

TEST RESULTS			
Mode of Operation	No. of Channels Measured	Limit (No. of Channels)	Test Results
#	#	#	
Normal Mode	28	≥25	PASS
Walkie-Talkie Mode	27	≥25	PASS

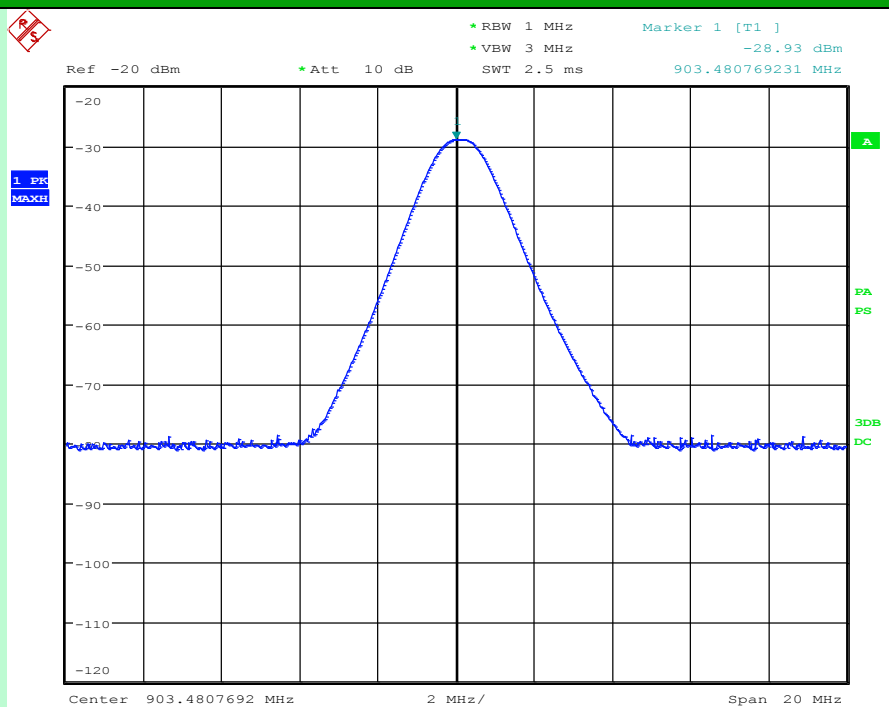
TEST SETUP PHOTOGRAPHS
Refer Annexure-1

2.3 EFFECTIVE ISOTROPIC RADIATED POWER

EUT Nomenclature	Wireless Display Driver	Test Report No.	EMC0181-1
Model No.	W-DIS-D	Serial No.	MEL-122
Test Start Date	31-Jan-2017	Temperature (°C)	24.5±2
Test End Date	01-Feb-2017	Humidity RH (%)	51±2
Tested By	Magesh. S	Pressure (mbar)	NA
Input Voltage / Freq	24Vdc		
Operating Mode	Refer Page 5 Operating Modes Table		
Test configuration	Refer Page 5 Test Configuration Table		
Deviation from Std	NA		
Comment	Nil		
TEST FREQUENCY RANGE			
Start Frequency	902MHz	Stop Frequency	928 MHz
MAXIMUM OPERATING FREQUENCY			
902MHz to 928MHz			
TEST PARAMETERS			
Antenna Height	1m to 4m	Turntable Rotation	0° to 360°
Applicable standard	FCC Part 15.247 & 15.209	Test Method	KDB 412172
Equipment Class	NA	Measurement Distance	3m

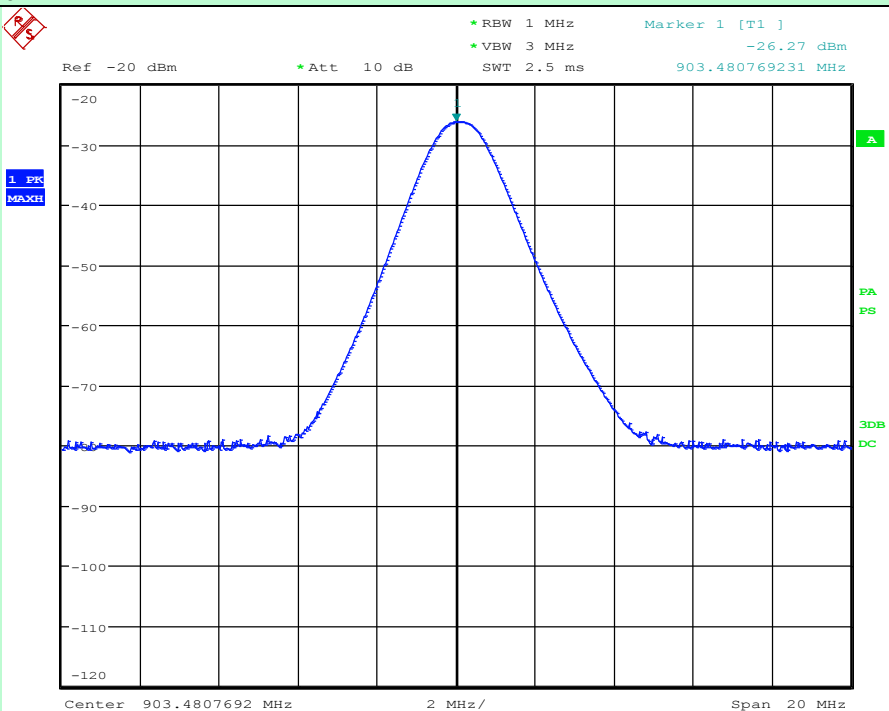
TEST EQUIPMENT					
Y/N	Equipment	Make	Model	Sl. No	Cal Due Date
Y	EMI Test Receiver	R&S	ESU26	100229	10-May-2017
Y	3m Semi Anechoic Chamber	ETS Lindgren	DKE 6X7 DBL.DR	1625	26-Jul-2018
Y	Bilog Antenna	ETS Lindgren	HLP3003C	130524	03-Jun-2017
Y	RF cable (9KHz to 1GHz)	ENS Microwave	MNS-MNS	11202012	22-Feb-2018
Y	RF cable (9KHz to 1GHz)	AH System	SAC-18G-06	RE-03	22-Feb-2018
Note: Switch ON /OFF the Internal Preamplifier based on carrier level and or noise floor without overloading the receiver					

TEST GRAPHS



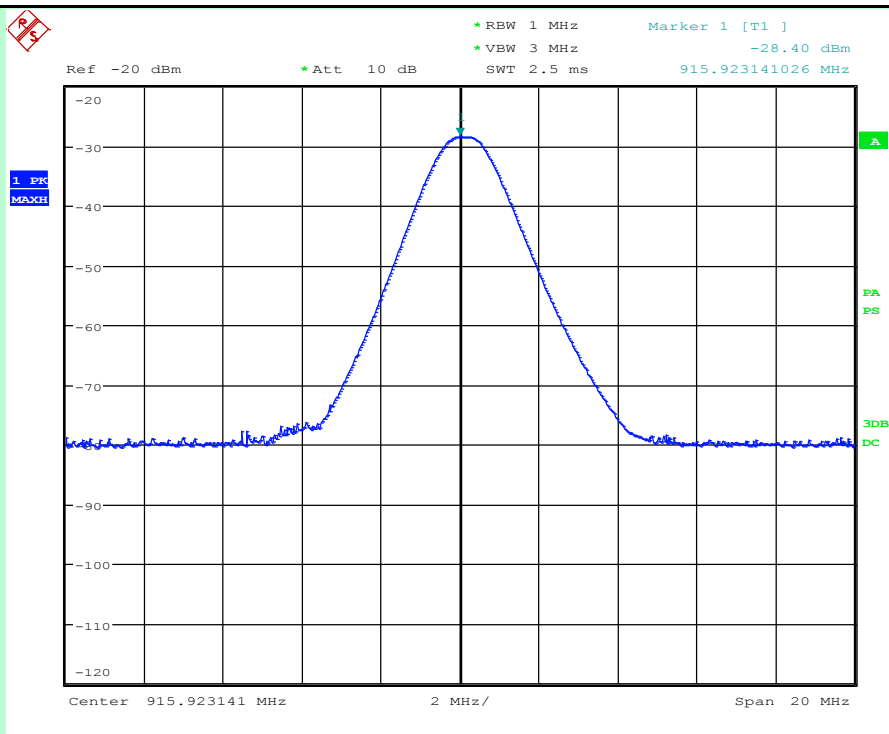
Antenna-1, Channel 1 (903.55 MHz)

Horizontal Polarization



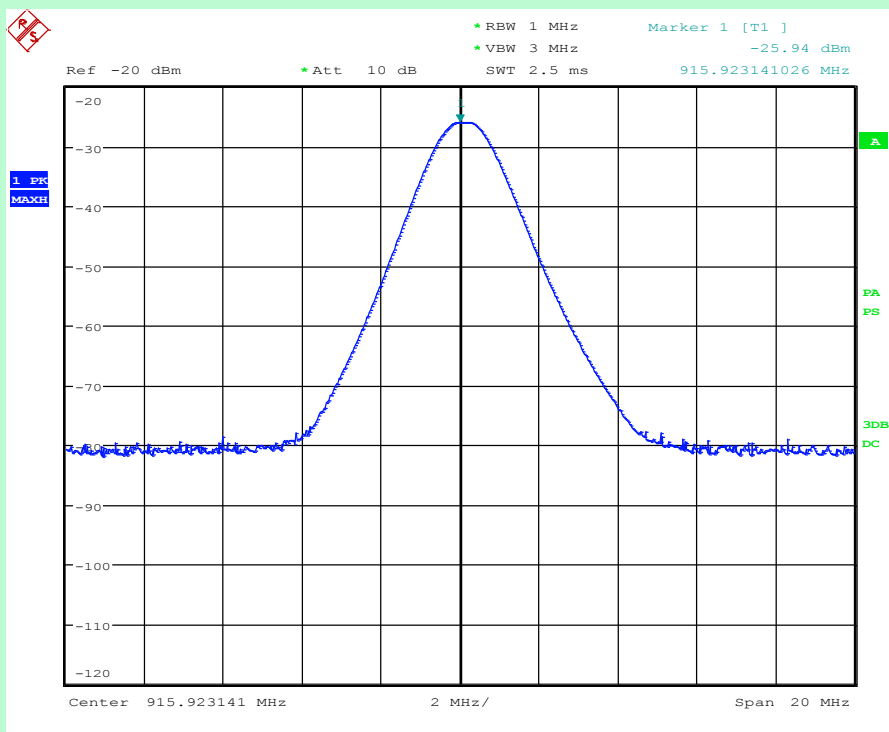
Antenna-1, Channel 1 (903.55 MHz)

Vertical Polarization



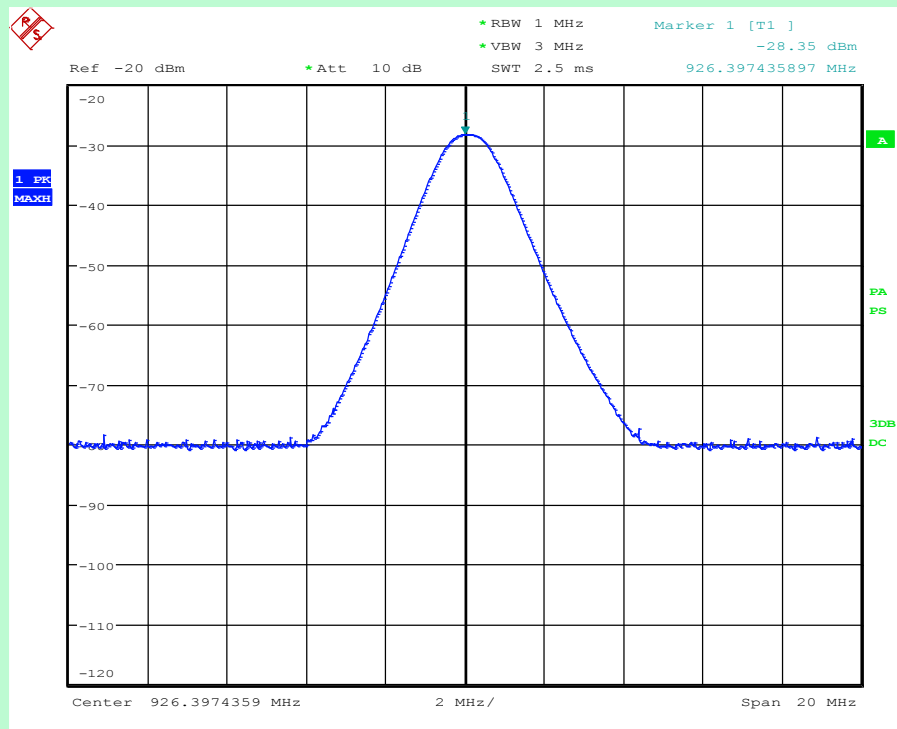
Antenna-1, Channel 28 (916 MHz)

Horizontal Polarization



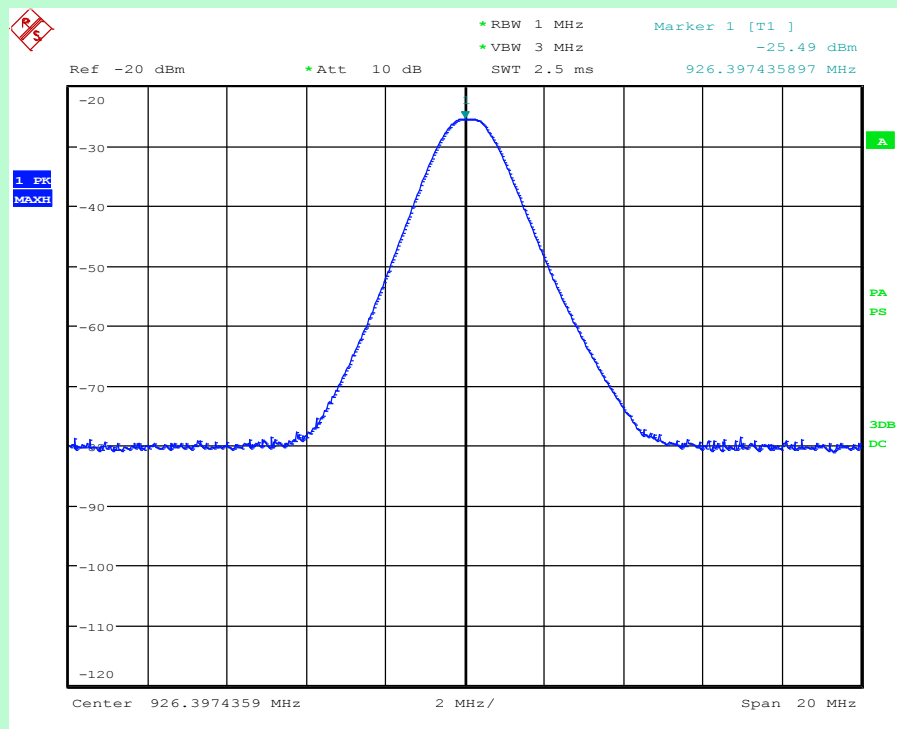
Antenna-1, Channel 28 (916 MHz)

