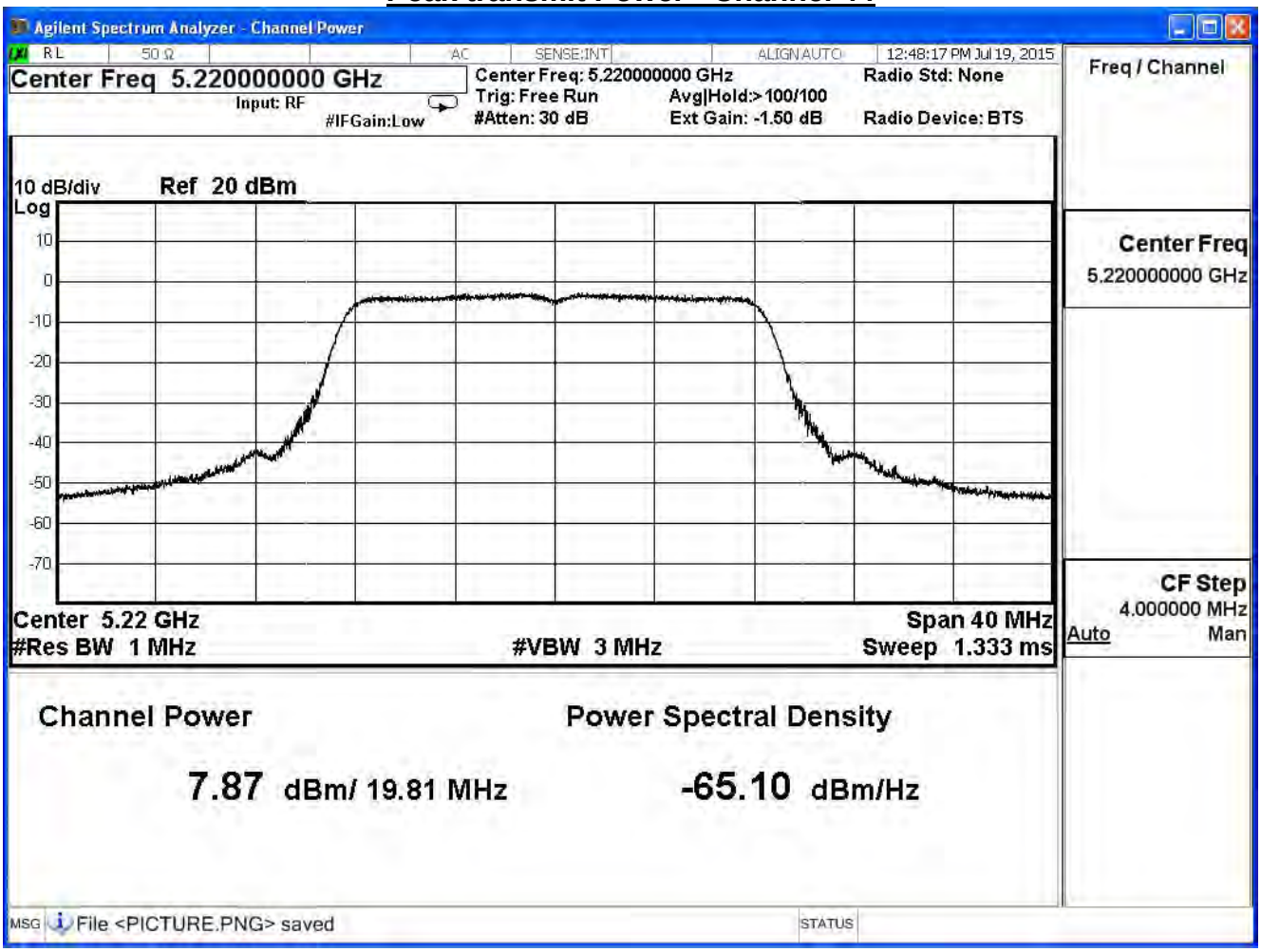
The worst emission of data rate is 6Mbps.

Peak Power Output (dBm)									
Channel No	Frequency (MHz)	Data Rate							Required Limit (dBm)
		6	12	18	24	36	48	54	
36	5180	7.71	--	--	--	--	--	--	≤24
44	5220	7.87	7.77	7.57	7.37	7.13	7.01	6.77	
48	5240	8.39	--	--	--	--	--	--	

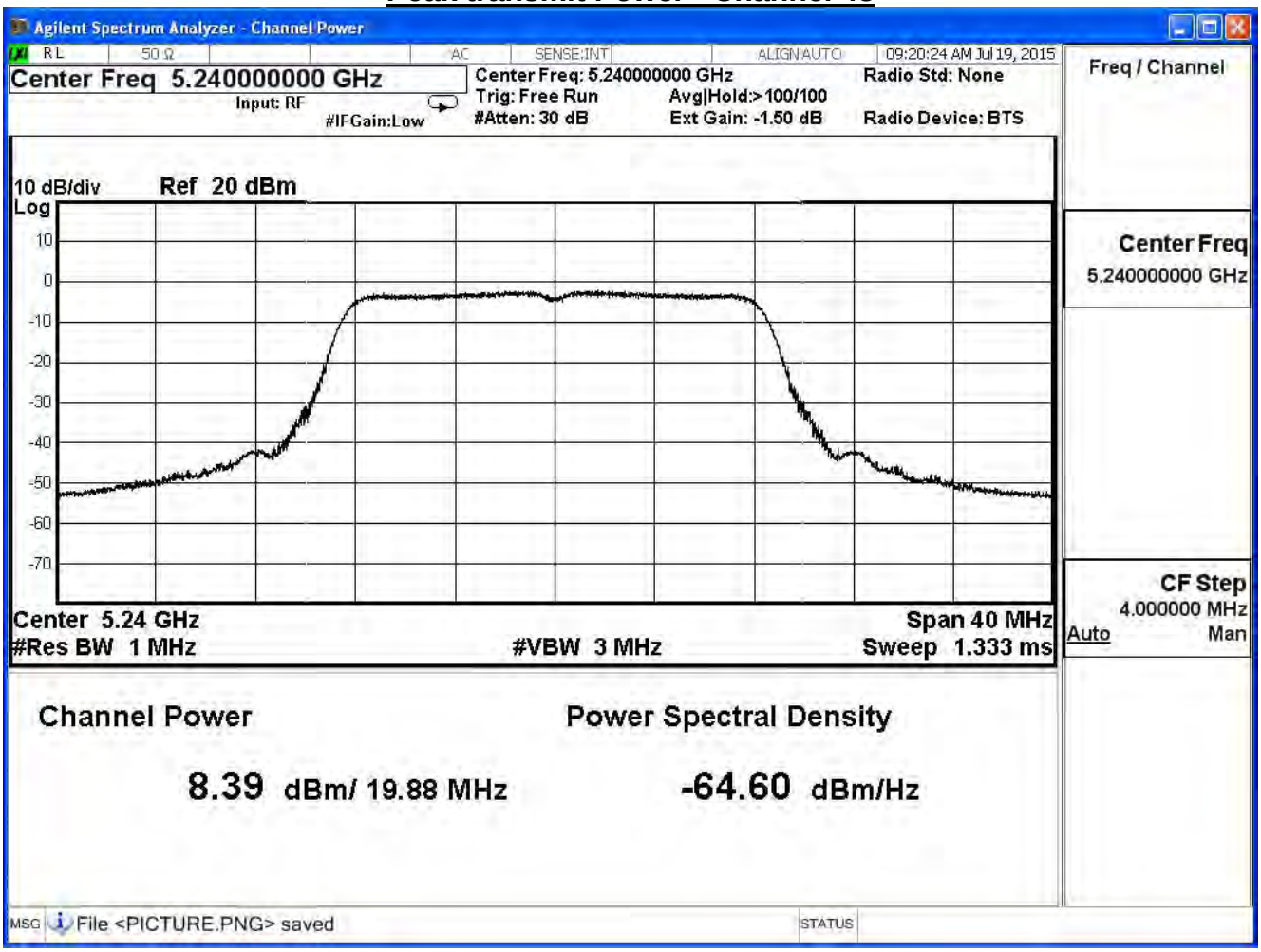
Peak transmit Power - Channel 36



Peak transmit Power - Channel 44



Peak transmit Power - Channel 48



Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

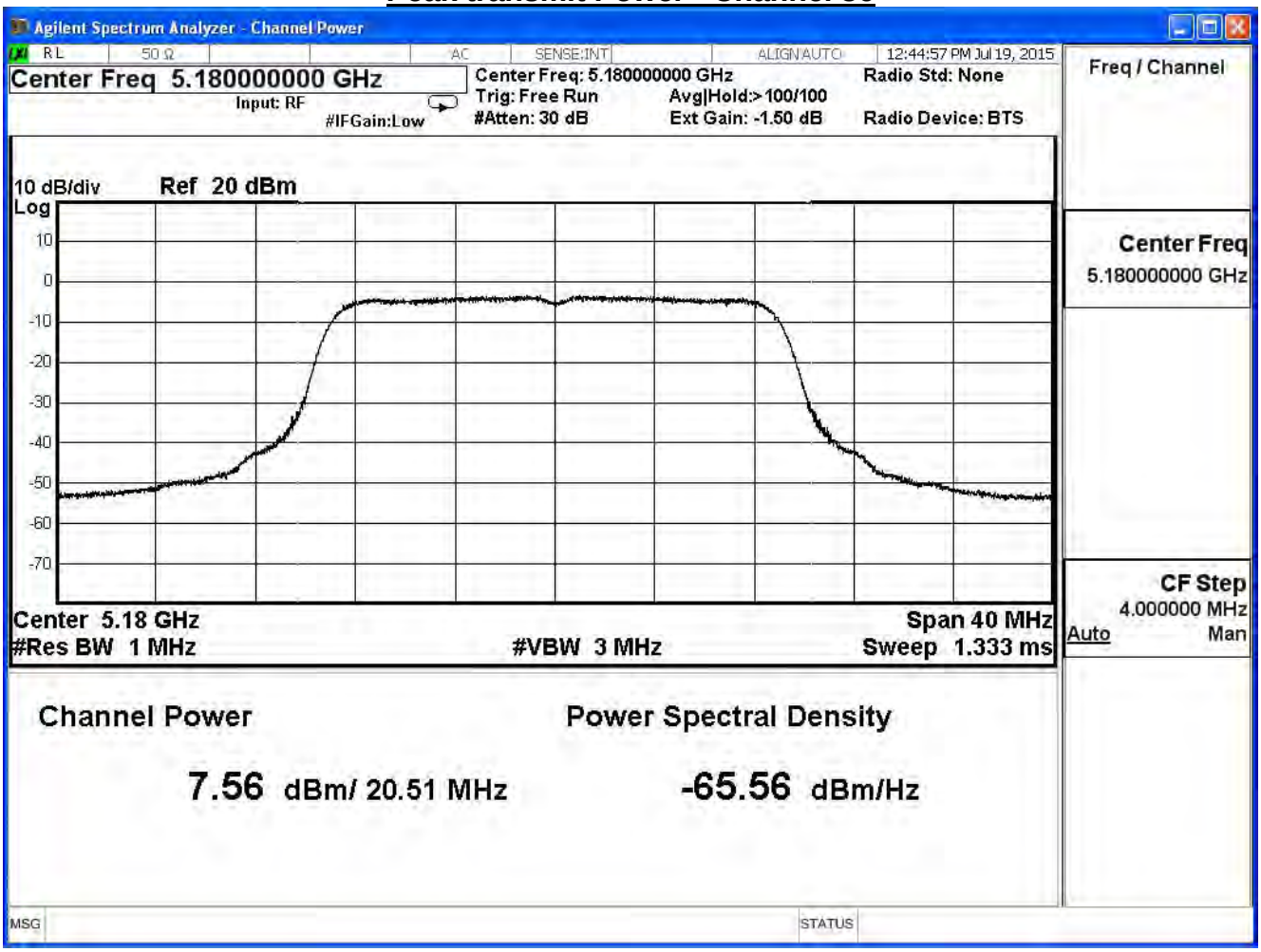
IEEE 802.11n(20MHz)_ANT 0

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Required Limit (dBm)	Result
36	5180	20.510	7.560	≤24	Pass
44	5220	20.550	7.890	≤24	Pass
48	5240	20.490	7.820	≤24	Pass

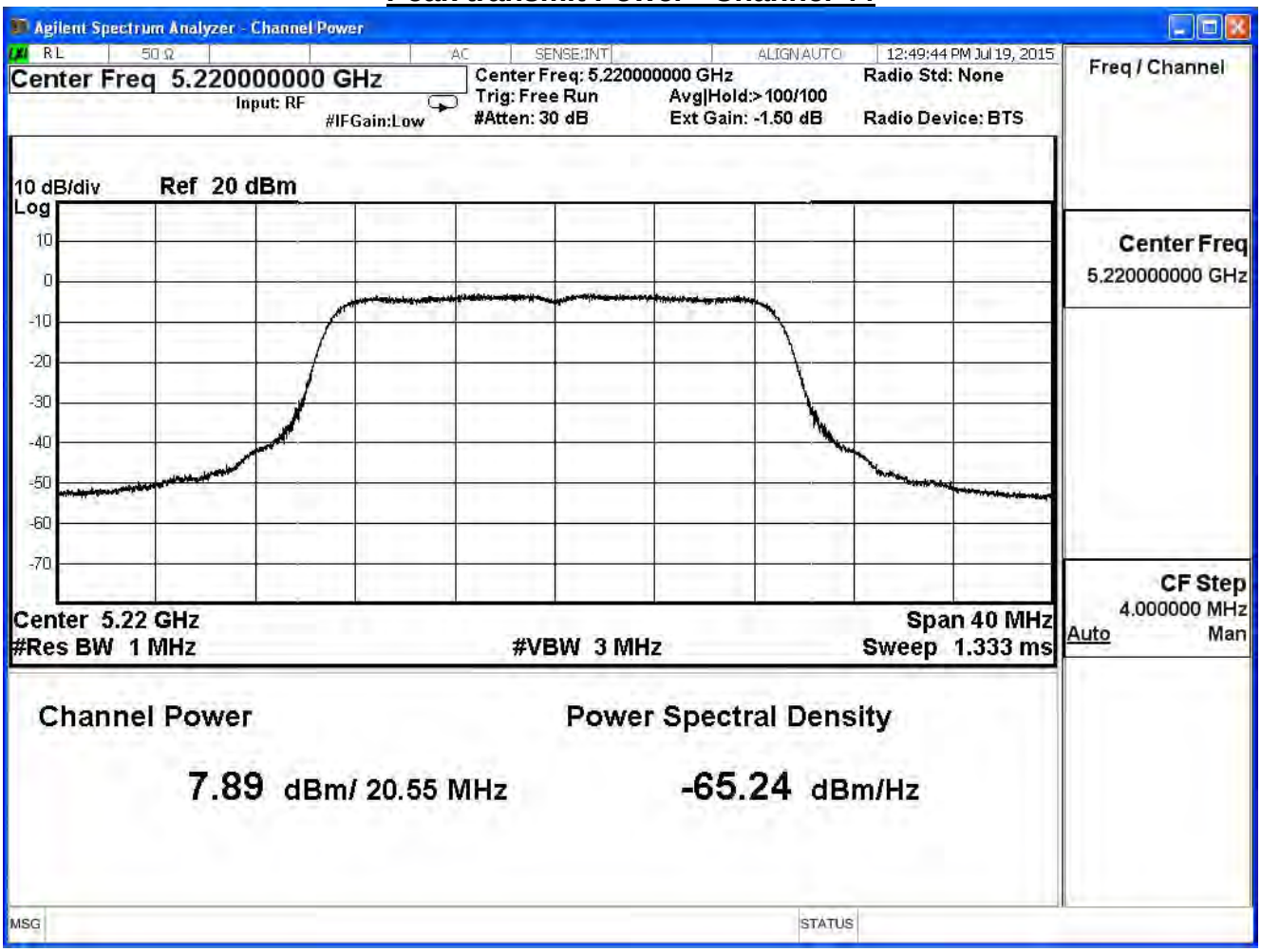
The worst emission of data rate is 6.5 Mbps.

Peak Power Output (dBm)										
MCS Index		0	1	2	3	4	5	6	7	Required Limit (dBm)
Channel No	Frequency (MHz)	Data Rate								
		6.5	13.0	19.5	26.0	39.0	52.0	58.5	65.0	
36	5180	7.56	--	--	--	--	--	--	7.56	≤24
44	5220	7.89	7.69	7.59	7.49	7.39	7.15	6.91	7.89	
48	5240	7.82	--	--	--	--	--	--	7.82	

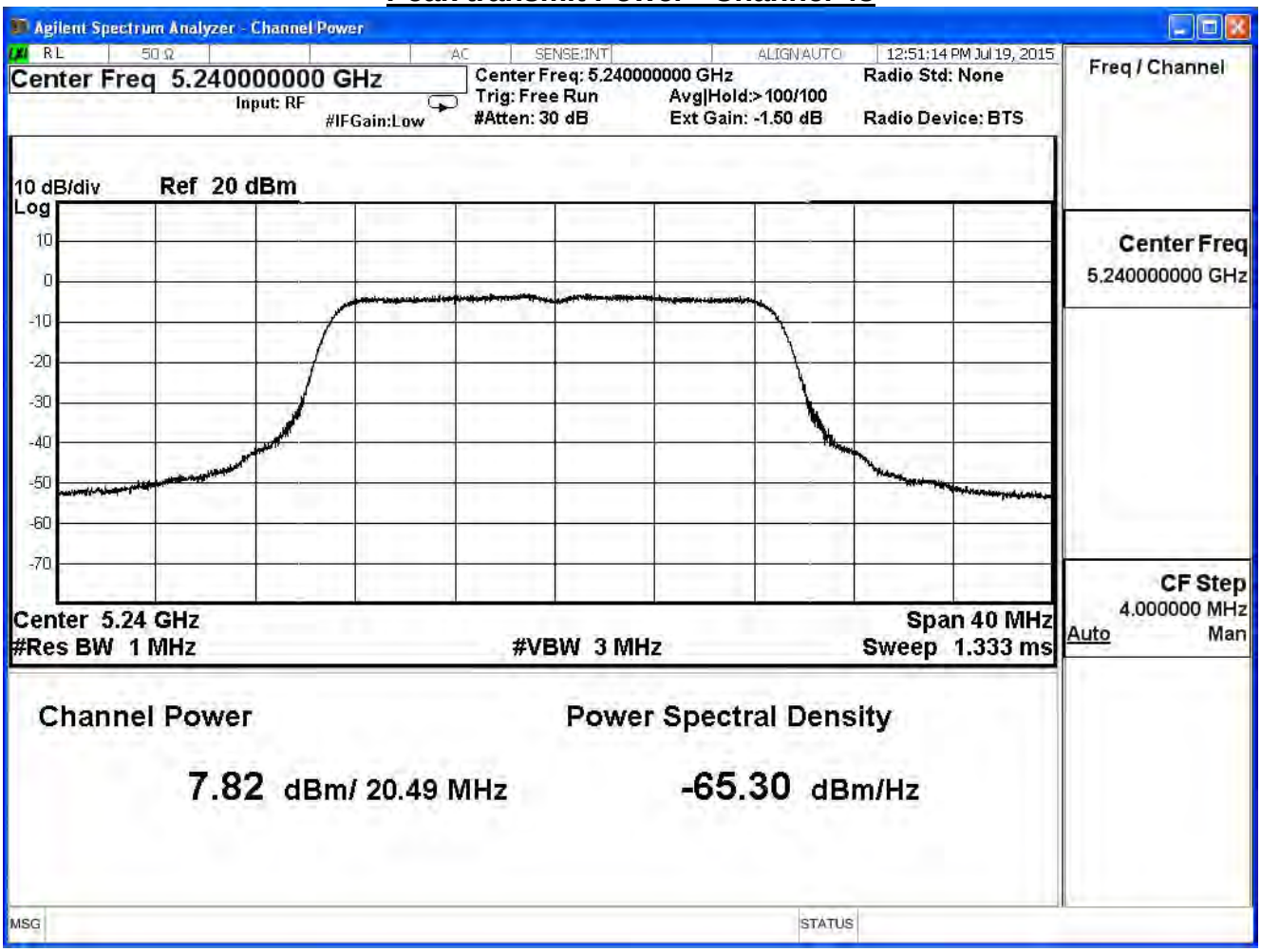
Peak transmit Power - Channel 36



Peak transmit Power - Channel 44



Peak transmit Power - Channel 48



Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

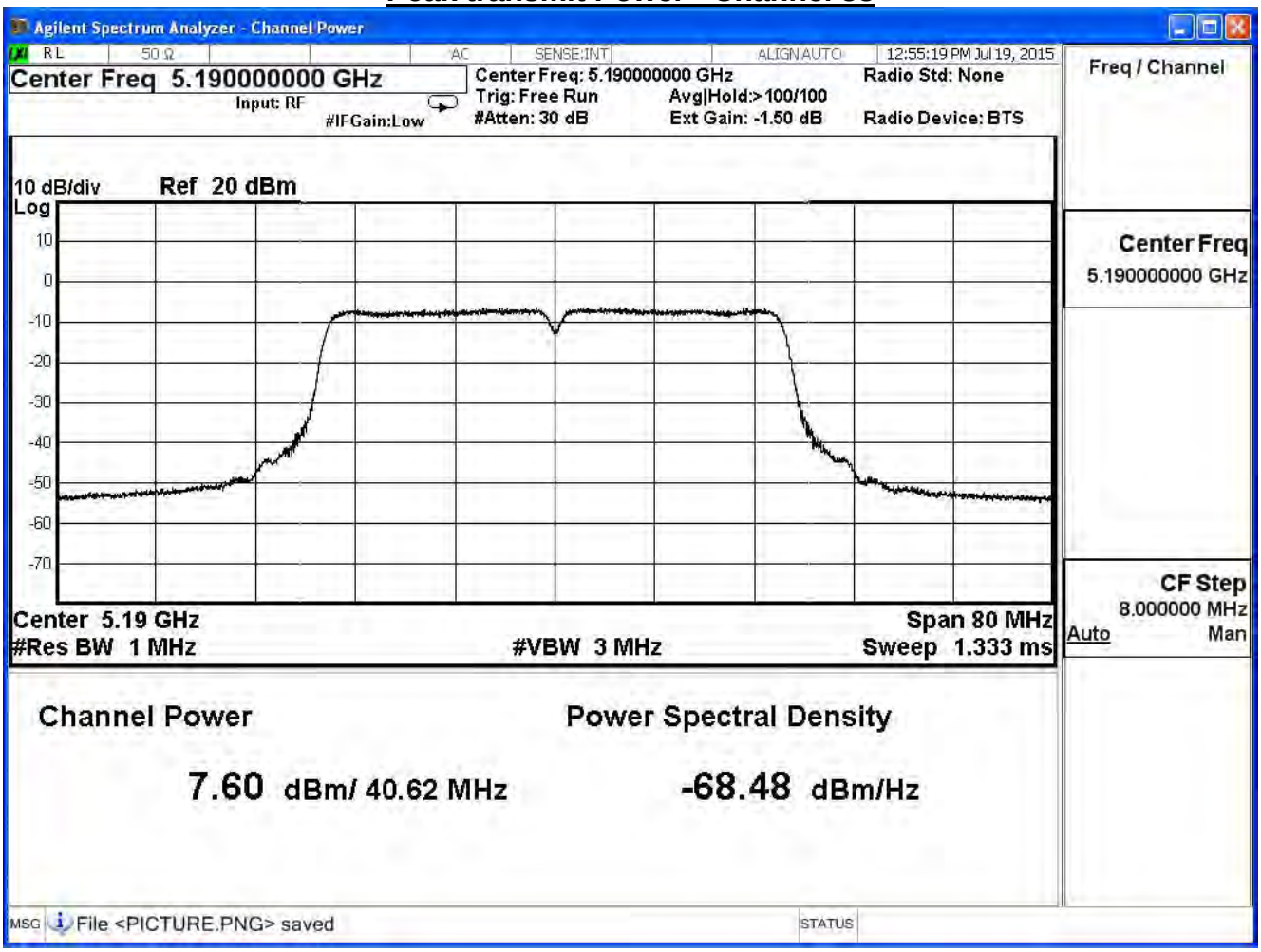
IEEE 802.11n(40MHz)_ANT 0

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Required Limit (dBm)	Result
38	5190	40.620	7.600	≤24	Pass
46	5230	40.460	7.990	≤24	Pass

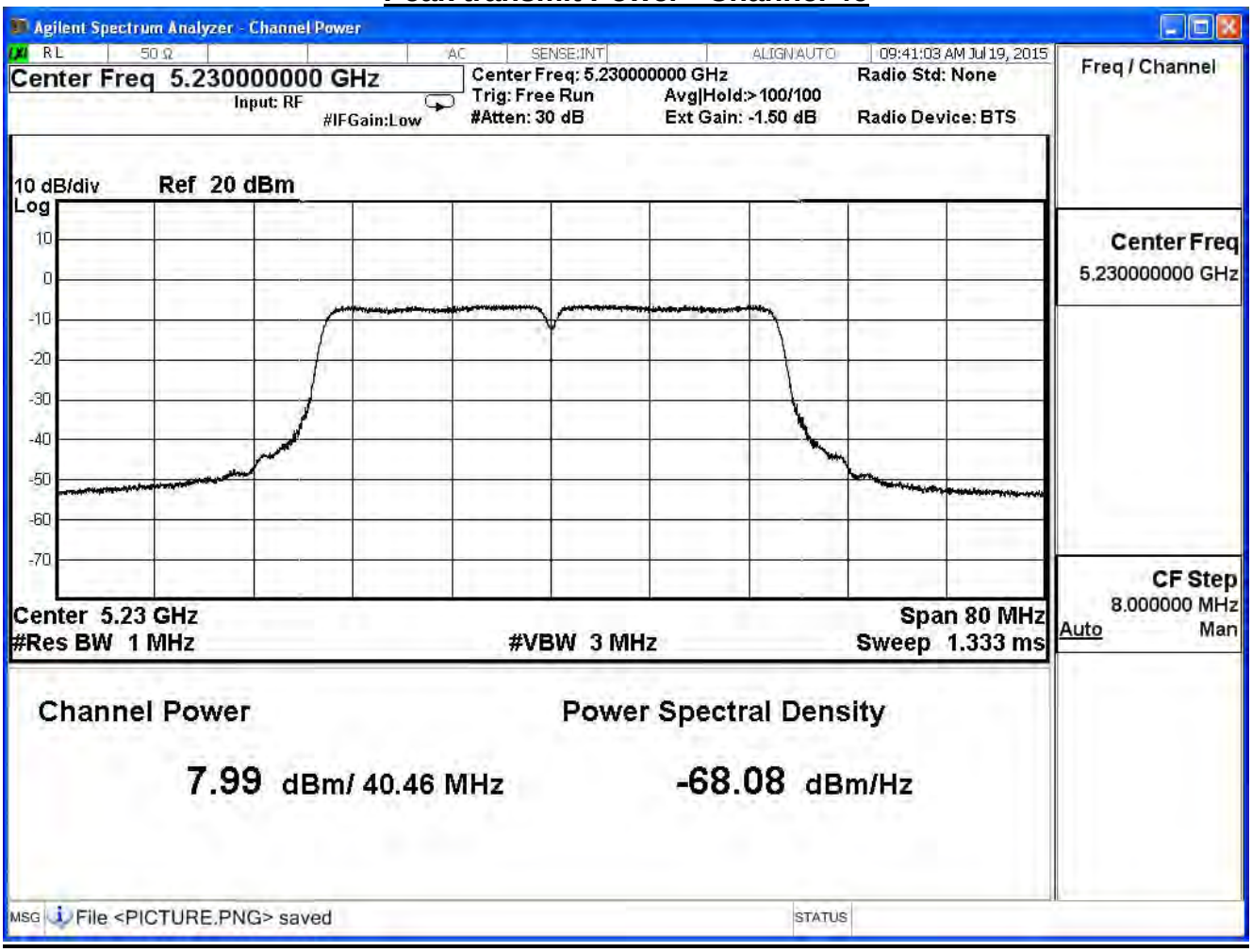
The worst emission of data rate is 13.5Mbps

Peak Power Output (dBm)										
MCS Index		0	1	2	3	4	5	6	7	Required Limit (dBm)
Channel No	Frequency (MHz)	Data Rate								
		13.5	27.0	40.5	54.0	81.0	108.0	121.5	135.0	
38	5190	7.60	--	--	--	--	--	--	--	≤24
46	5230	7.99	7.89	7.79	7.69	7.49	7.25	7.13	7.01	

Peak transmit Power - Channel 38



Peak transmit Power - Channel 46



Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

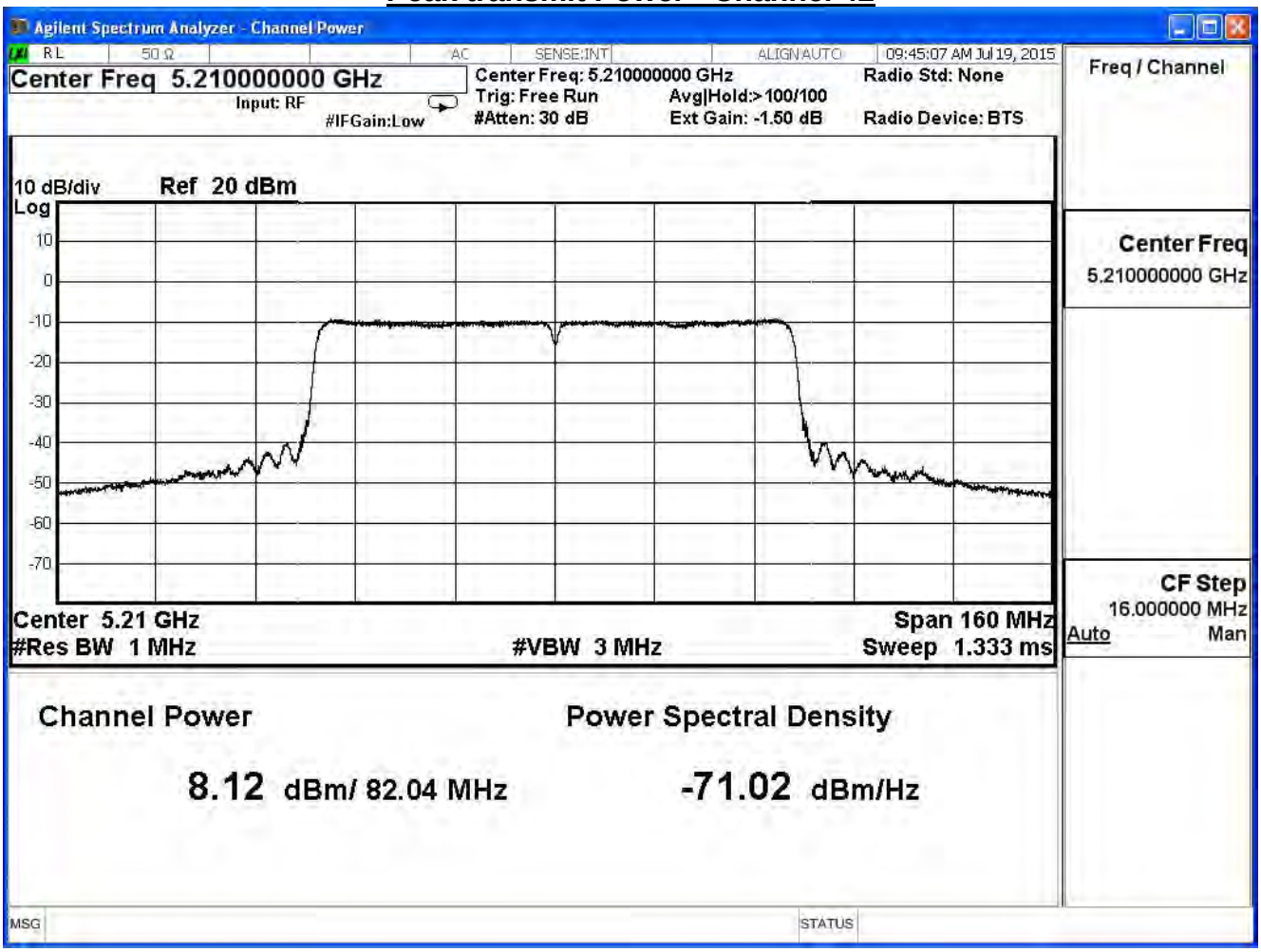
IEEE 802.11ac(80MHz)_ANT 0

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Required Limit (dBm)	Result
42	5210	82.040	8.120	≤24	Pass

The worst emission of data rate is 29.3 Mbps

Peak Power Output (dBm)											
MCS Index		0	1	2	3	4	5	6	7	8	9
Channel No	Frequency (MHz)	Data Rate									
		29.3	58.5	87.8	117	175.5	234	263.3	292.5	351	390
42	5210	8.12	7.92	7.82	7.62	7.52	7.42	7.30	7.18	7.06	6.94

Peak transmit Power - Channel 42



Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

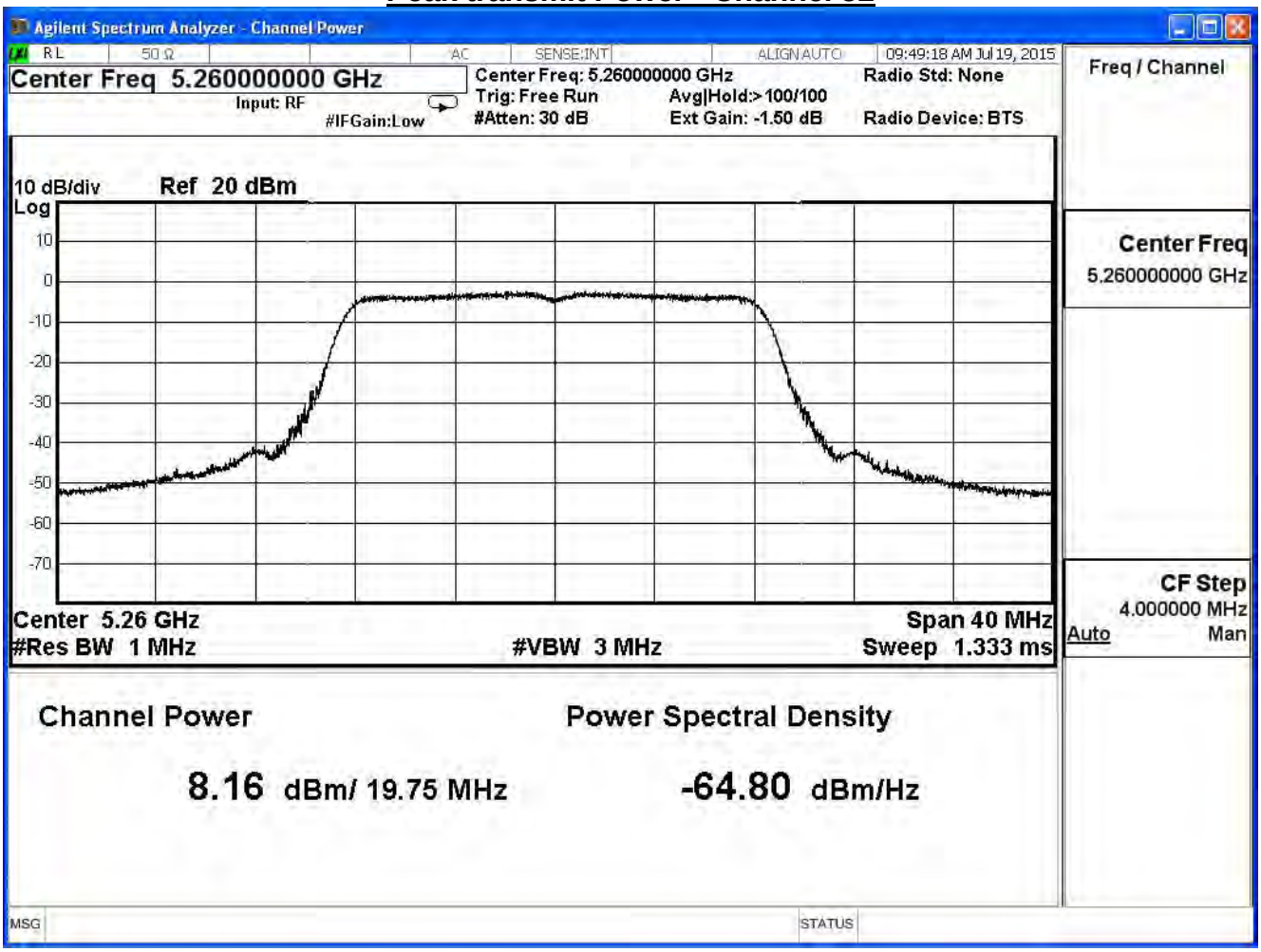
IEEE 802.11a_ANT 0

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Required Limit (dBm)	11+10LogB (dBm)	Result
52	5260	19.750	8.160	≤24	23.96	Pass
60	5300	19.810	8.180	≤24	23.97	Pass
64	5320	19.740	8.080	≤24	23.95	Pass

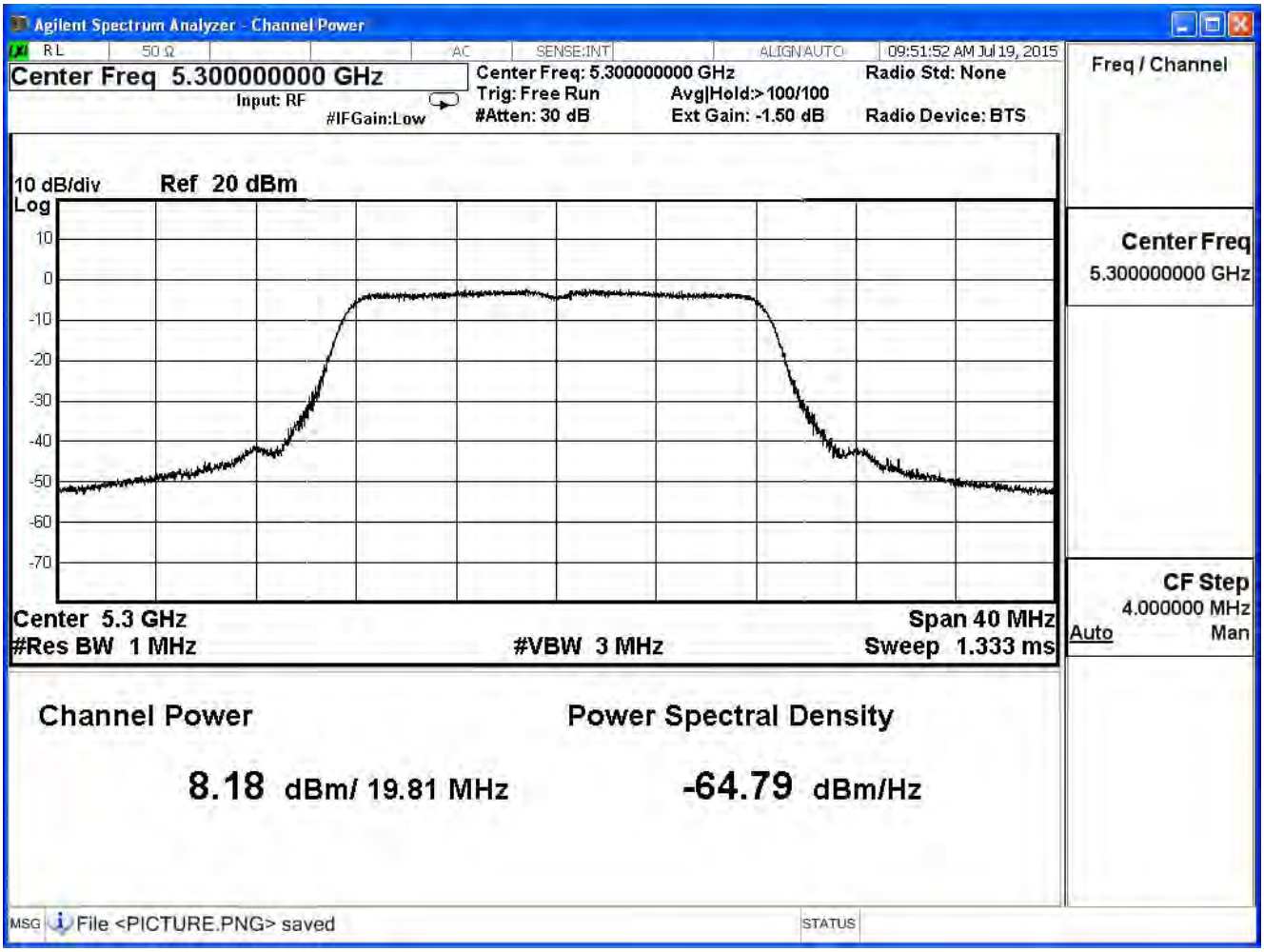
The worst emission of data rate is 6Mbps.

Peak Power Output (dBm)									
Channel No	Frequency (MHz)	Data Rate							Required Limit (dBm)
		6	12	18	24	36	48	54	
52	5260	8.16	--	--	--	--	--	--	≤24 or 11+10LogB
60	5300	8.18	8.08	7.98	7.88	7.76	7.52	7.28	
64	5320	8.08	--	--	--	--	--	--	

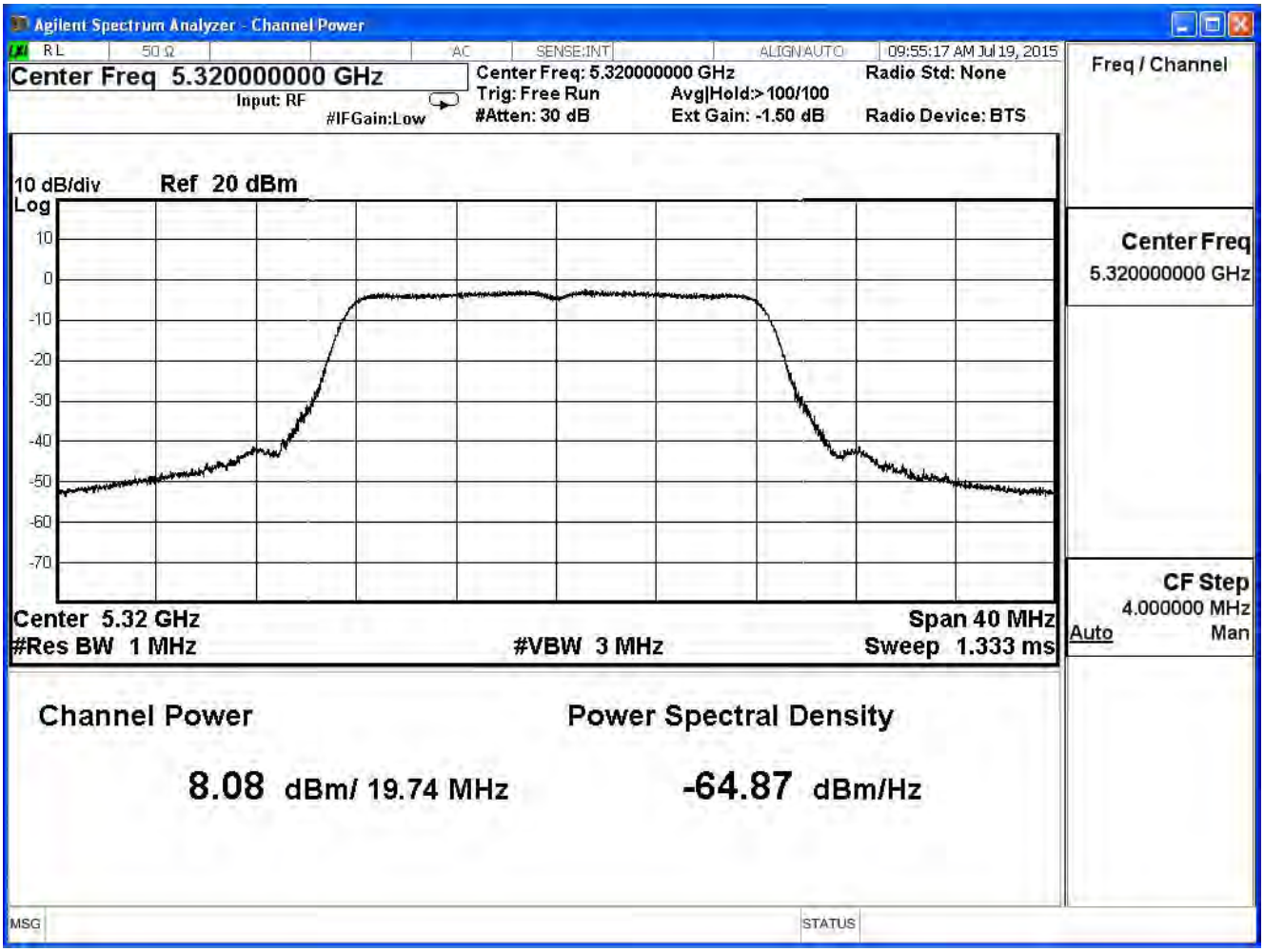
Peak transmit Power - Channel 52



Peak transmit Power - Channel 60



Peak transmit Power - Channel 64



Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

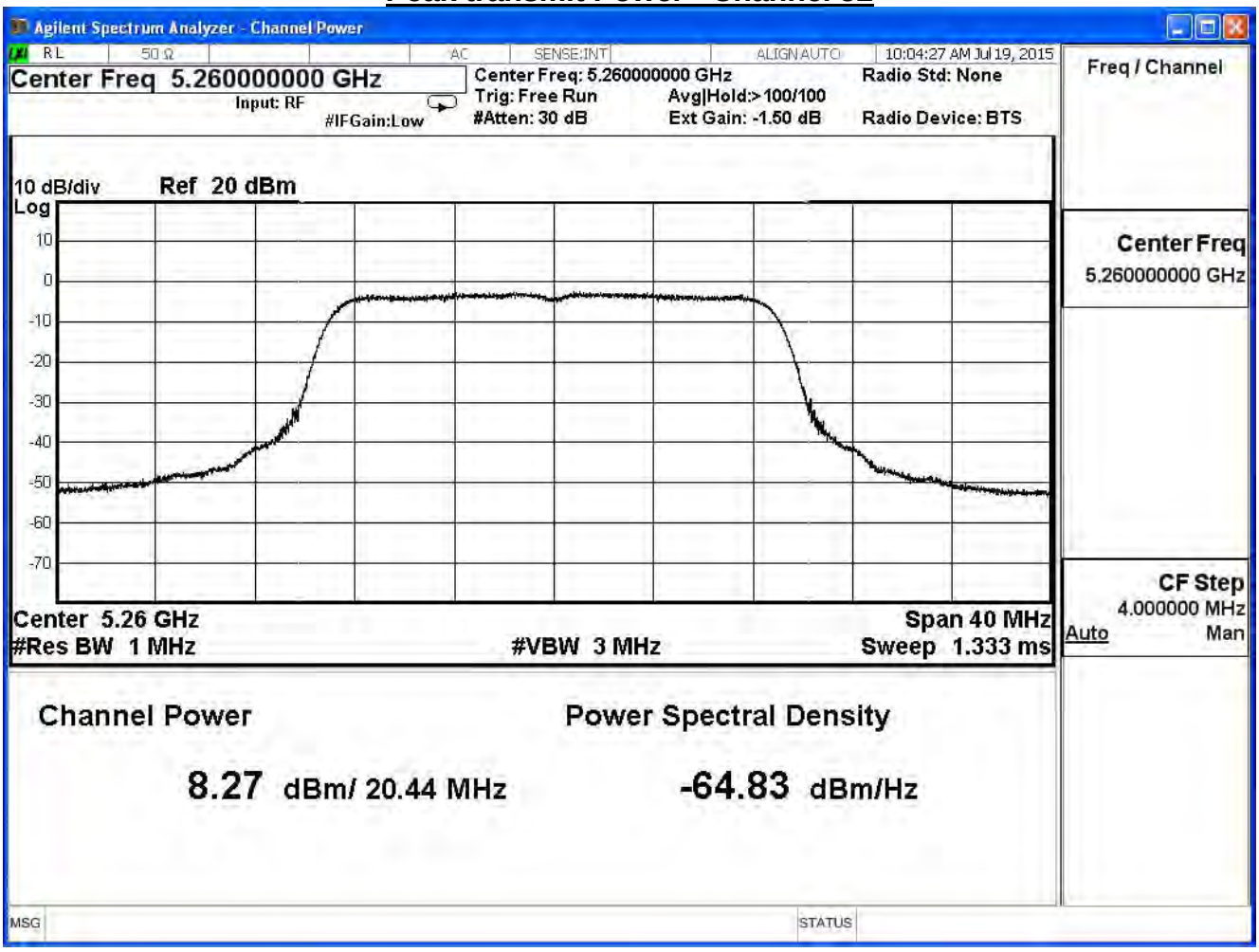
IEEE 802.11n(20MHz)_ANT 0

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Required Limit (dBm)	11+10Log B (dBm)	Result
52	5260	20.440	8.270	≤24	24.10	Pass
60	5300	20.530	8.220	≤24	24.12	Pass
64	5320	20.380	8.140	≤24	24.09	Pass

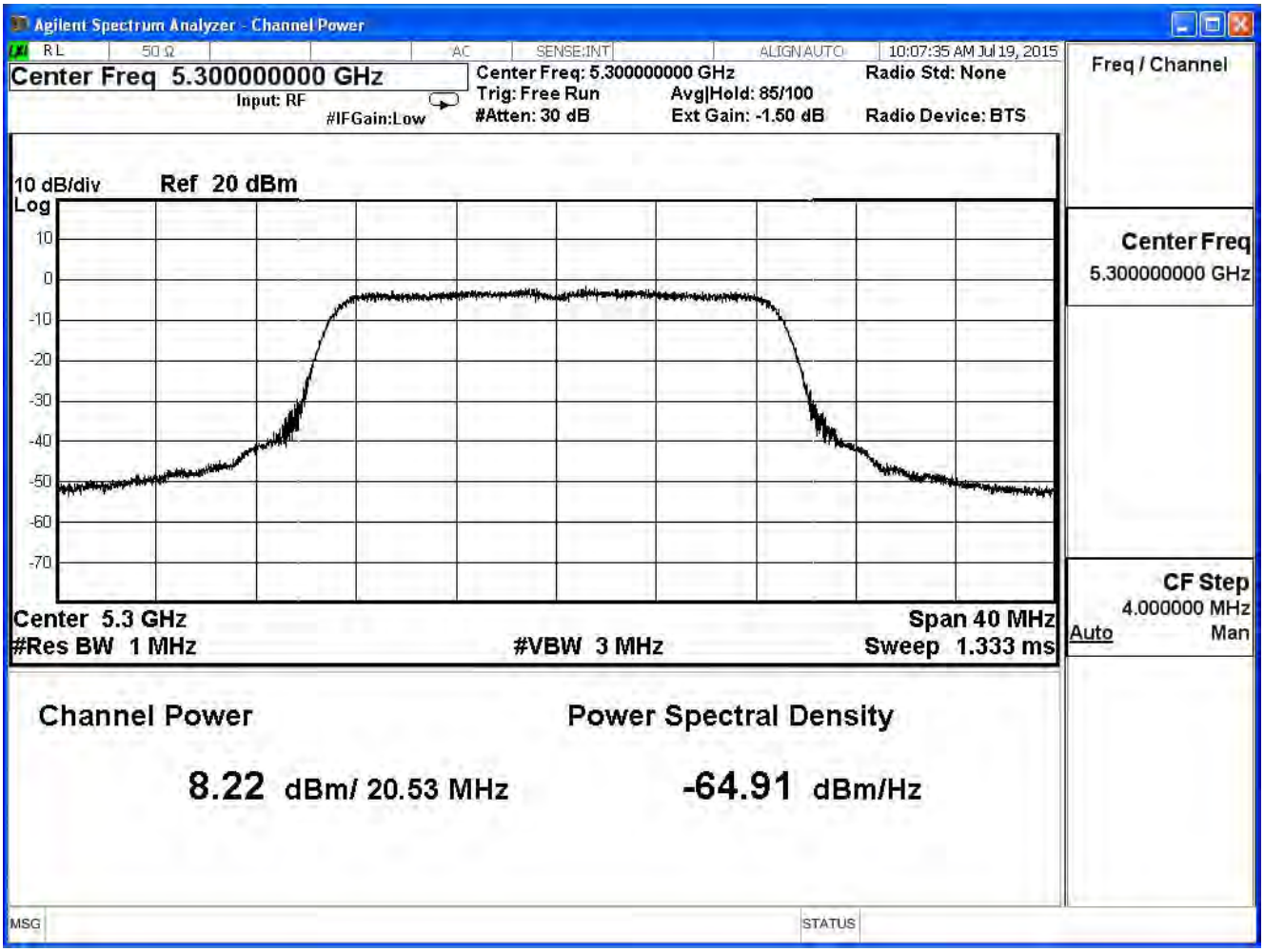
The worst emission of data rate is 6.5 Mbps.

Peak Power Output (dBm)										
MCS Index		0	1	2	3	4	5	6	7	Required Limit (dBm)
Channel No	Frequency (MHz)	Data Rate								
		6.5	13.0	19.5	26.0	39.0	52.0	58.5	65.0	
52	5260	8.27	--	--	--	--	--	--	--	≤24 or 11+10Log B
60	5300	8.22	8.02	7.82	7.72	7.52	7.40	7.28	7.16	
64	5320	8.14	--	--	--	--	--	--	--	

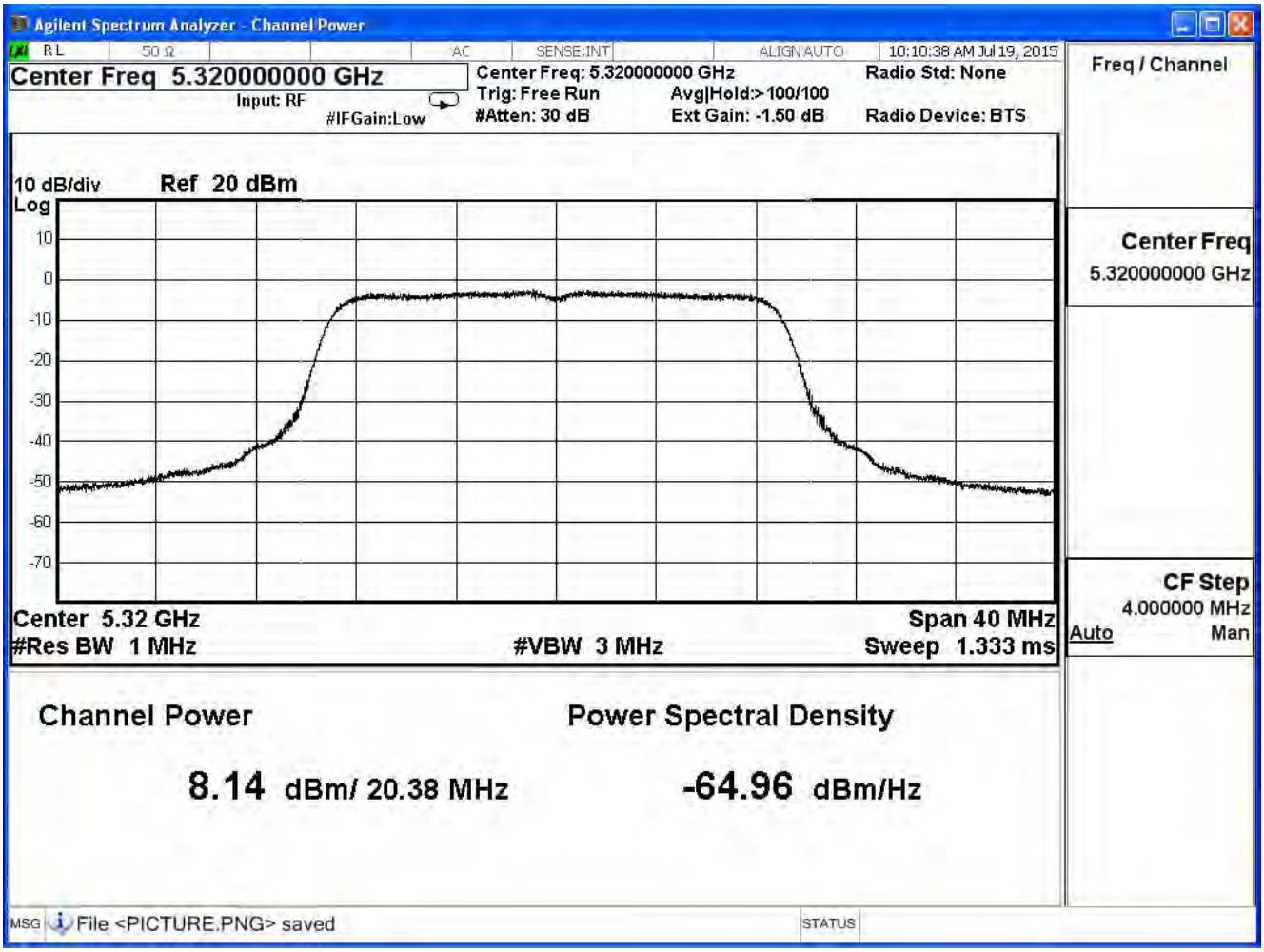
Peak transmit Power - Channel 52



Peak transmit Power - Channel 60



Peak transmit Power - Channel 64



Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

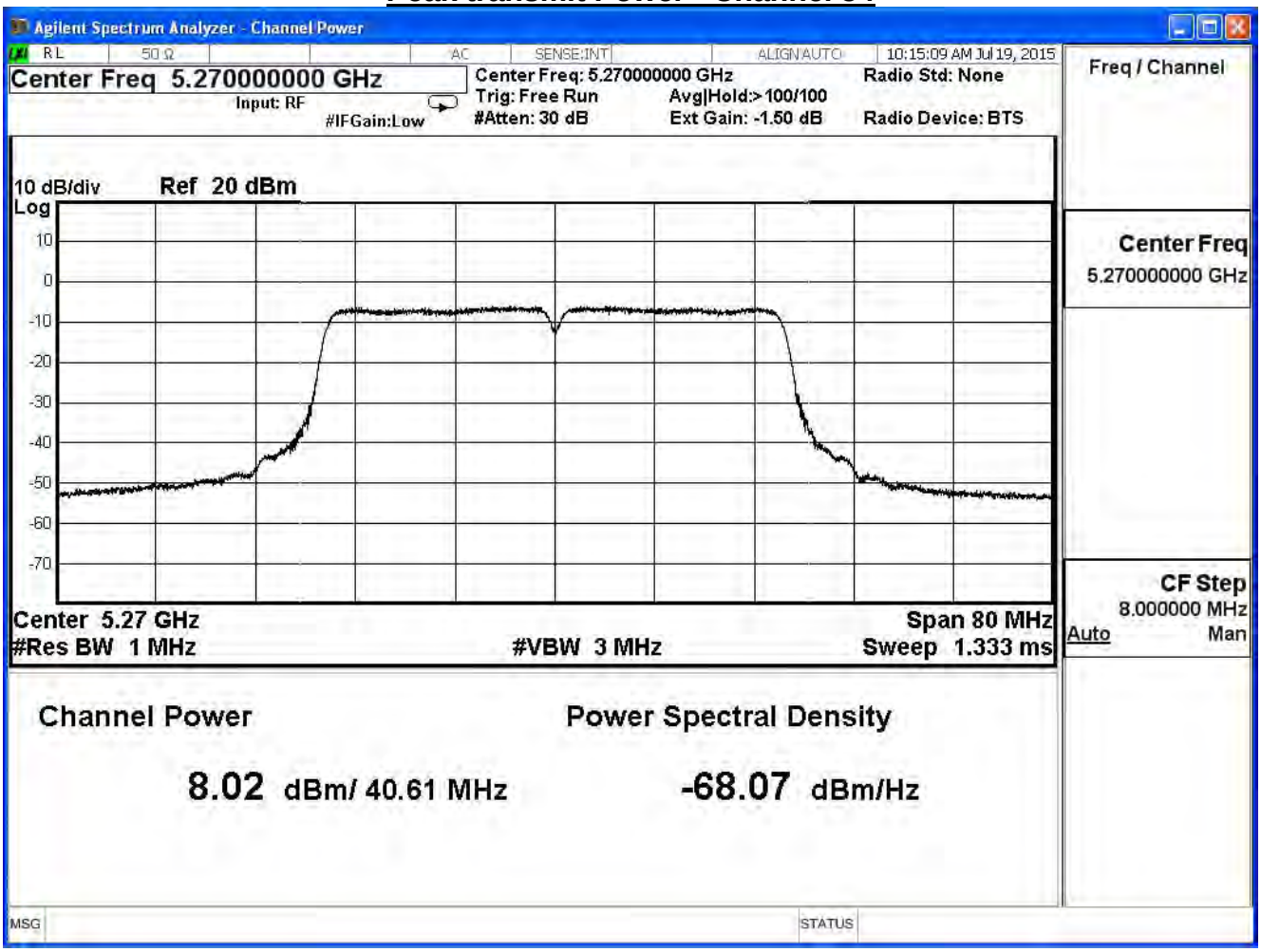
IEEE 802.11n(40MHz)_ANT 0

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Required Limit (dBm)	11+10LogB (dBm)	Result
54	5270	40.610	8.020	≤24	27.09	Pass
62	5310	40.550	8.070	≤24	27.08	Pass

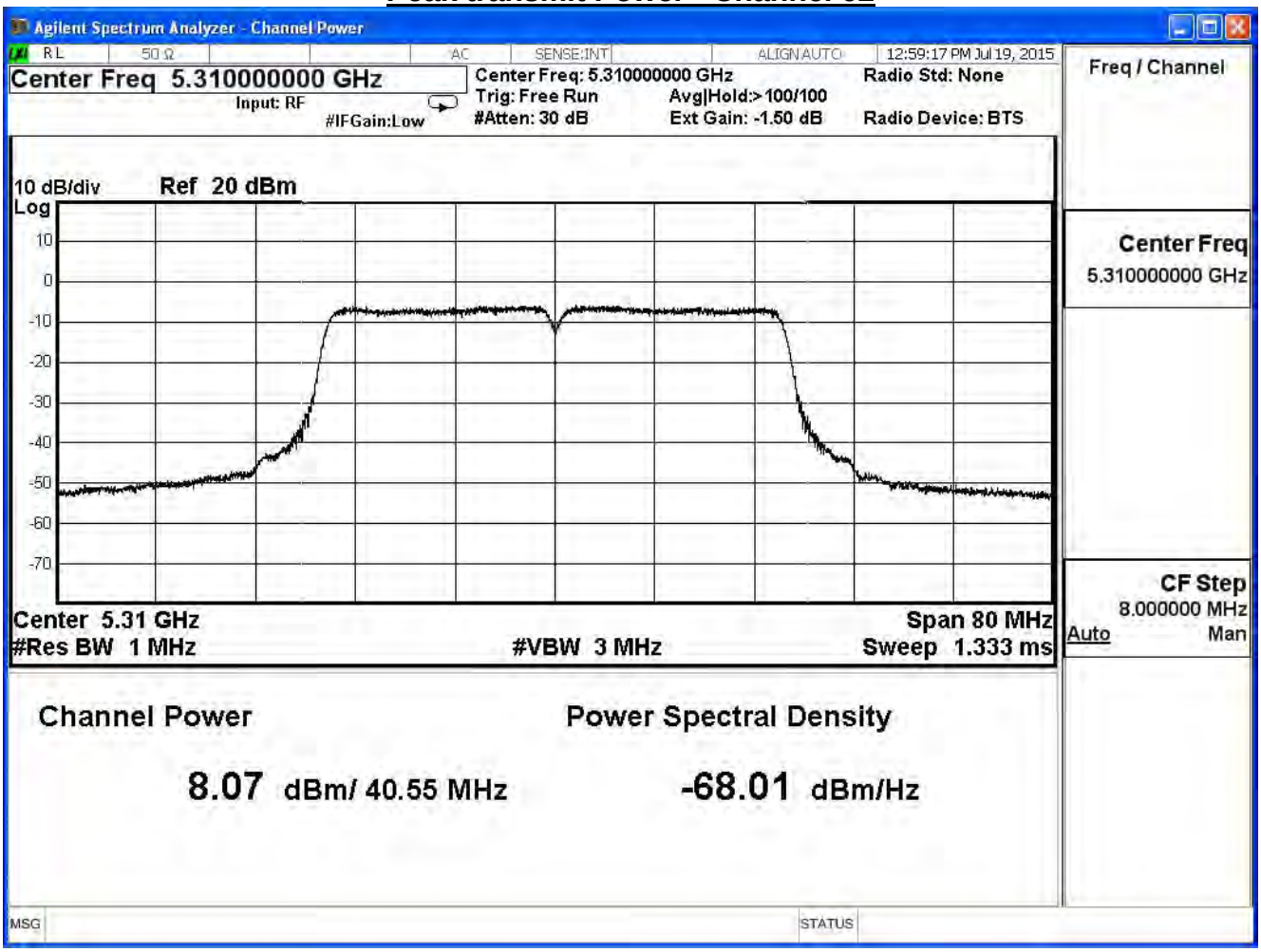
The worst emission of data rate is 13.5Mbps

Peak Power Output (dBm)										
MCS Index		0	1	2	3	4	5	6	7	Required Limit (dBm)
Channel No	Frequency (MHz)	Data Rate								
		13.5	27.0	40.5	54.0	81.0	108.0	121.5	135.0	
54	5270	8.02	--	--	--	--	--	--	--	≤24 or 11+10Log B
62	5310	8.07	7.97	7.87	7.67	7.57	7.45	7.33	7.21	

Peak transmit Power - Channel 54



Peak transmit Power - Channel 62



Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

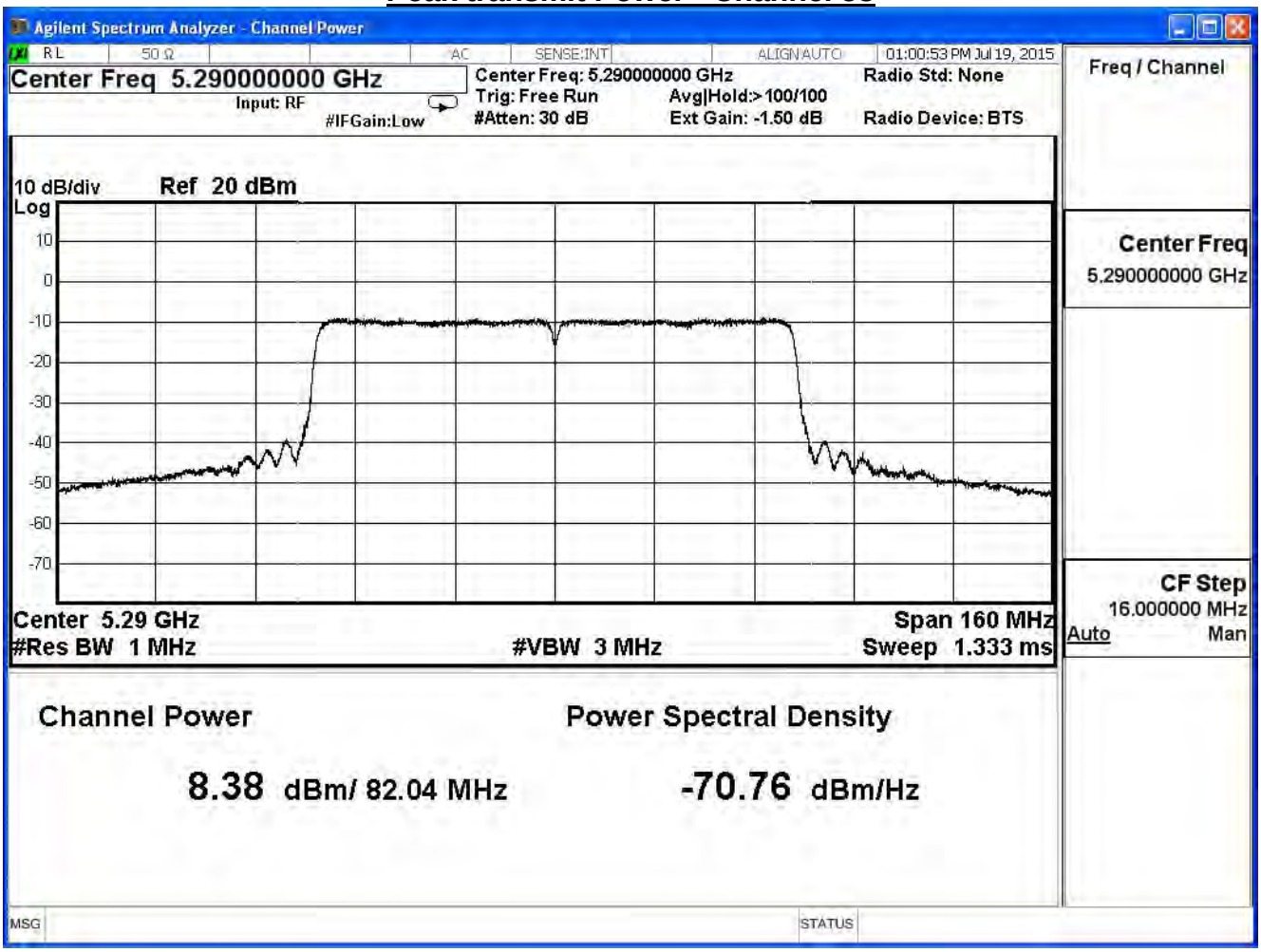
IEEE 802.11ac(80MHz)_ANT 0

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Required Limit (dBm)	11+10Log B (dBm)	Result
58	5290	82.040	8.380	≤24	30.14	Pass

The worst emission of data rate is 29.3 Mbps

Peak Power Output (dBm)											
MCS Index		0	1	2	3	4	5	6	7	8	9
Channel No	Frequency (MHz)	Data Rate									
		29.3	58.5	87.8	117	175.5	234	263.3	292.5	351	390
58	5290	8.38	8.18	8.08	7.88	7.68	7.58	7.46	7.22	7.10	6.86

Peak transmit Power - Channel 58



Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

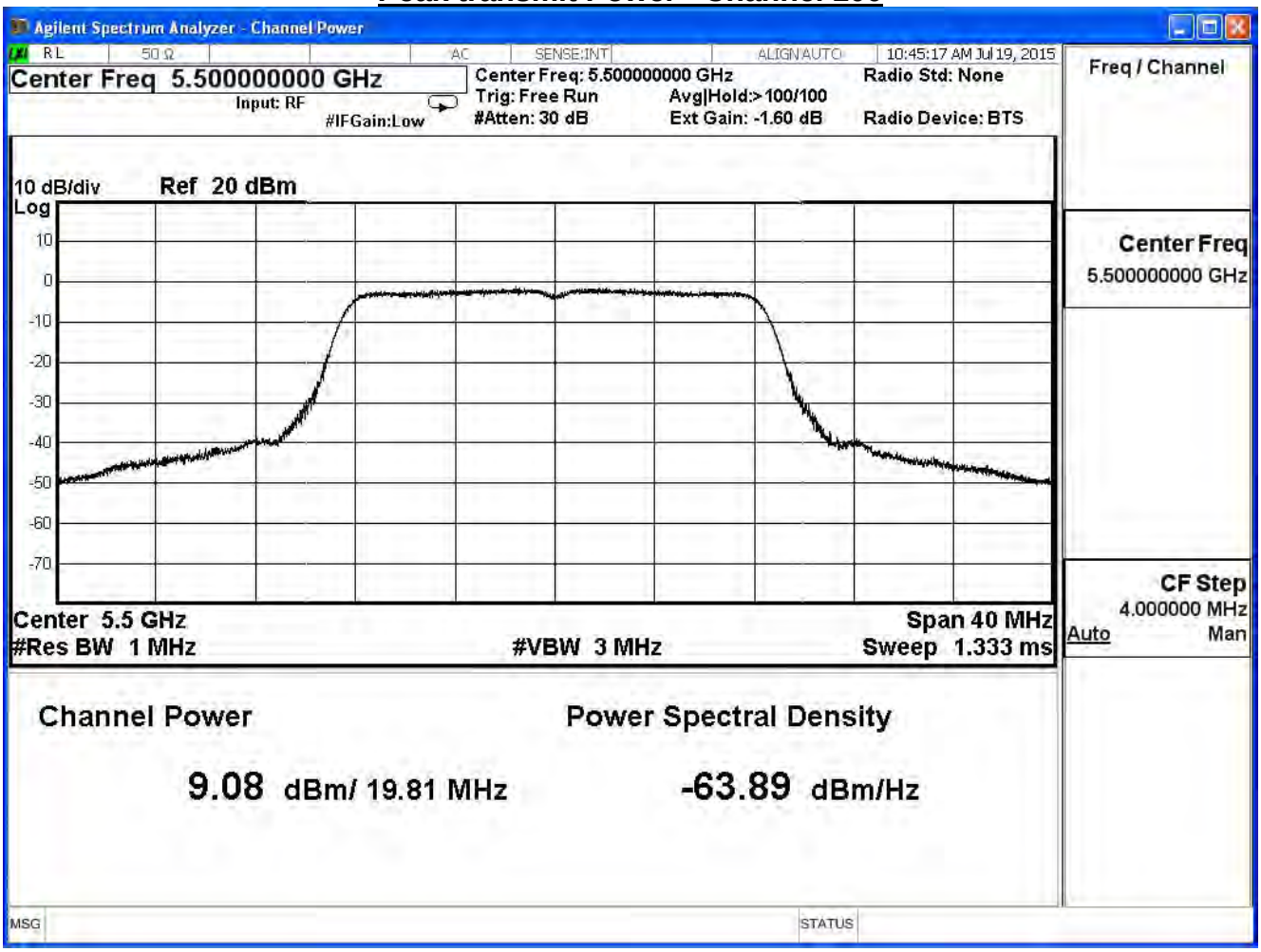
IEEE 802.11a_ANT 0

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Required Limit (dBm)	11+10Log B (dBm)	Result
100	5500	19.810	9.080	≤24	23.97	Pass
116	5580	19.940	9.310	≤24	24.00	Pass
140	5700	19.980	10.280	≤24	24.01	Pass

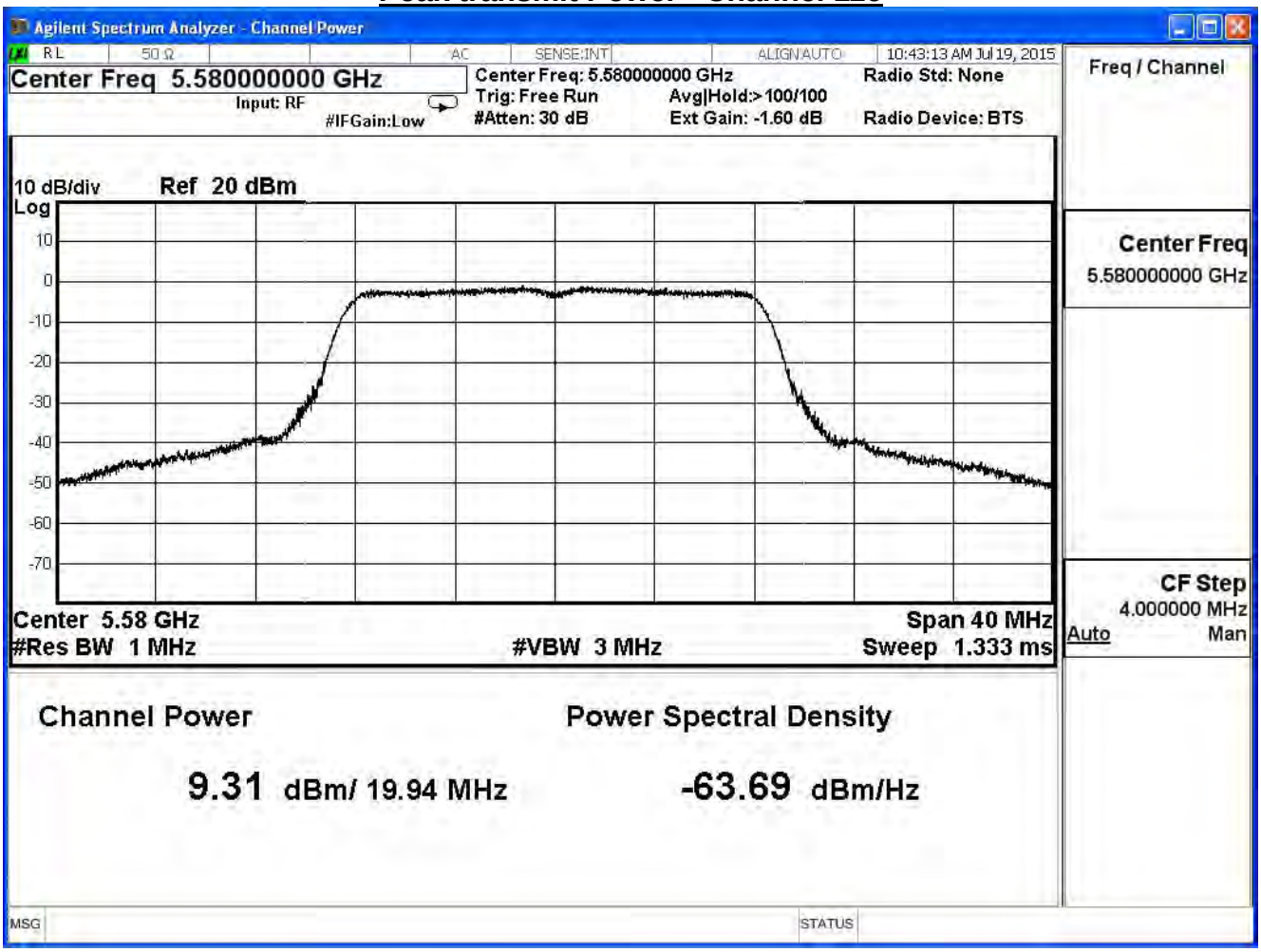
The worst emission of data rate is 6Mbps.