Vertical Polarization



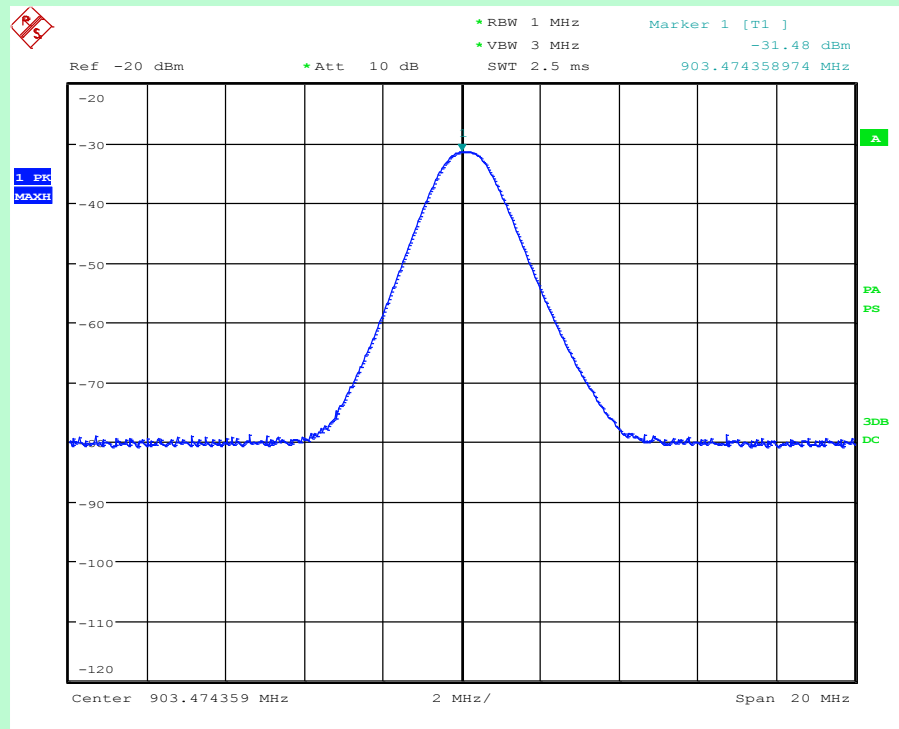
Antenna-1, Channel 55 (926.45 MHz)

Horizontal Polarization



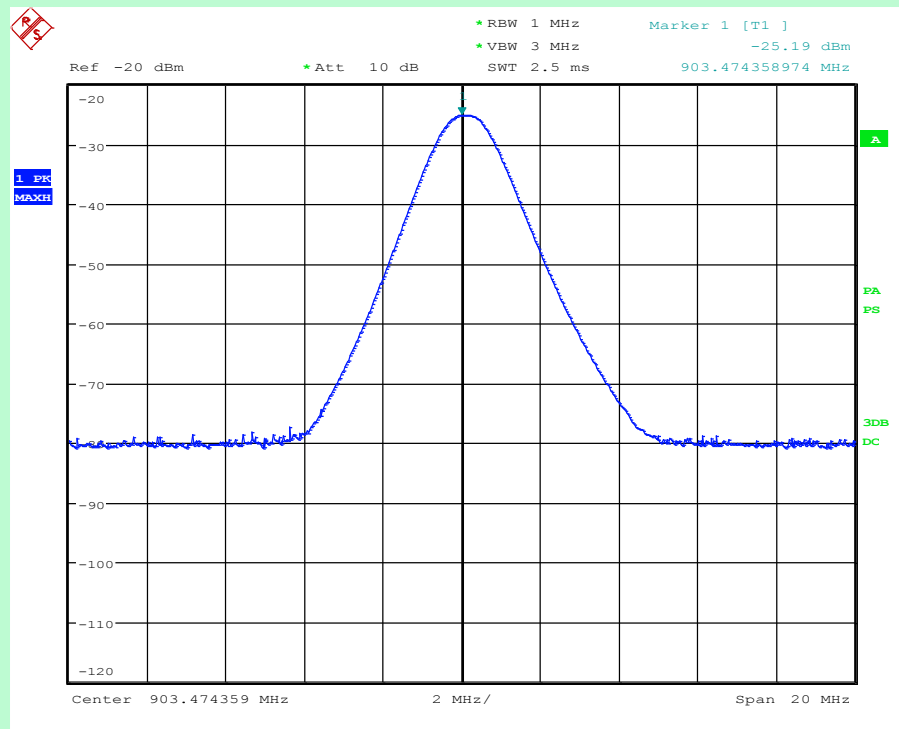
Antenna-1, Channel 55 (926.45 MHz)

Vertical Polarization



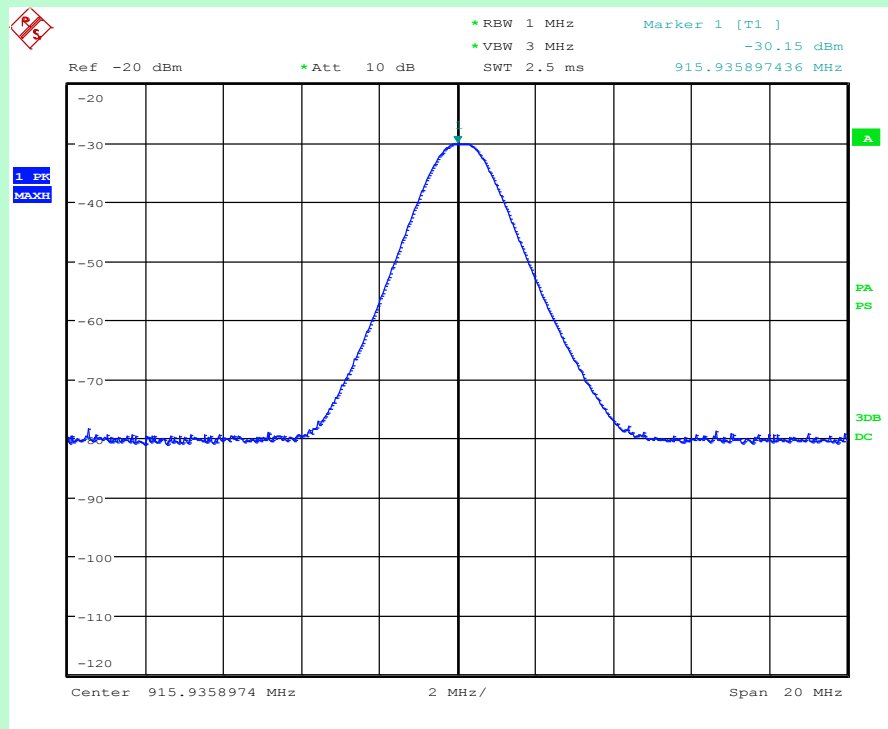
Antenna-2, Channel 1 (903.55 MHz)

Horizontal Polarization



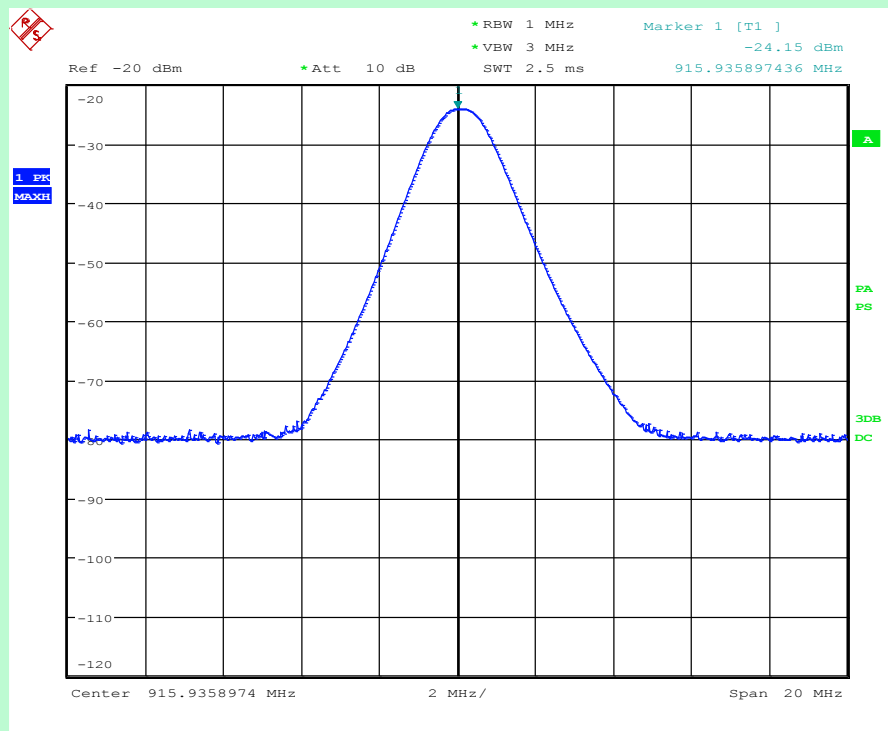
Antenna-2, Channel 1 (903.55 MHz)

Vertical Polarization



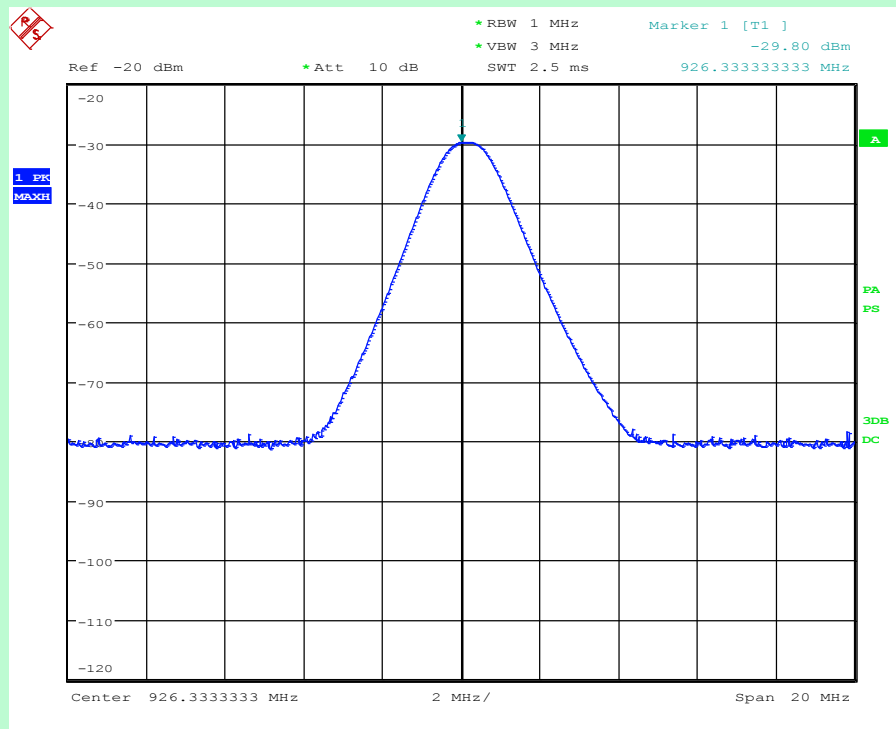
Antenna-2, Channel 28 (916 MHz)

Horizontal Polarization



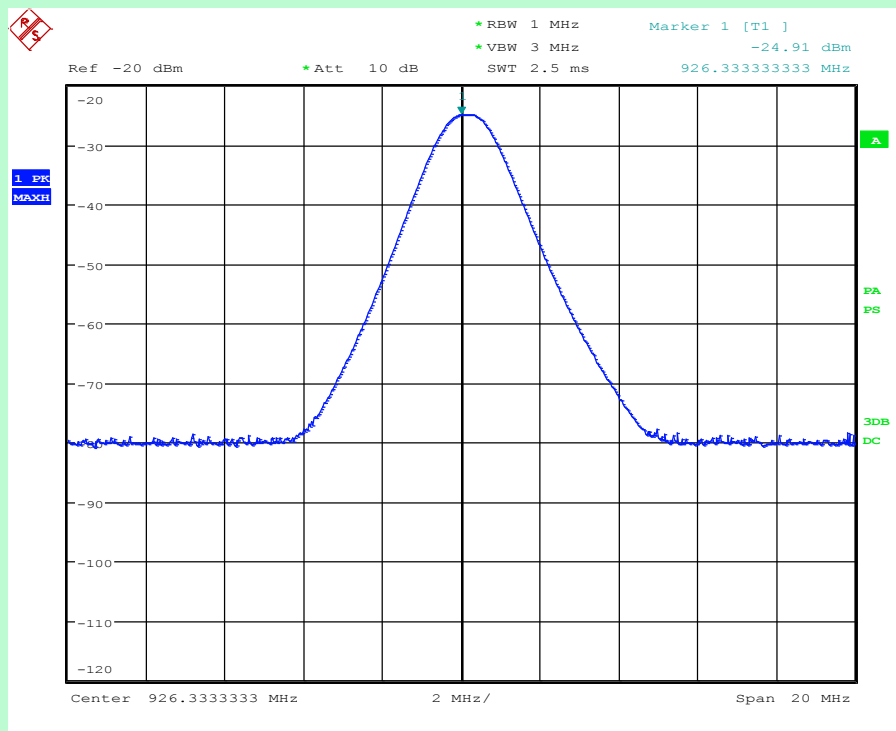
Antenna-2, Channel 28 (916 MHz)

Vertical polarization



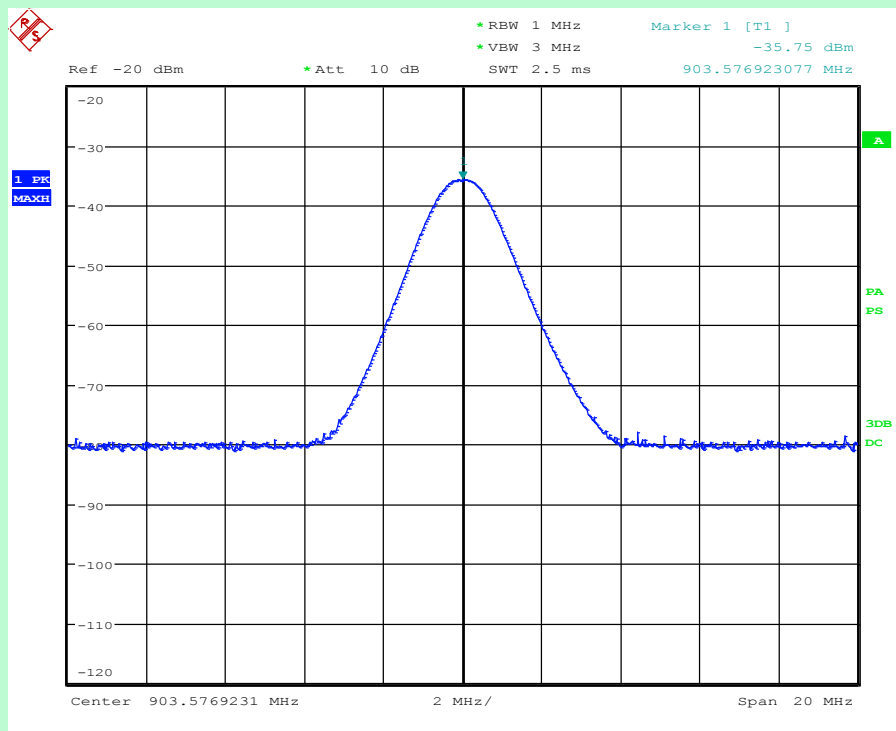
Antenna-2, Channel 55 (926.45 MHz)