Peak Power Output (dBm)									
Channel No	Frequency (MHz)	Data Rate							Required Limit (dBm)
		6	12	18	24	36	48	54	
100	5500	9.08	--	--	--	--	--	--	≤24 or 11+10Log B
116	5580	9.31	9.21	9.01	8.91	8.67	8.55	8.43	
140	5700	10.28	--	--	--	--	--	--	

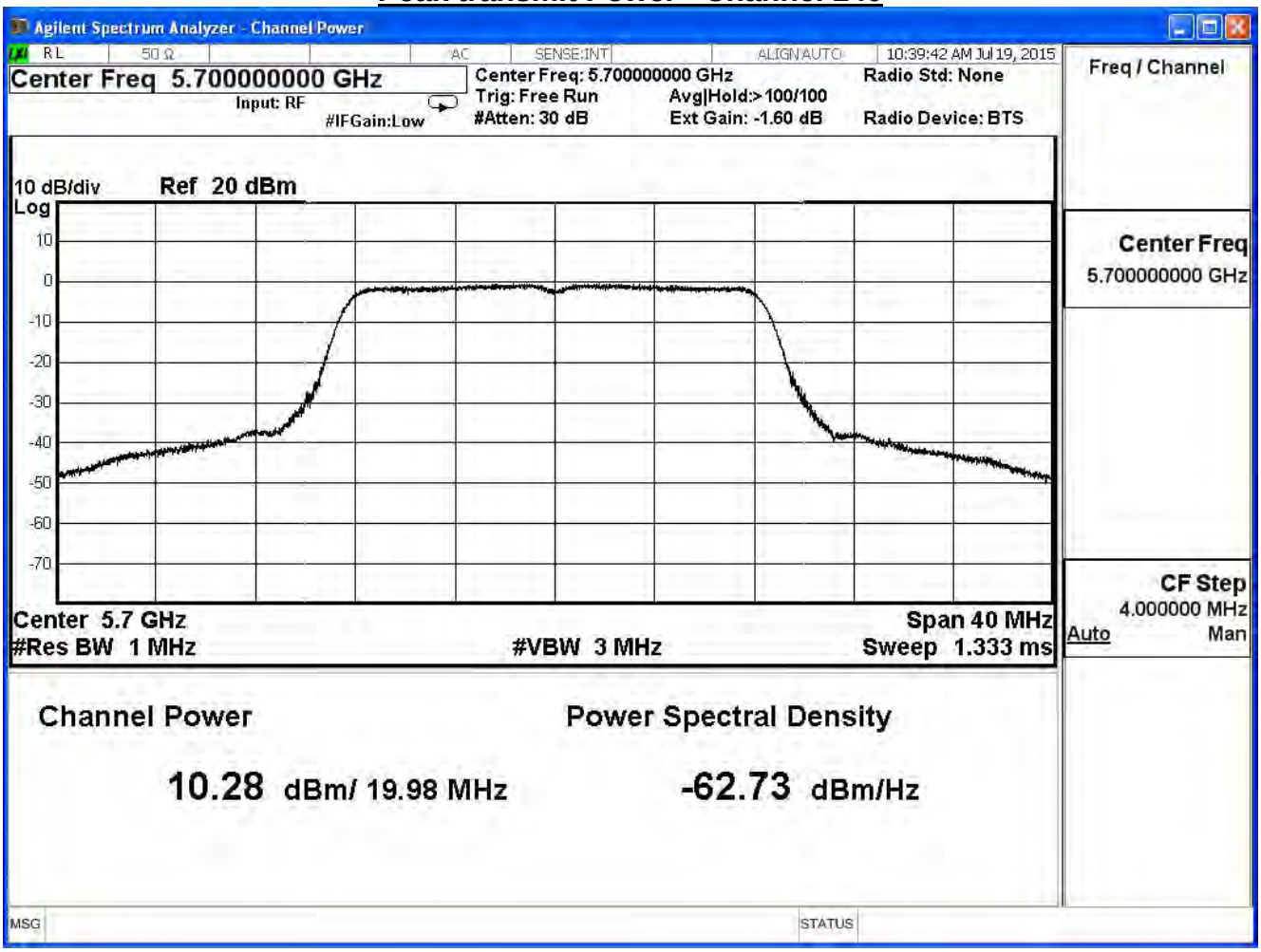
Peak transmit Power - Channel 100



Peak transmit Power - Channel 116



Peak transmit Power - Channel 140



Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

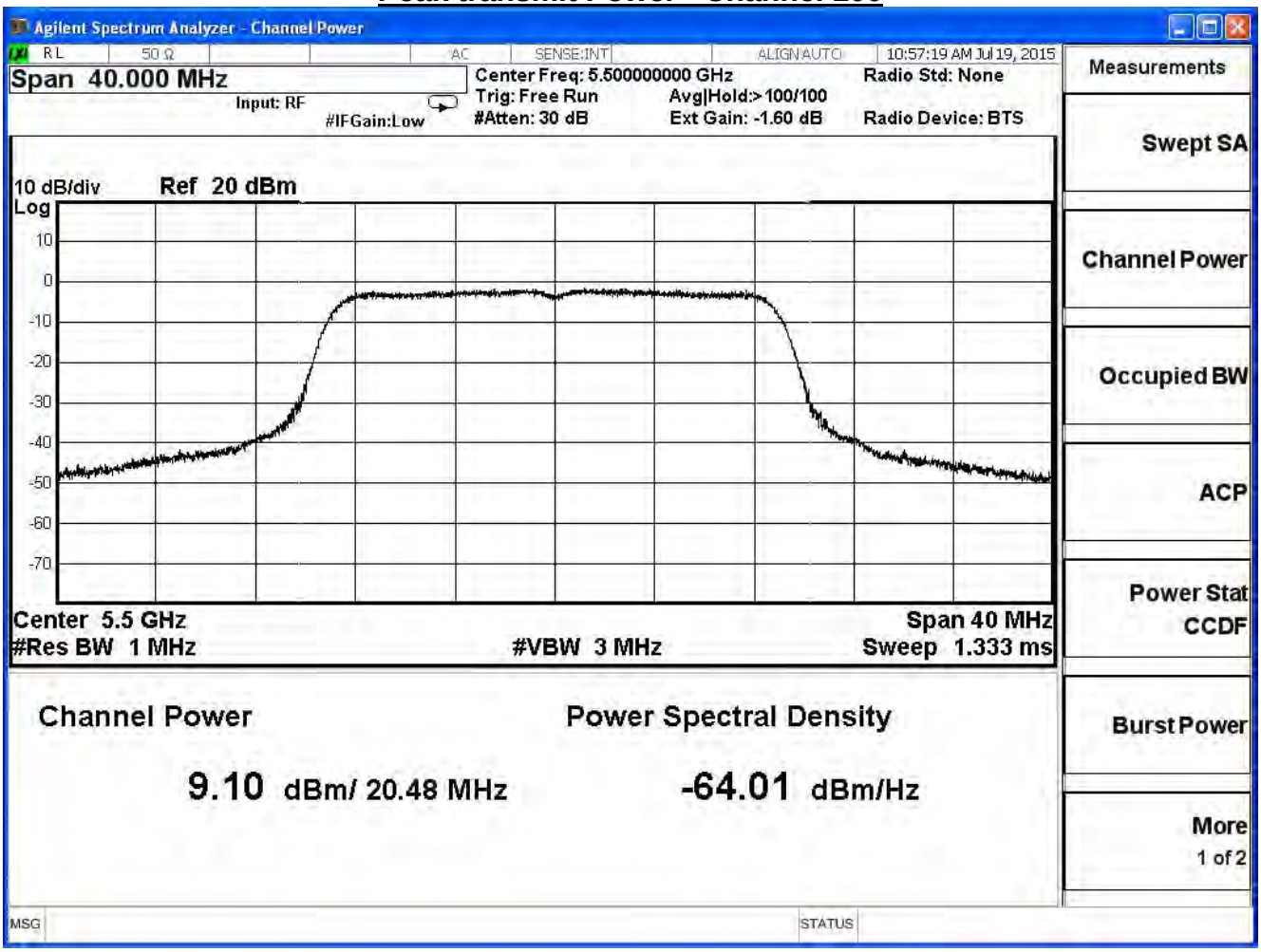
IEEE 802.11n(20MHz)_ANT 0

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Required Limit (dBm)	11+10Log B (dBm)	Result
100	5500	20.480	9.100	≤24	24.11	Pass
116	5580	20.510	9.240	≤24	24.12	Pass
140	5700	20.470	10.110	≤24	24.11	Pass

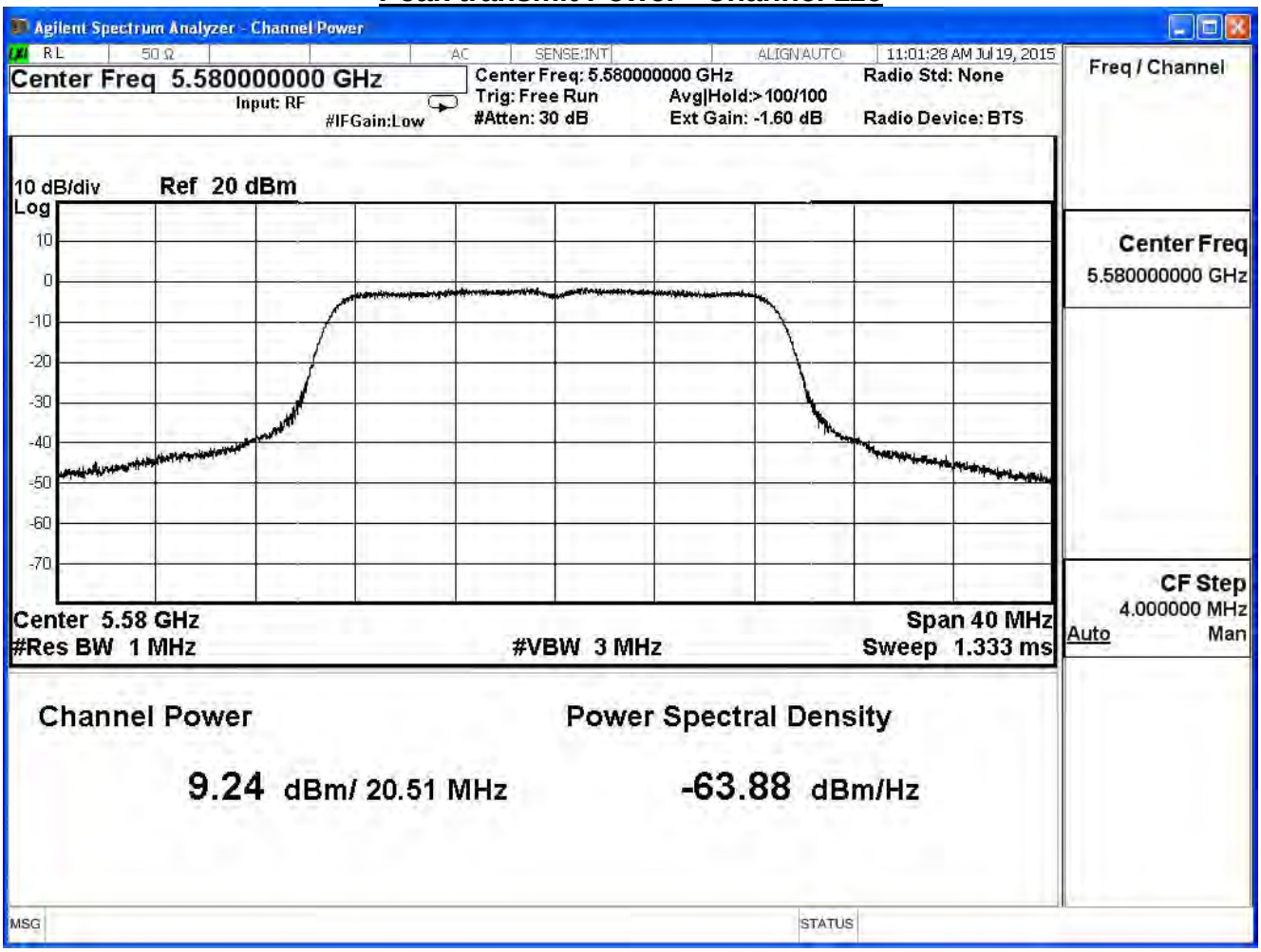
The worst emission of data rate is 6.5 Mbps.

Peak Power Output (dBm)										
MCS Index		0	1	2	3	4	5	6	7	Required Limit (dBm)
Channel No	Frequency (MHz)	Data Rate								
		6.5	13.0	19.5	26.0	39.0	52.0	58.5	65.0	
100	5500	9.10	--	--	--	--	--	--	--	≤24 or 11+10Log B
116	5580	9.24	9.04	8.94	8.74	8.64	8.52	8.28	8.04	
140	5700	10.11	--	--	--	--	--	--	--	

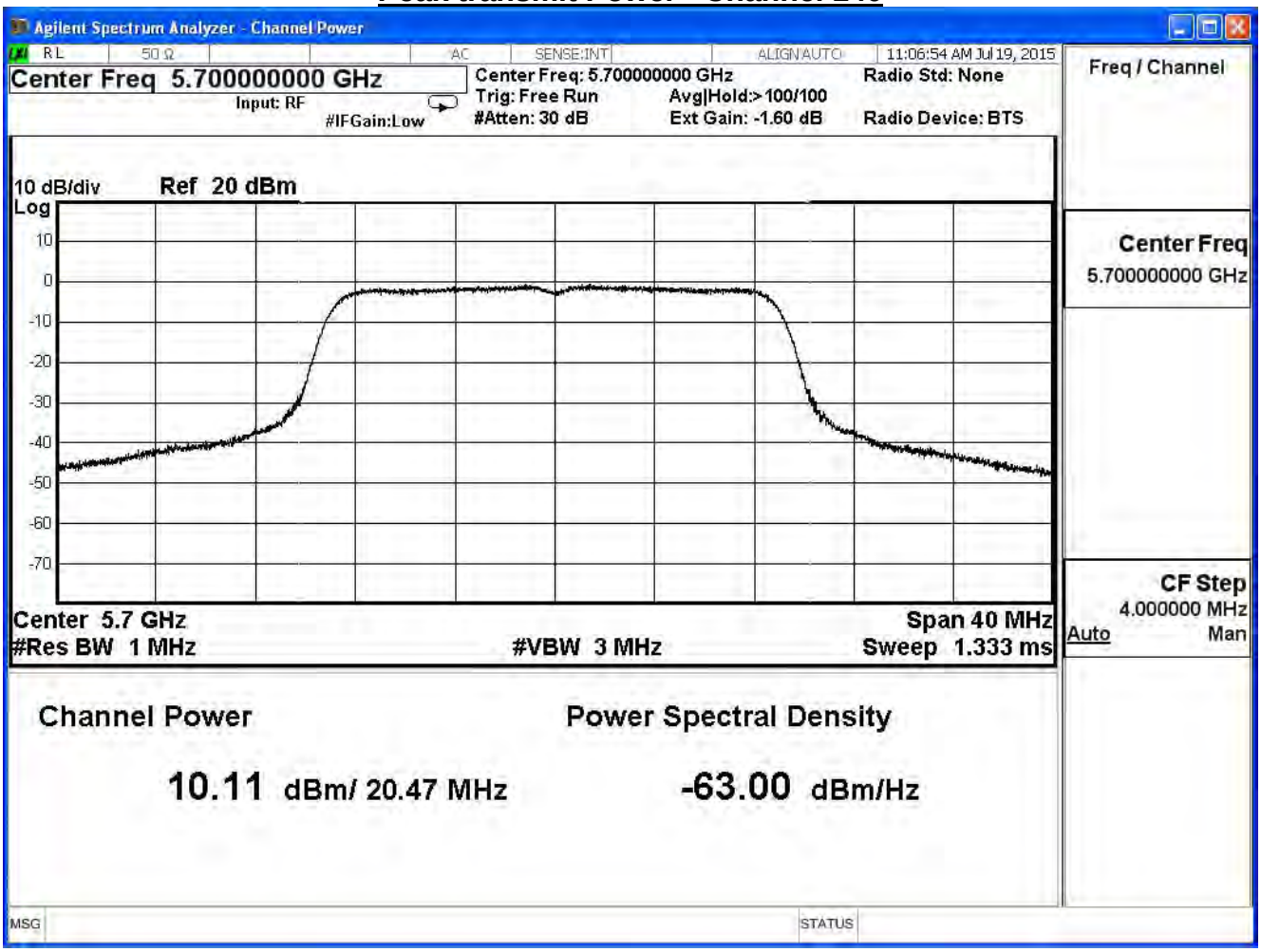
Peak transmit Power - Channel 100



Peak transmit Power - Channel 116



Peak transmit Power - Channel 140



Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

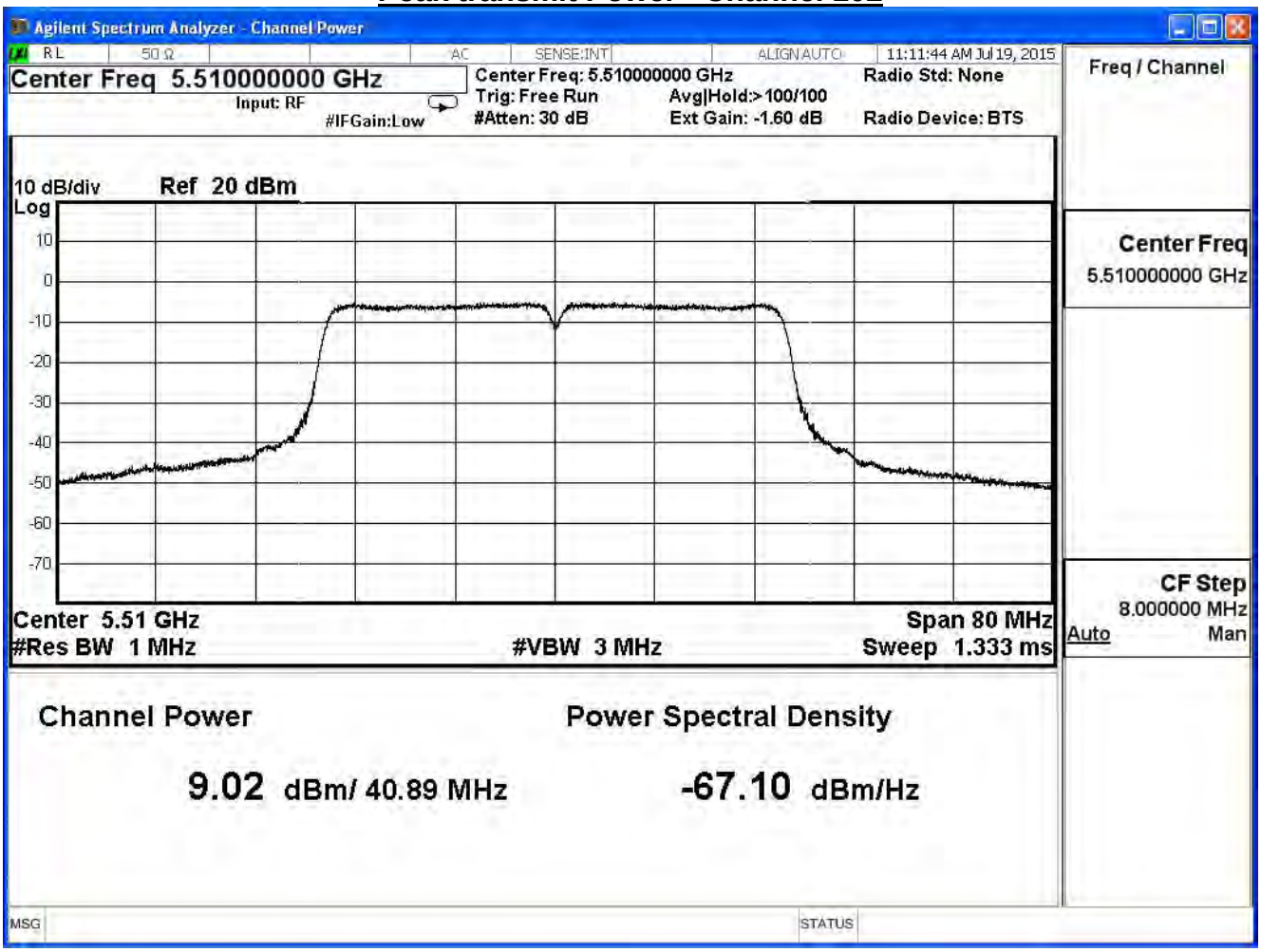
IEEE 802.11n(40MHz)_ANT 0

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Required Limit (dBm)	11+10Log B (dBm)	Result
102	5510	40.890	9.02	≤24	27.12	Pass
134	5670	40.900	9.63	≤24	27.12	Pass

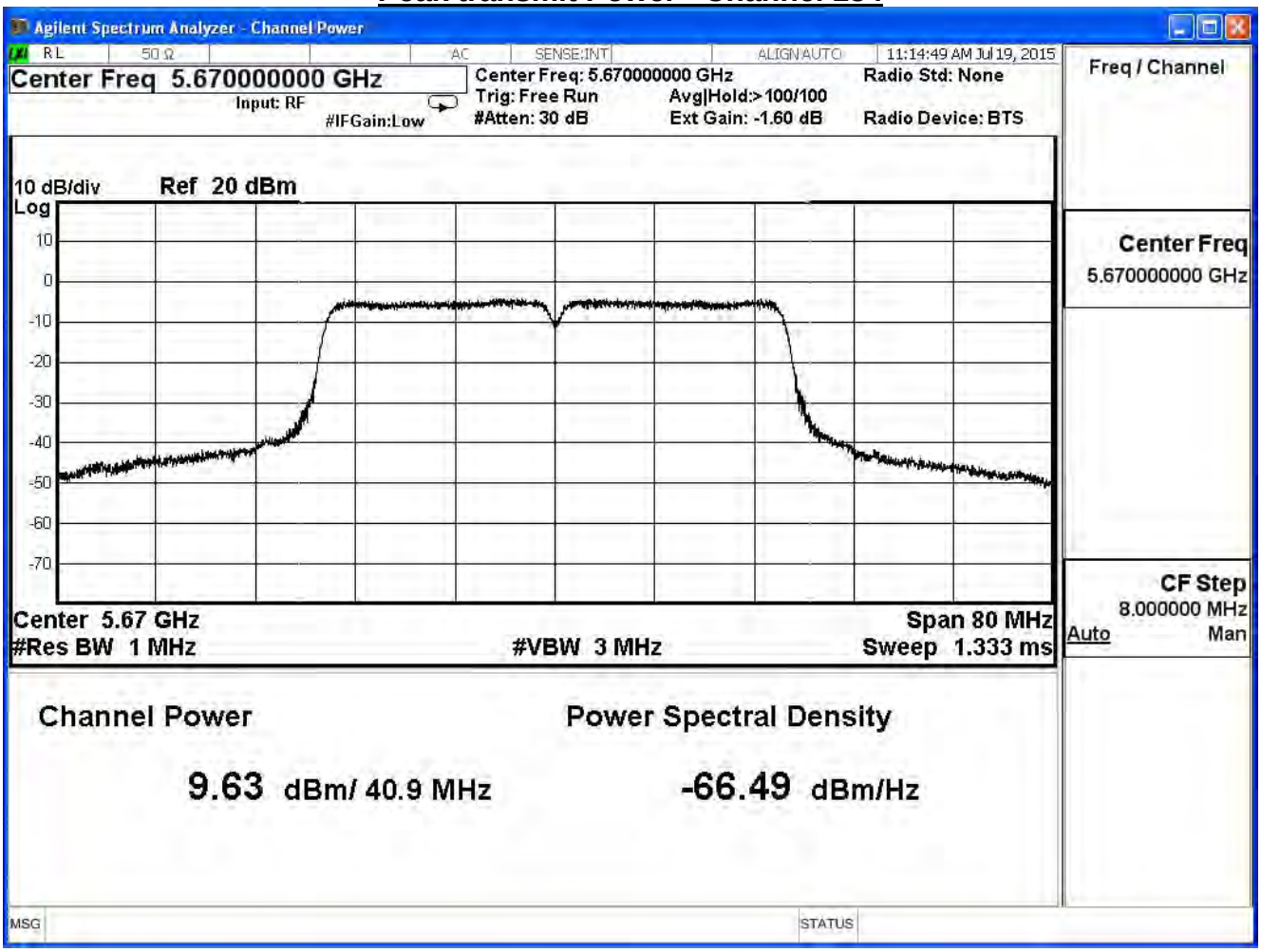
The worst emission of data rate is 13.5Mbps

Peak Power Output (dBm)										
MCS Index		0	1	2	3	4	5	6	7	Required Limit (dBm)
Channel No	Frequency (MHz)	Data Rate								
		13.5	27.0	40.5	54.0	81.0	108.0	121.5	135.0	
102	5510	9.02	--	--	--	--	--	--	--	≤24 or 11+10Log B
134	5670	9.63	9.43	9.23	9.13	9.03	8.79	8.55	8.43	

Peak transmit Power - Channel 102



Peak transmit Power - Channel 134



Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/23	Test Site	SR7

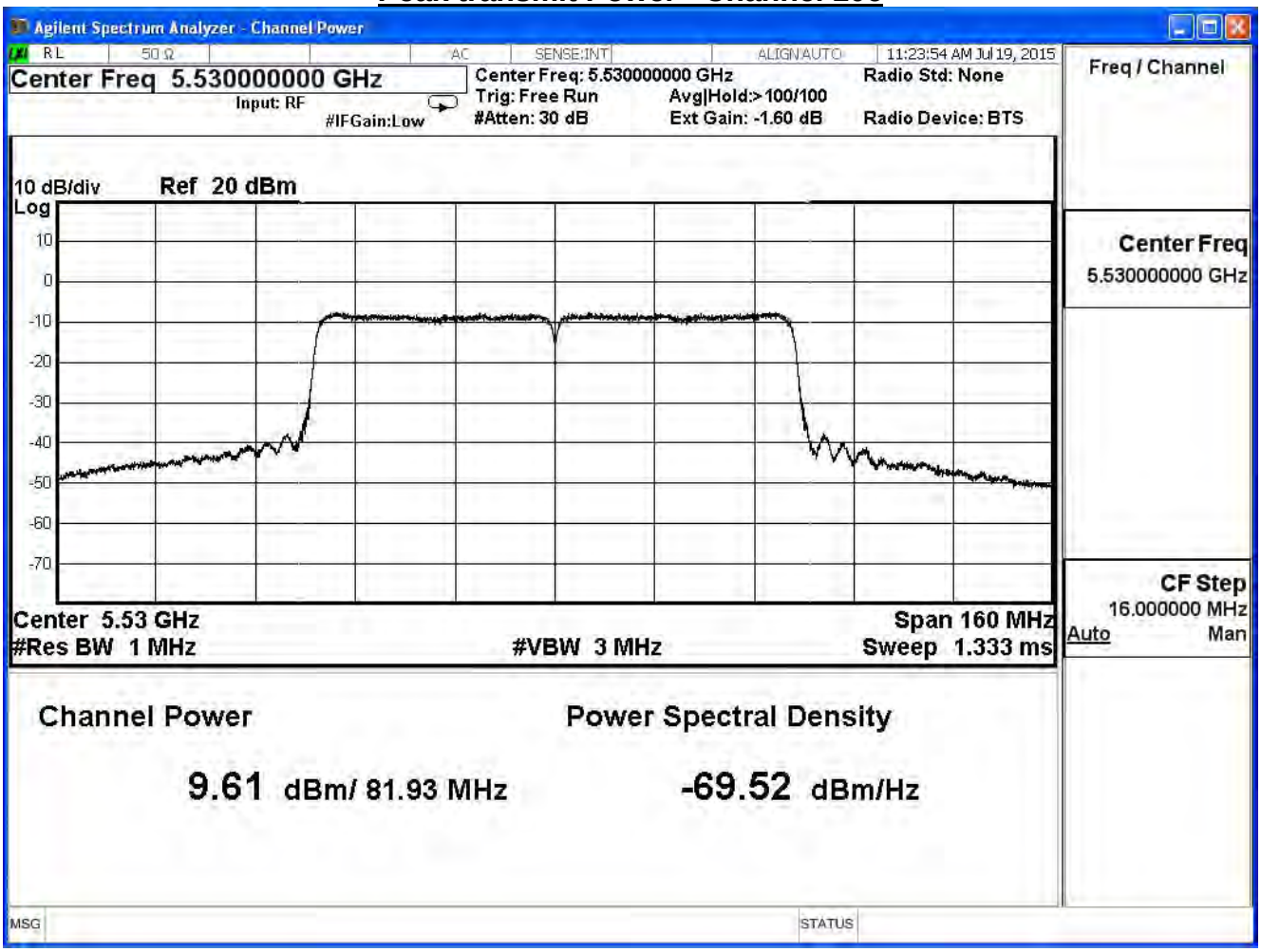
IEEE 802.11ac(80MHz)_ANT 0

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Required Limit (dBm)	11+10Log B (dBm)	Result
106	5530	81.930	9.610	≤24	30.13	Pass
122	5610	82.190	9.560	≤24	30.15	Pass

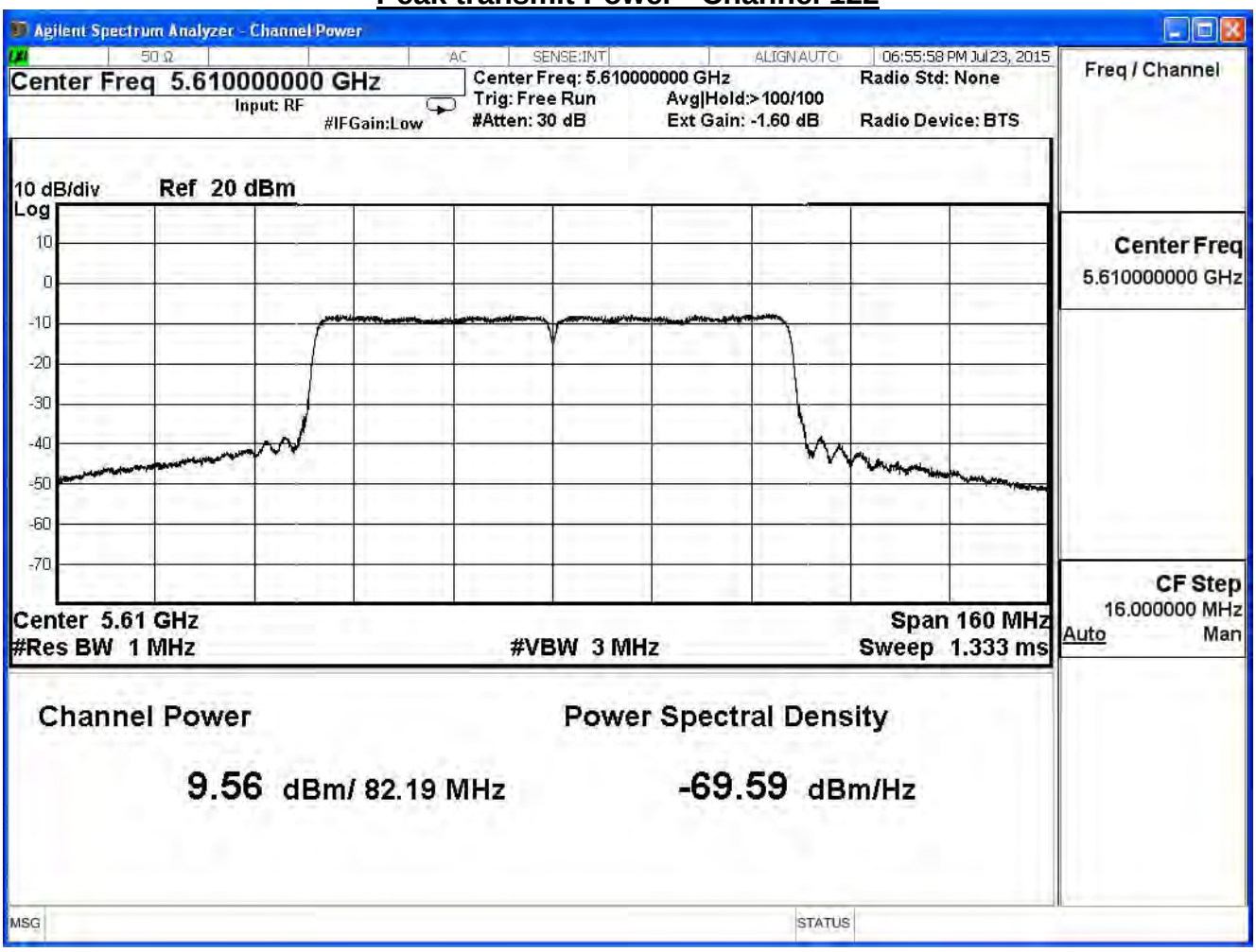
The worst emission of data rate is 29.3 Mbps