Horizontal polarization



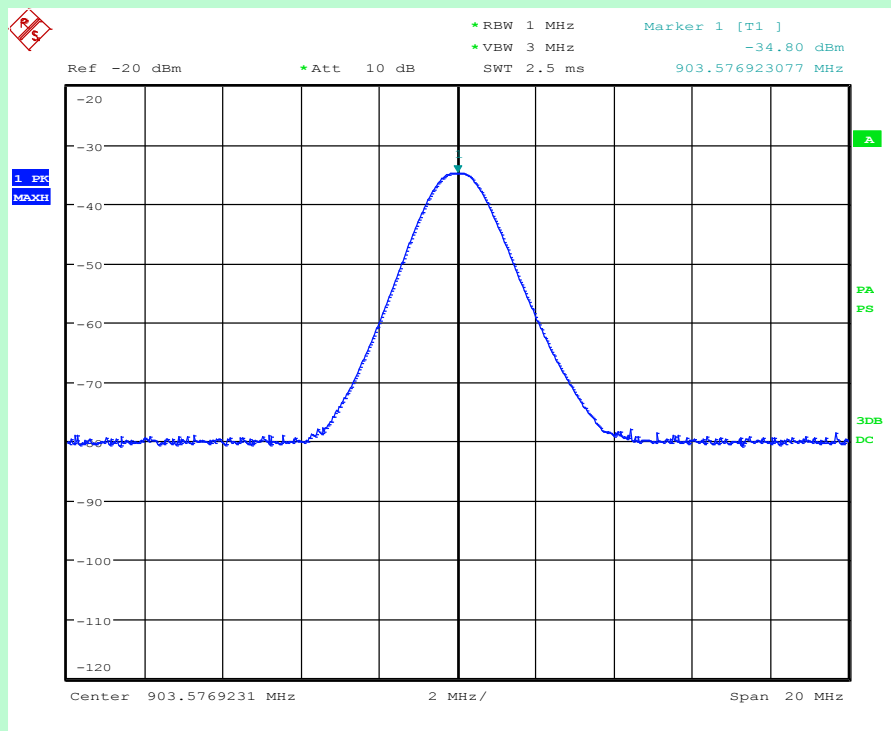
Antenna-2, Channel 55 (926.45 MHz)

Vertical polarization



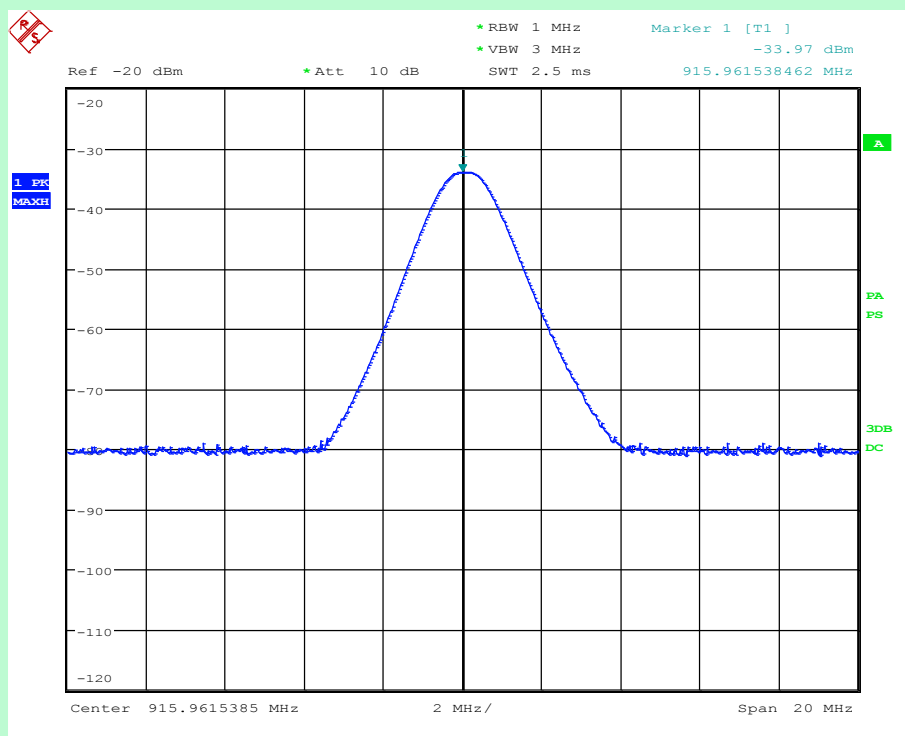
Antenna-3, Channel 1 (903.55 MHz)

Horizontal Polarization



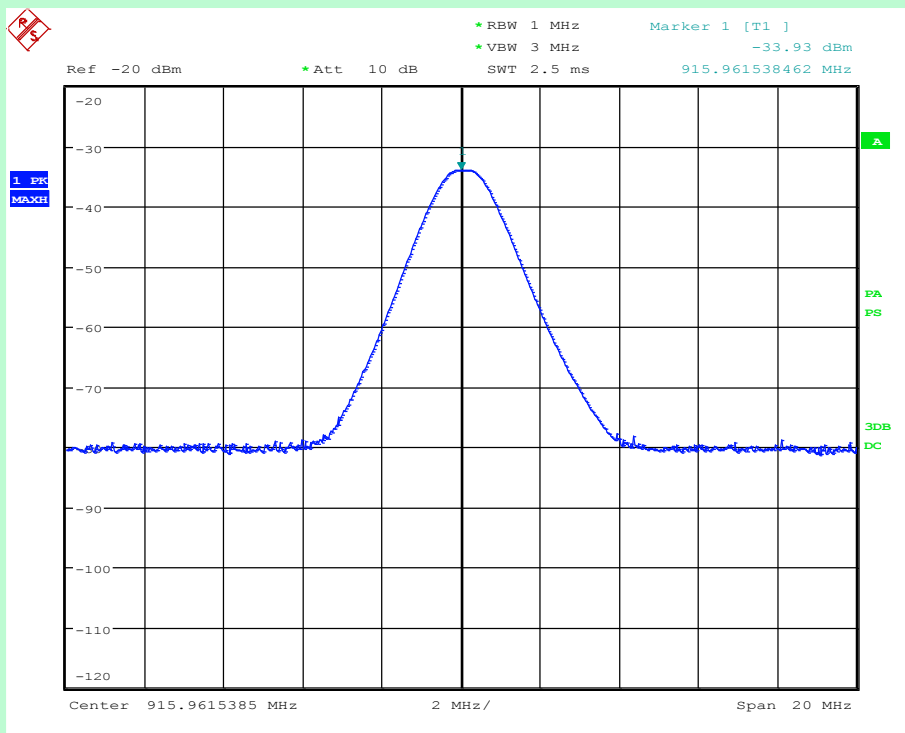
Antenna-3, Channel 1 (903.55 MHz)

Vertical Polarization



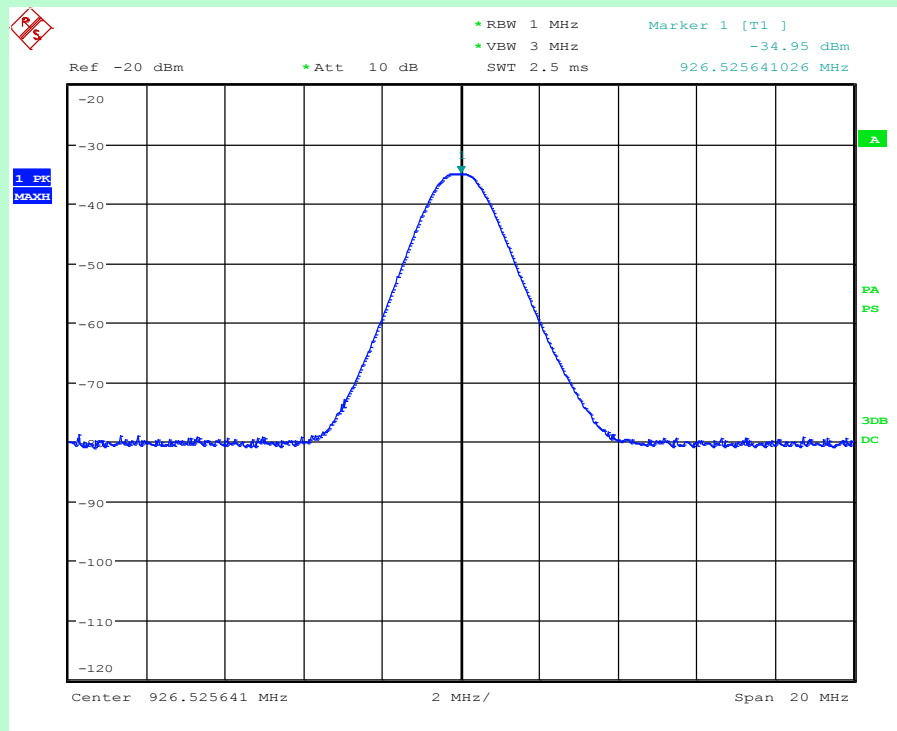
Antenna-3, Channel 28 (916 MHz)

Horizontal Polarization



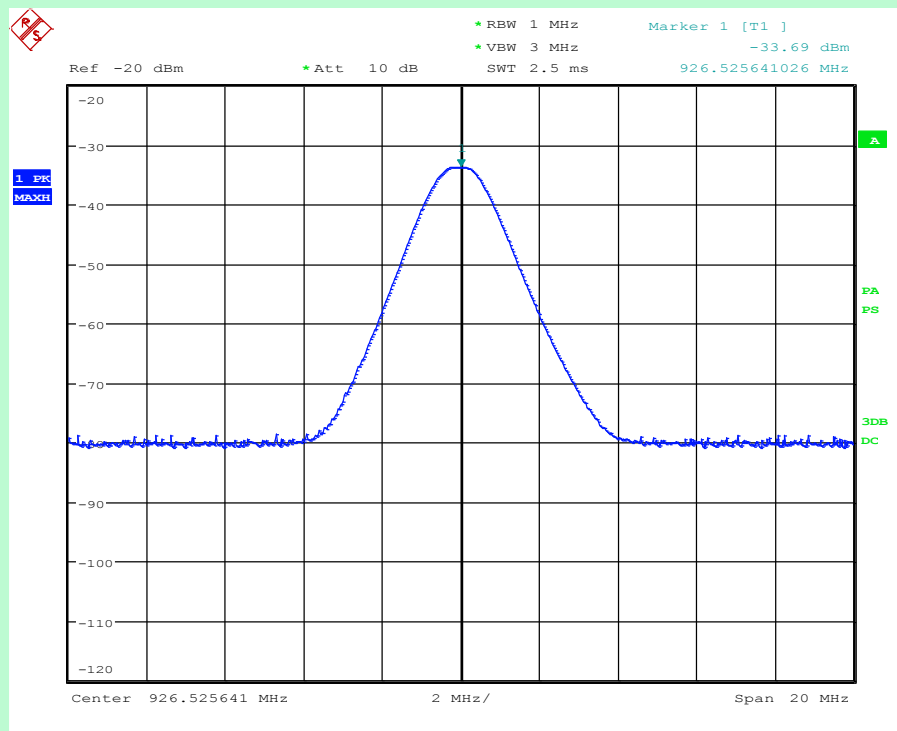
Antenna-3, Channel 28 (916 MHz)

Vertical Polarization



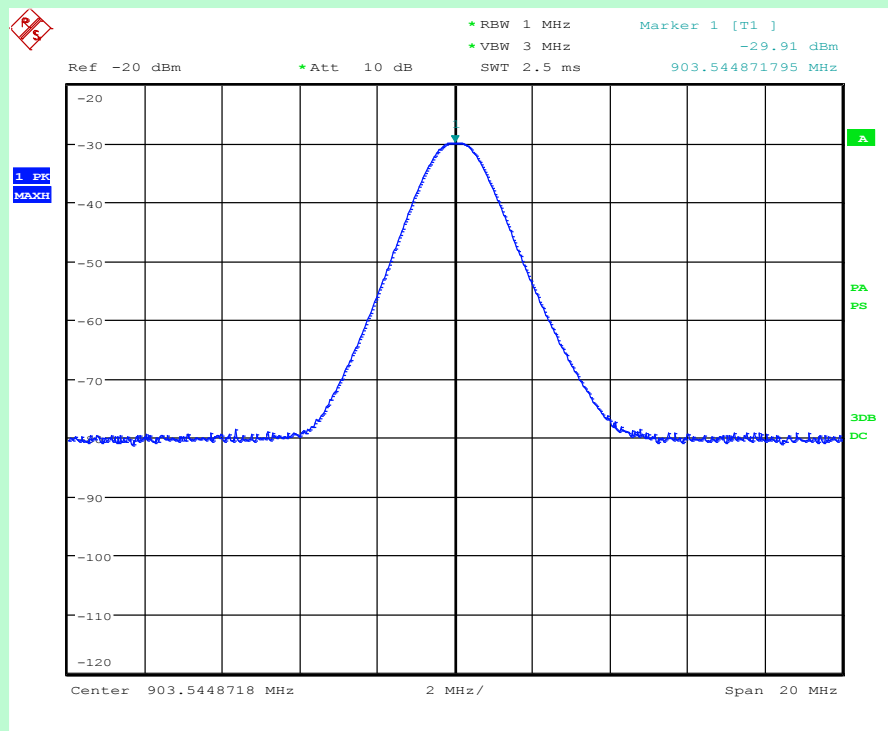
Antenna-3, Channel 55 (926.45 MHz)

Horizontal Polarization



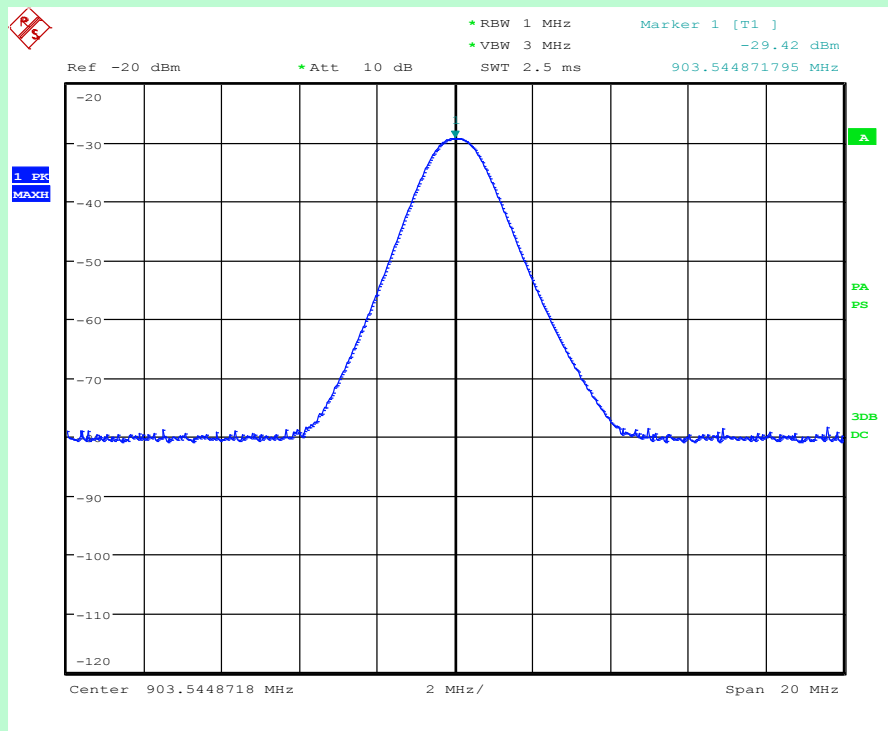
Antenna-3, Channel 55 (926.45 MHz)

Vertical Polarization



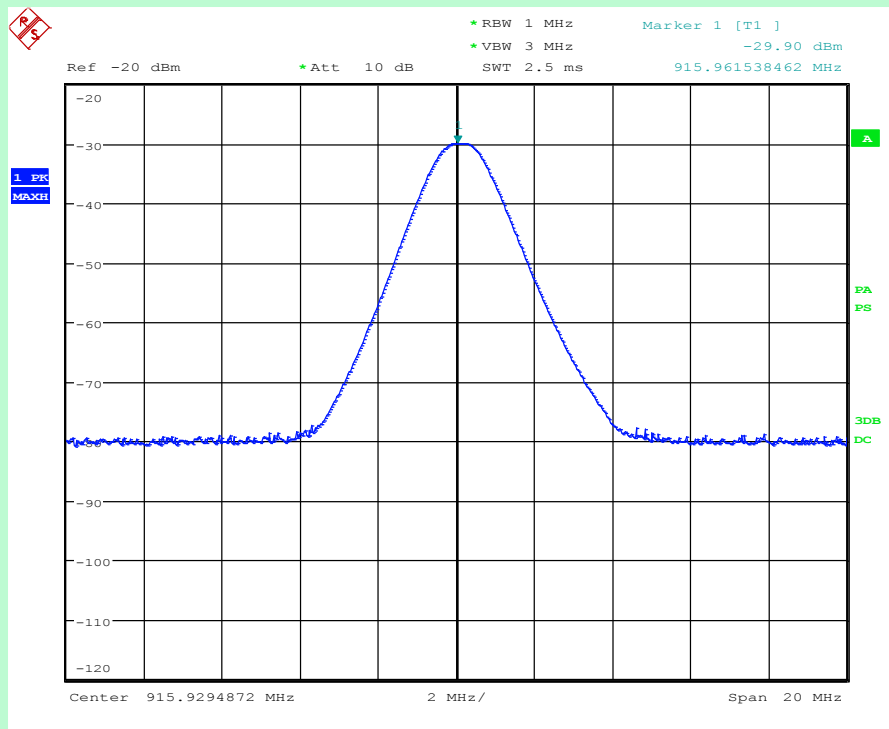
Antenna-4, Channel 1 (903.55 MHz)

Horizontal Polarization



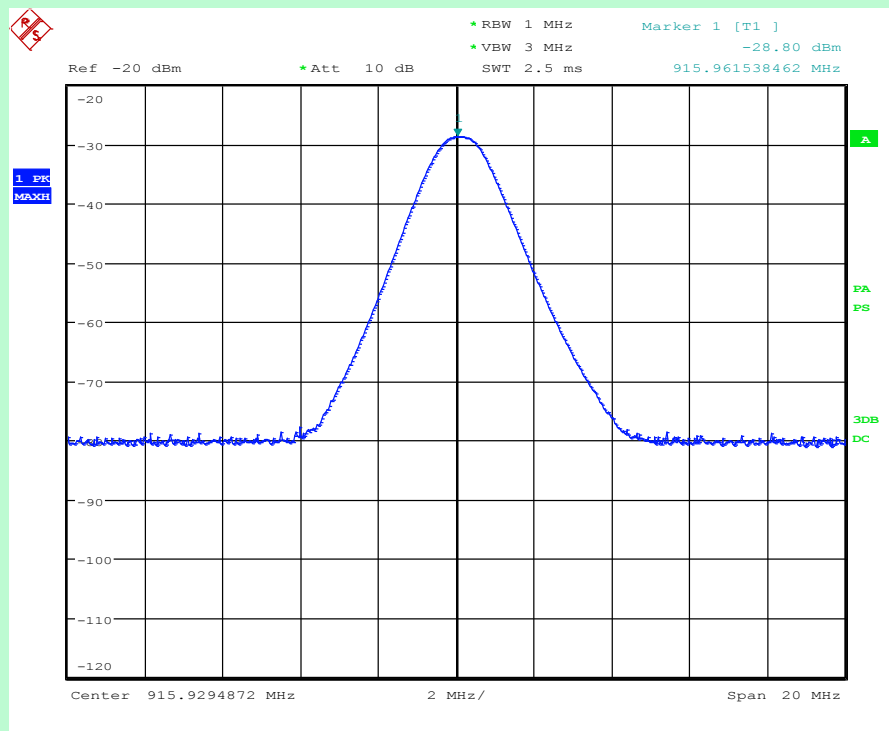
Antenna-4, Channel 1 (903.55 MHz)

Vertical Polarization



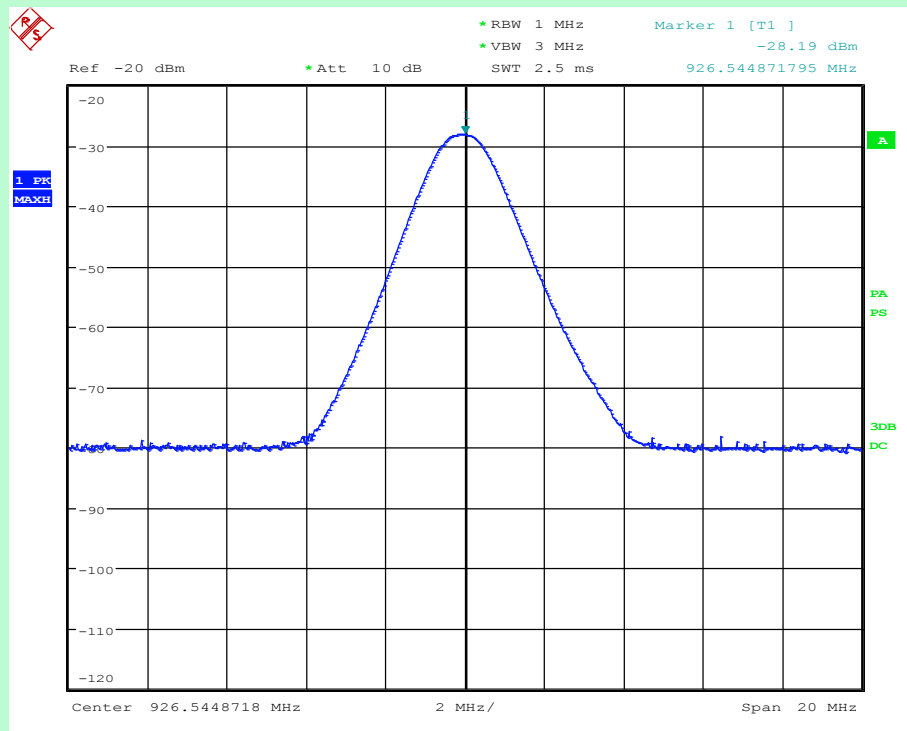
Antenna-4, Channel 28 (916 MHz)

Horizontal Polarization



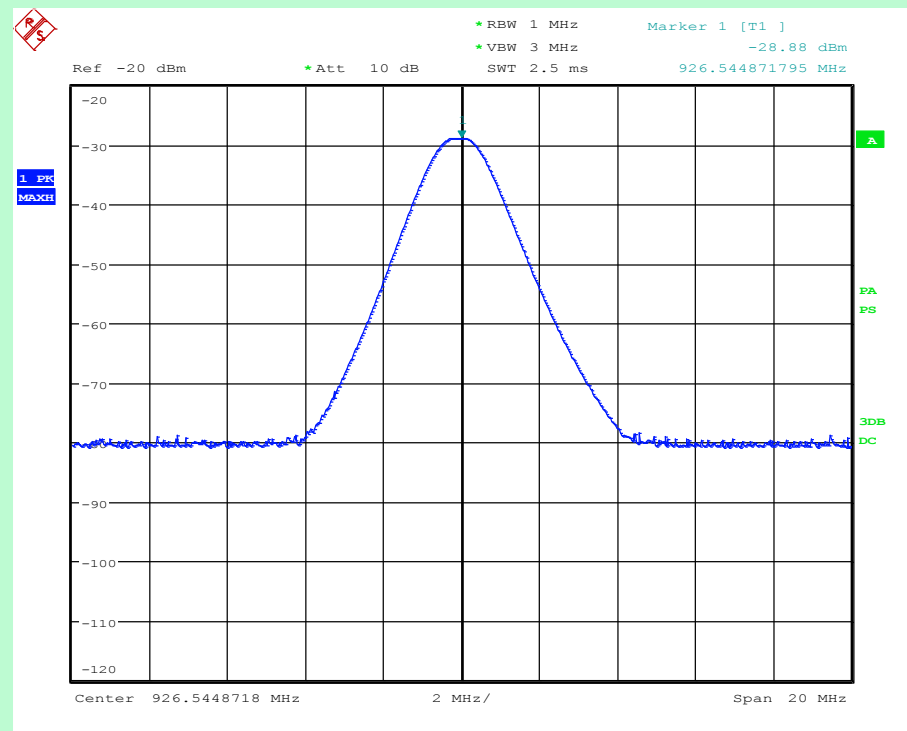
Antenna-4, Channel 28 (916 MHz)

Vertical Polarization



Antenna-4, Channel 55 (926.45 MHz)

Horizontal Polarization



Antenna-4, Channel 55 (926.45 MHz)

Vertical Polarization

TEST RESULT – EIRP											
Channel	Channel Freq	Rx Antenna Height	Rx Ant Pol	Azimuth	Measured Level	Cable Loss	External Att	Path loss @ 3m	Rx Antenna Gain	Calculated Rx Power	Calculated EIRP
#	MHz	cm	H/V	deg	dBm	dB	dB	dB	dBi	dBm	dBm
Antenna - 1											
CH-1	903.55	100	H	0	-28.93	2.4	6	41.21	6.3	-26.23	14.38
CH-1	903.55	100	V	120	-26.27	2.4	6	41.21	6.3	-23.57	17.04
CH-28	916	150	H	0	-28.50	2.4	6	41.21	6.3	-25.80	14.81
CH-28	916	100	V	120	-25.94	2.4	6	41.21	6.3	-23.24	17.37
CH-55	926.4	150	H	0	-28.35	2.4	6	41.21	6.3	-25.65	14.96
CH-55	926.4	100	V	140	-25.49	2.4	6	41.21	6.3	-22.79	17.82
Antenna – 2											
CH-1	903.55	100	H	0	-31.48	2.4	6	41.21	6.3	-28.78	11.83
CH-1	903.55	100	V	0	-25.19	2.4	6	41.21	6.3	-22.49	18.12
CH-28	916	100	H	350	-30.15	2.4	6	41.21	6.3	-27.45	13.16
CH-28	916	100	V	0	-24.15	2.4	6	41.21	6.3	-21.45	19.16
CH-55	926.4	150	H	220	-29.80	2.4	6	41.21	6.3	-27.10	13.51
CH-55	926.4	100	V	0	-24.91	2.4	6	41.21	6.3	-22.21	18.4
Antenna – 3											
CH-1	903.55	150	H	220	-35.75	2.4	6	41.21	6.3	-33.05	7.56
CH-1	903.55	100	V	220	-34.80	2.4	6	41.21	6.3	-32.10	8.51
CH-28	916	150	H	0	-33.97	2.4	6	41.21	6.3	-31.27	9.34
CH-28	916	100	V	220	-33.93	2.4	6	41.21	6.3	-31.23	9.38
CH-55	926.4	150	H	240	-34.95	2.4	6	41.21	6.3	-32.25	8.36
CH-55	926.4	100	V	340	-33.69	2.4	6	41.21	6.3	-30.99	9.62
Antenna - 4											
CH-1	903.55	150	H	170	-29.91	2.4	6	41.21	6.3	-27.21	13.4
CH-1	903.55	100	V	270	-29.42	2.4	6	41.21	6.3	-26.72	13.89
CH-28	916	100	H	170	-29.90	2.4	6	41.21	6.3	-27.20	13.41
CH-28	916	100	V	270	-28.80	2.4	6	41.21	6.3	-26.10	14.51
CH-55	926.4	150	H	0	-28.19	2.4	6	41.21	6.3	-25.49	15.12
CH-55	926.4	100	V	270	-28.88	2.4	6	41.21	6.3	-26.18	14.43
Note : Effective Isotropic Radiated Power (dBm)= Pr(dBm) +Lp(dB) Pr = Pmeas(dBm)-Gr(dBi)+Lc(dB)+Latt(dB) Lp =20Log F+20LogD-27.5 Where: Pr =Calculated Received Power Level(dBm) Lp= Free Space Path Loss(dB) Pmeas= Measured Power Level(dBm) Gr = Receiver Antenna Gain(dBi) Lc = Cable Loss (dB) Latt= External Attenuator(dB) F = Frequency (MHz) D= Distance (m)											