Peak Power Output (dBm)											
MCS Index		0	1	2	3	4	5	6	7	8	9
Channel No	Frequency (MHz)	Data Rate									
		29.3	58.5	87.8	117	175.5	234	263.3	292.5	351	390
106	5530	9.61	9.41	9.31	9.11	8.91	8.71	8.59	8.35	8.11	7.99
122	5610	9.56	9.51	9.44	9.40	9.32	9.28	9.22	9.15	9.13	9.01

Peak transmit Power - Channel 106



Peak transmit Power - Channel 122



Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

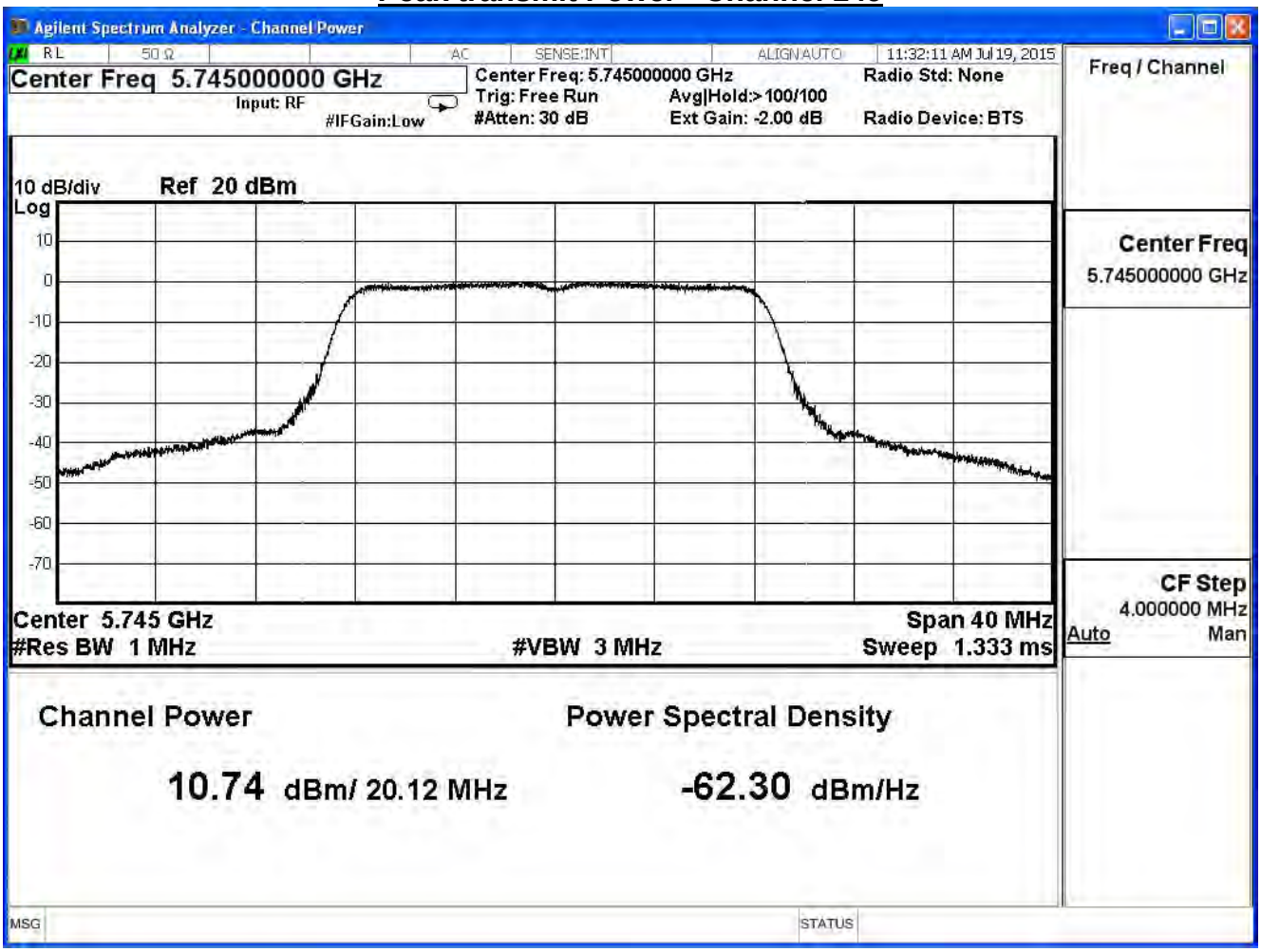
IEEE 802.11a_ANT 0

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Required Limit (dBm)	Result
149	5745	20.12	10.74	≤30	Pass
157	5785	19.87	10.78	≤30	Pass
165	5825	19.70	10.84	≤30	Pass

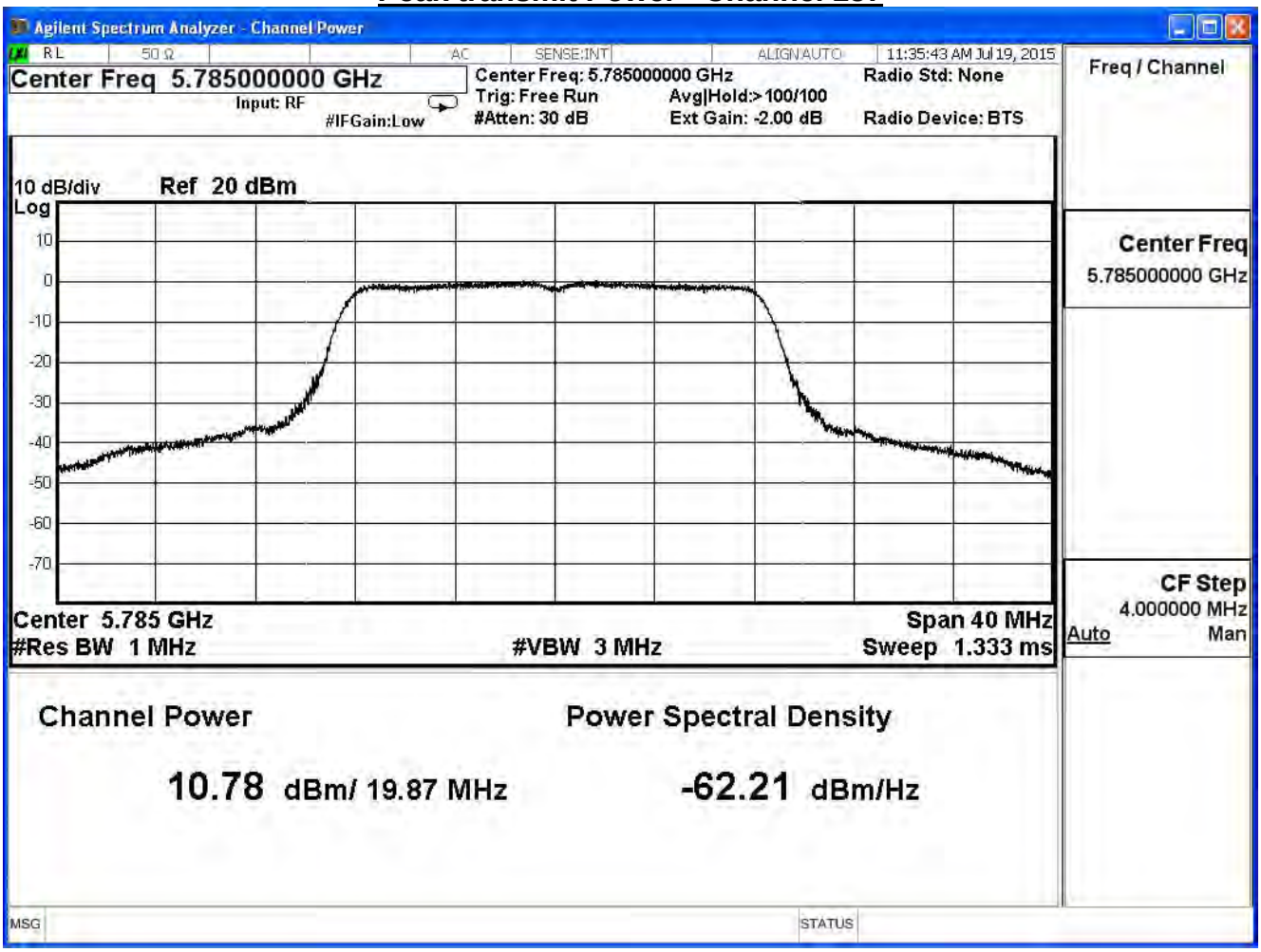
The worst emission of data rate is 6Mbps.

Peak Power Output (dBm)									
Channel No	Frequency (MHz)	Data Rate							Required Limit (dBm)
		6	12	18	24	36	48	54	
149	5745	10.74	--	--	--	--	--	--	≤30
157	5785	10.78	10.68	10.58	10.48	10.24	10.00	9.76	
165	5825	10.84	--	--	--	--	--	--	

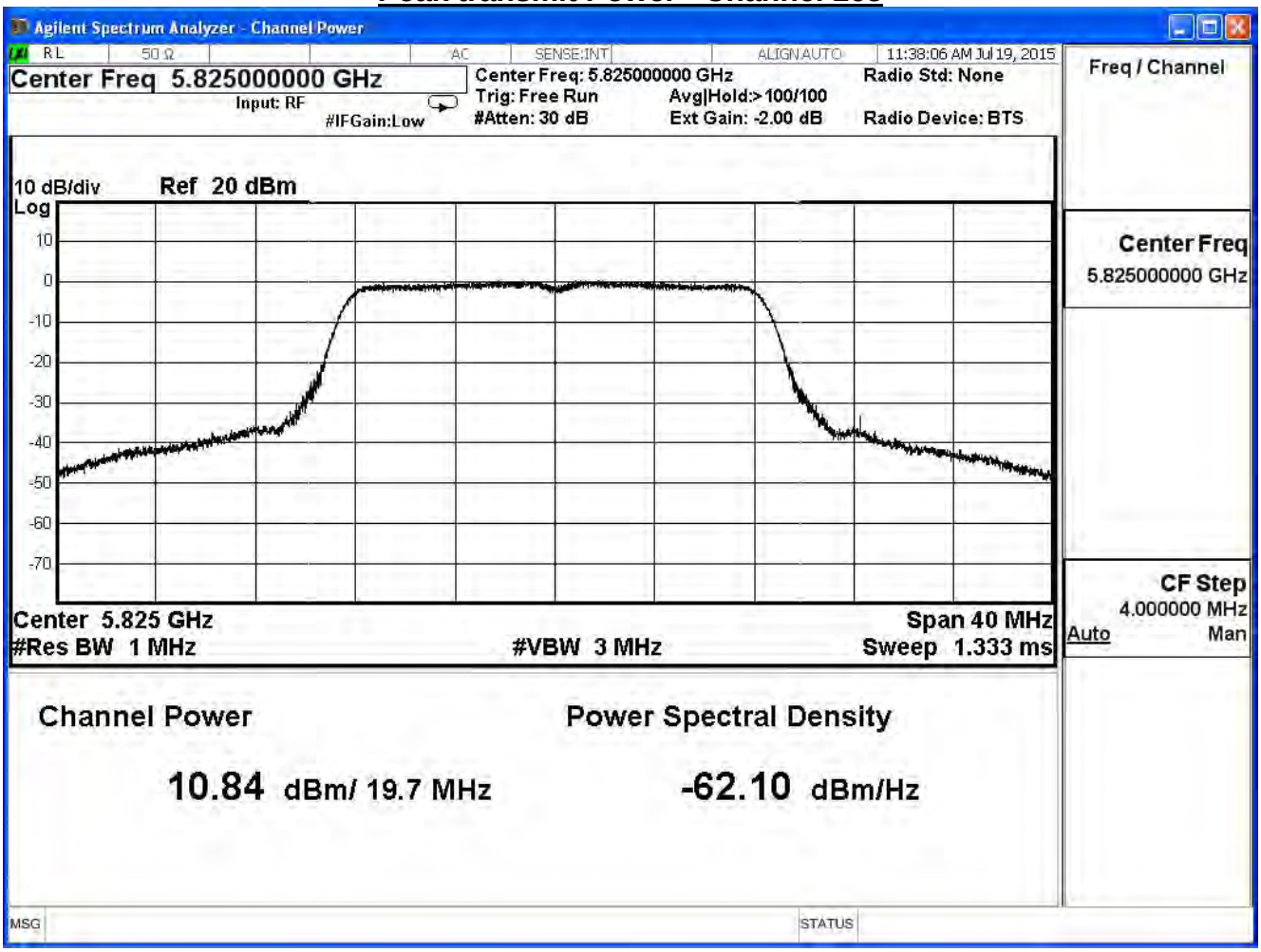
Peak transmit Power - Channel 149



Peak transmit Power - Channel 157



Peak transmit Power - Channel 165



Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

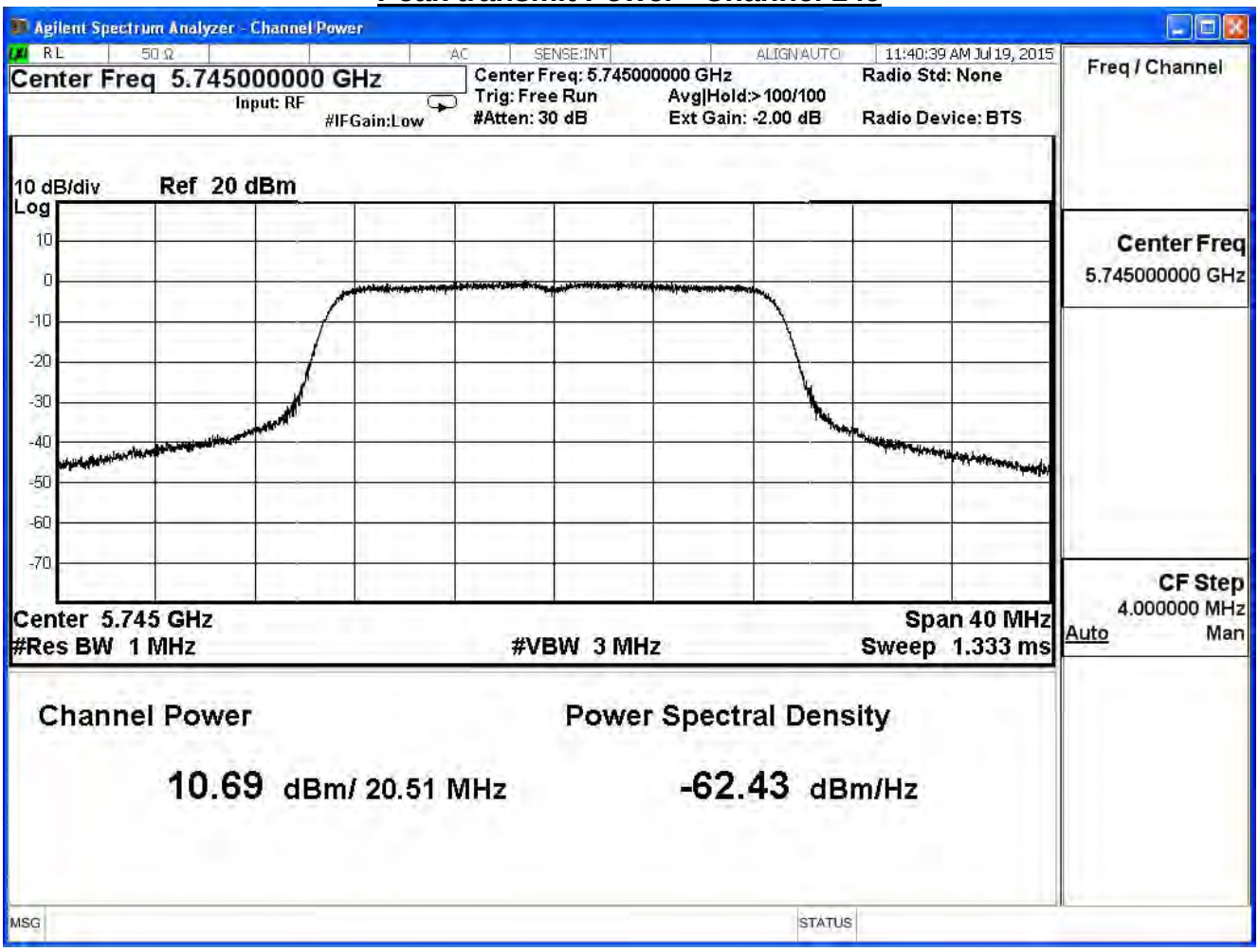
IEEE 802.11n(20MHz)_ANT 0

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Required Limit (dBm)	Result
149	5745	20.51	10.69	≤30	Pass
157	5785	20.40	10.73	≤30	Pass
165	5825	20.48	10.68	≤30	Pass

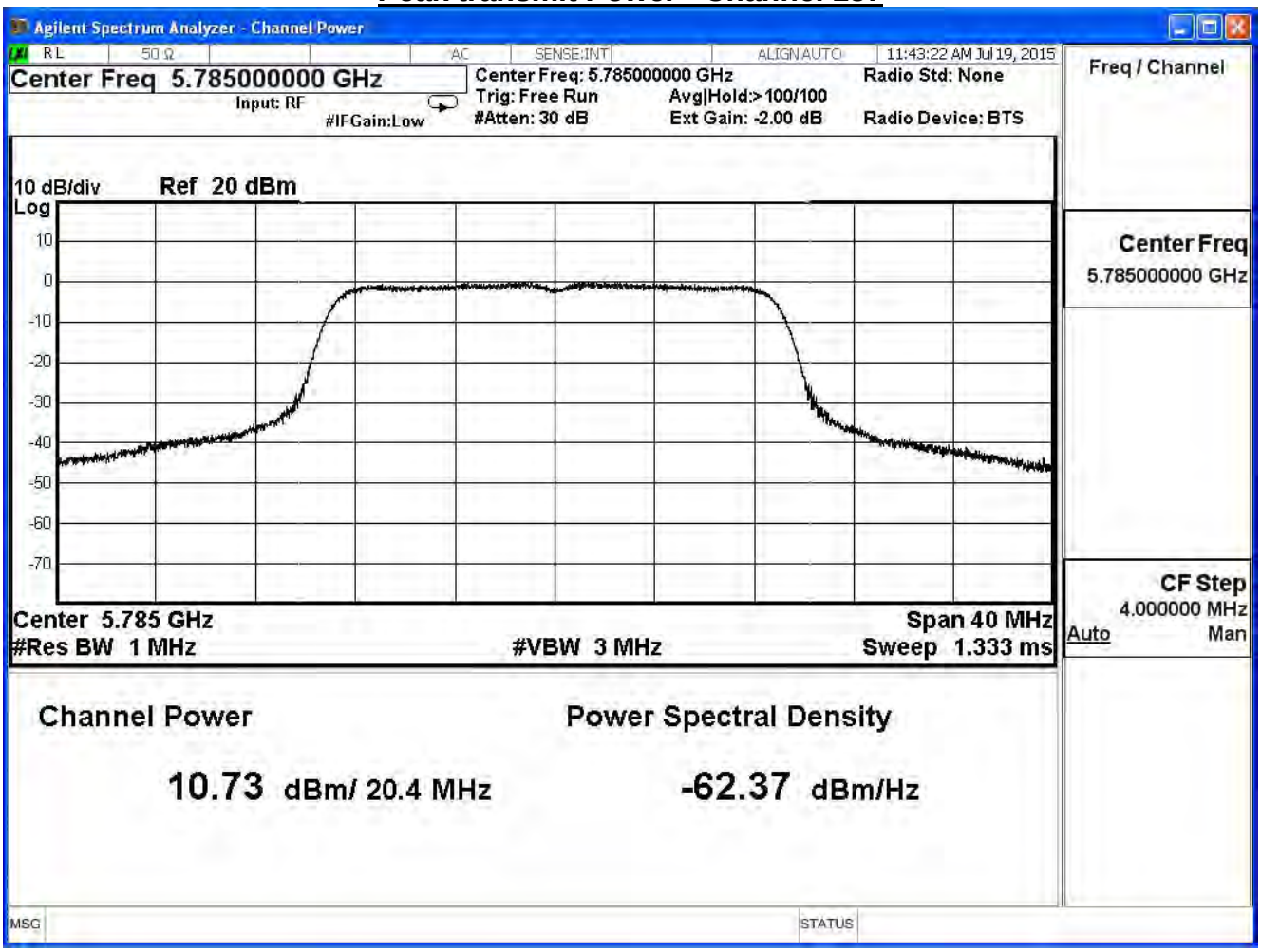
The worst emission of data rate is 6.5 Mbps.

Peak Power Output (dBm)										
MCS Index		0	1	2	3	4	5	6	7	Required Limit (dBm)
Channel No	Frequency (MHz)	Data Rate								
		6.5	13.0	19.5	26.0	39.0	52.0	58.5	65.0	
149	5745	10.69	--	--	--	--	--	--	--	≤30
157	5785	10.73	10.63	10.43	10.23	10.03	9.91	9.79	9.55	
165	5825	10.68	--	--	--	--	--	--	--	

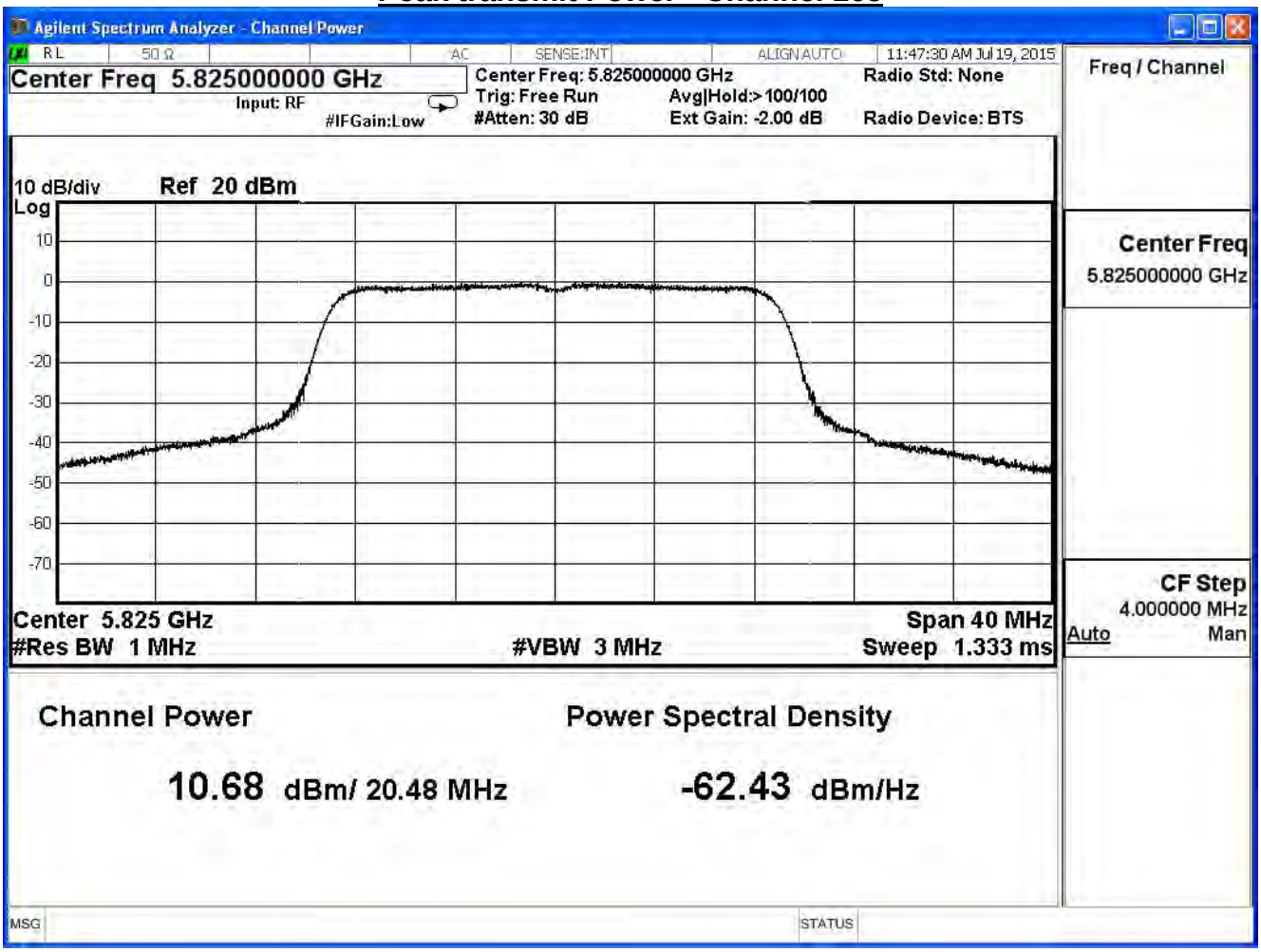
Peak transmit Power - Channel 149



Peak transmit Power - Channel 157



Peak transmit Power - Channel 165



Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

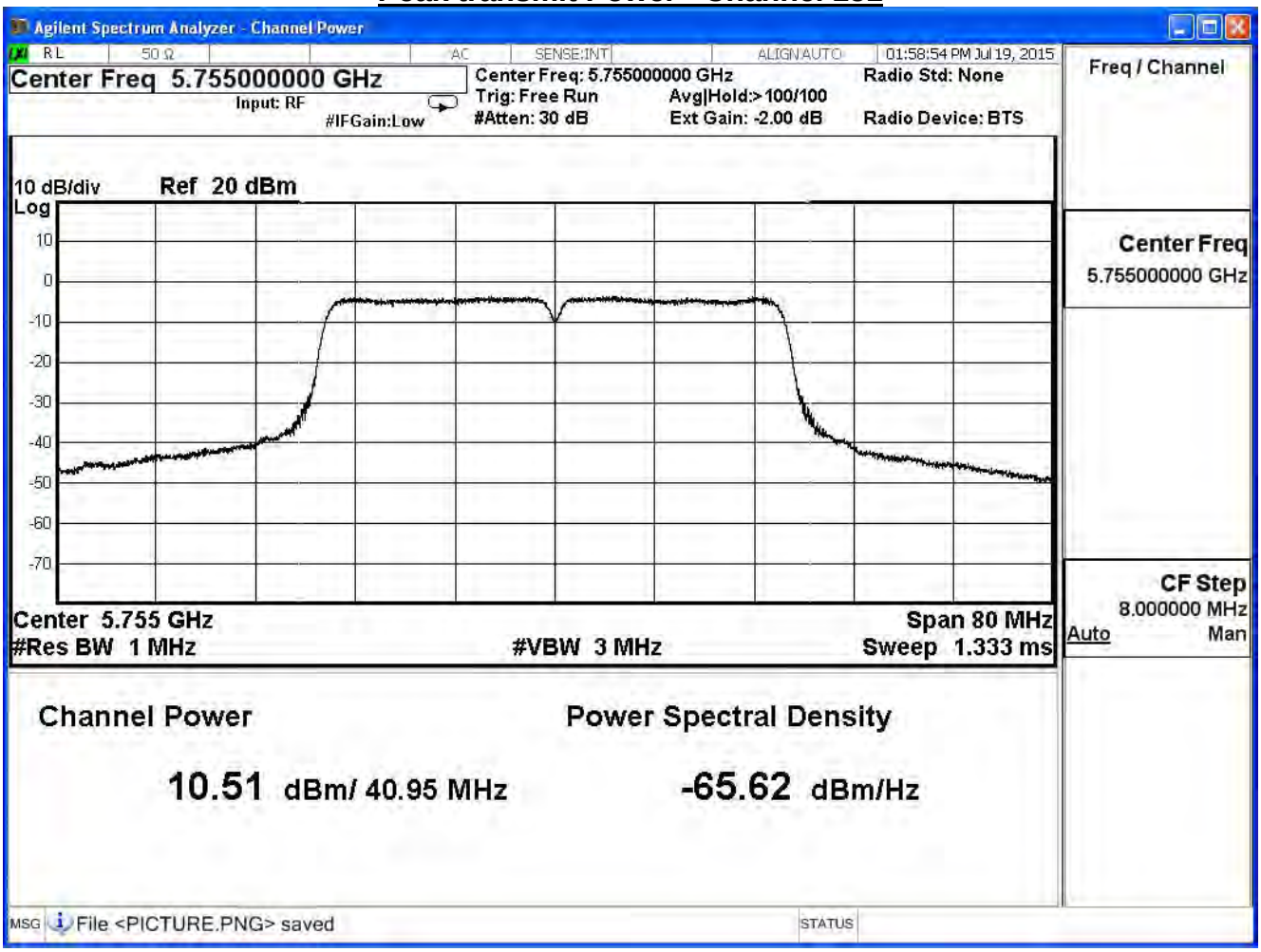
IEEE 802.11n(40MHz)_ANT 0

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Required Limit (dBm)	Result
151	5755	40.95	10.51	≤30	Pass
159	5795	40.76	10.80	≤30	Pass

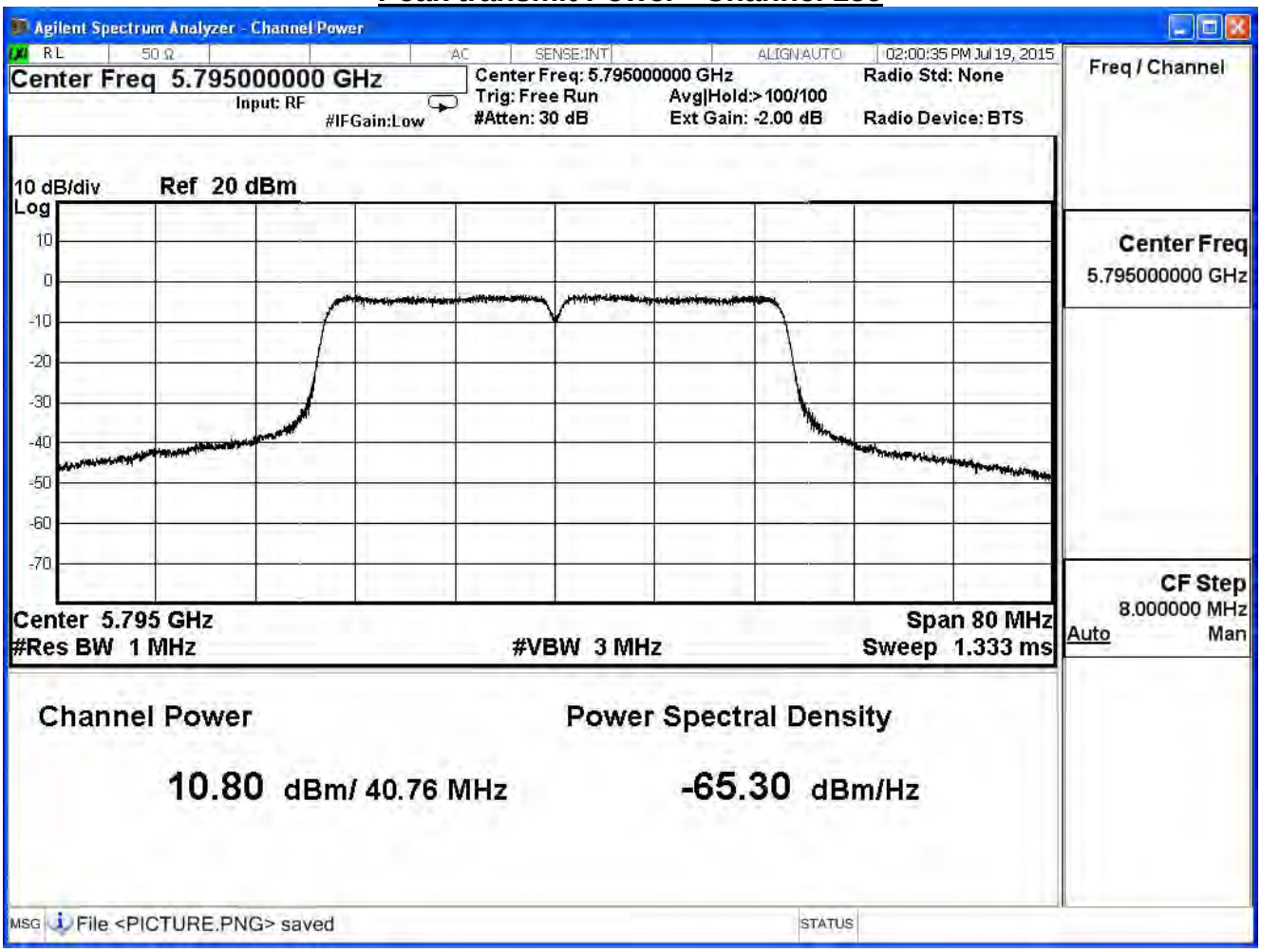
The worst emission of data rate is 13.5Mbps

Peak Power Output (dBm)										
MCS Index		0	1	2	3	4	5	6	7	Required Limit (dBm)
Channel No	Frequency (MHz)	Data Rate								
		13.5	27.0	40.5	54.0	81.0	108.0	121.5	135.0	
151	5755	10.51	--	--	--	--	--	--	--	≤30
159	5795	10.80	10.70	10.50	10.40	10.30	10.06	9.94	9.70	

Peak transmit Power - Channel 151



Peak transmit Power - Channel 159



Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

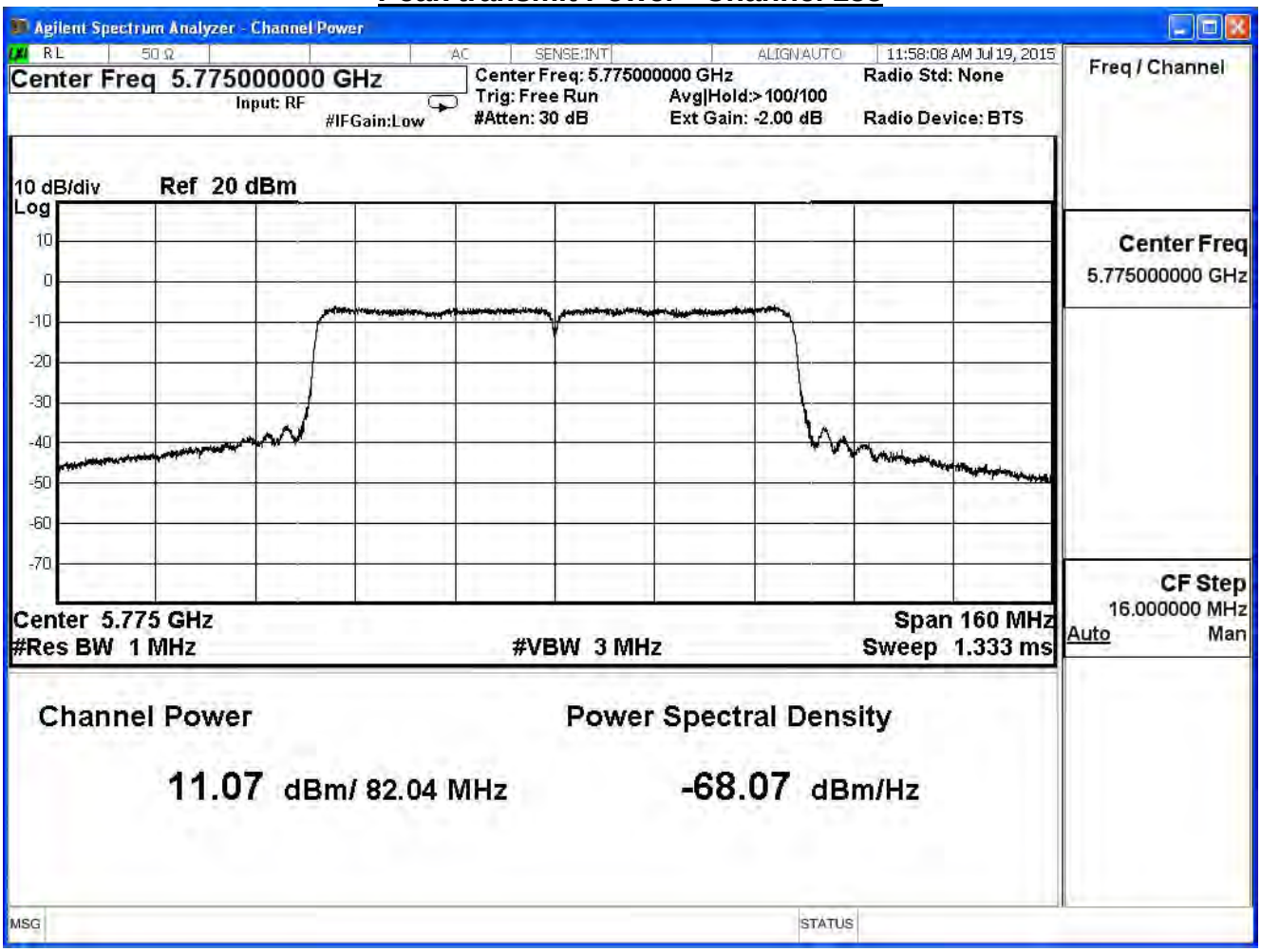
IEEE 802.11ac(80MHz)_ANT 0

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Required Limit (dBm)	Result
155	5775	82.04	11.07	≤30	Pass

The worst emission of data rate is 29.3 Mbps

Peak Power Output (dBm)											
MCS Index		0	1	2	3	4	5	6	7	8	9
Channel No	Frequency (MHz)	Data Rate									
		29.3	58.5	87.8	117	175.5	234	263.3	292.5	351	390
155	5775	11.07	10.97	10.77	10.57	10.47	10.37	10.13	9.89	9.65	9.41

Peak transmit Power - Channel 155



5. Peak Power Spectrum Density

5.1. Test Equipment

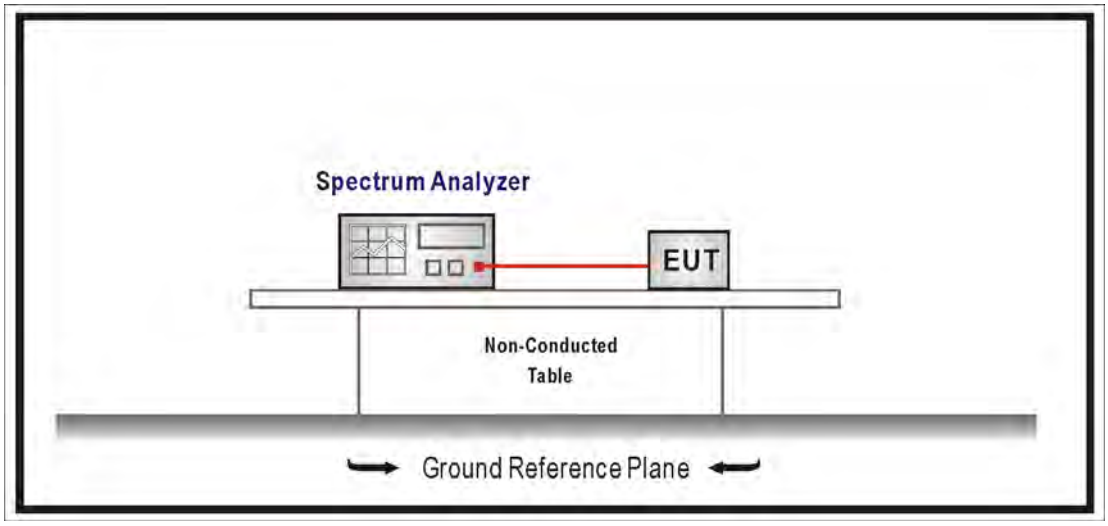
The following test equipments are used during the radiated emission tests:

Peak Power Spectrum Density / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A-EXA	US47140172	2016/07/13

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

5.2. Test Setup



5.3. Limits

(1) For the band 5.15–5.25 GHz.