TEST SETUP PHOTOGRAPHS

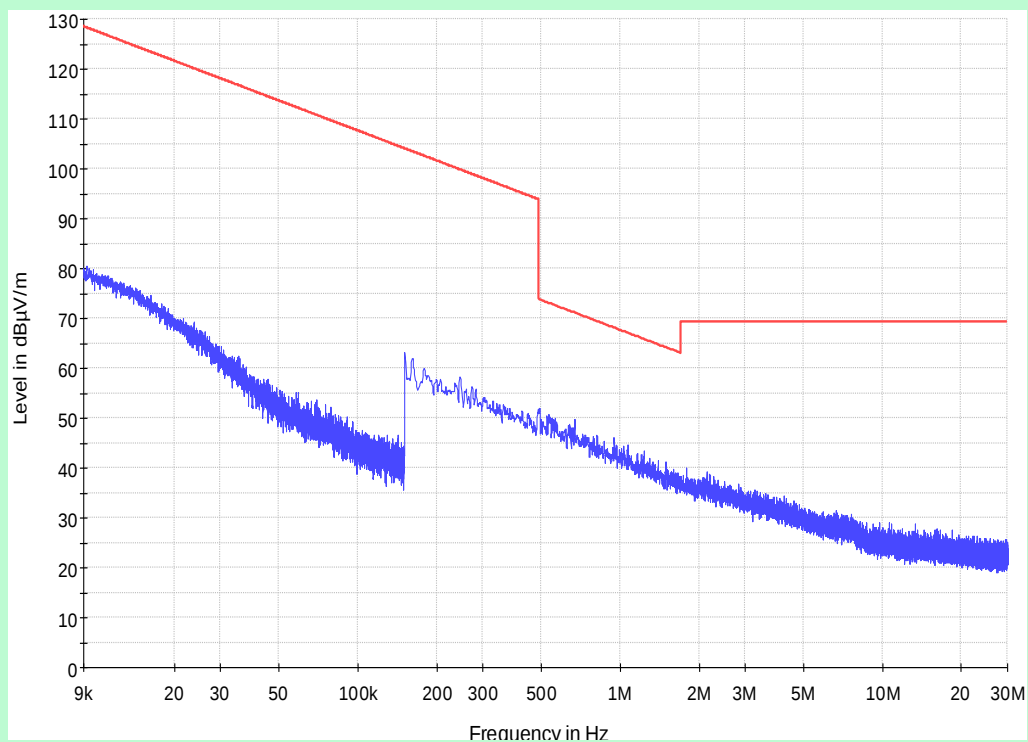
Refer Annexure-1

2.4 SPURIOUS RADIATED EMISSIONS

EUT Nomenclature	Wireless Display Driver	Test Report No.	EMC0181-1
Model No.	W-DIS-D	Serial No.	MEL-122
Test Start Date	02 – Feb – 2017	Temperature (°C)	23.5±2
Test End Date	28 – Feb – 2017	Humidity RH (%)	55±2
Tested By	Magesh.S	Pressure (mbar)	NR
Input Voltage / Freq	24Vdc		
Operating Mode	Refer Page 5 Operating Modes Table		
Test configuration	Refer Page 5 Test Configuration Table		
Deviation from Std	NA		
Comment	Nil		
TEST FREQUENCY RANGE			
Start Frequency	9 KHz	Stop Frequency	10 GHz
MAXIMUM OPERATING FREQUENCY			
902MHz to 928MHz			
TEST PARAMETERS			
Antenna Height	1m to 4m	Turntable Rotation	0° to 360°
Applicable standard	FCC Part 15.247 & 15.209	Test Method	ANSI 63.10 :2013
Equipment Class	NA	Measurement Distance	3m

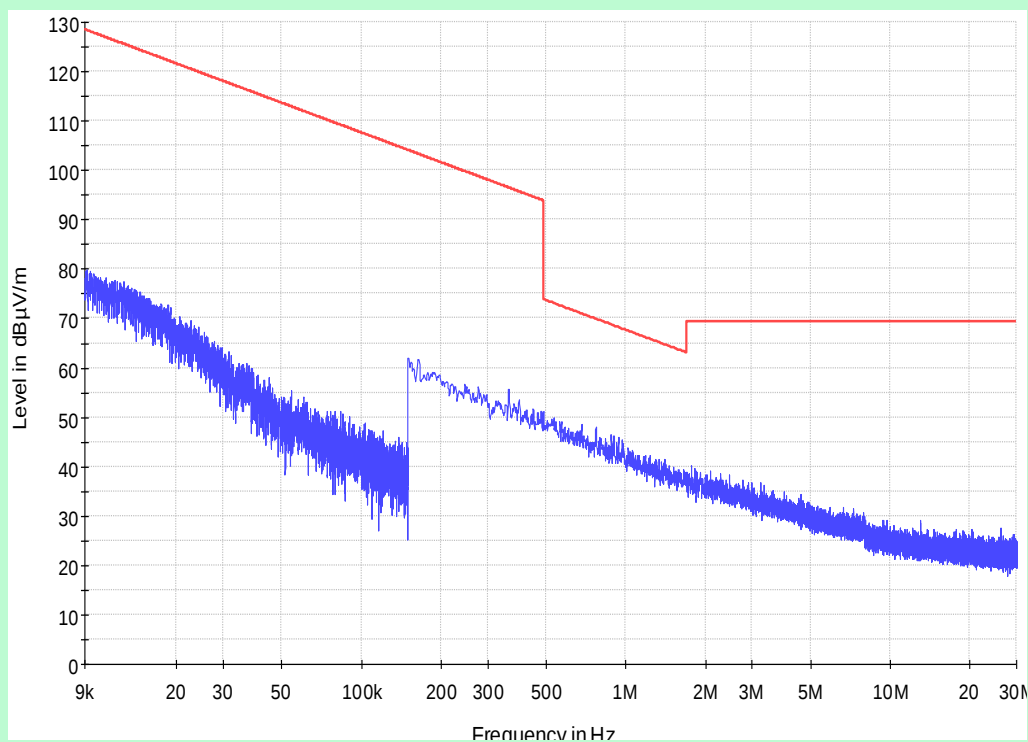
TEST EQUIPMENT					
Y/N	Equipment	Make	Model	Sl. No.	Cal Due Date
Y	EMI Test Receiver	R&S	ESU26	100229	10-May-2017
Y	3m Semi Anechoic Chamber	ETS Lindgren	DKE 6X7 DBL.DR	1625	26-Jul-2018
Y	Active Loop Antenna	ETS Lindgren	6507	000103694	2-Jun-2017
Y	Bilog Antenna	ETS Lindgren	HLP3003C	130524	03-Jun-2017
Y	Double Ridge Guide Horn Antenna	ETS Lindgren	3117	00119022	8-Jun-2017
Y	RF cable (9KHz to 1GHz)	ENS Microwave	MNS-MNS	11202012	22-Feb-2018
Y	RF cable (9KHz to 1GHz)	AH System	SAC-18G-06	RE-03	22-Feb-2018
Y	RF cable (1GHz to 18GHz)	Huber + Schuner	Sucoflex 104	MY13472/4	24-Feb-2018
Y	Signal Conditioning unit	R&S	SCU-18	10178	28-Apr-2017
Y	EMC32 Software	R&S	8.30.0	820-OT101248	NA
Y	EMI Test Receiver	R&S	ESU26	100229	10-May-2017
Y	3m Semi Anechoic Chamber	ETS Lindgren	DKE 6X7 DBL.DR	1625	26-Jul-2018
Note: Switch ON /OFF the Internal Preamplifier based on carrier level and or noise floor without overloading the receiver					

TEST GRAPHS – 9KHz to 30MHz



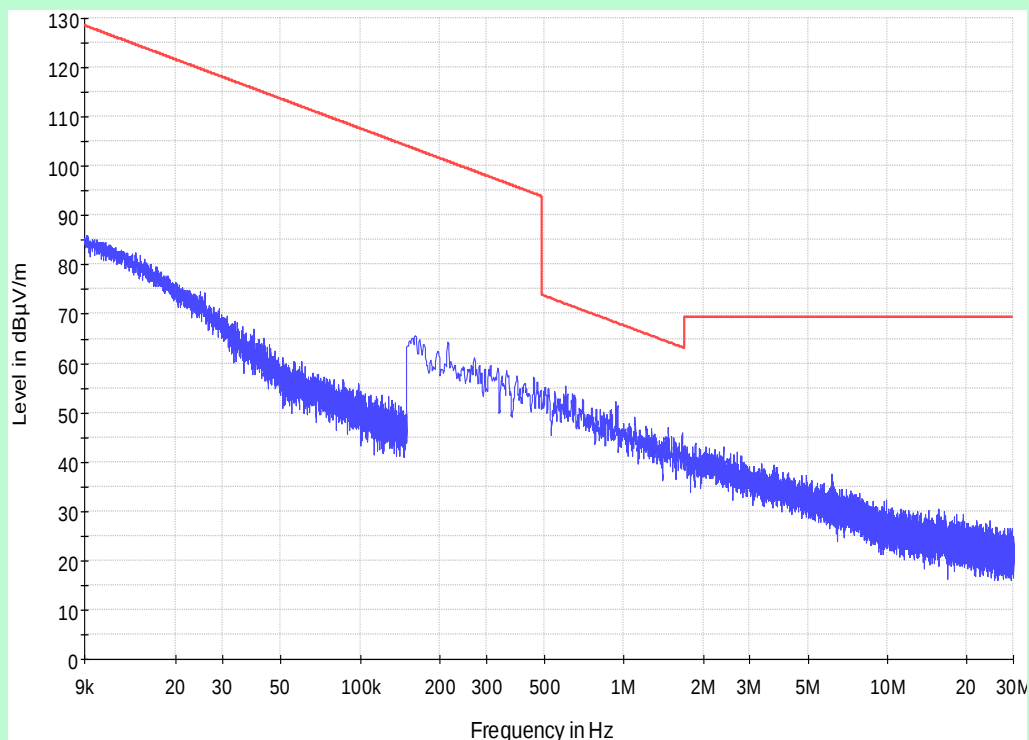
Antenna – 1, Channel – 1 (903.55MHz)

Note : Peak Graph - Parallel

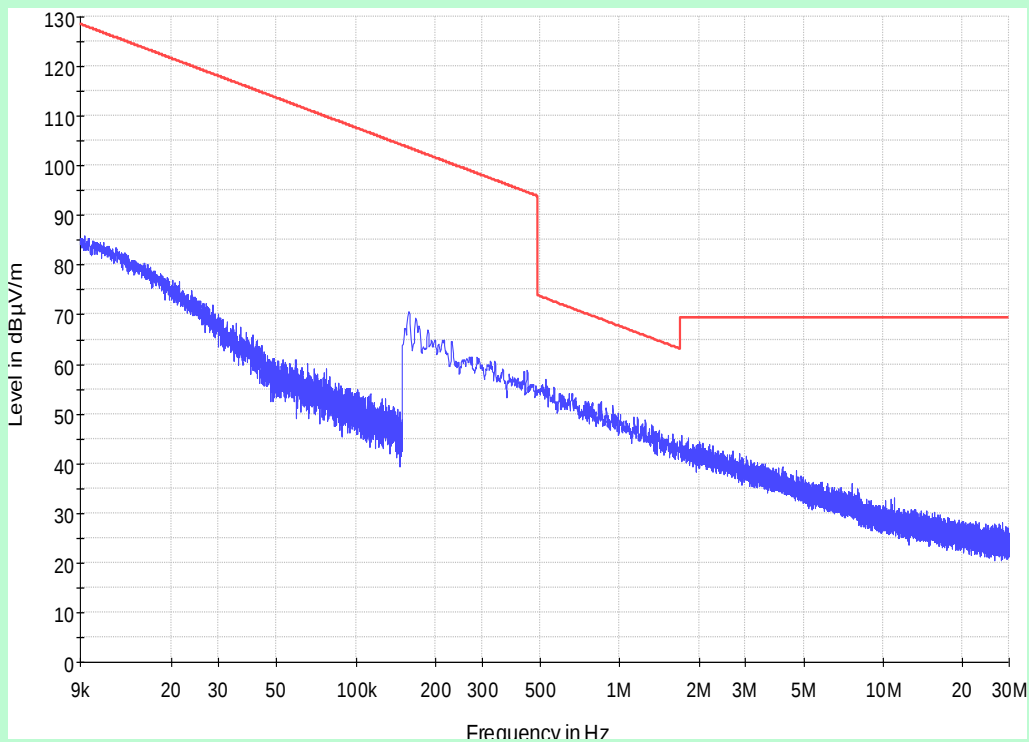


Antenna – 1, Channel – 1 (903.55MHz)