(i) For an outdoor access point operating in the band 5.15–5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(ii) For an indoor access point operating in the band 5.15–5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15–5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed pointto-point U–NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U–NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(2) For the 5.25–5.35 GHz and 5.47–5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(3) For the band 5.725–5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U–NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U–NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

5.4. Test Procedure

The EUT was setup to ANSI C63.4; tested to U-NII test procedure of KDB 789033 and KDB 644545 for compliance to FCC 47CFR Subpart E requirements.

For Band1 : Set RBW=1MHz, VBW=3MHz with RMS detector. The PPSD is the highest level found across the emission in any 1-MHz band after 100 sweeps of averaging.

For Band4 : Set RBW=500KHz, VBW=1.5MHz with RMS detector. The PPSD is the highest level found across the emission in any 500KHz band after 100 sweeps of averaging.

5.5. Uncertainty

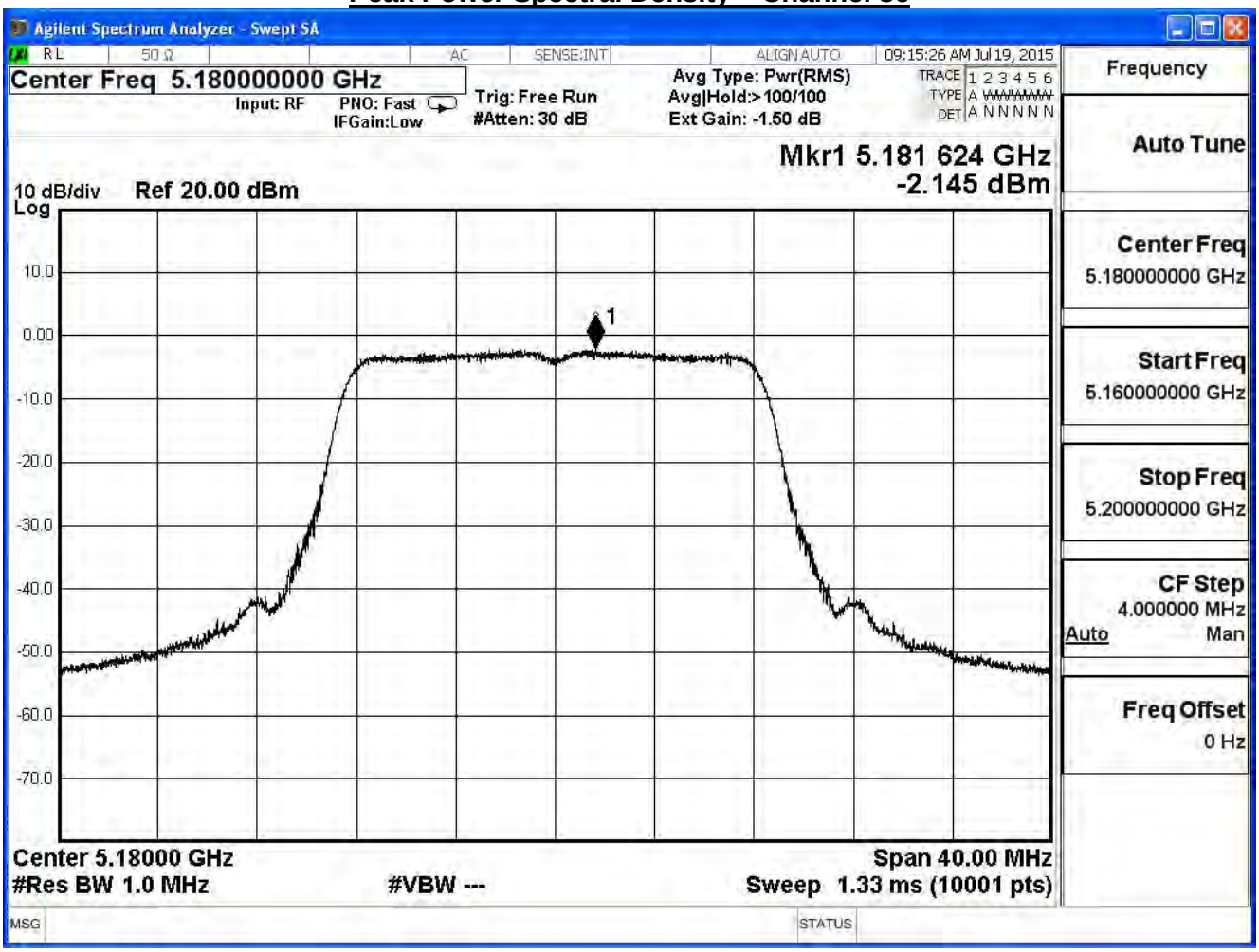
The measurement uncertainty is defined as ± 1.27 dB

5.6. Test Result

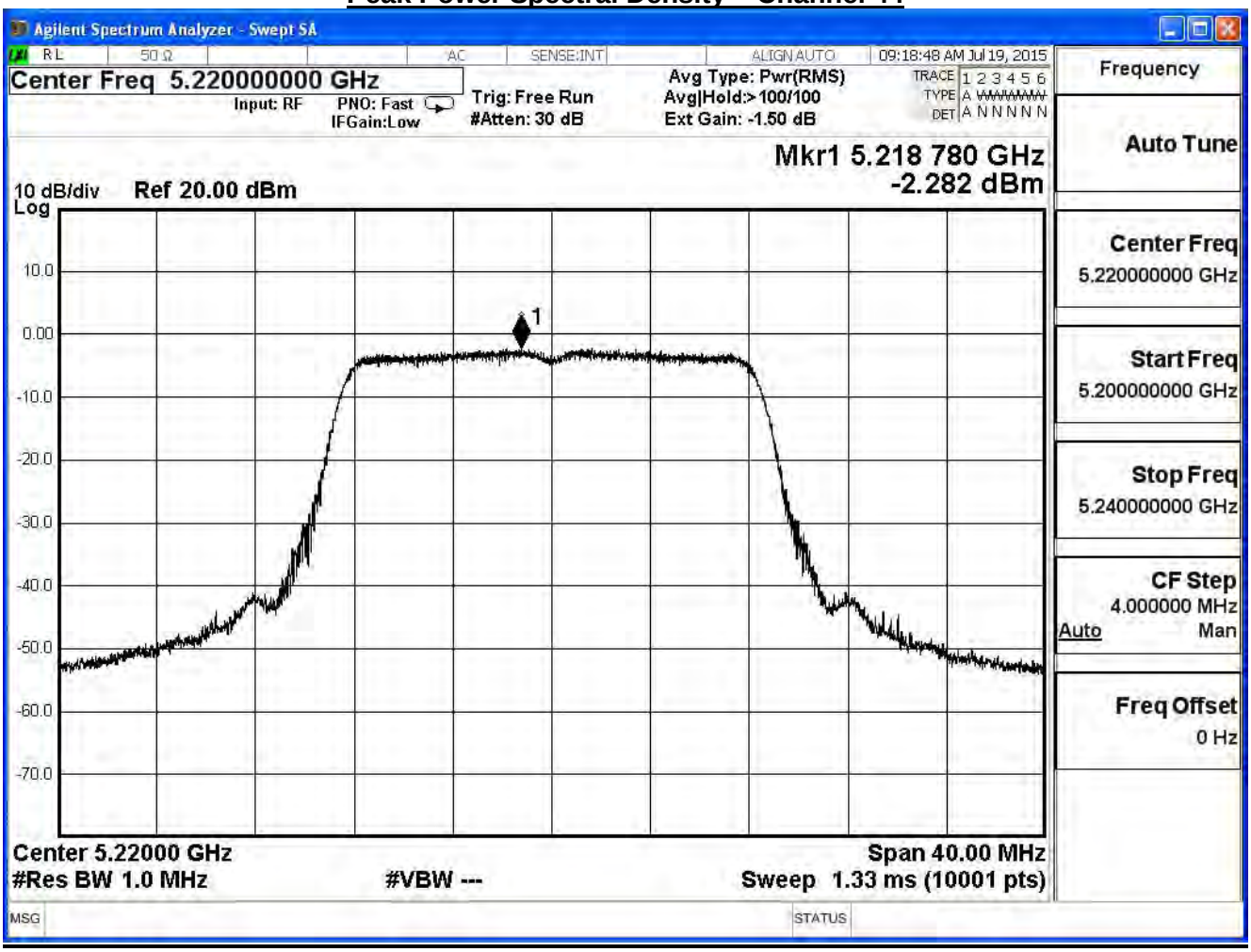
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

IEEE 802.11a_ANT 0				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
36	5180	-2.145	≦11	Pass
44	5220	-2.282	≦11	Pass
48	5240	-2.377	≦11	Pass

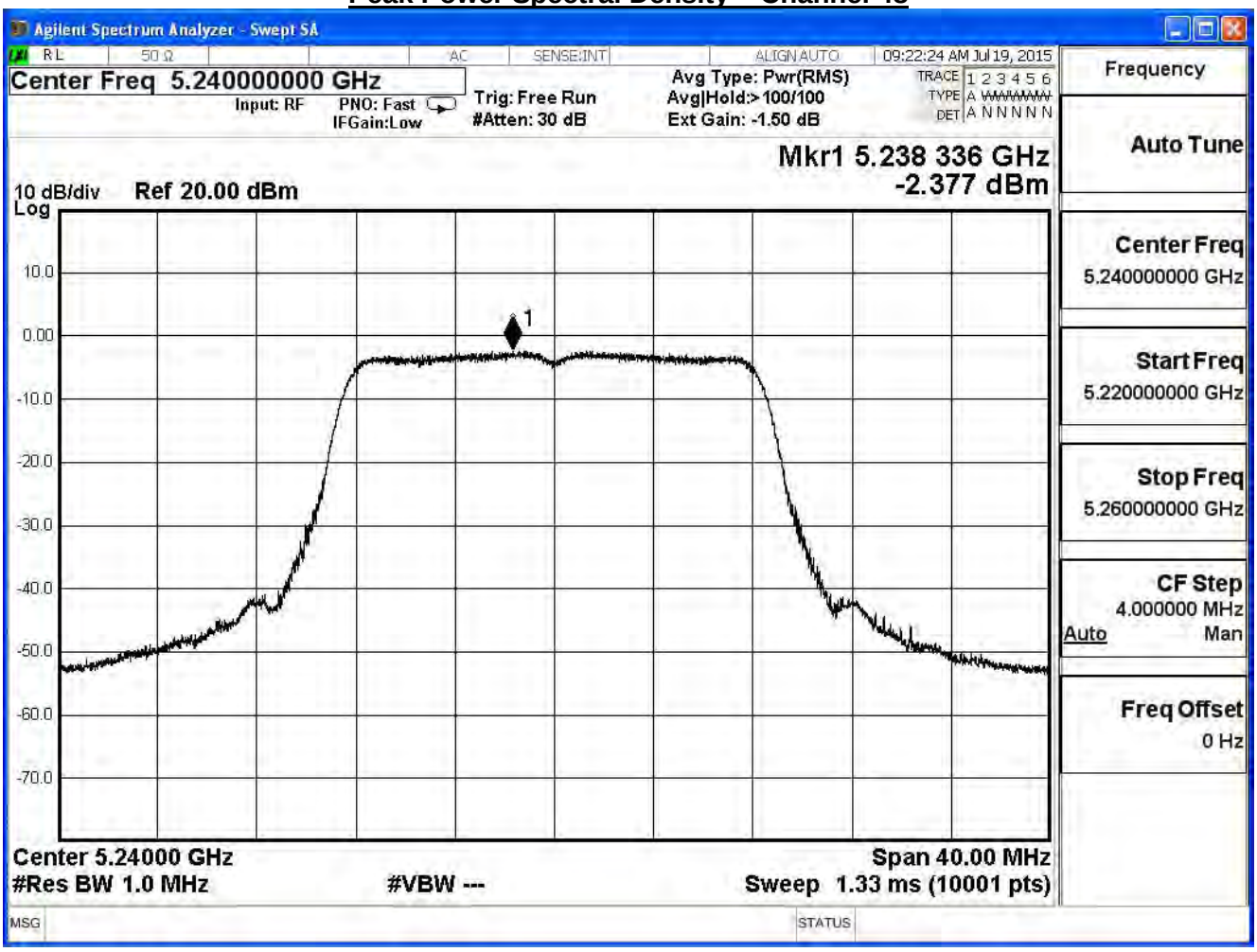
Peak Power Spectral Density – Channel 36



Peak Power Spectral Density – Channel 44



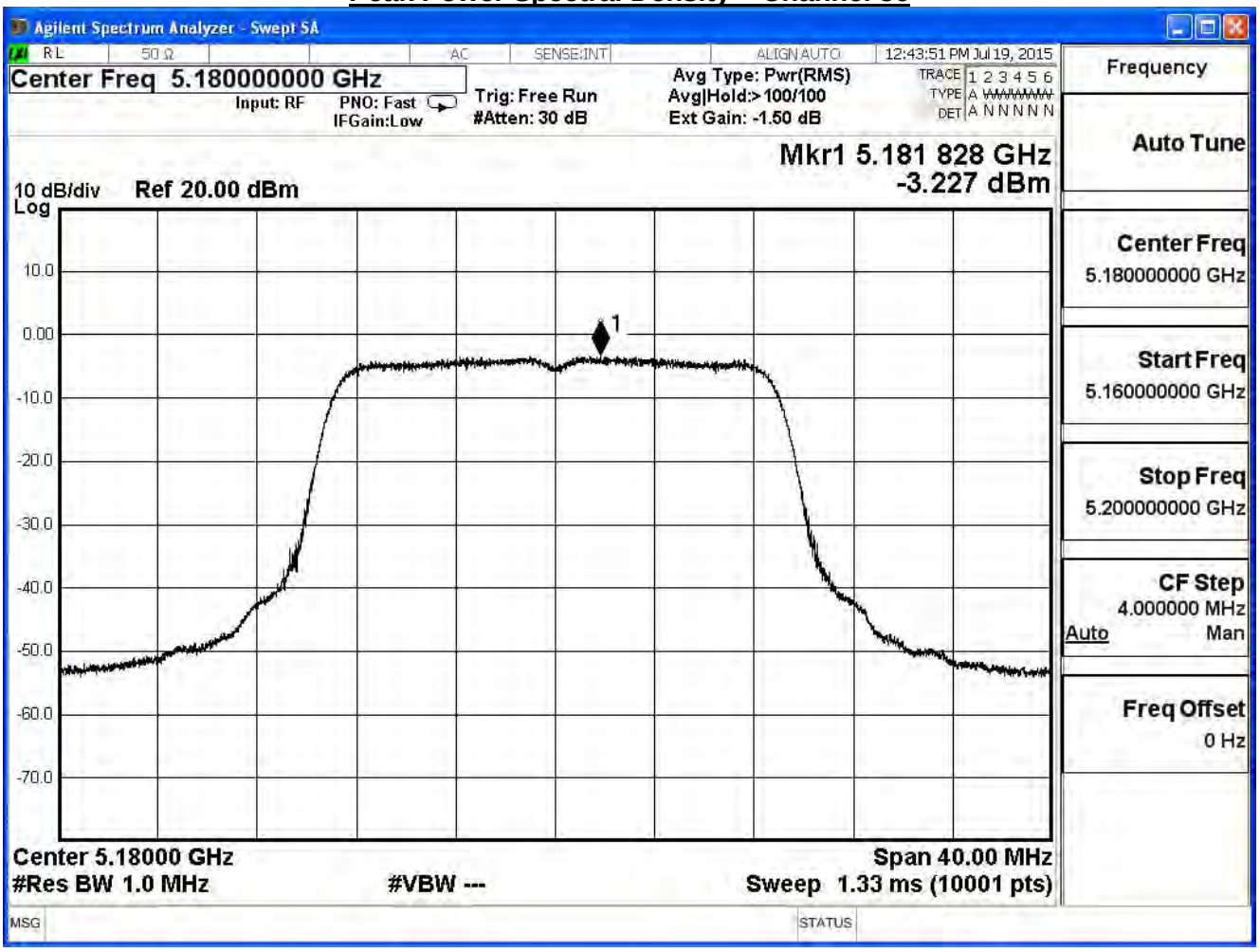
Peak Power Spectral Density – Channel 48



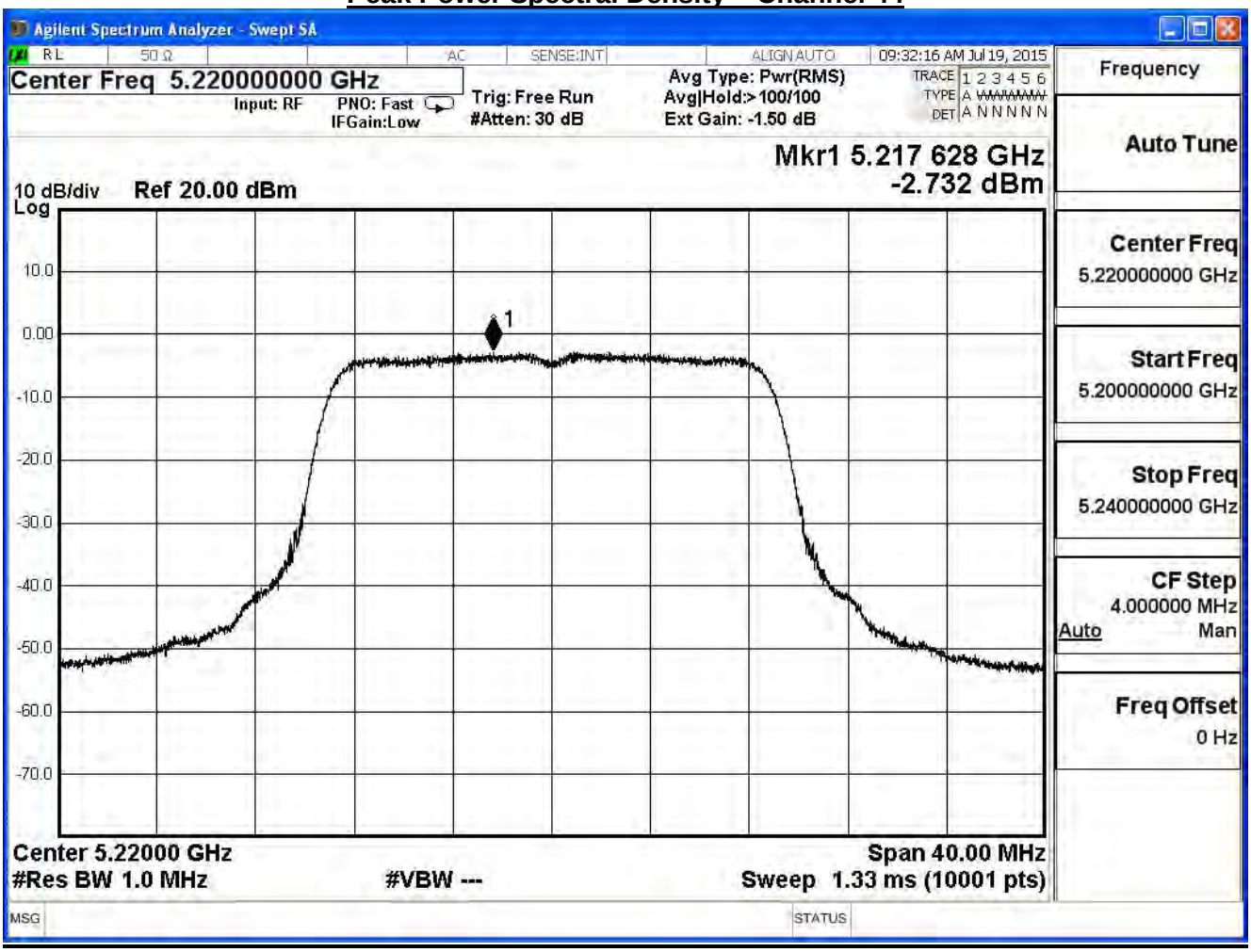
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

IEEE 802.11n_20M_ANT 0				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
36	5180	-3.227	≦11	Pass
44	5220	-2.732	≦11	Pass
48	5240	-2.412	≦11	Pass

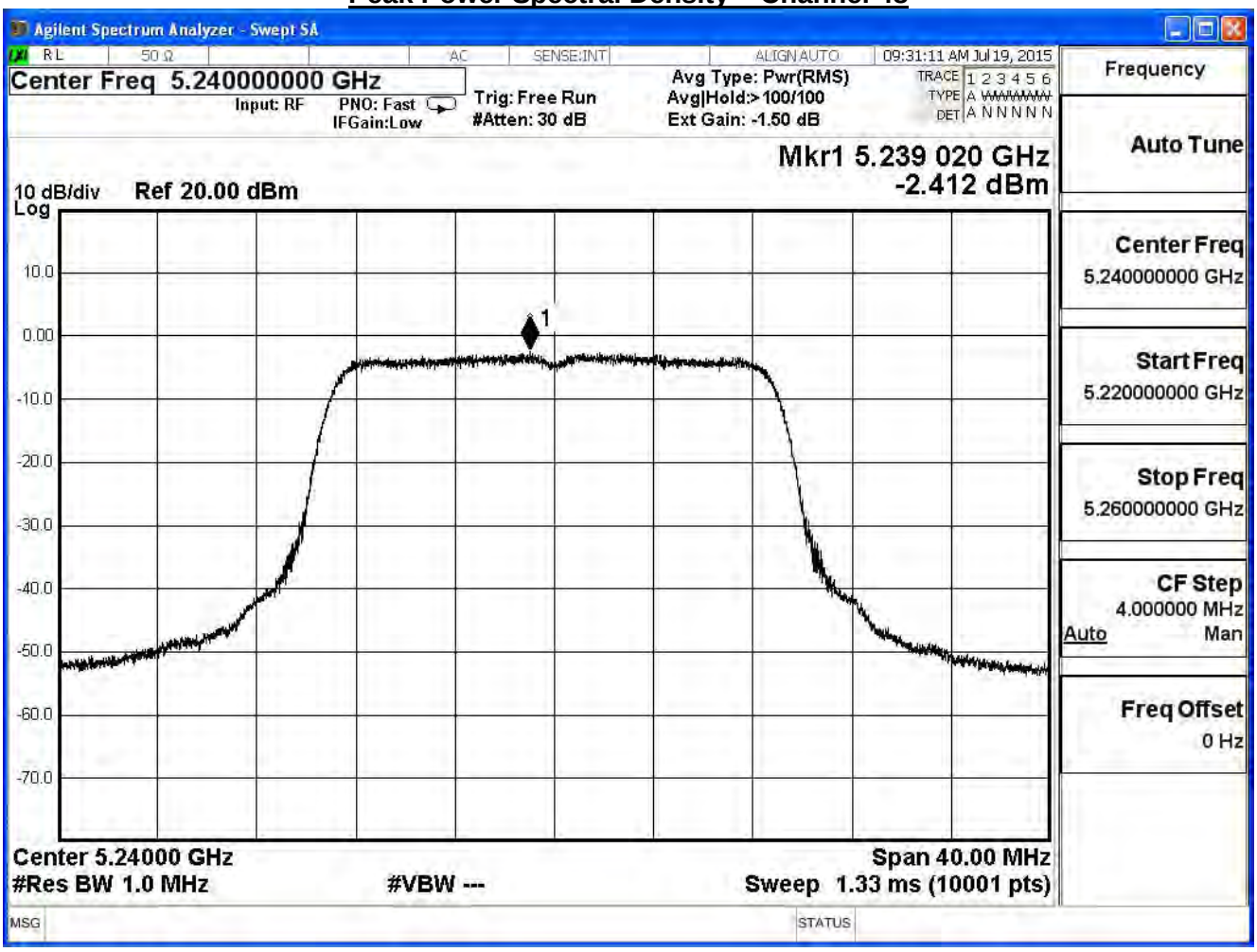
Peak Power Spectral Density – Channel 36



Peak Power Spectral Density – Channel 44



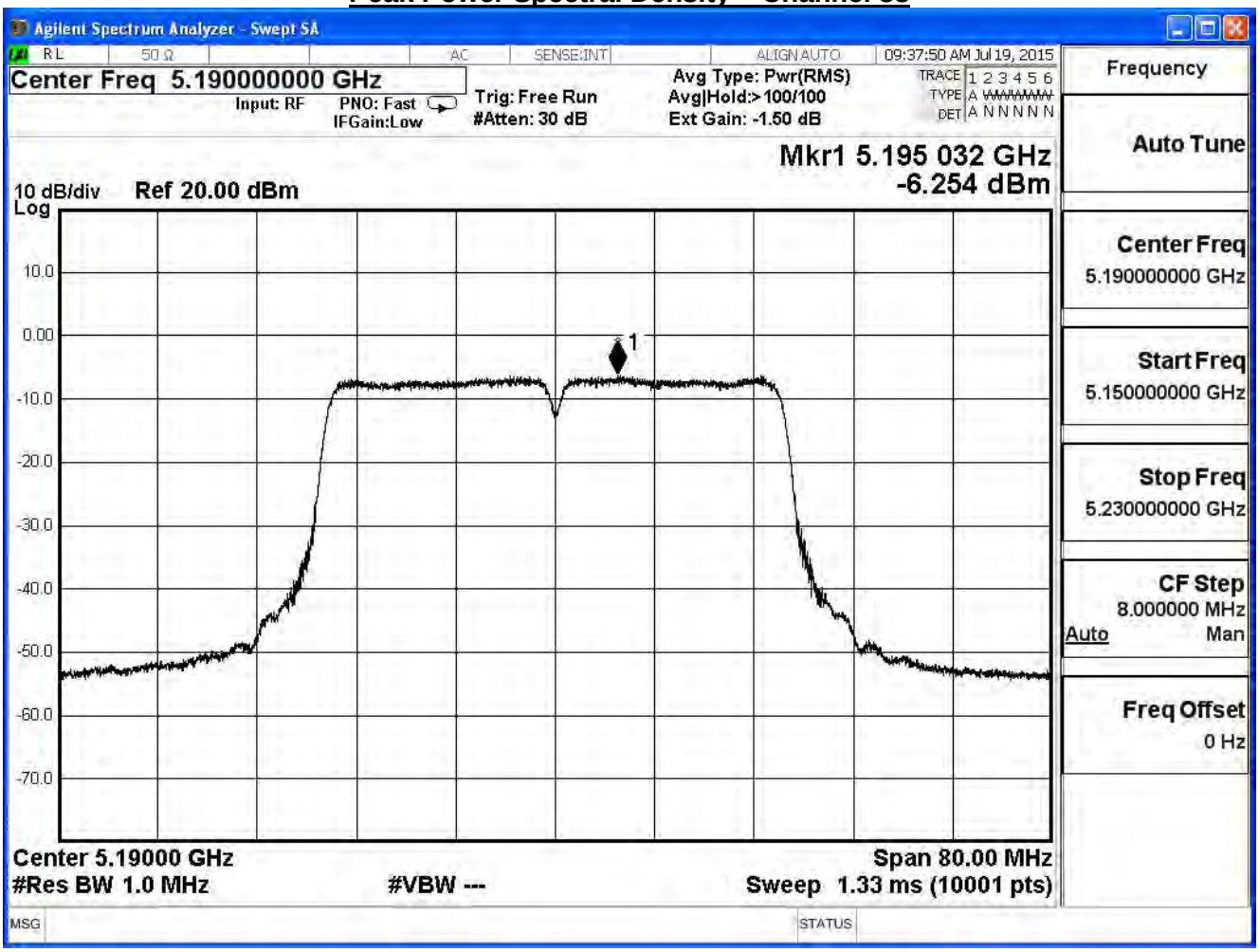
Peak Power Spectral Density – Channel 48



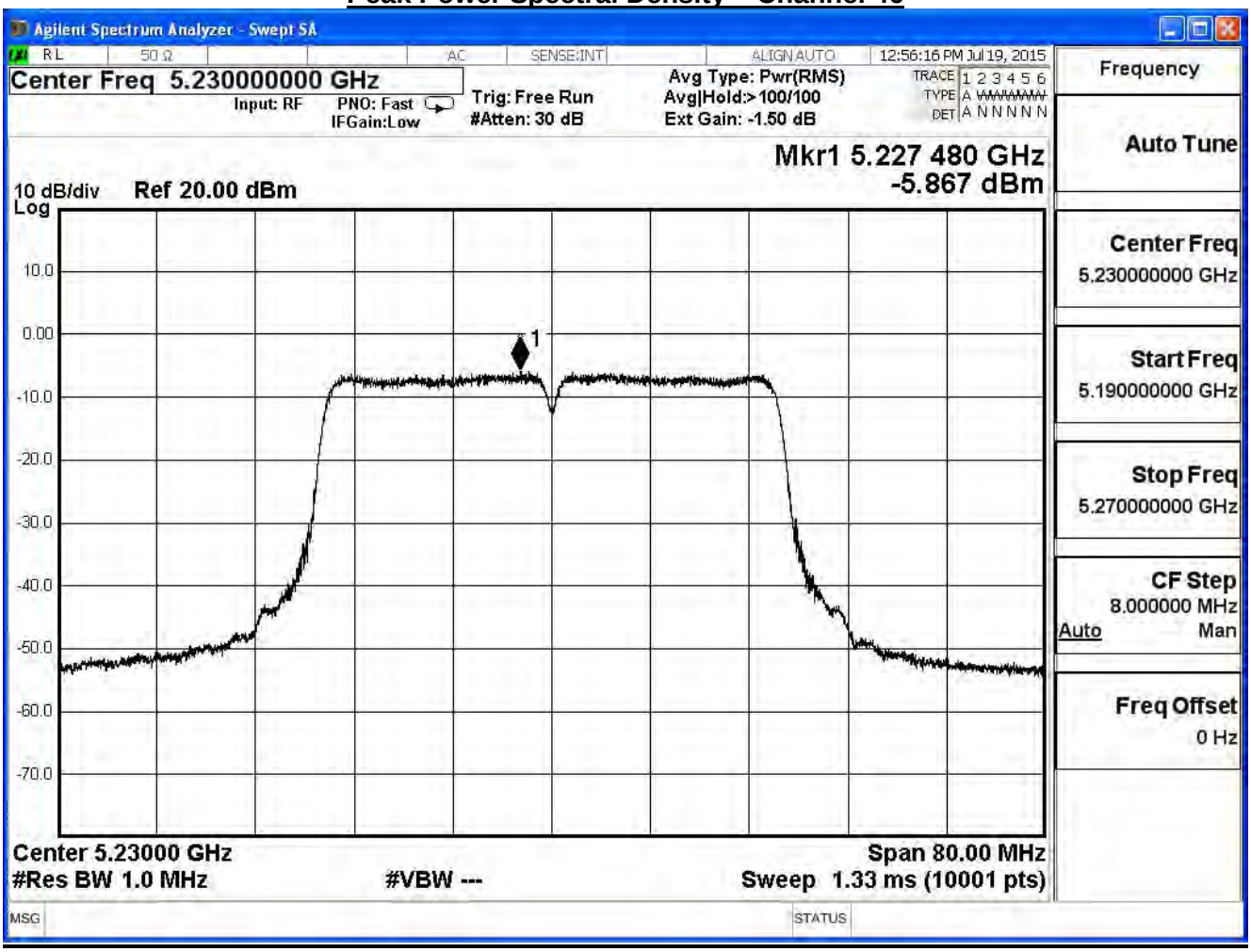
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

IEEE 802.11n_40M_ANT 0				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
38	5190	-6.254	≦11	Pass
46	5230	-5.867	≦11	Pass

Peak Power Spectral Density – Channel 38



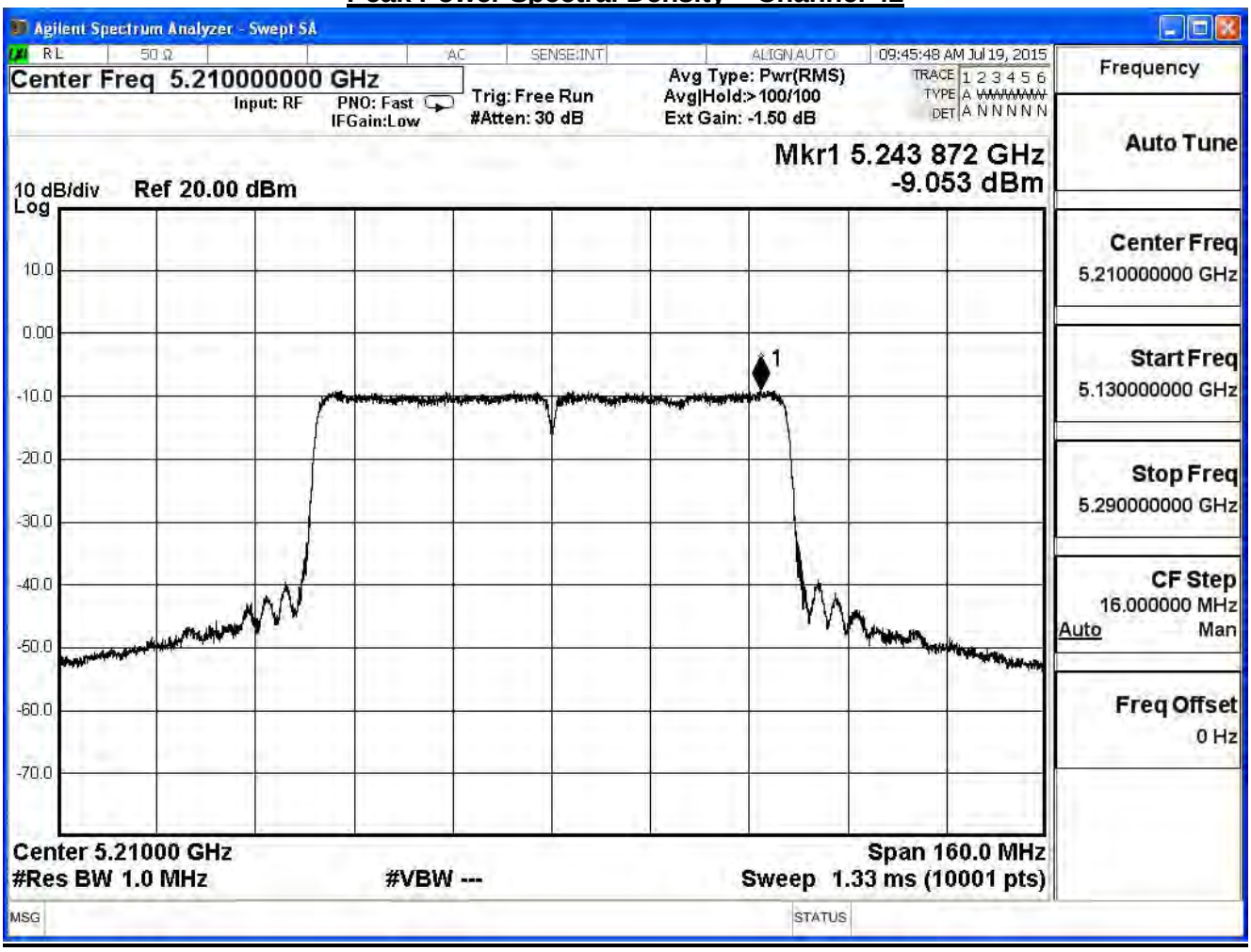
Peak Power Spectral Density – Channel 46



Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

IEEE 802.11ac_80M_ANT 0				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
42	5210	-9.053	≦11	Pass

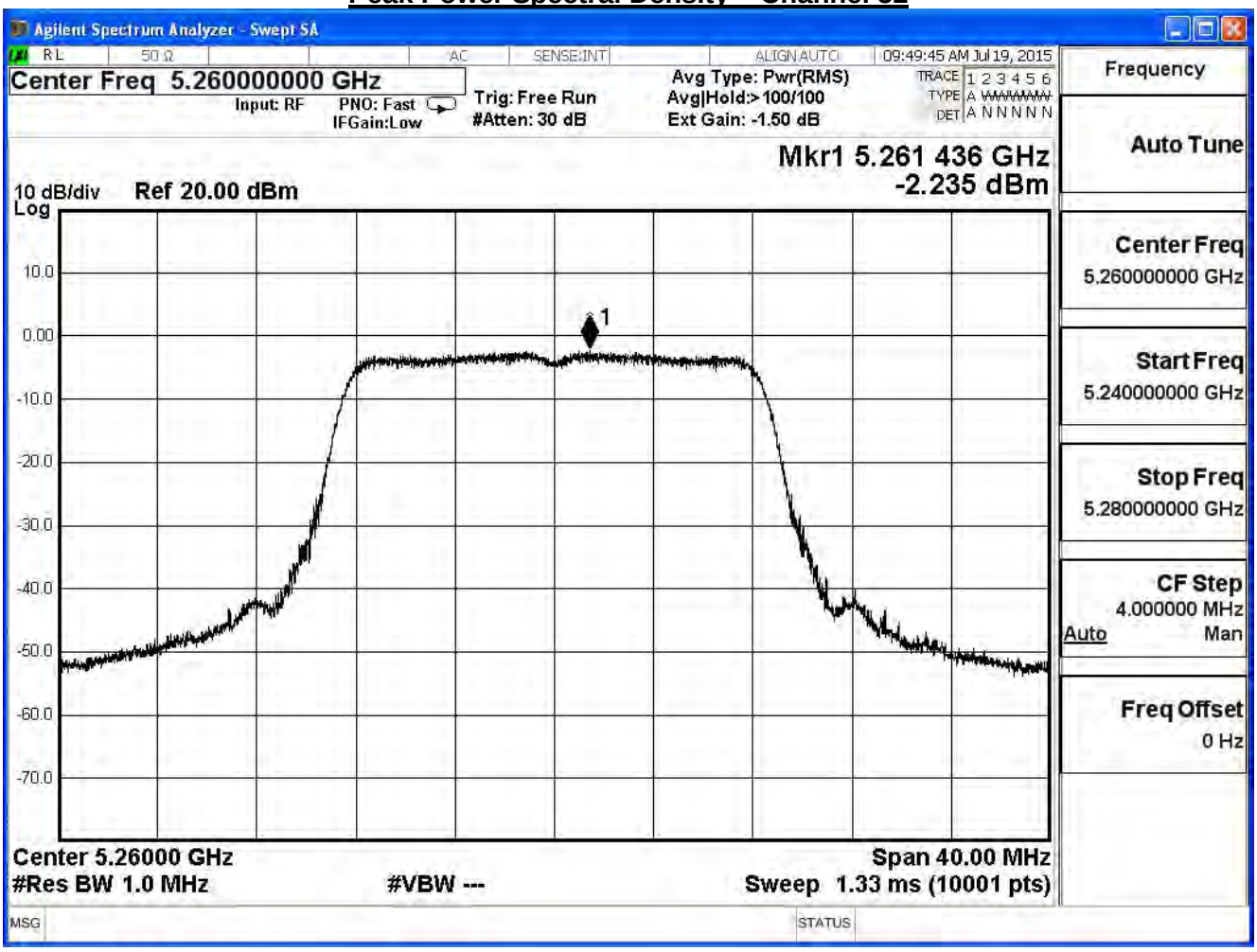
Peak Power Spectral Density – Channel 42



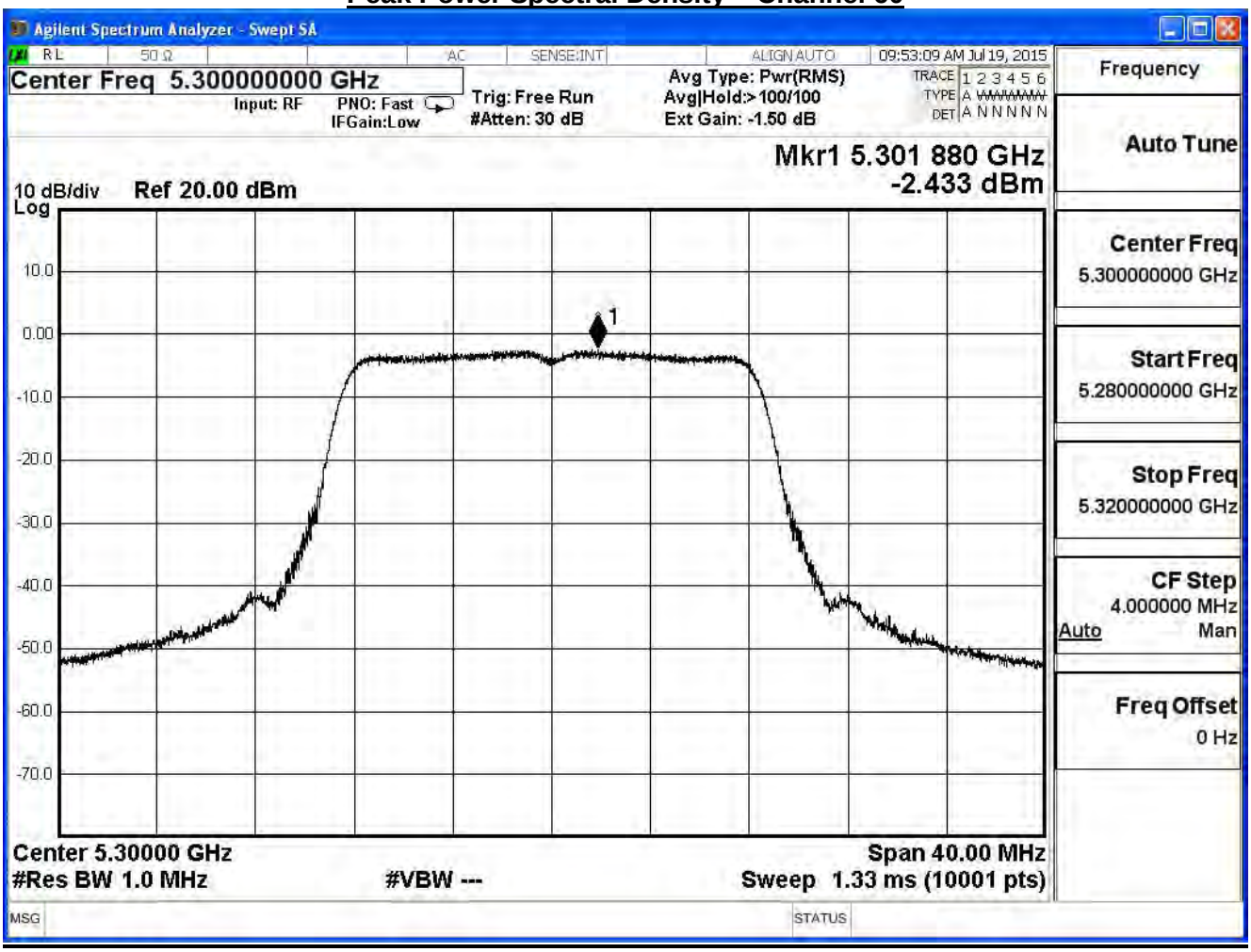
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

IEEE 802.11a_ANT 0				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
52	5260	-2.235	≦11	Pass
60	5300	-2.433	≦11	Pass
64	5320	-2.481	≦11	Pass

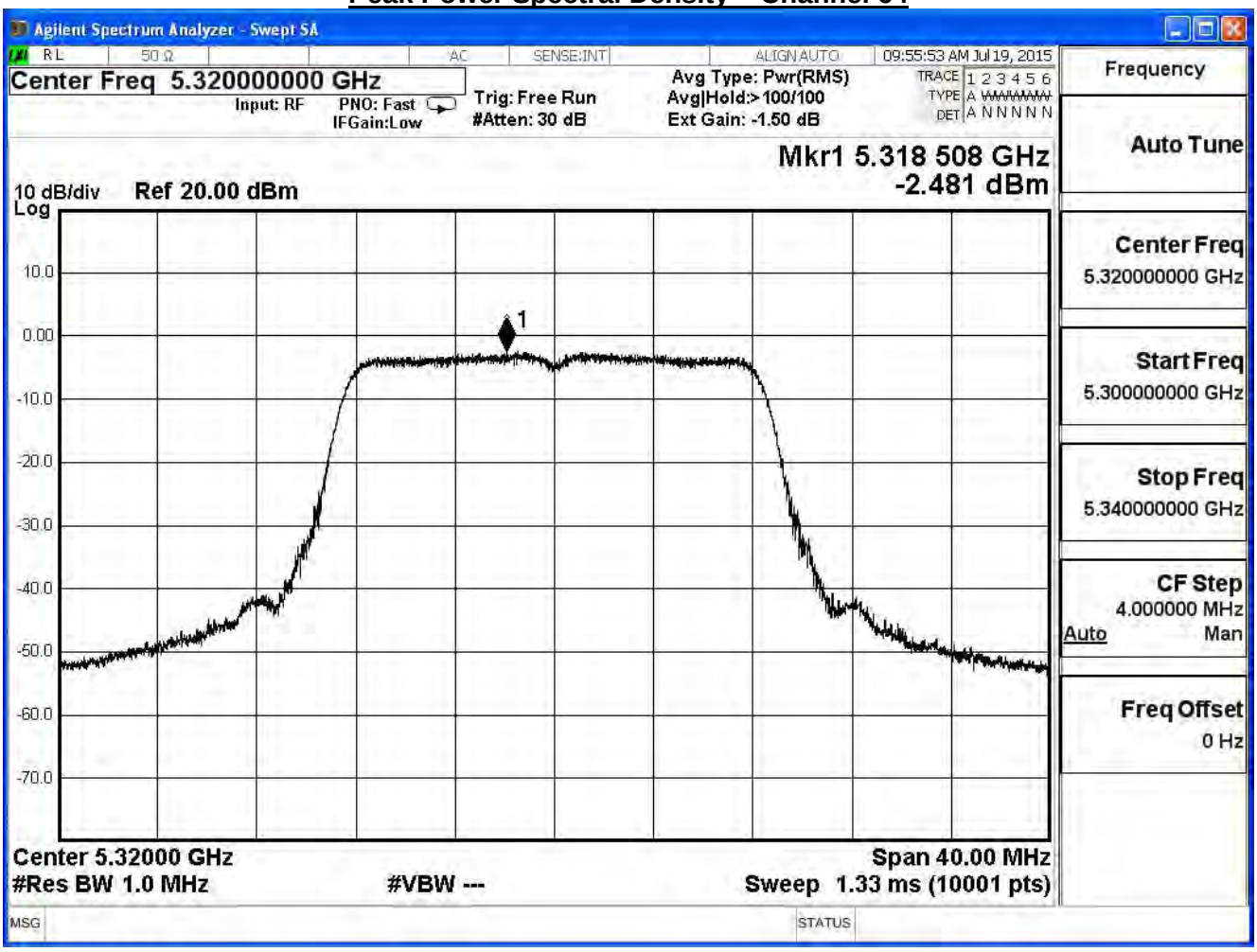
Peak Power Spectral Density – Channel 52



Peak Power Spectral Density – Channel 60



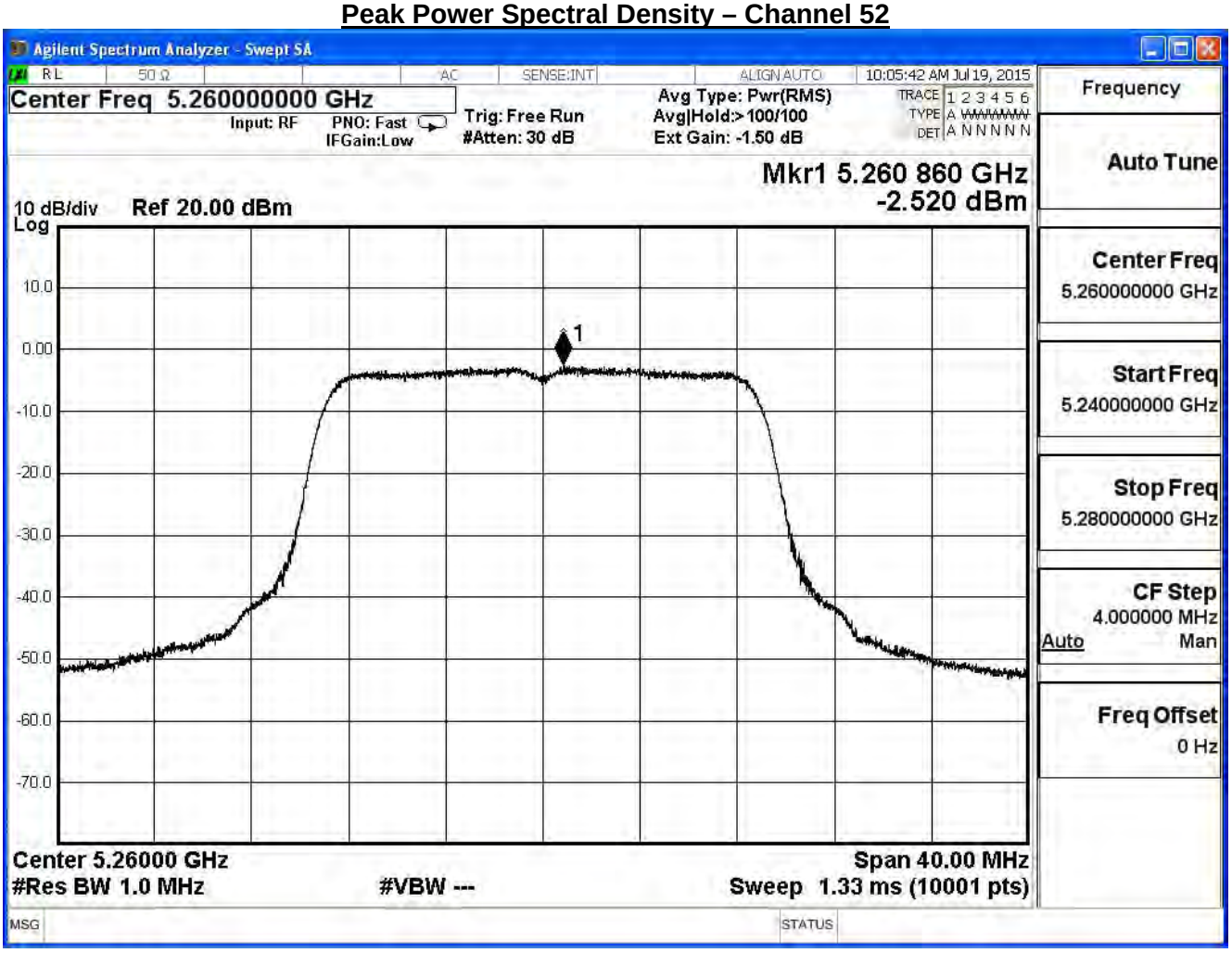
Peak Power Spectral Density – Channel 64



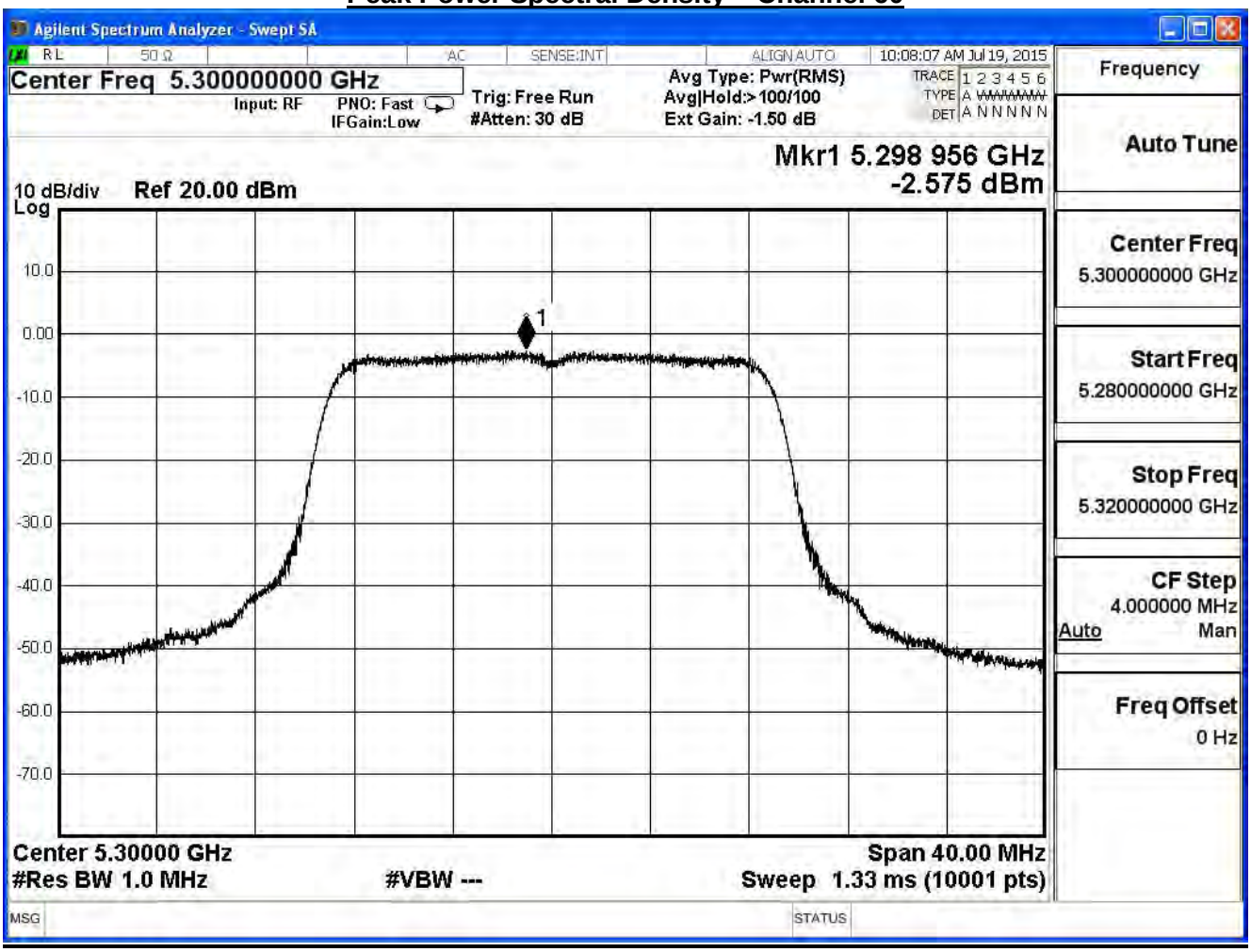
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

IEEE 802.11n_20M_ANT 0				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
52	5260	-2.520	≦11	Pass
60	5300	-2.575	≦11	Pass
64	5320	-2.487	≦11	Pass

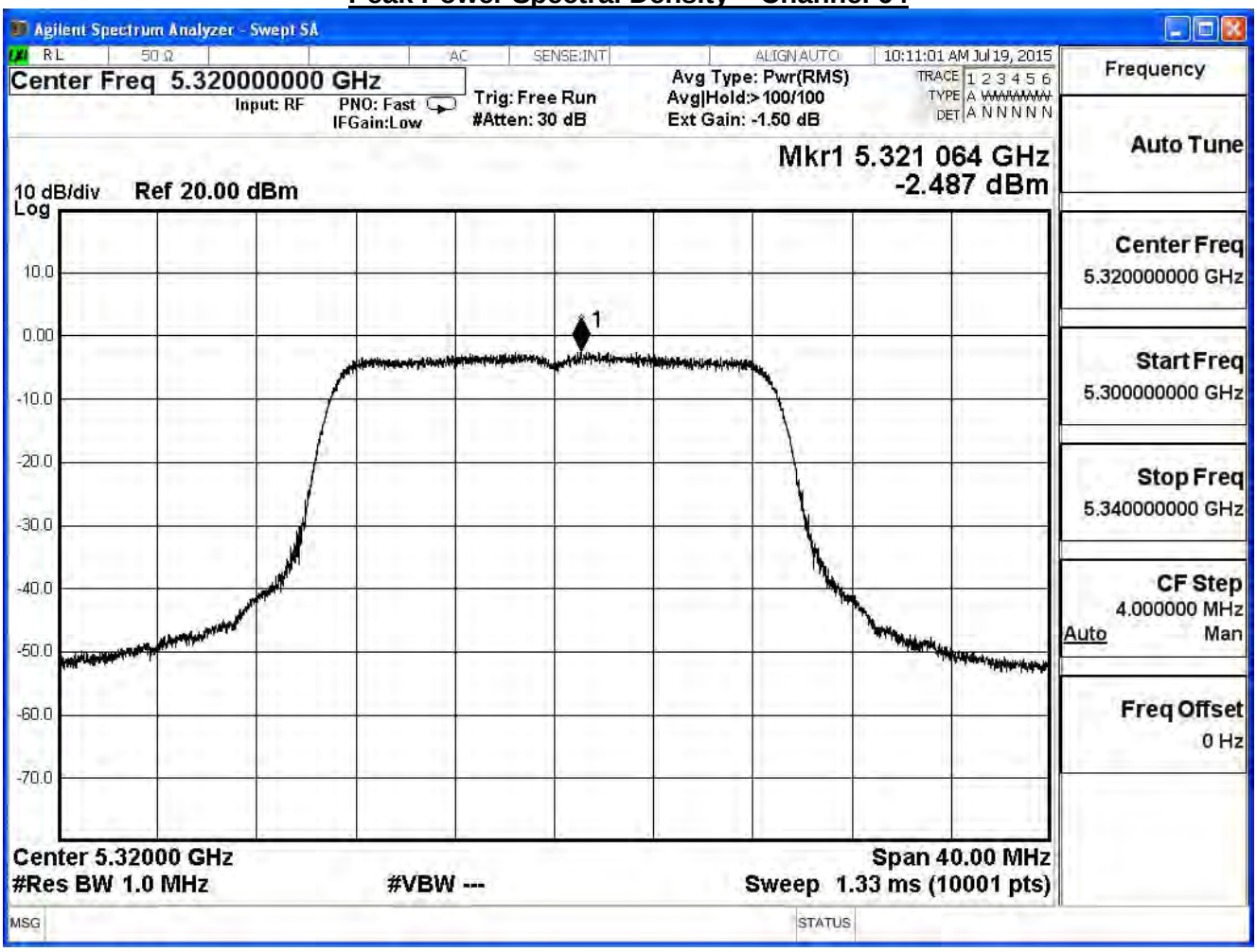
Peak Power Spectral Density – Channel 52



Peak Power Spectral Density – Channel 60



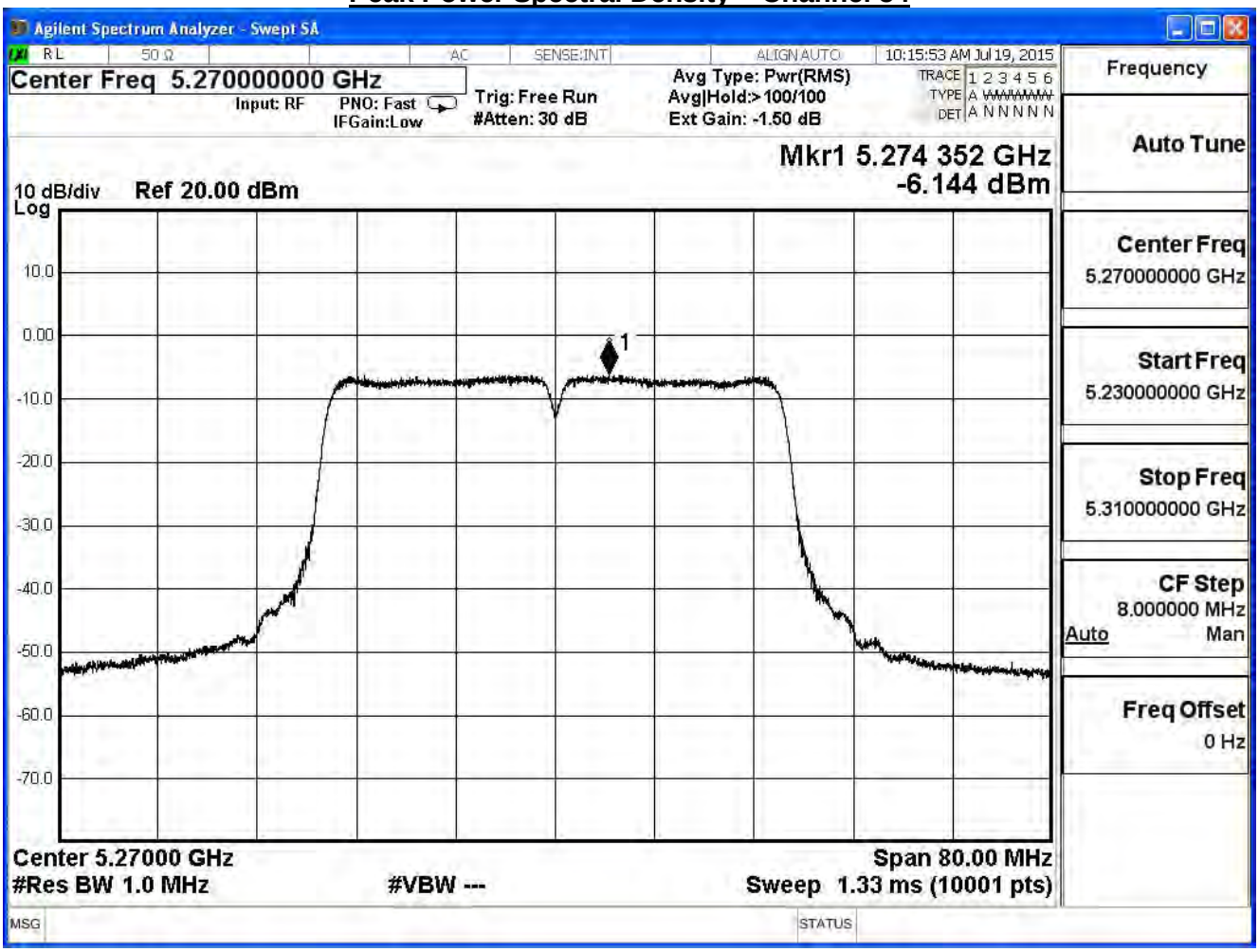
Peak Power Spectral Density – Channel 64



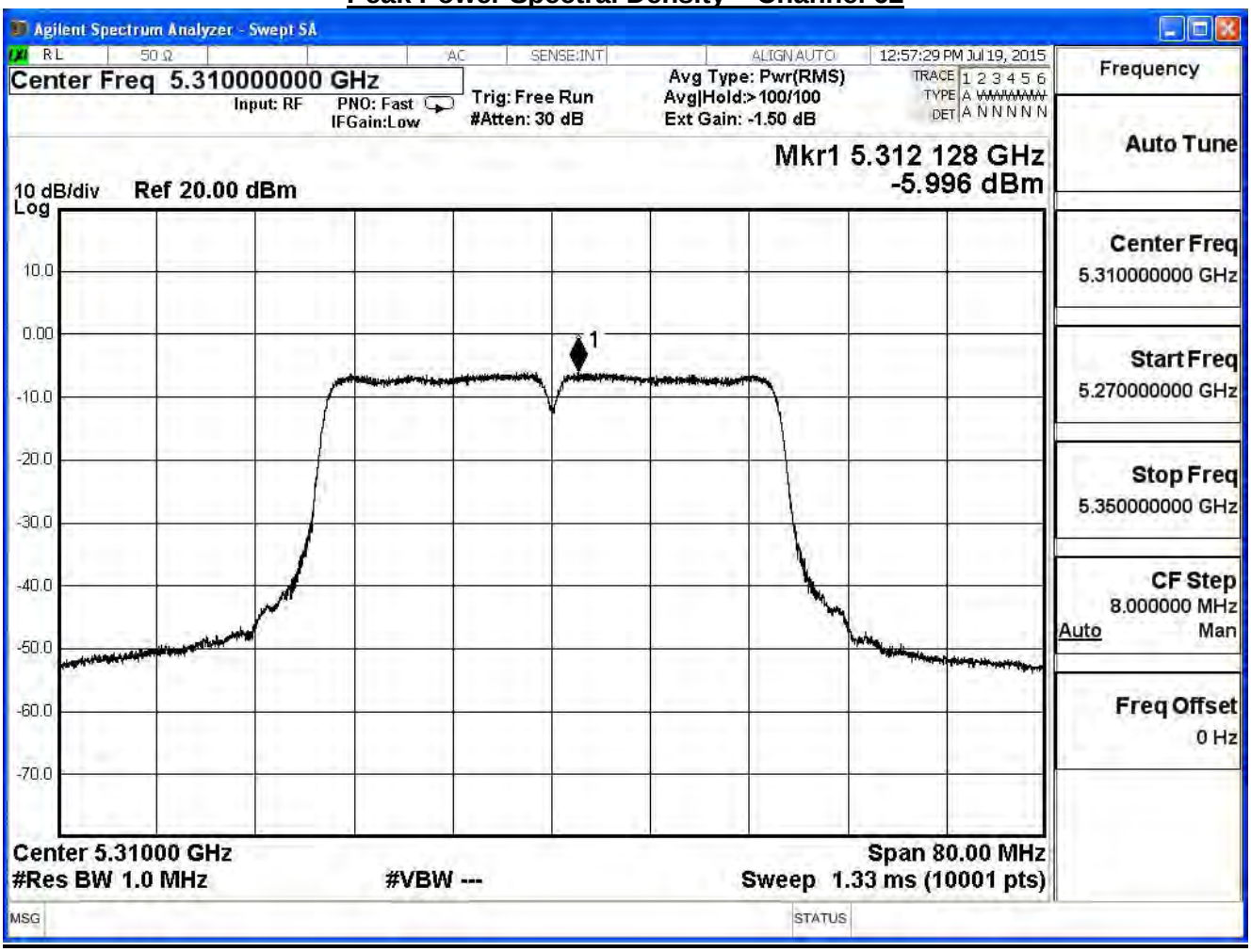
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

IEEE 802.11n_40M_ANT 0				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
54	5270	-6.144	≦11	Pass
62	5310	-5.996	≦11	Pass

Peak Power Spectral Density – Channel 54



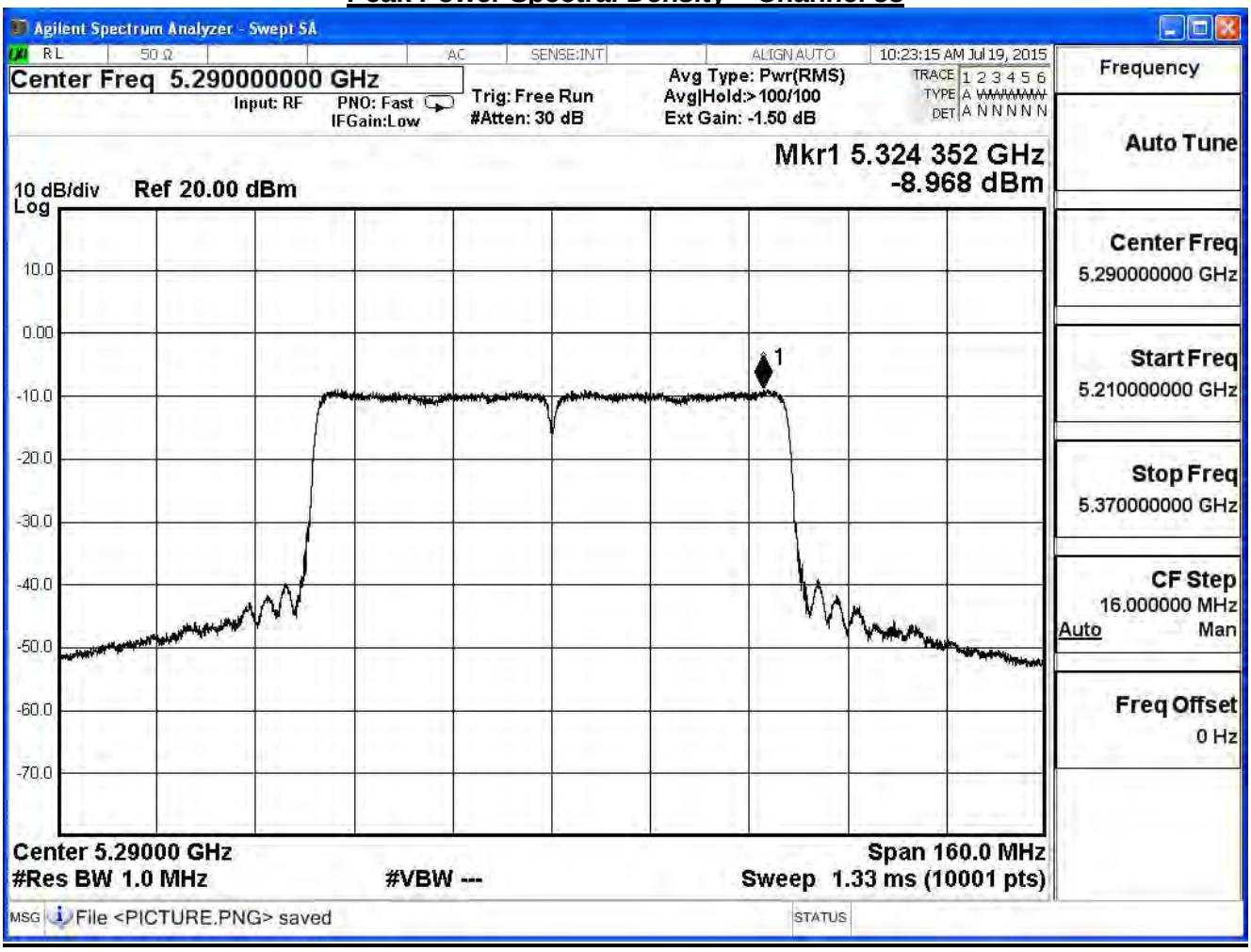
Peak Power Spectral Density – Channel 62



Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

IEEE 802.11ac_80M_ANT 0				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
58	5290	-8.968	≦11	Pass

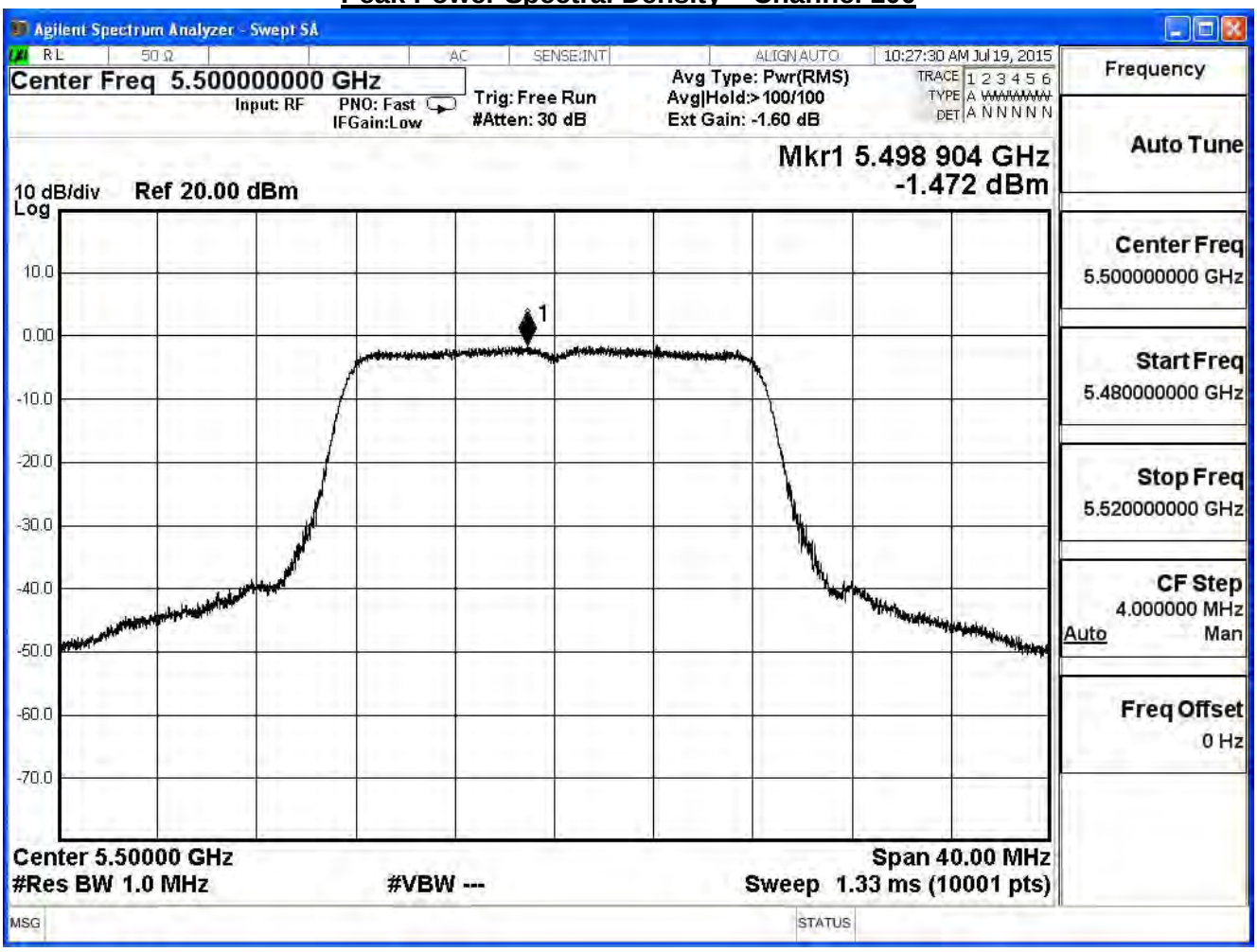
Peak Power Spectral Density – Channel 58



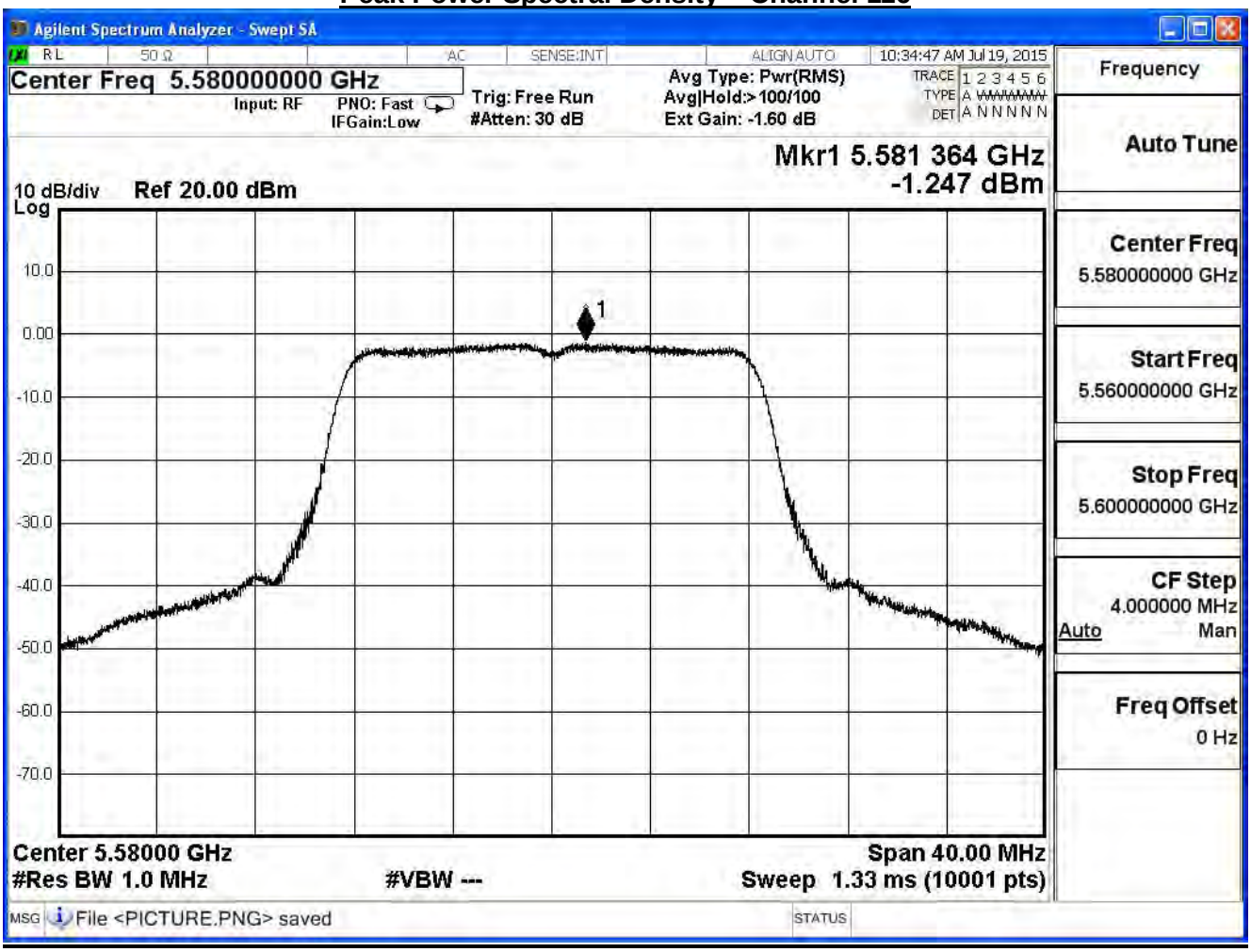
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

IEEE 802.11a_ANT 0				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
100	5500	-1.472	≦11	Pass
116	5580	-1.247	≦11	Pass
140	5700	-0.276	≦11	Pass

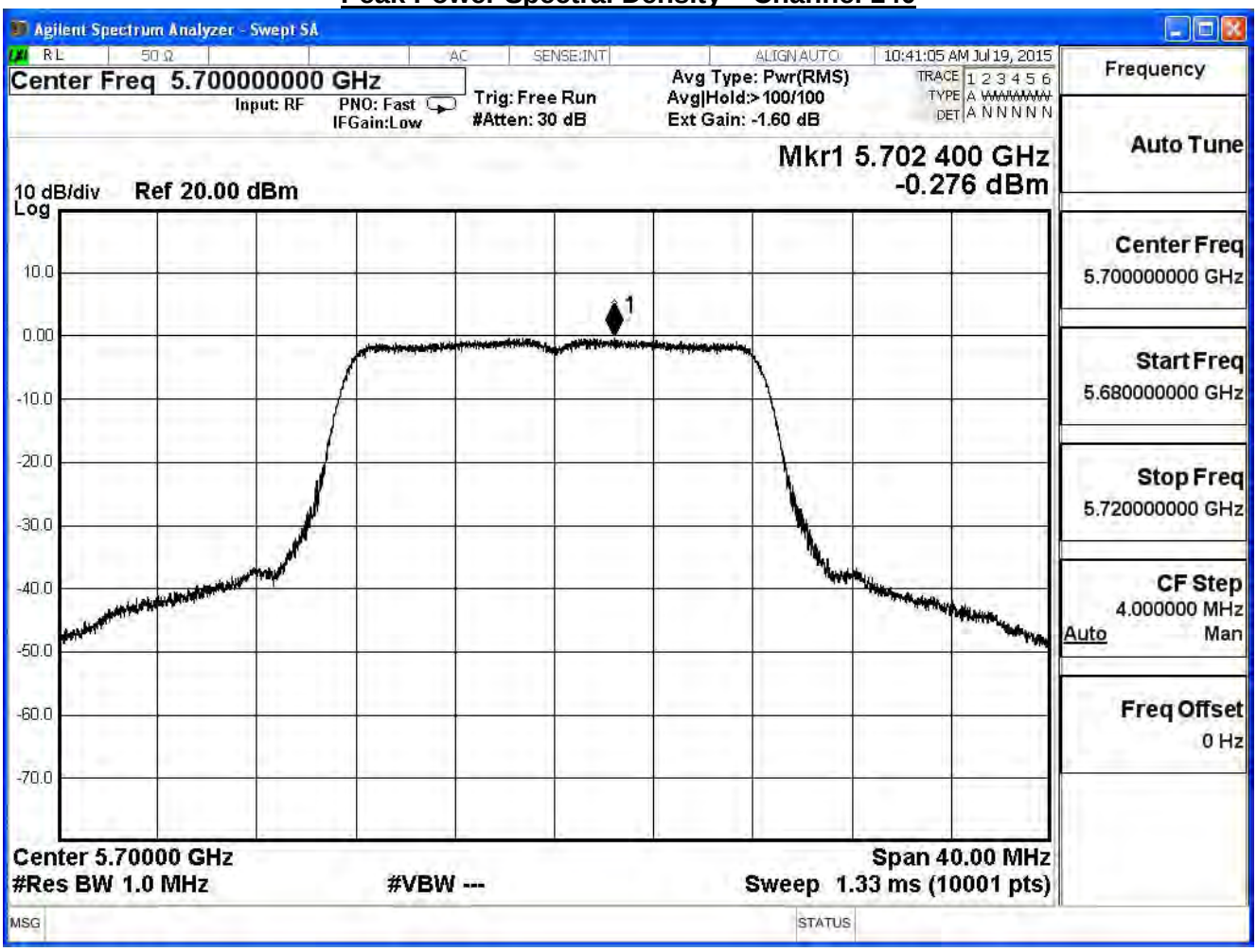
Peak Power Spectral Density – Channel 100



Peak Power Spectral Density – Channel 116



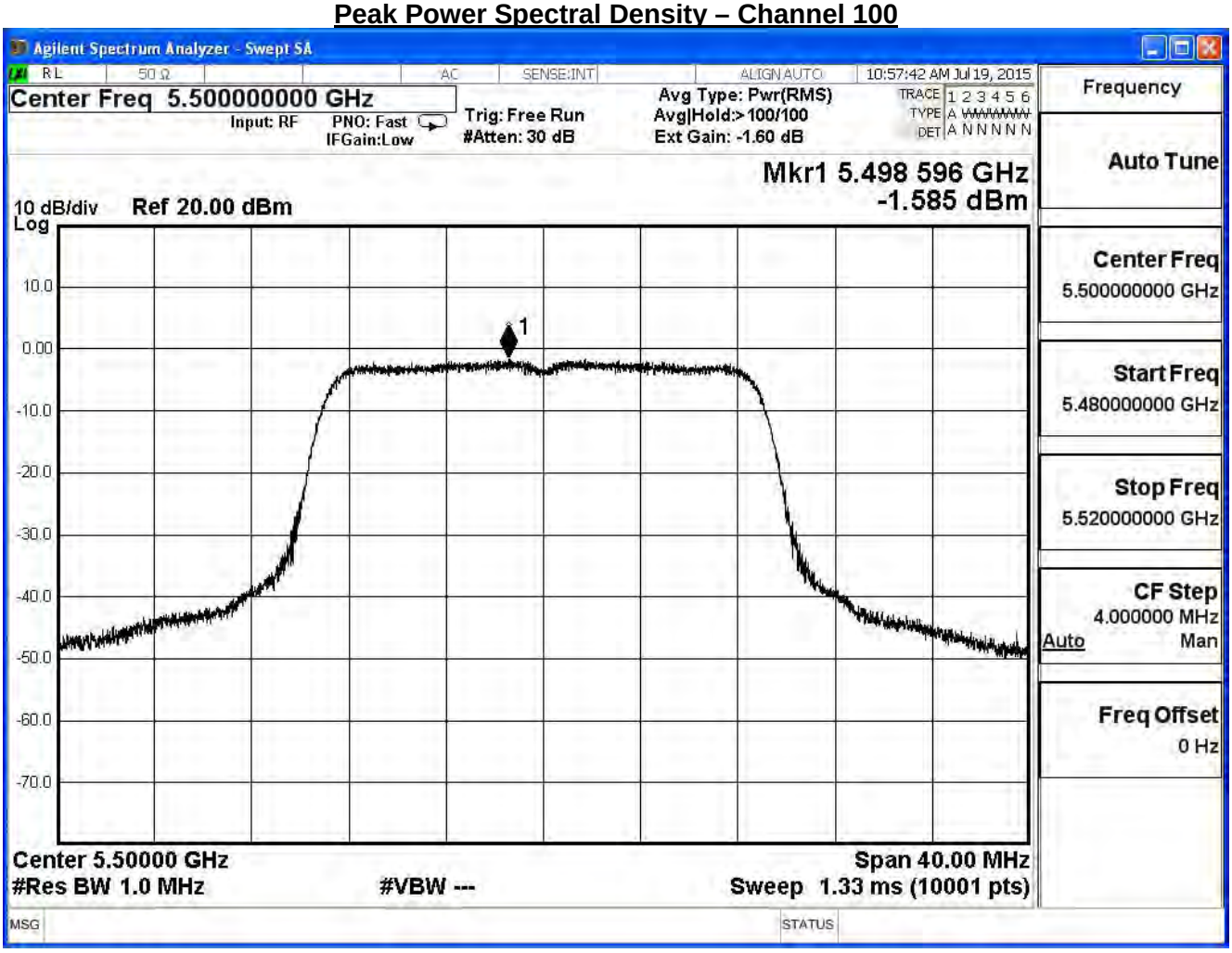
Peak Power Spectral Density – Channel 140



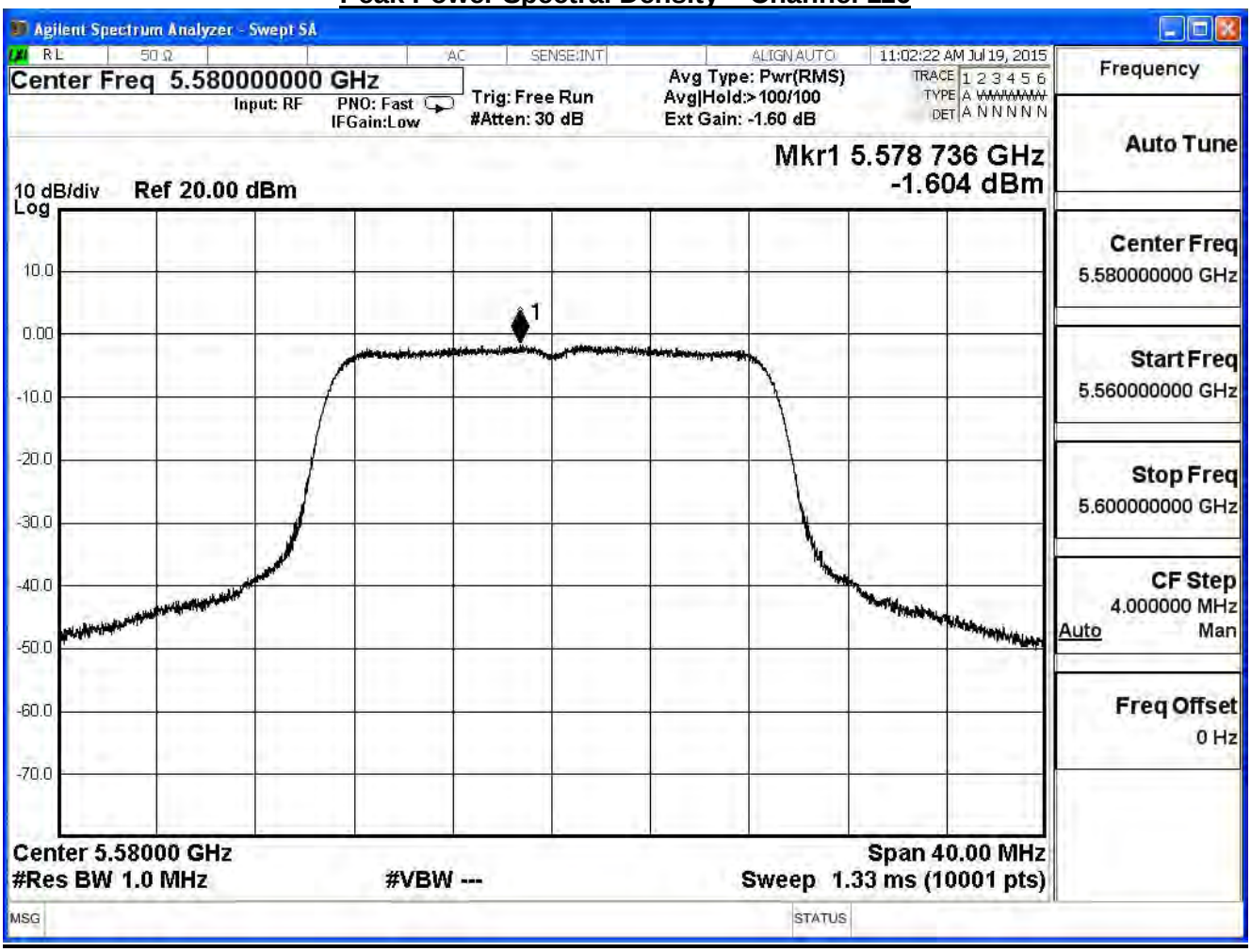
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

IEEE 802.11n_20M_ANT 0				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
100	5500	-1.585	≦11	Pass
116	5580	-1.604	≦11	Pass
140	5700	-1.016	≦11	Pass

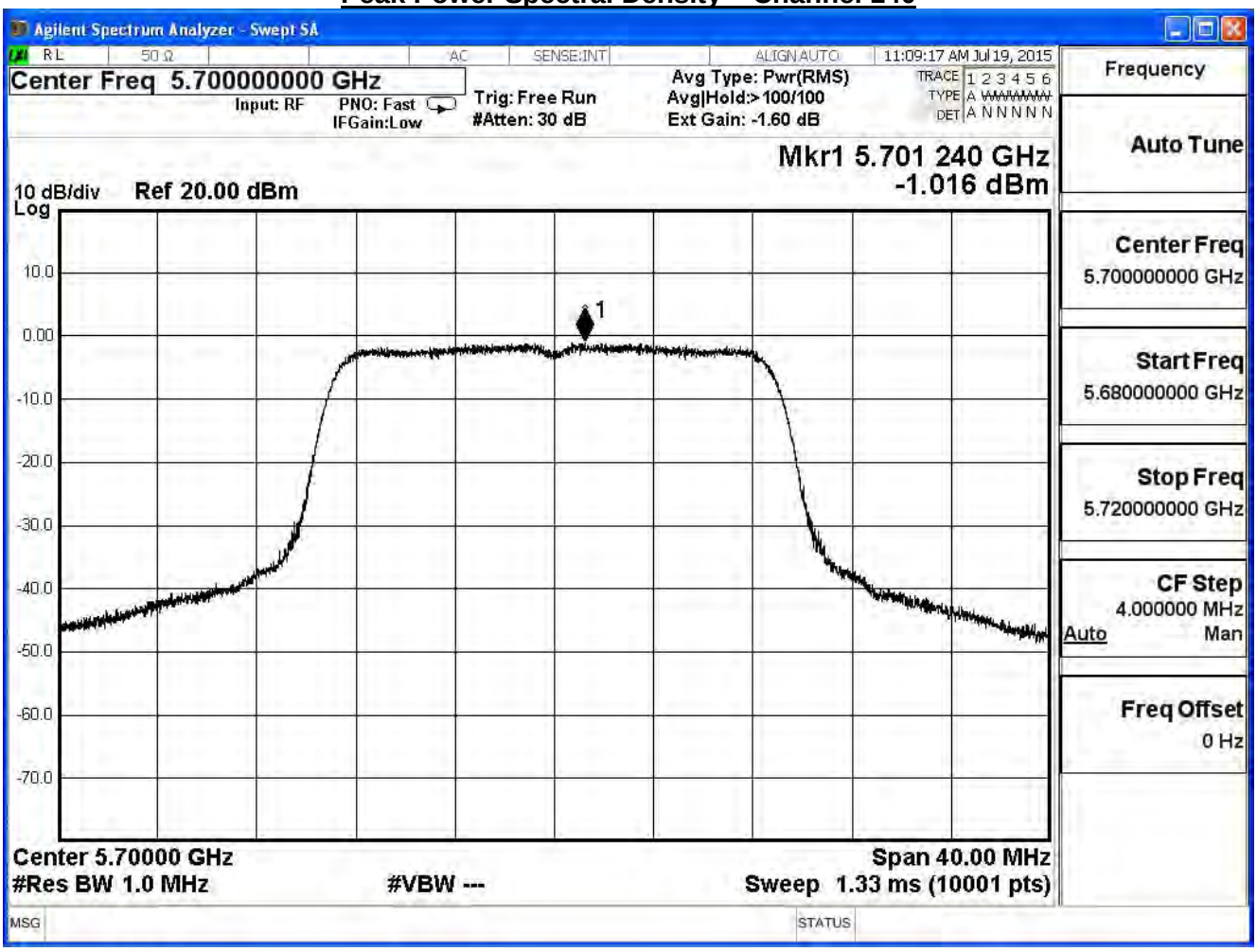
Peak Power Spectral Density – Channel 100



Peak Power Spectral Density – Channel 116



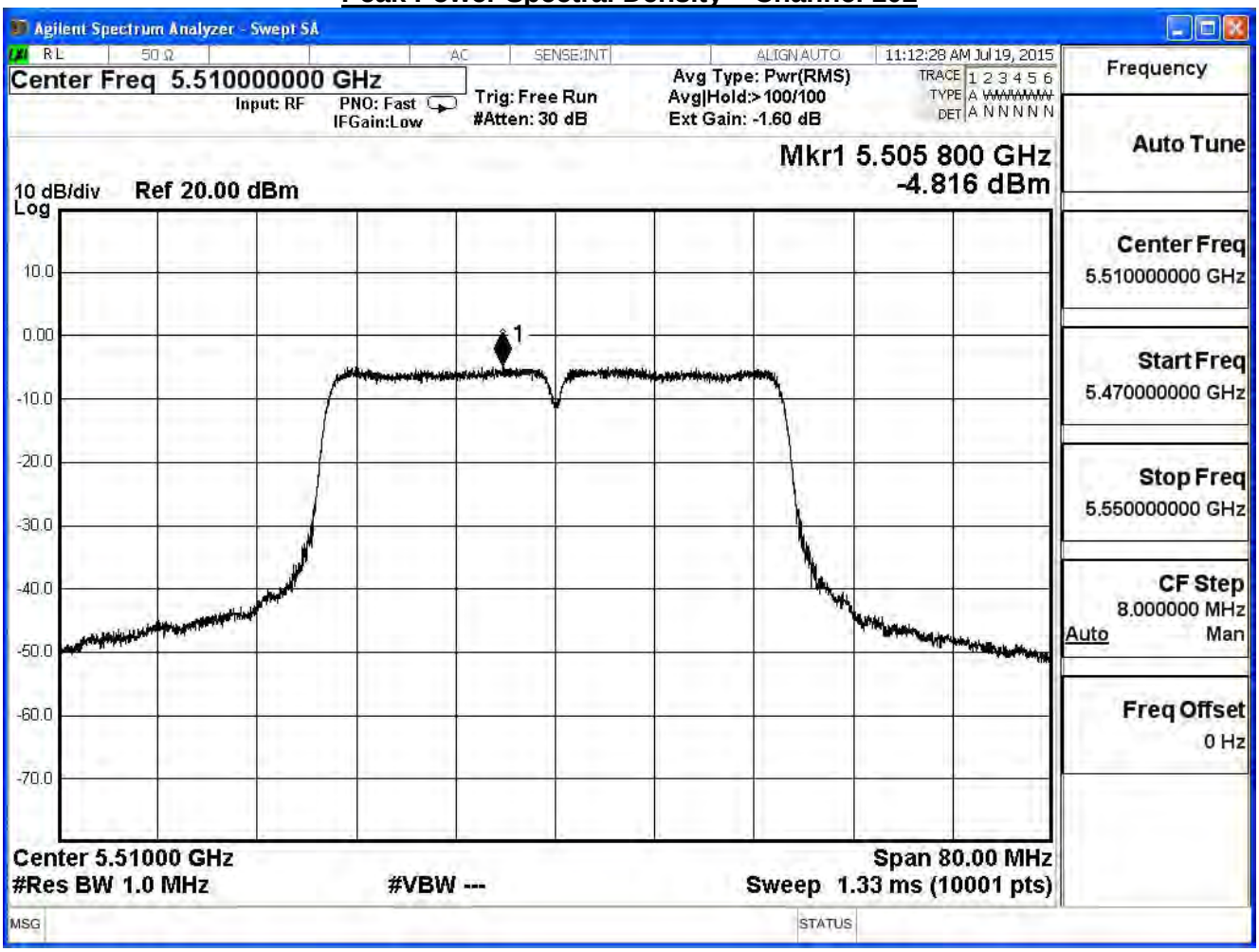
Peak Power Spectral Density – Channel 140



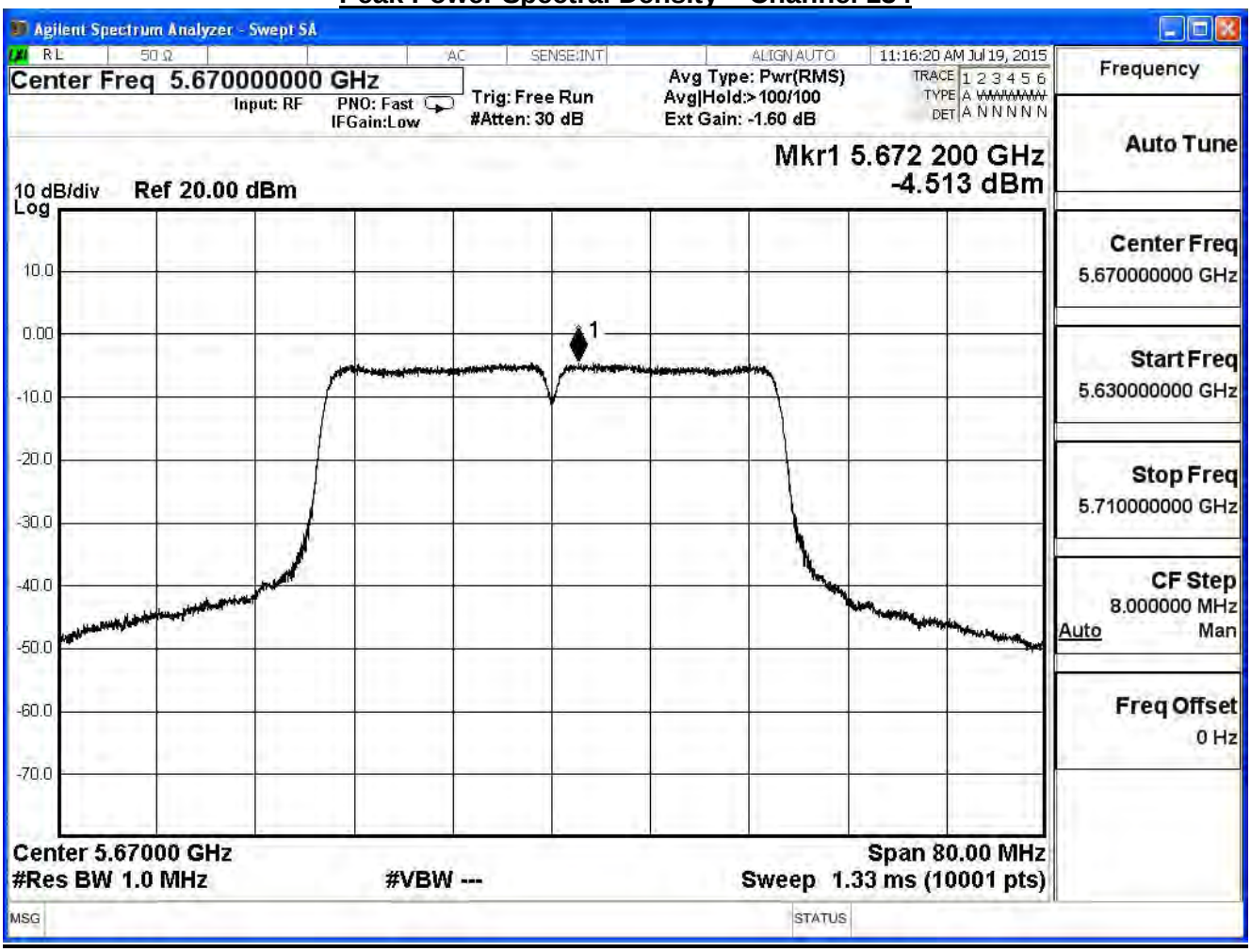
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

IEEE 802.11n_40M_ANT 0				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
102	5510	-4.816	≦11	Pass
134	5670	-4.513	≦11	Pass

Peak Power Spectral Density – Channel 102



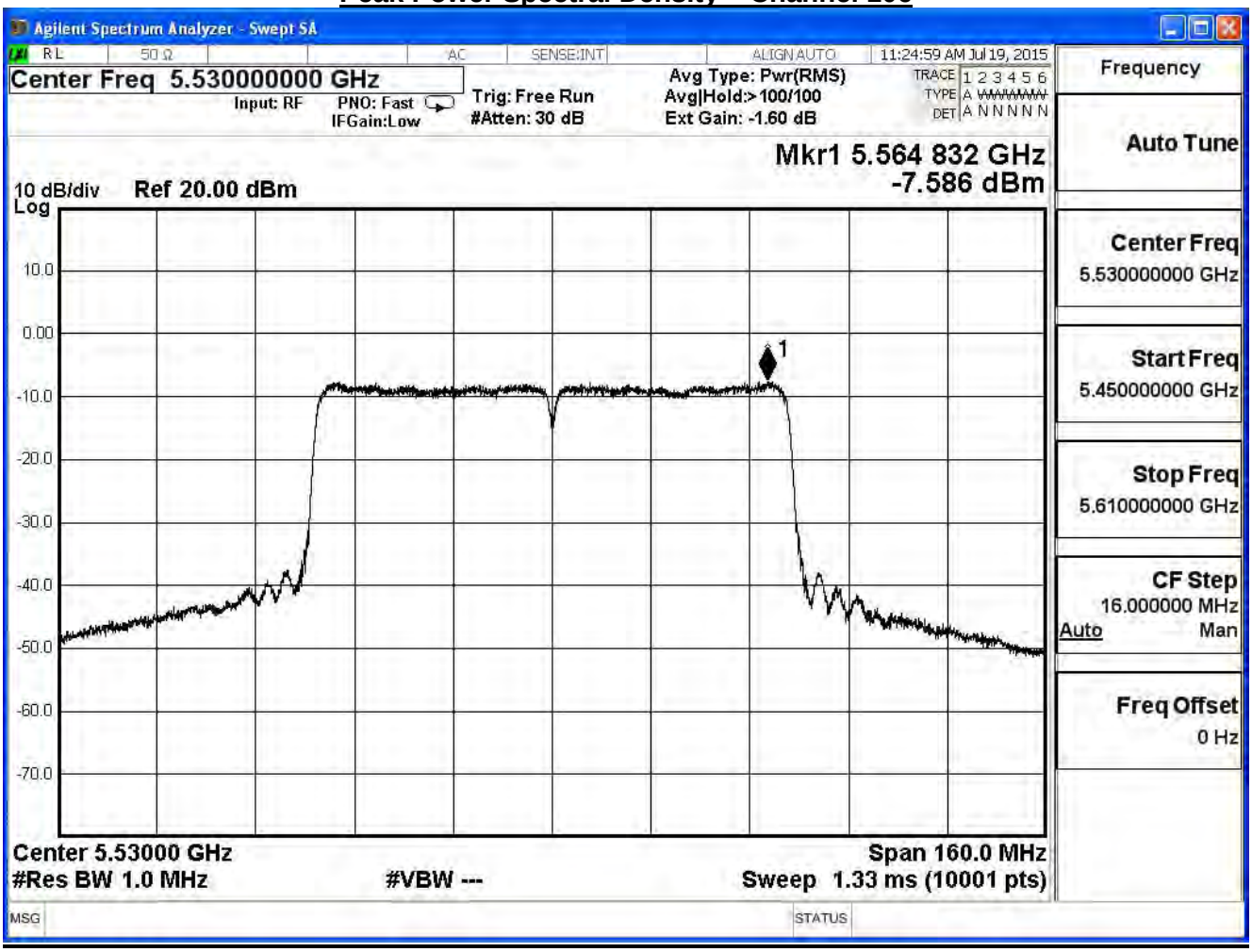
Peak Power Spectral Density – Channel 134