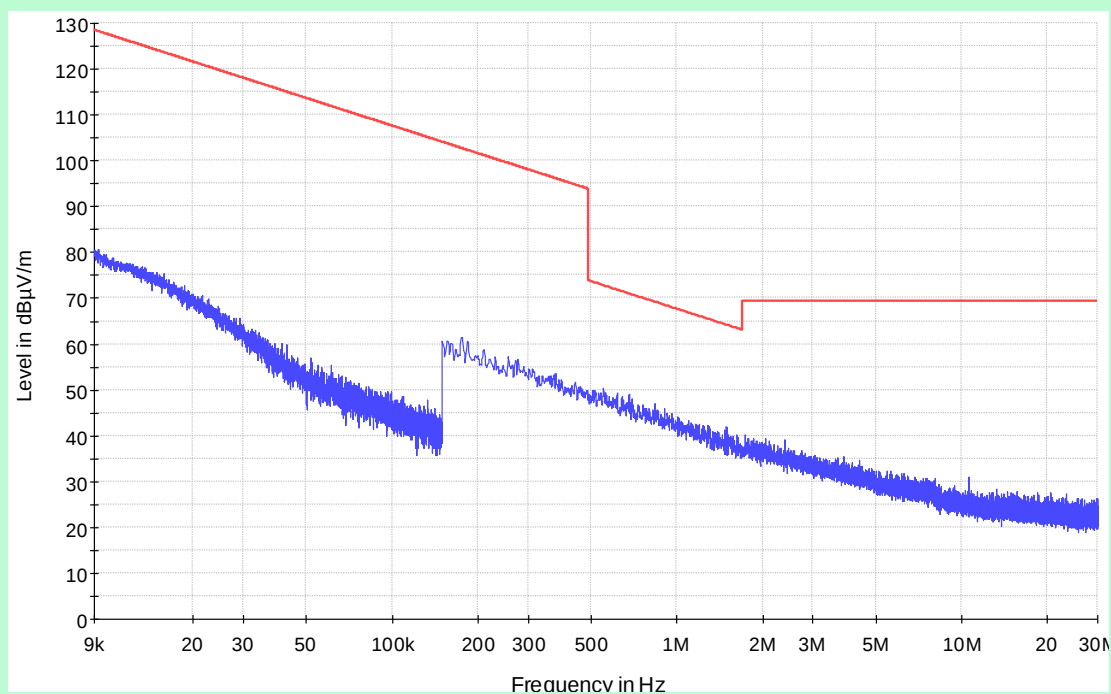
Note : Peak Graph - Perpendicular

**Antenna - 1, Channel - 28 (916MHz)**

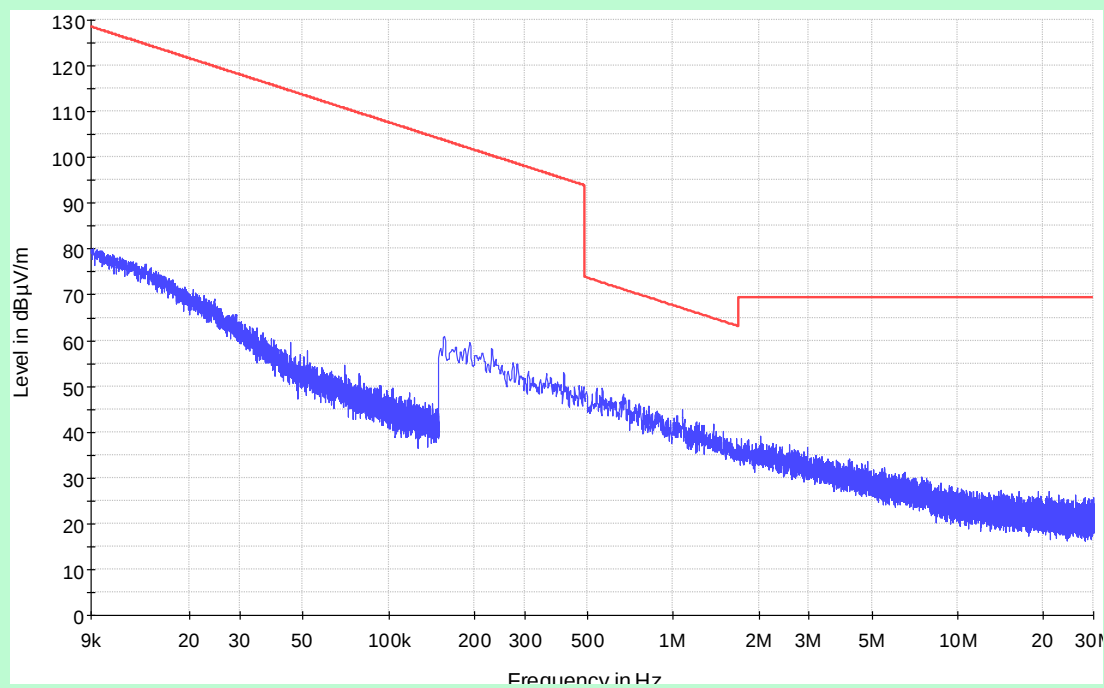
Note : Peak Graph - Parallel

**Antenna - 1, Channel - 28 (916MHz)**

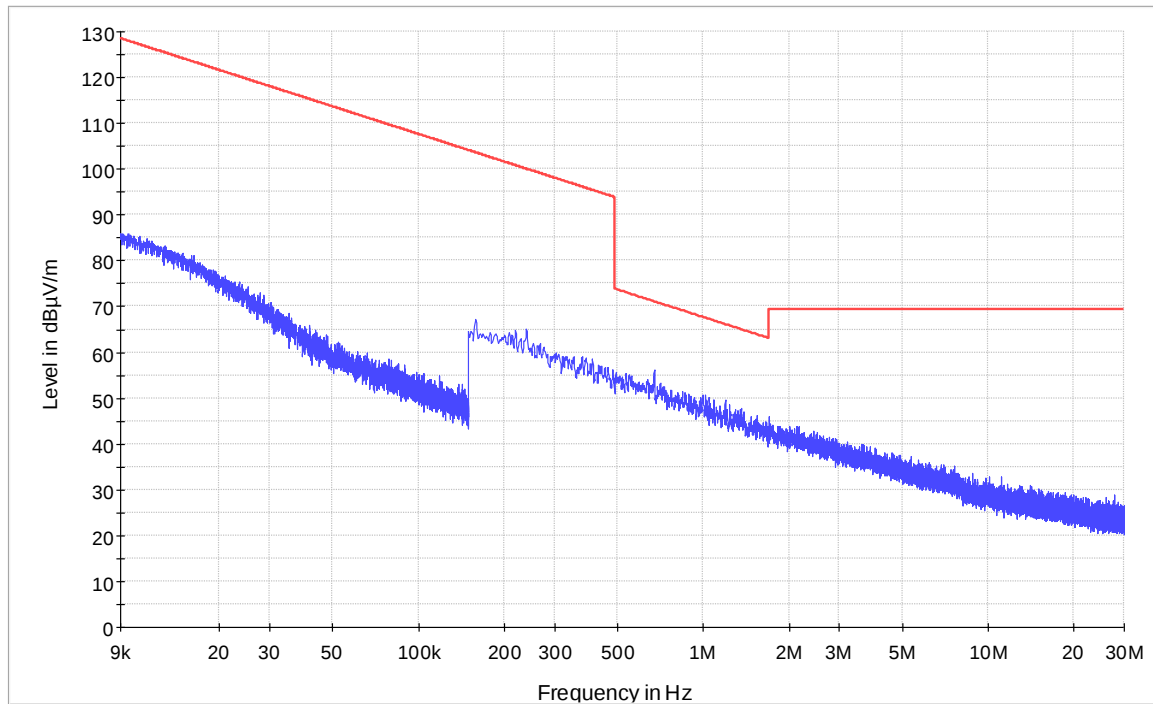
Note : Peak Graph - Perpendicular

**Antenna - 1, Channel - 55 (926.45 MHz)**

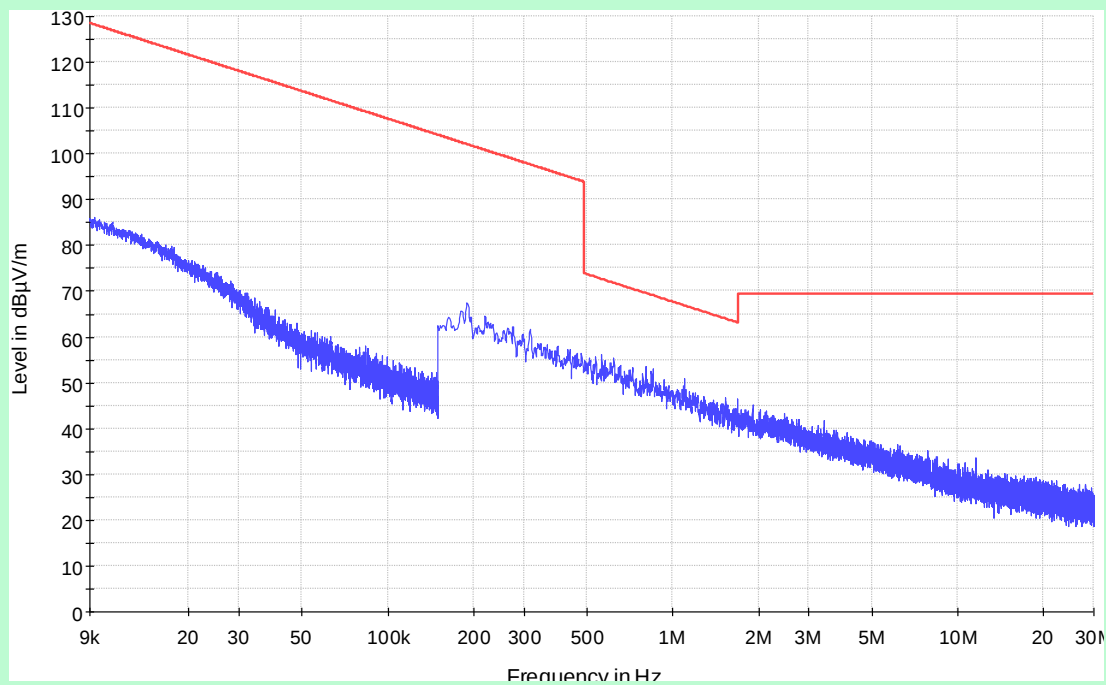
Note : Peak Graph - Parallel

**Antenna - 1, Channel - 55 (926.45 MHz)**

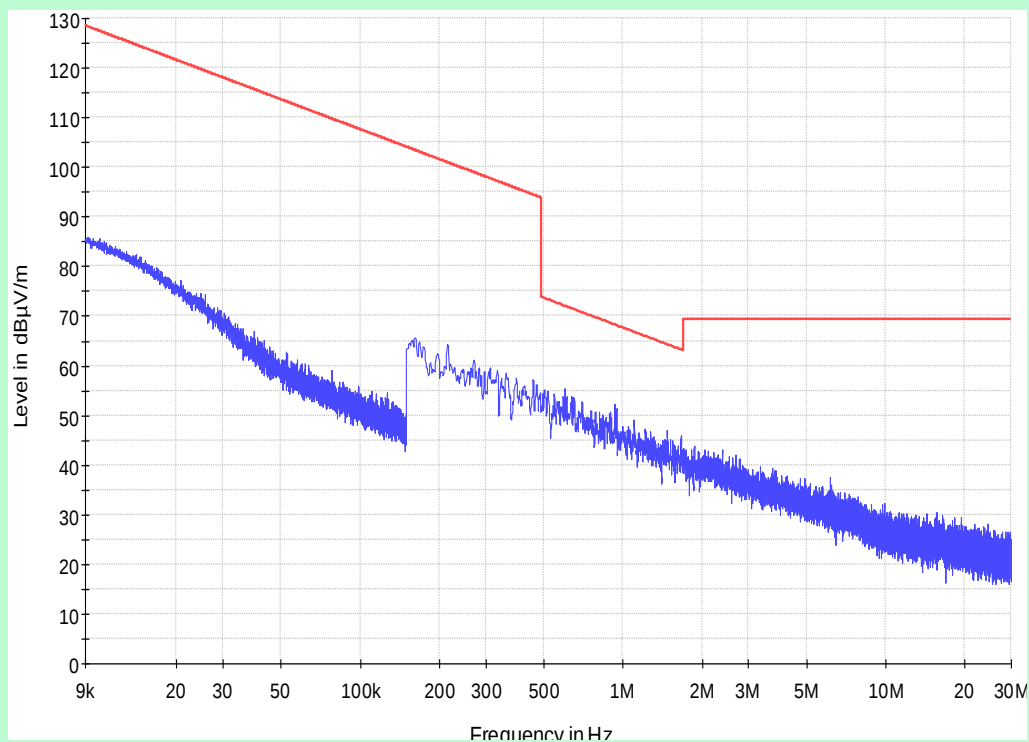
Note : Peak Graph - Perpendicular

**Antenna – 2, Channel – 1 (903.55 MHz)**

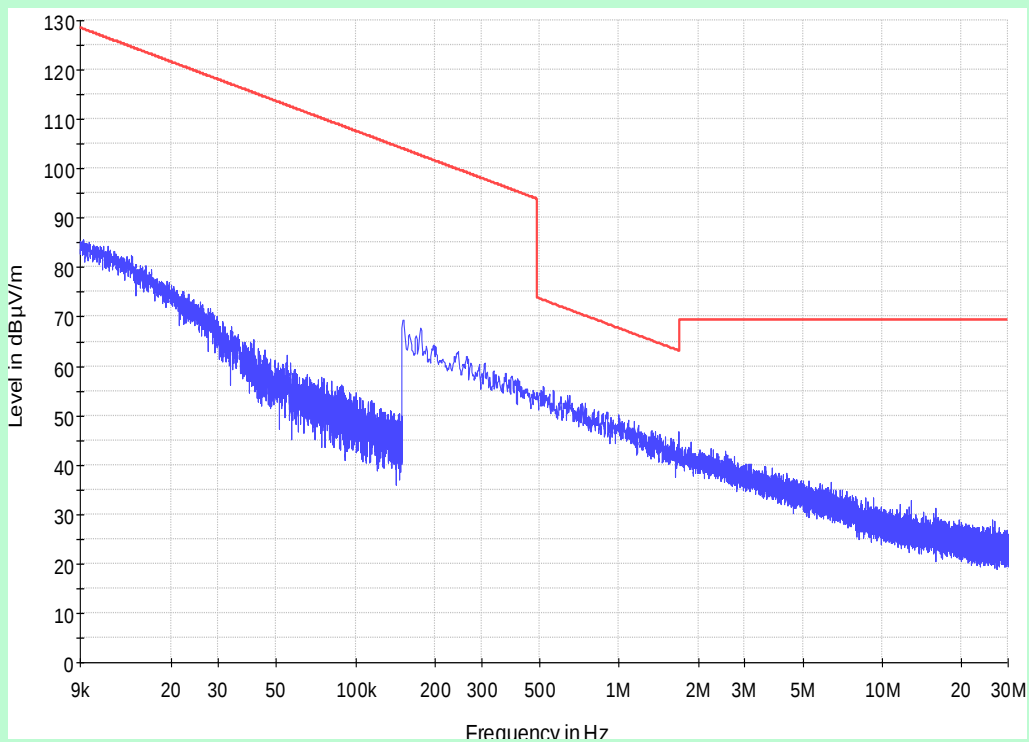
Note : Peak Graph - Parallel

**Antenna – 2, Channel – 1 (903.55 MHz)**

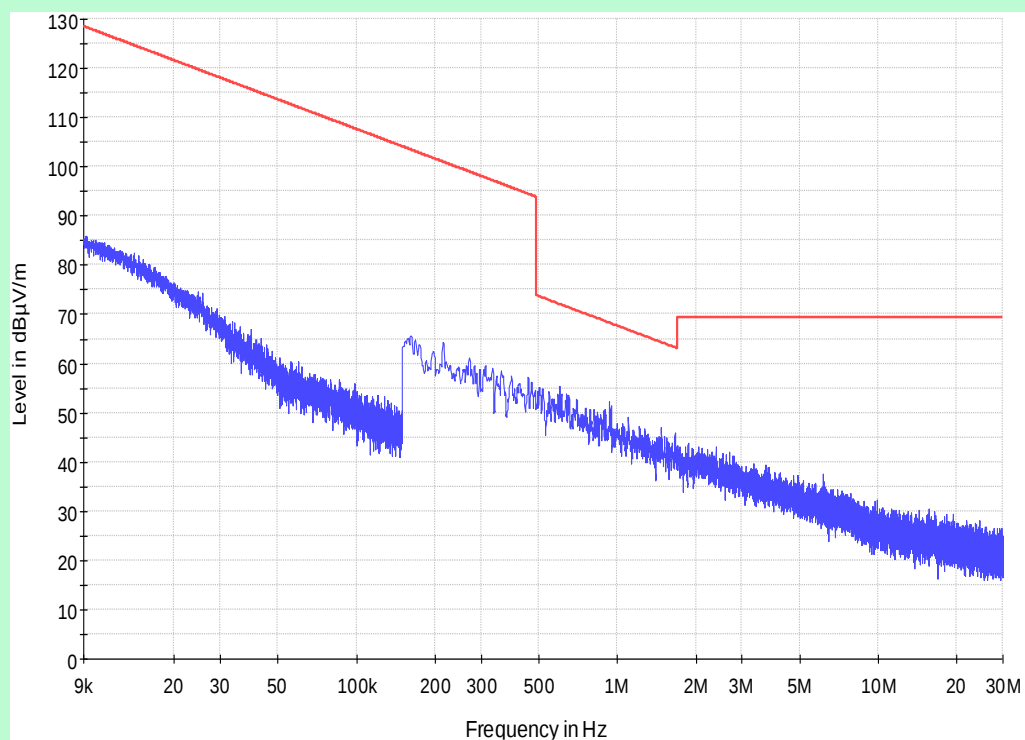