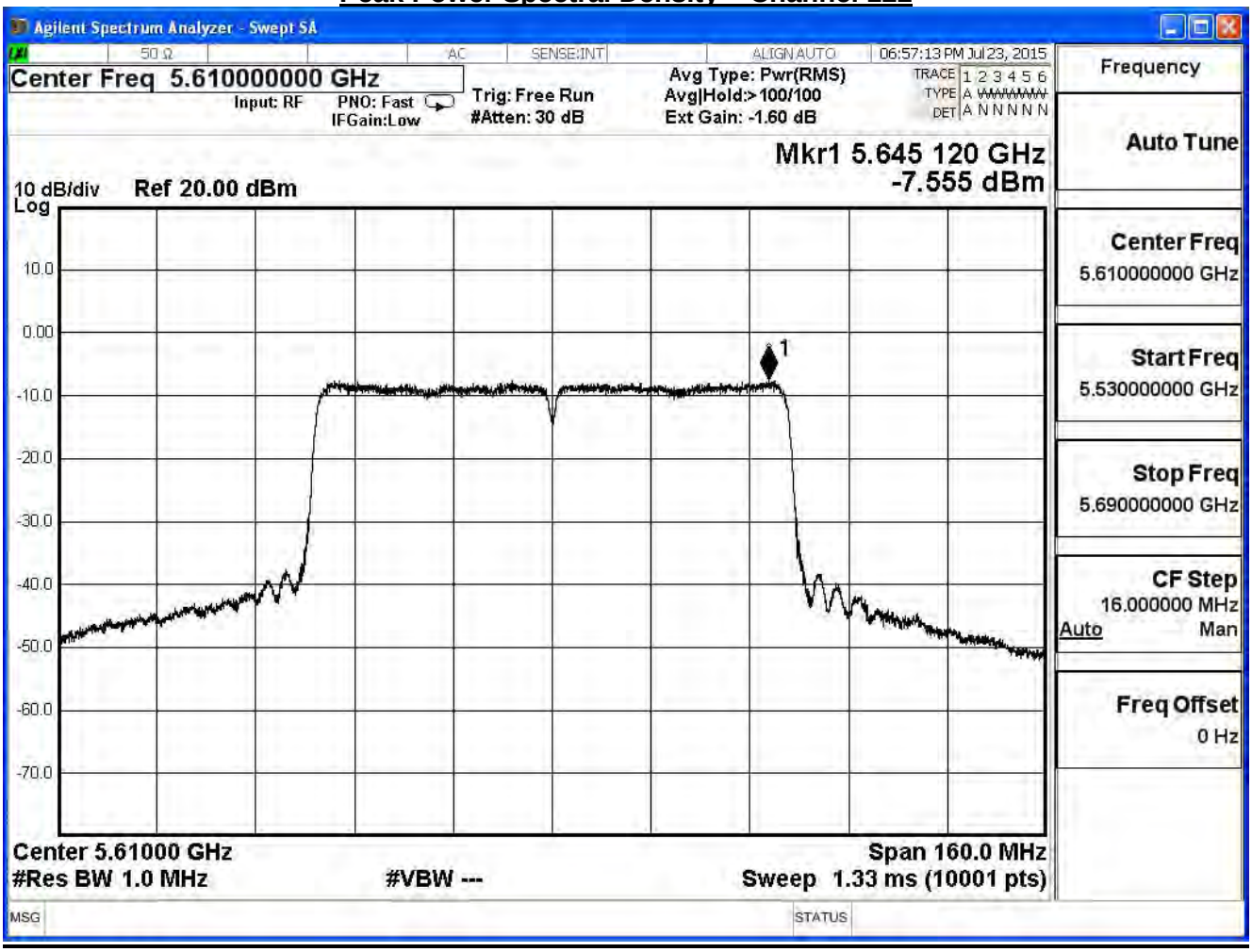
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/23	Test Site	SR7

IEEE 802.11ac_80M_ANT 0				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
106	5530	-7.586	≦11	Pass
122	5610	-7.555	≦11	Pass

Peak Power Spectral Density – Channel 106



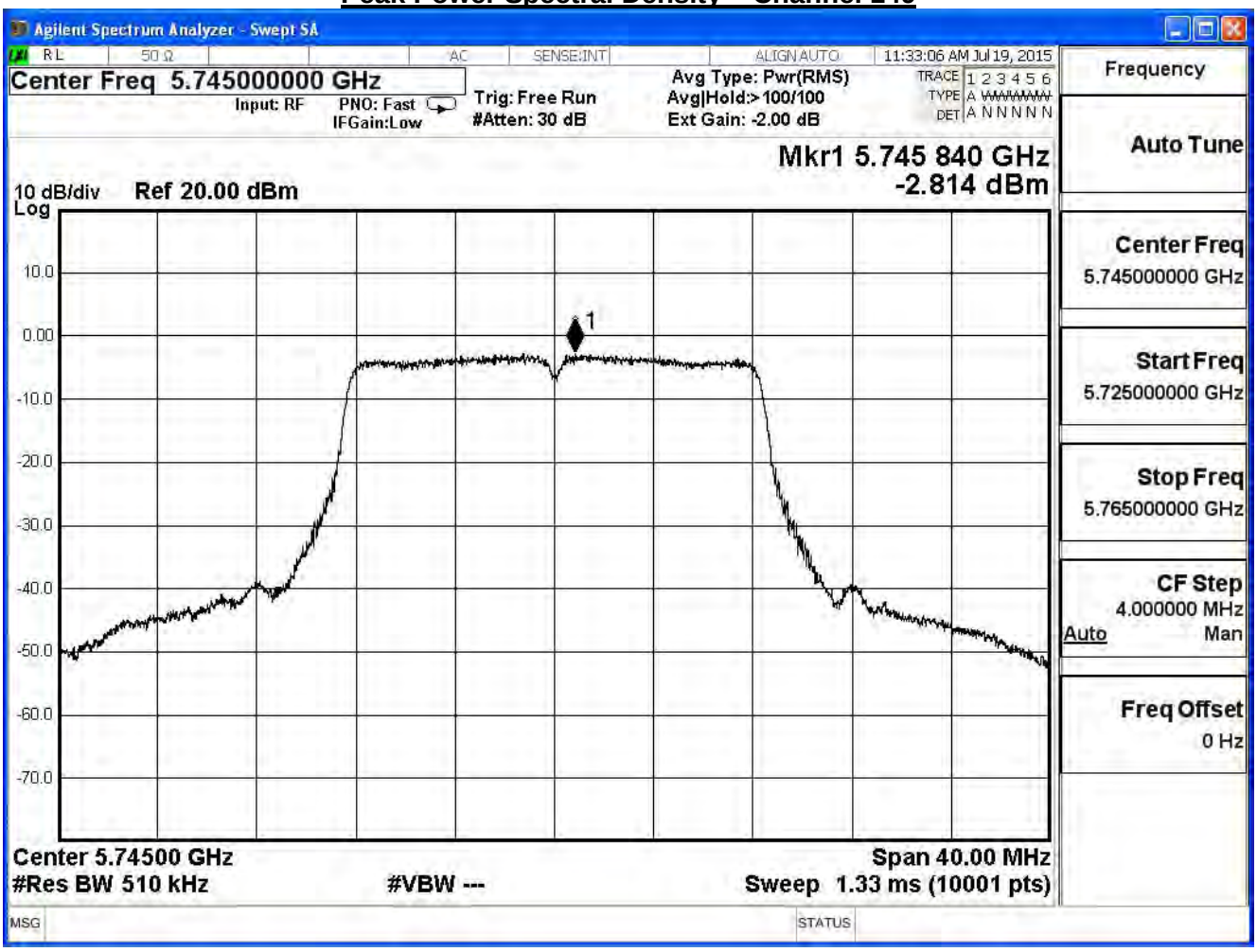
Peak Power Spectral Density – Channel 122



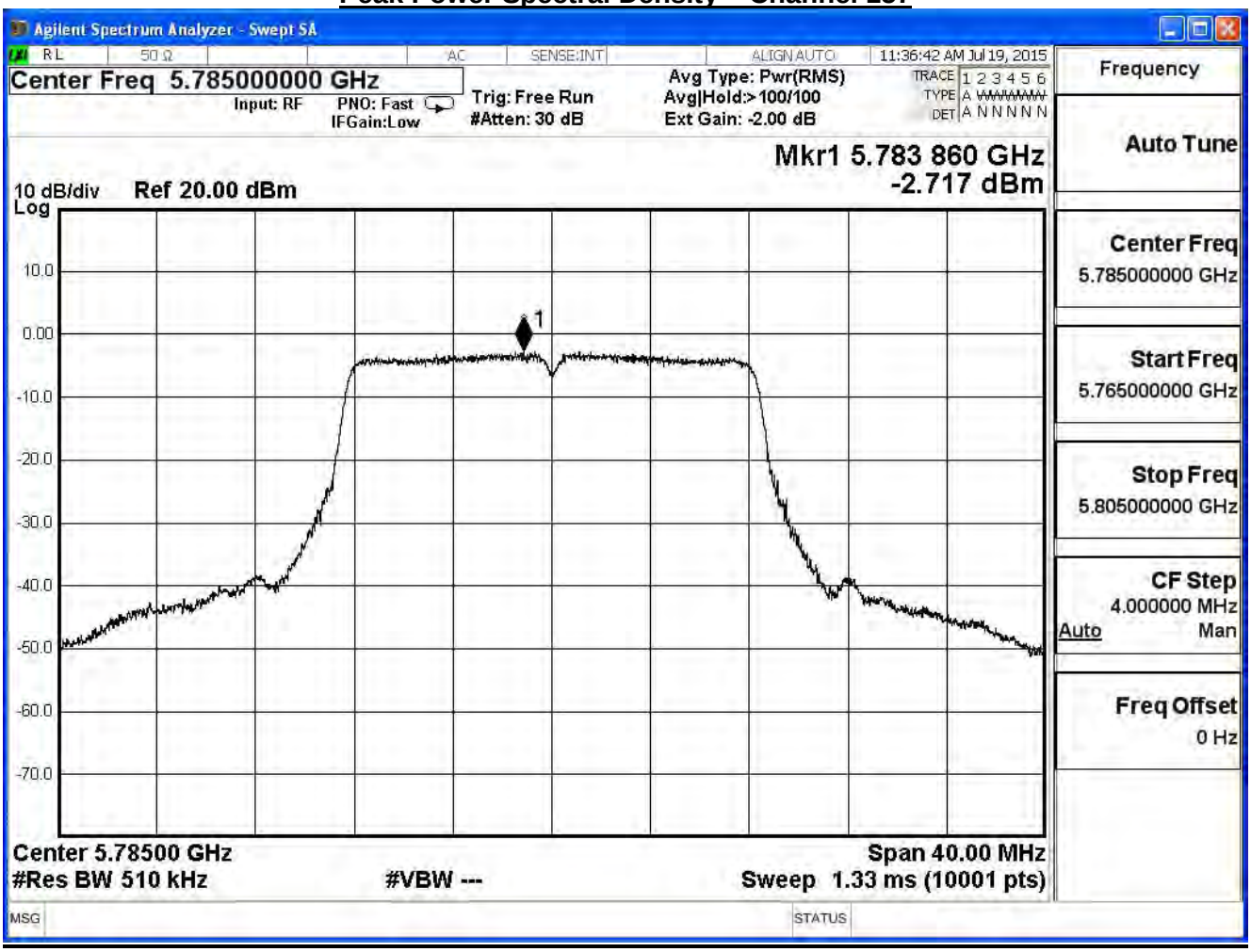
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

IEEE 802.11a_ANT 0				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
149	5745	-2.814	≦30	Pass
157	5785	-2.717	≦30	Pass
165	5825	-2.702	≦30	Pass

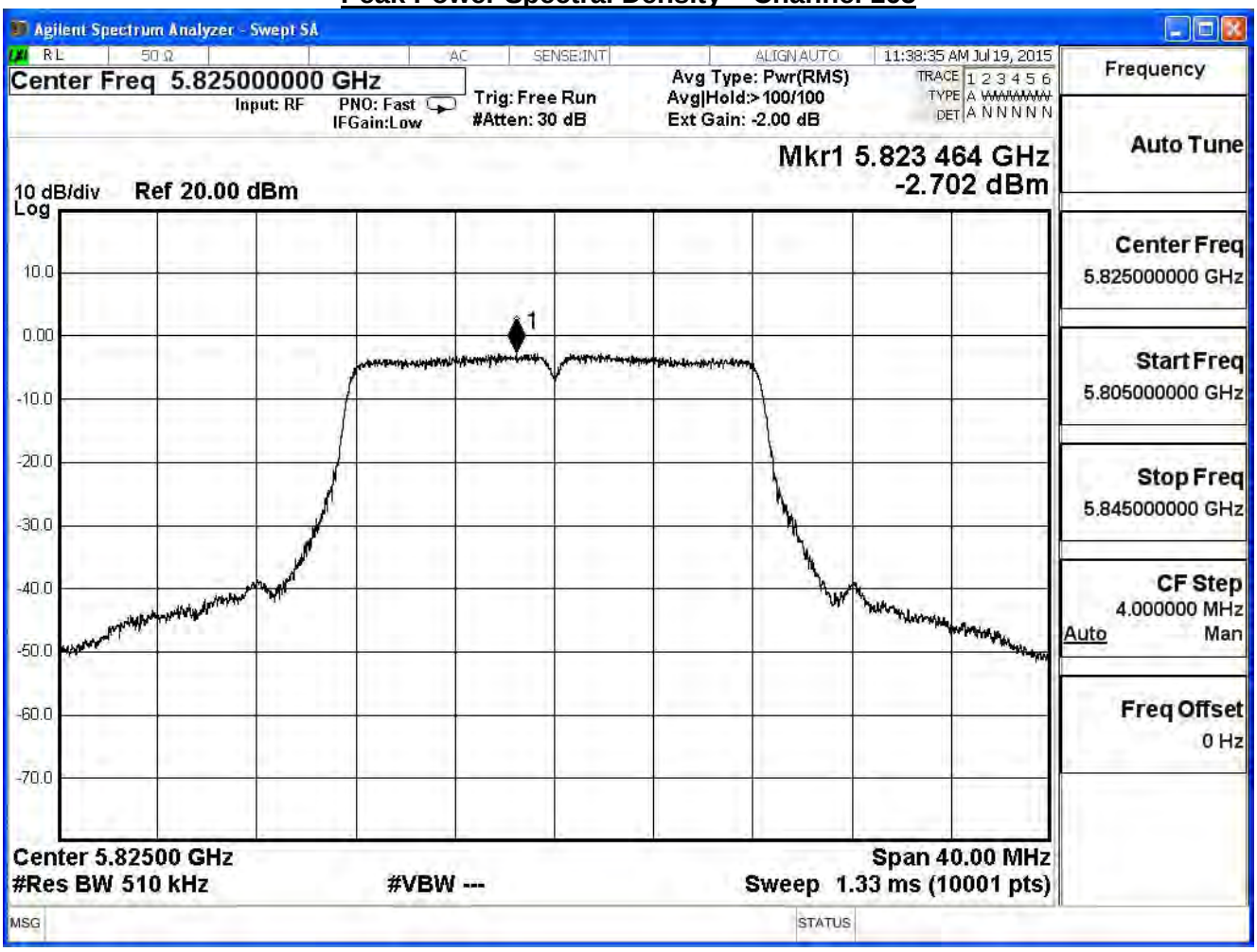
Peak Power Spectral Density – Channel 149



Peak Power Spectral Density – Channel 157



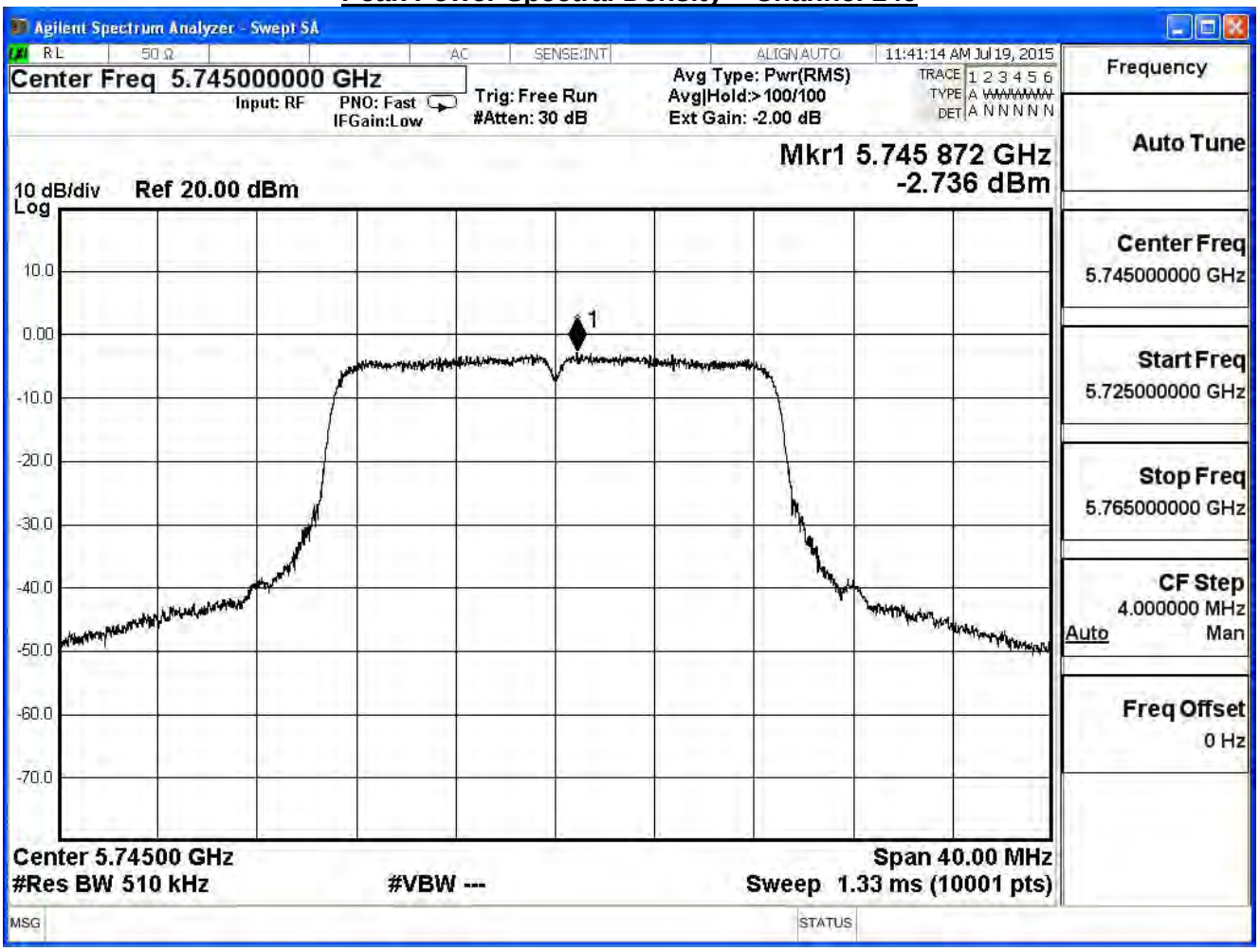
Peak Power Spectral Density – Channel 165



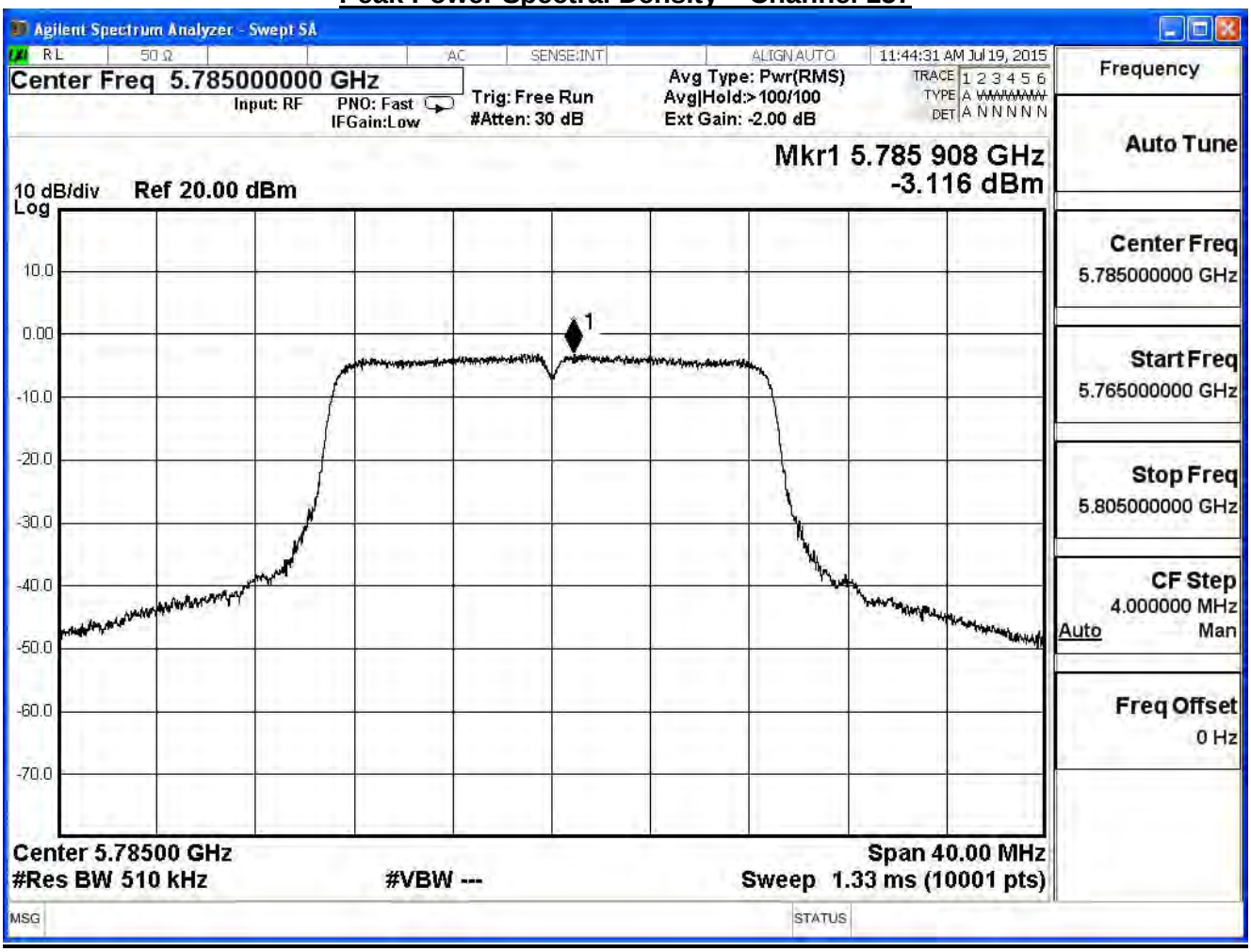
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

IEEE 802.11n_20M_ANT 0				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
149	5745	-2.736	≦30	Pass
157	5785	-3.116	≦30	Pass
165	5825	-2.999	≦30	Pass

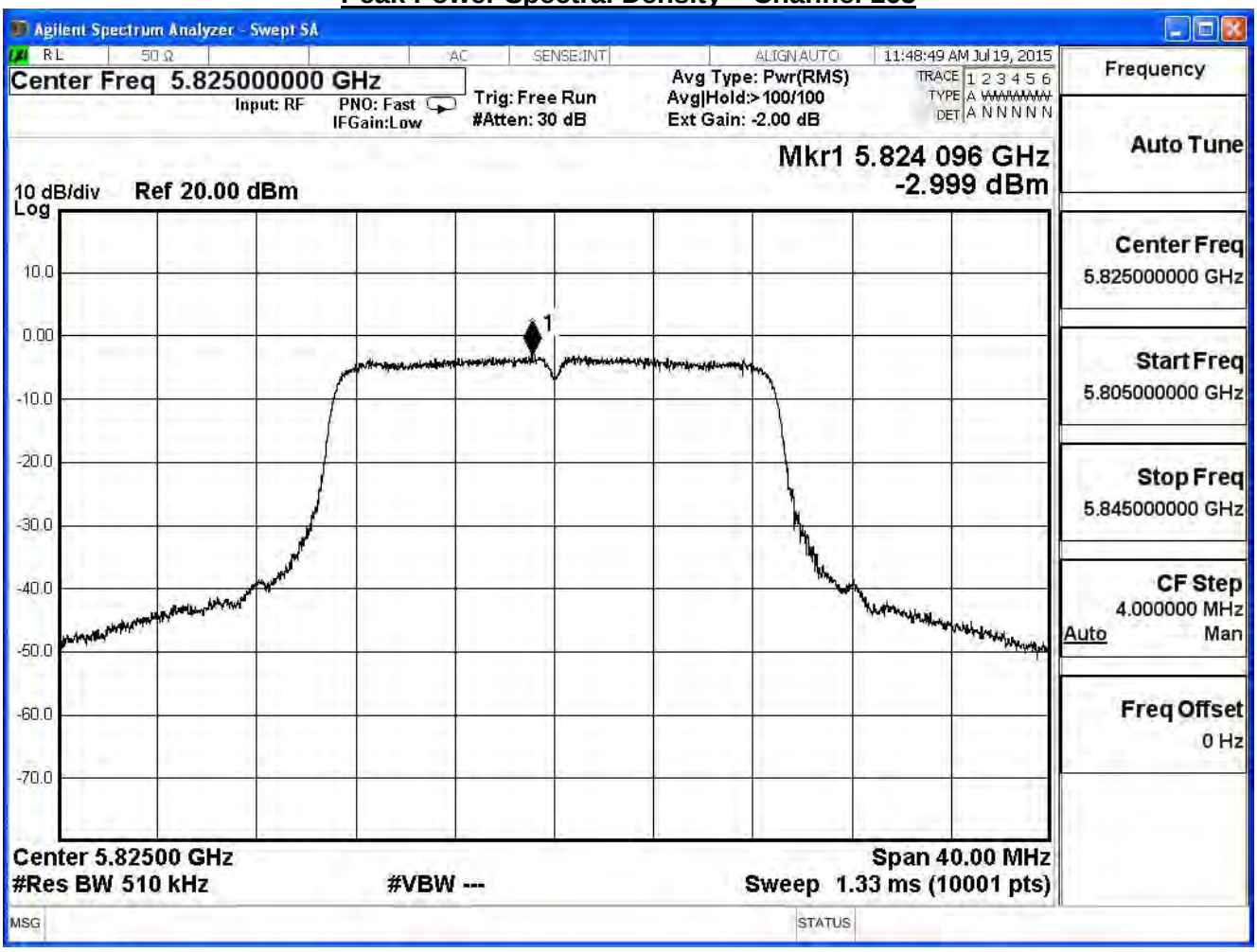
Peak Power Spectral Density – Channel 149



Peak Power Spectral Density – Channel 157



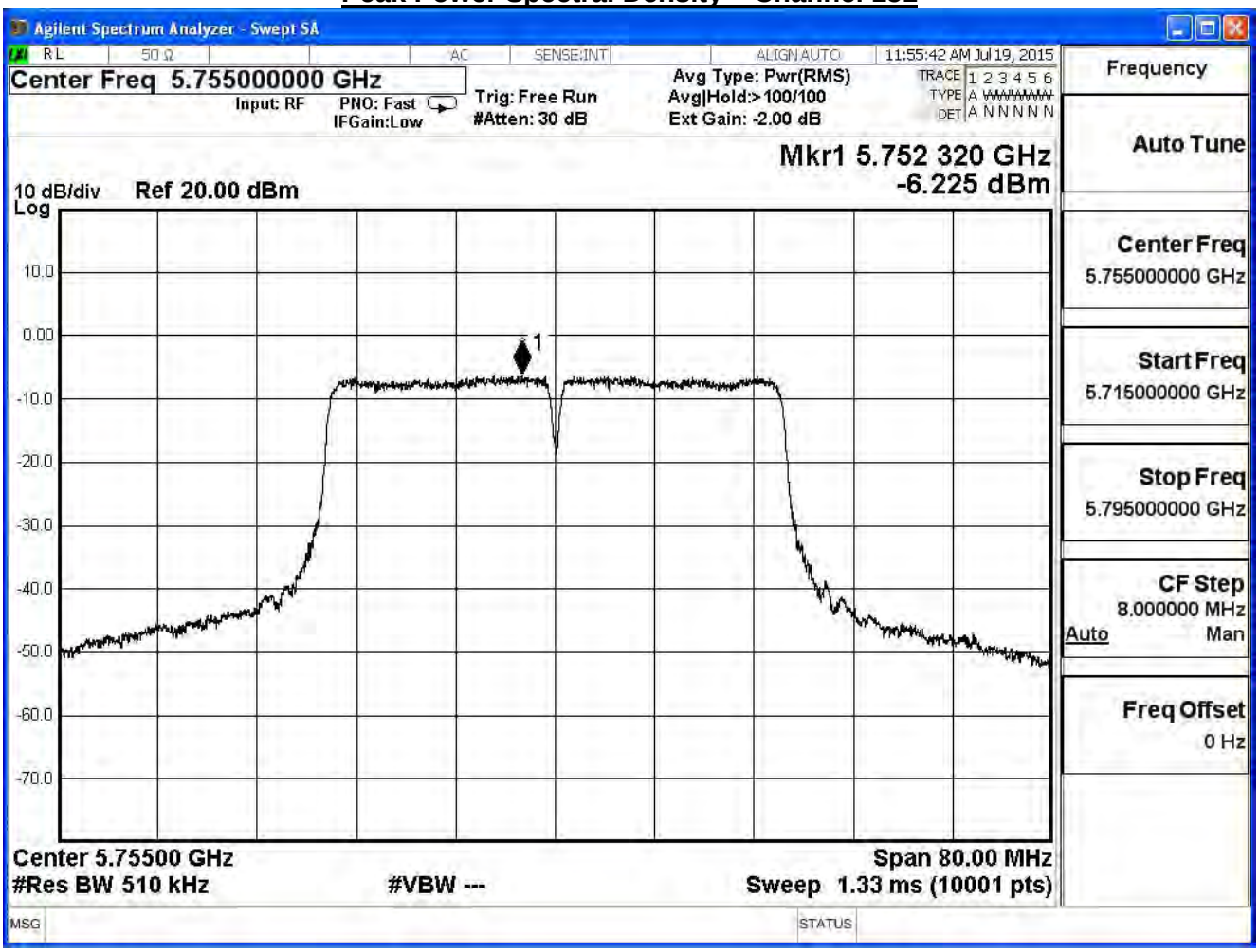
Peak Power Spectral Density – Channel 165



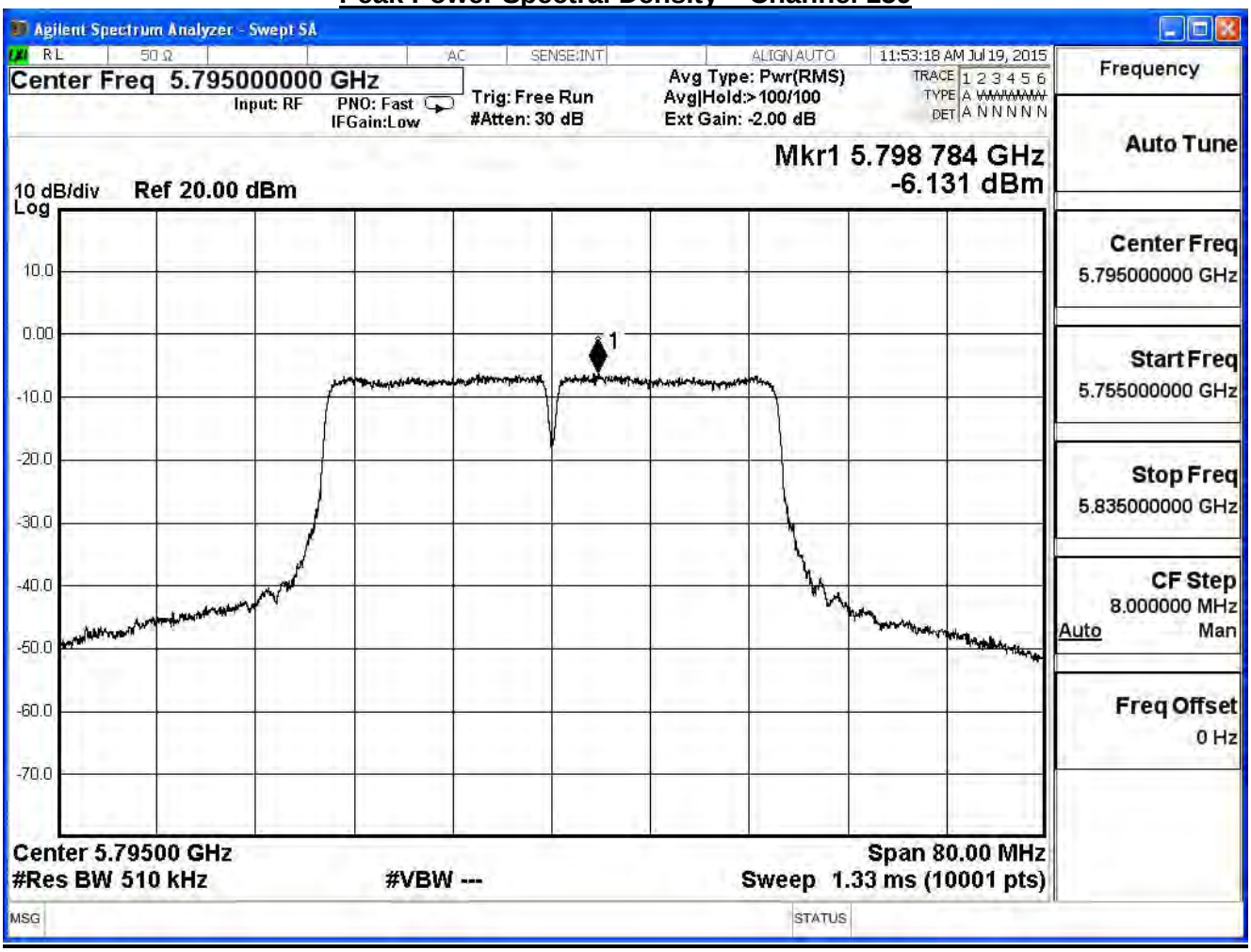
Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

IEEE 802.11n_40M_ANT 0				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
151	5755	-6.255	≦30	Pass
159	5795	-6.131	≦30	Pass

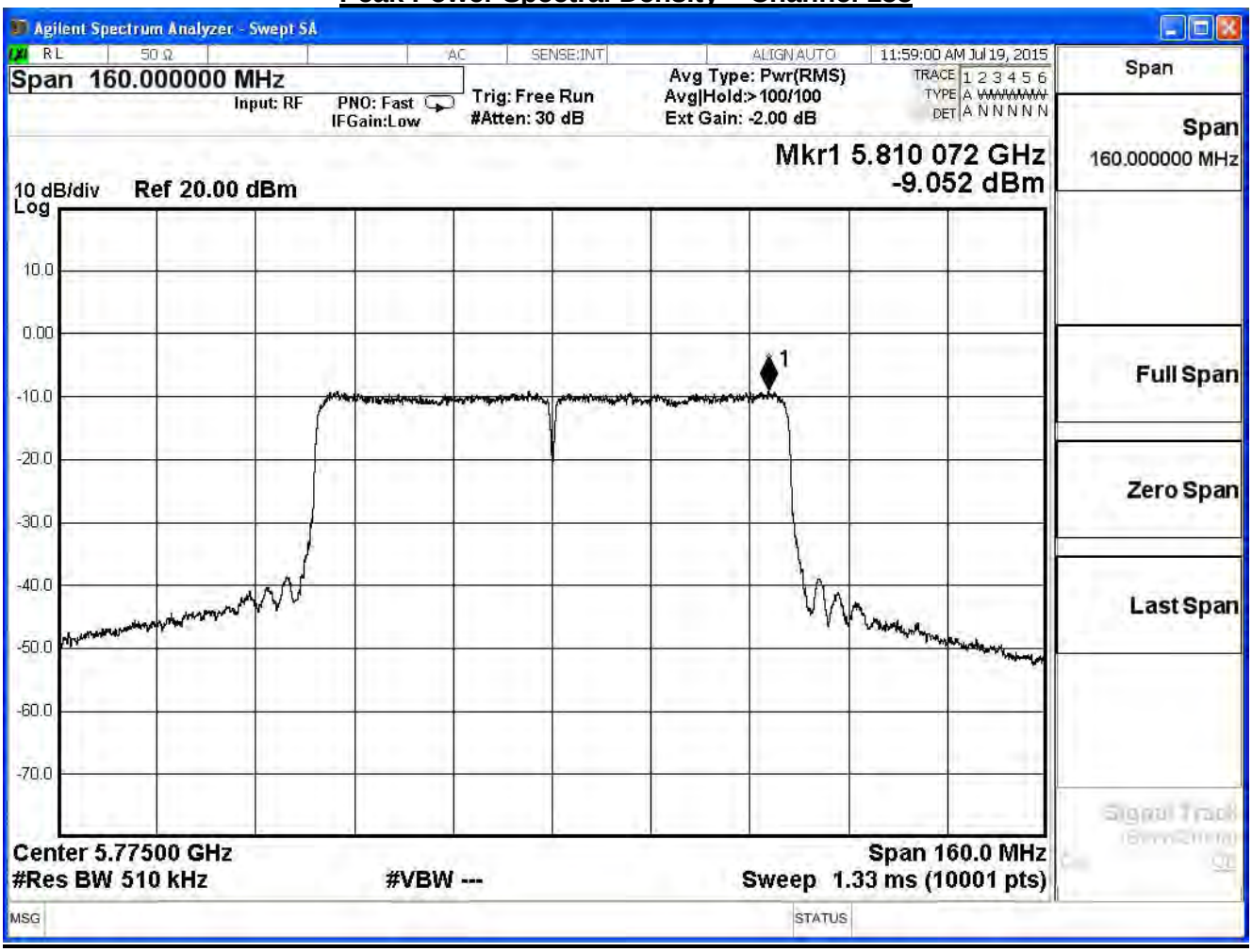
Peak Power Spectral Density – Channel 151



Peak Power Spectral Density – Channel 159



Product	Full HD Ultra-Wide View Wi-Fi Camera		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit		
Date of Test	2015/07/19	Test Site	SR7

IEEE 802.11ac_80M_ANT 0				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
155	5775	-9.052	≦30	Pass

Peak Power Spectral Density – Channel 155