Note : Peak Graph - Perpendicular



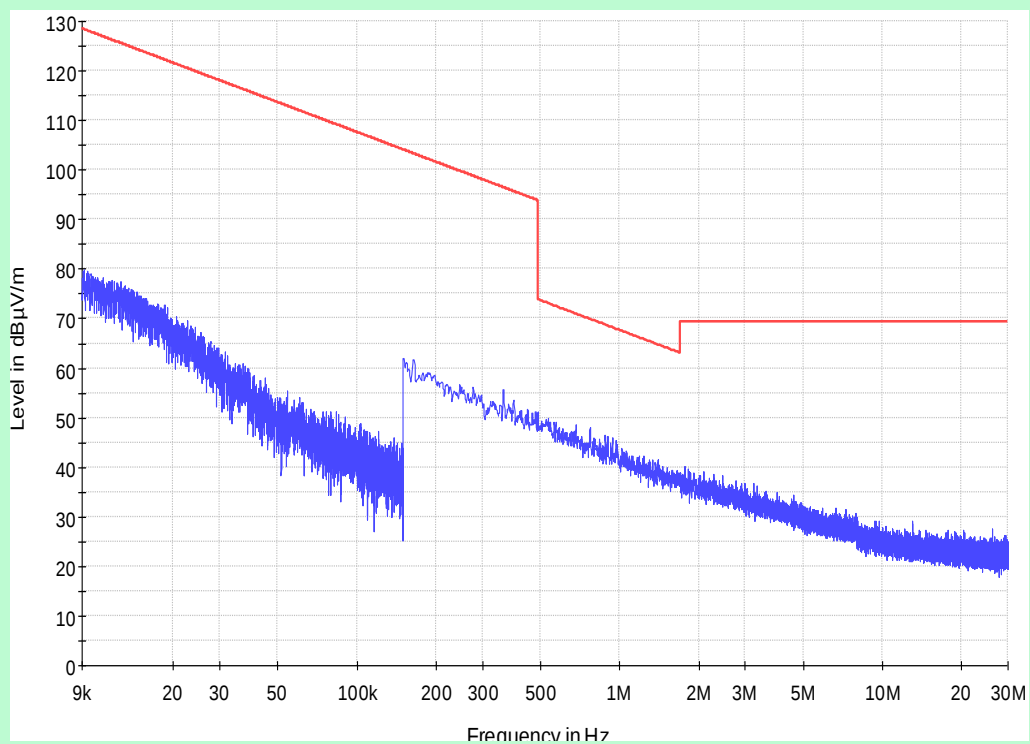
Note : Peak Graph - Parallel



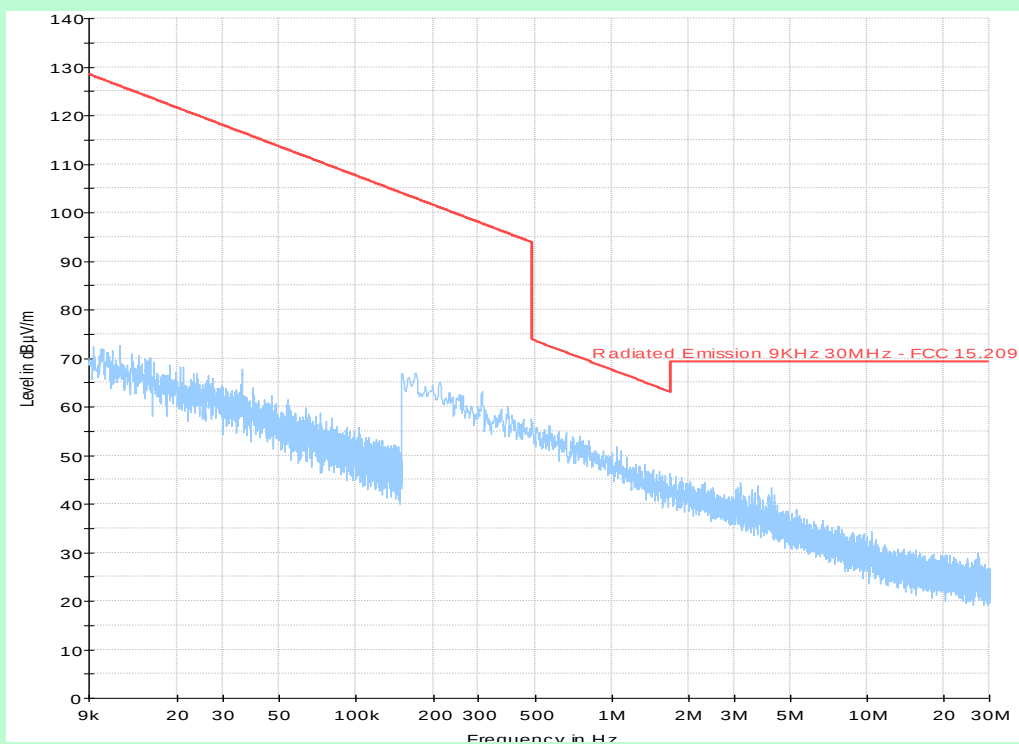
Note : Peak Graph - Perpendicular

**Antenna – 2, Channel – 55 (926.45 MHz)**

Note : Peak Graph - Parallel

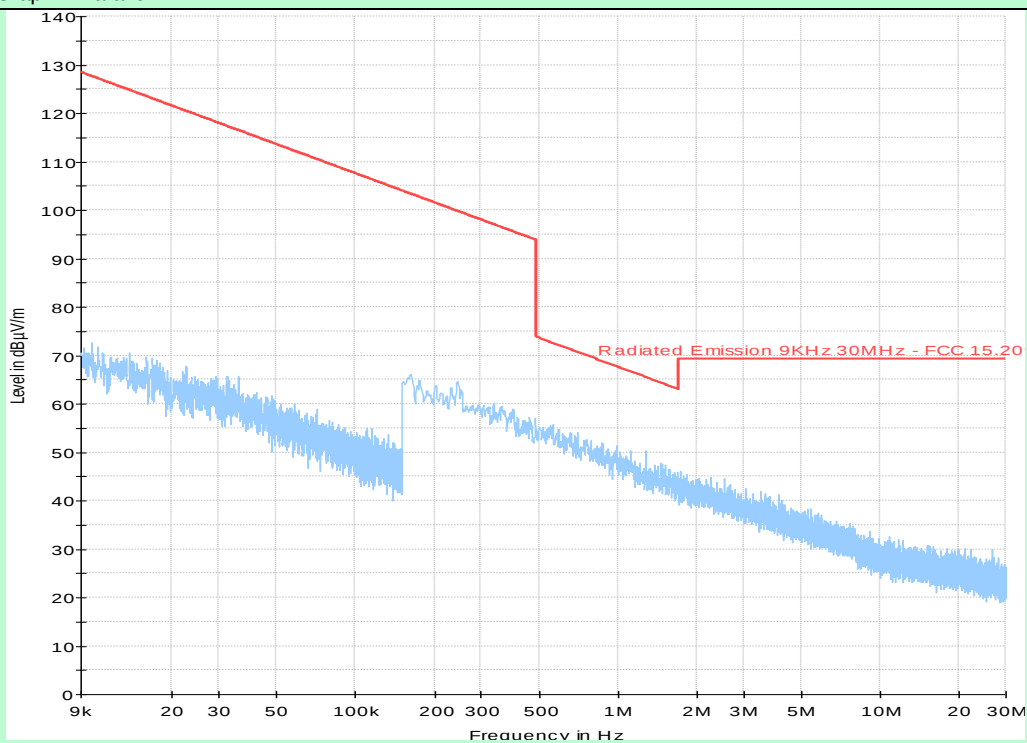
**Antenna – 2, Channel – 55 (926.45 MHz)**

Note : Peak Graph - Perpendicular



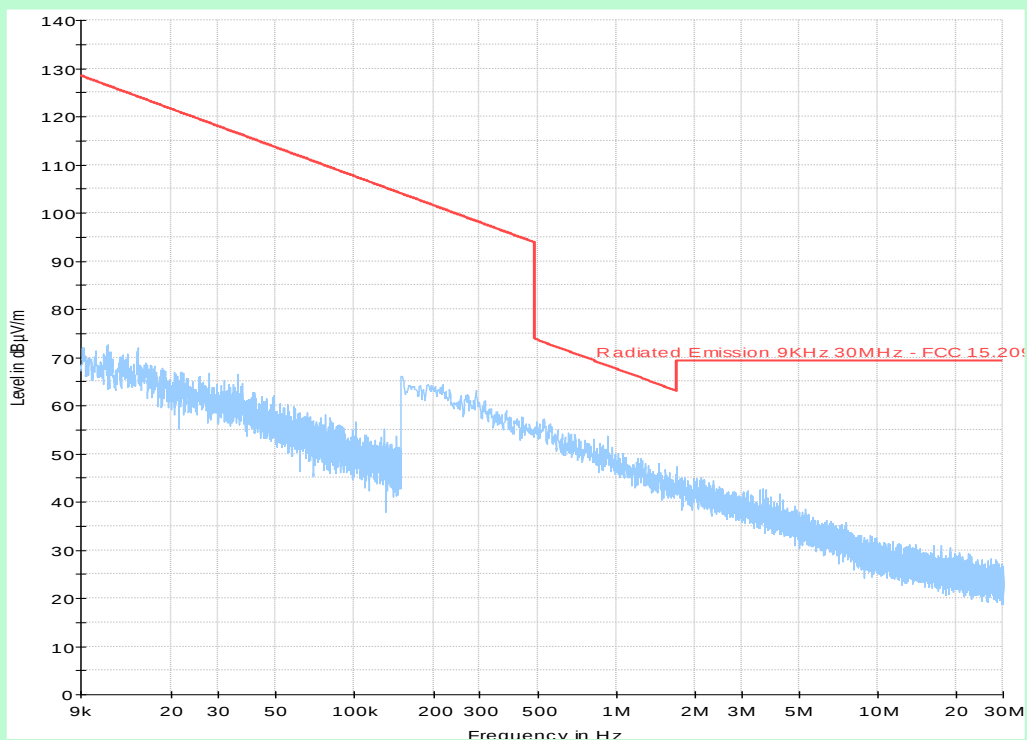
Antenna - 3, Channel - 1 (903.55 MHz)

Note : Peak Graph - Parallel



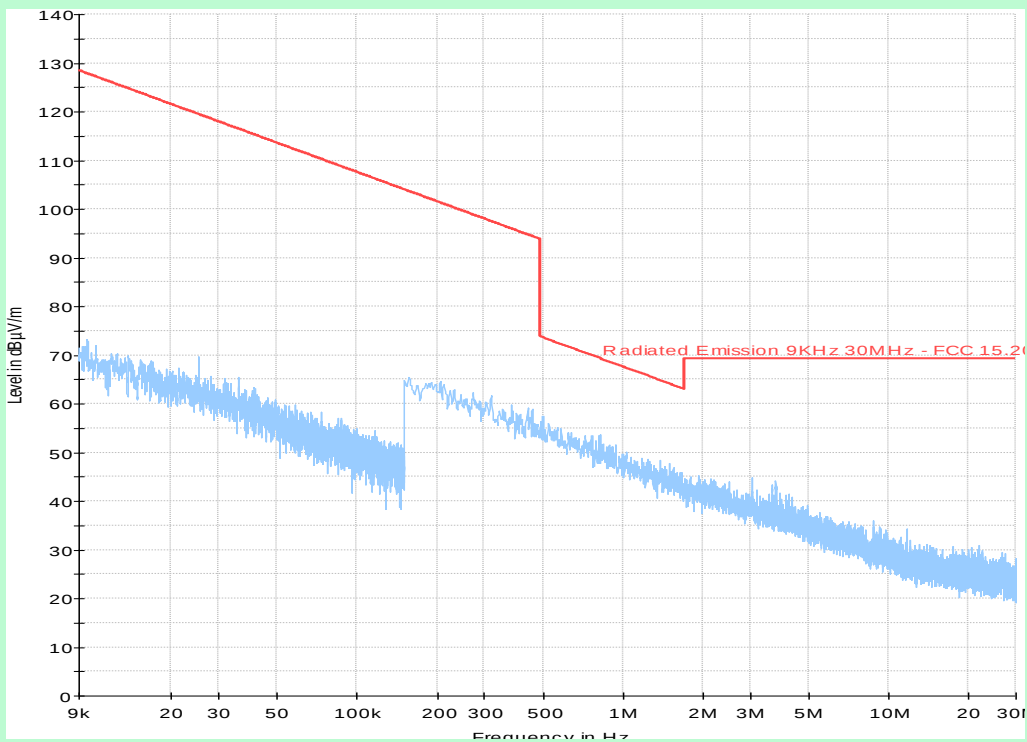
Antenna - 3, Channel - 1 (903.55 MHz)

Note : Peak Graph - Perpendicular



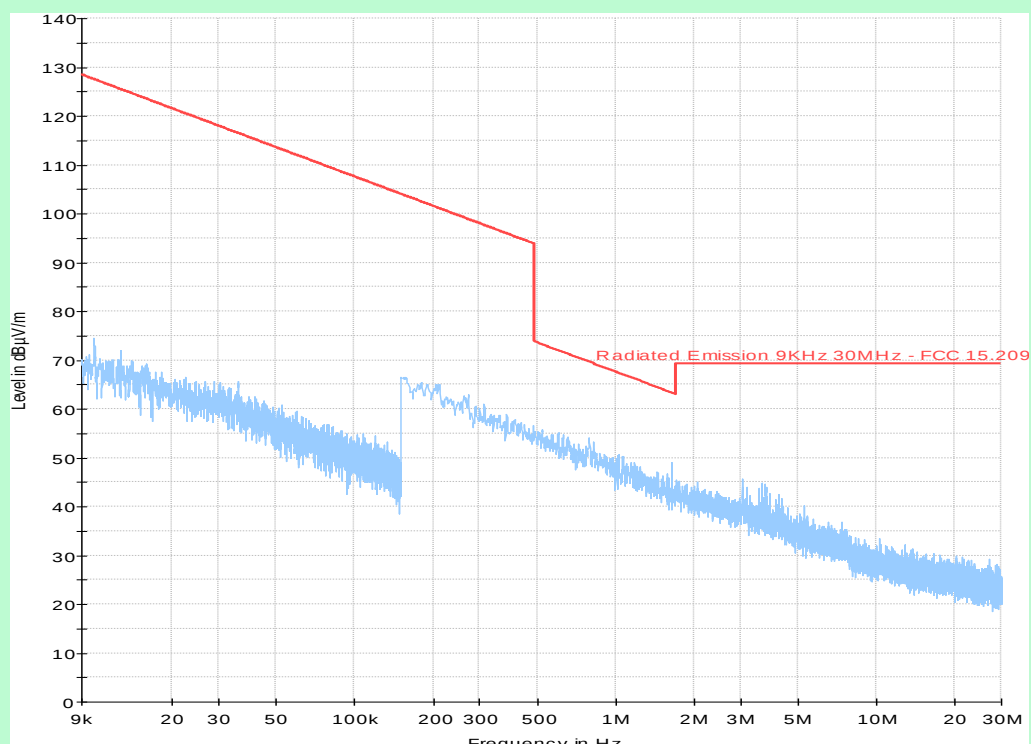
Antenna - 3, Channel - 28 (916 MHz)

Note : Peak Graph - Parallel



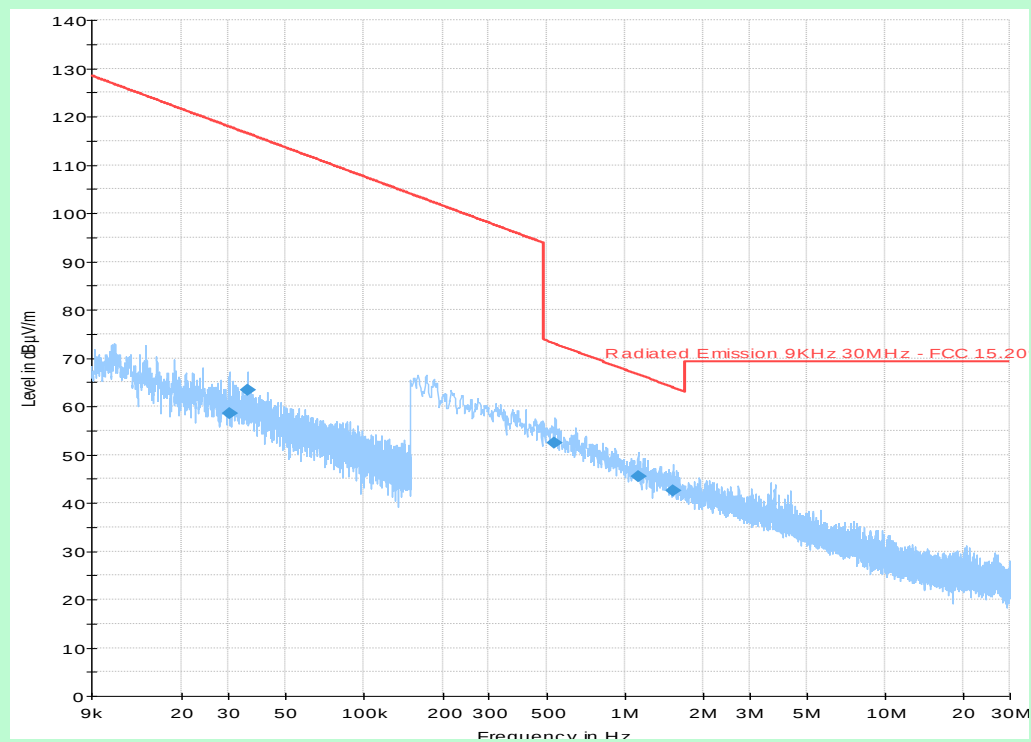
Antenna - 3, Channel - 28 (916 MHz)

Note : Peak Graph - Perpendicular



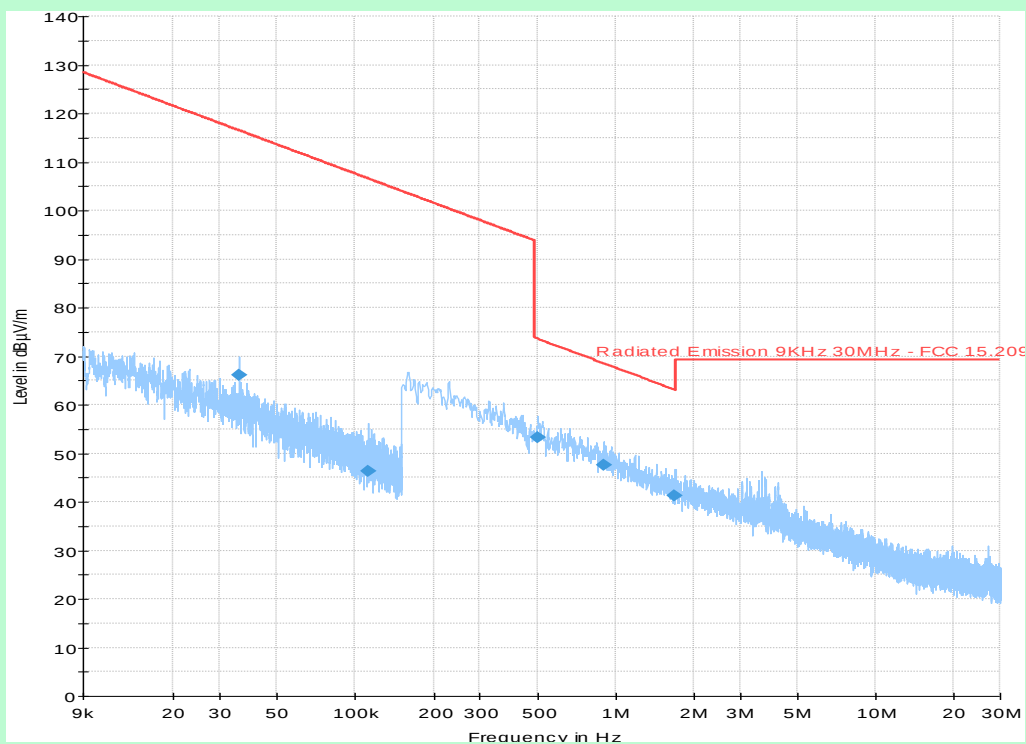
Antenna - 3, Channel - 55 (926.45 MHz)

Note : Peak Graph - Parallel



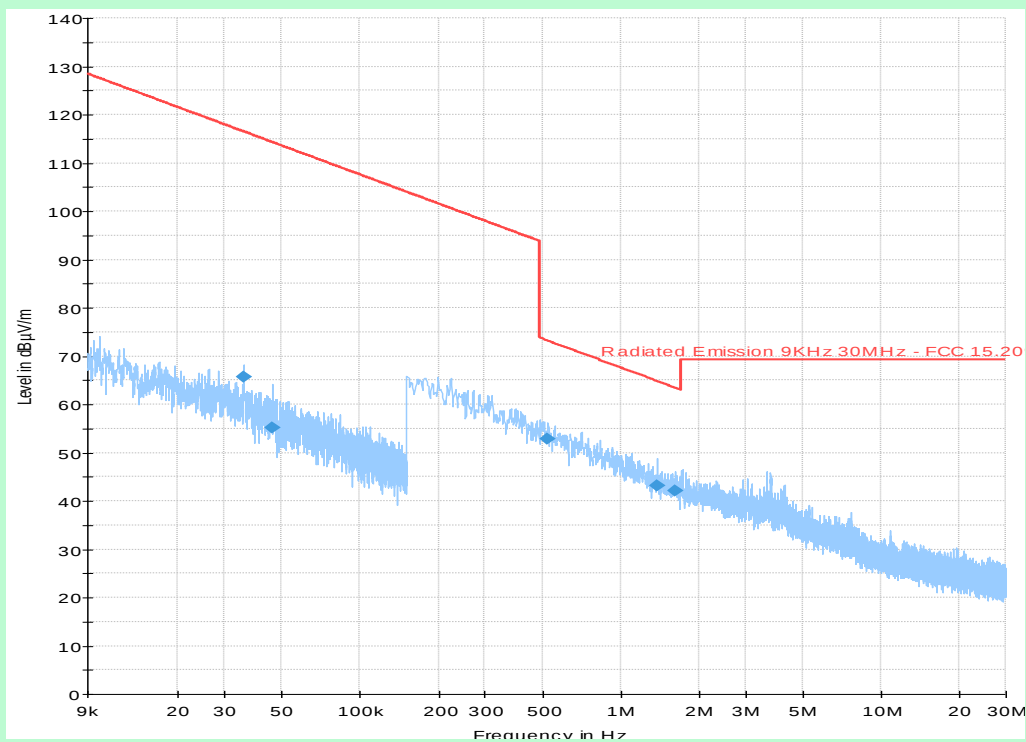
Antenna - 3, Channel - 55 (926.45 MHz)

Note : Peak Graph - Perpendicular



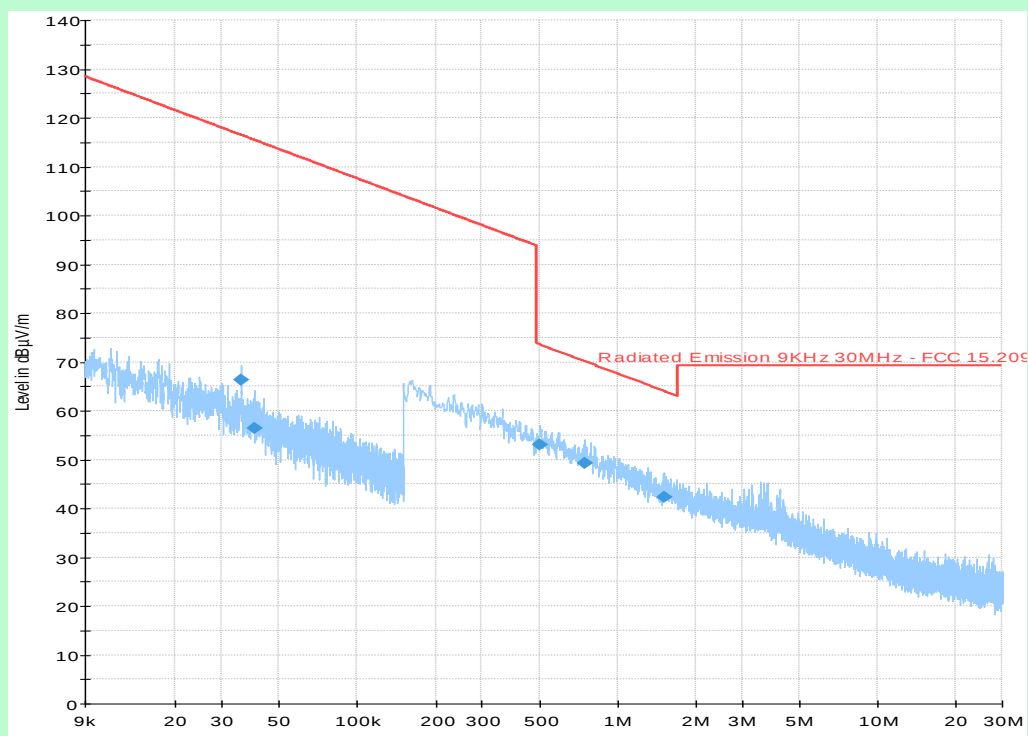
Antenna - 4, Channel - 1 (903.55 MHz)

Note : Peak Graph - Parallel



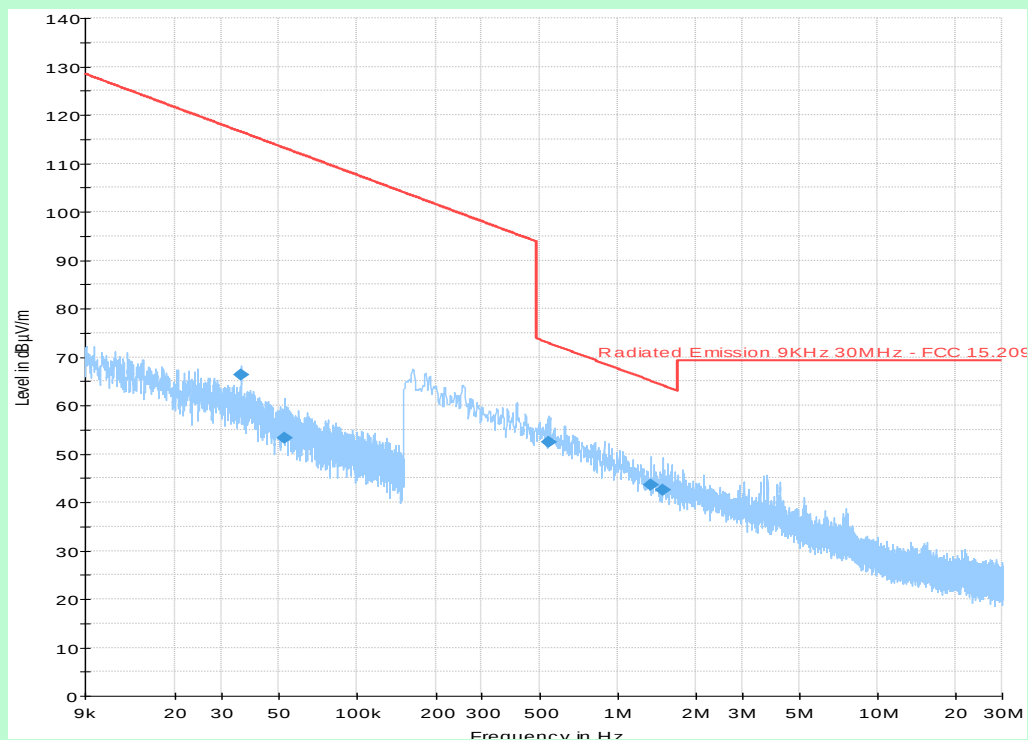
Antenna - 4, Channel - 1 (903.55 MHz)

Note : Peak Graph - Perpendicular



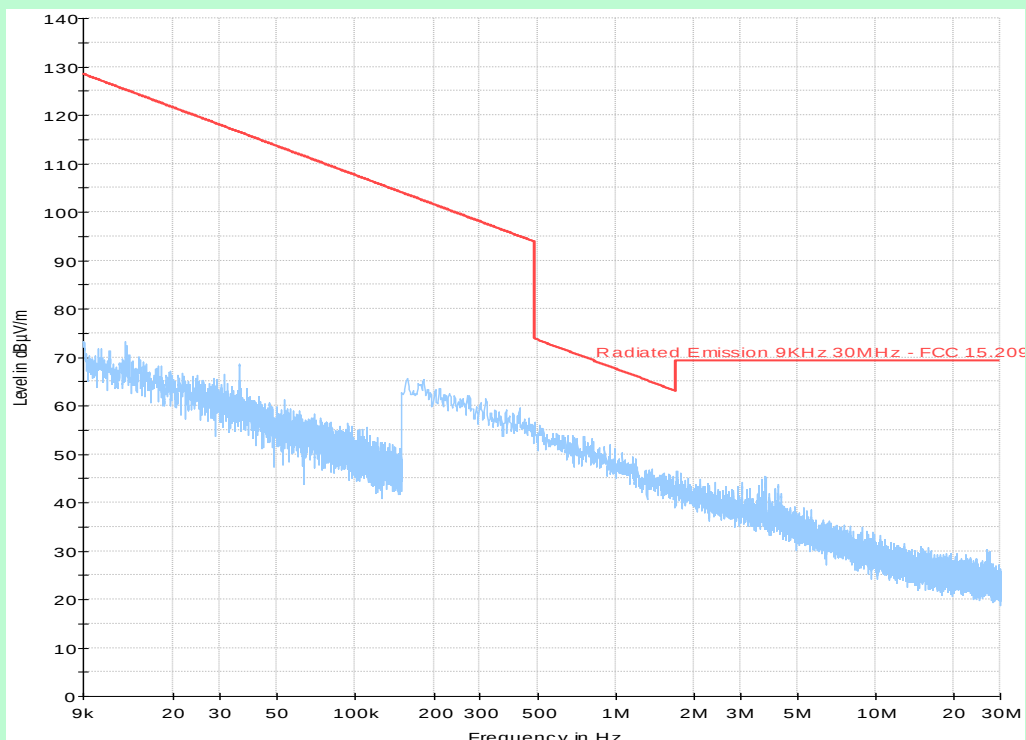
Antenna - 4, Channel - 28 (916 MHz)

Note : Peak Graph - Parallel



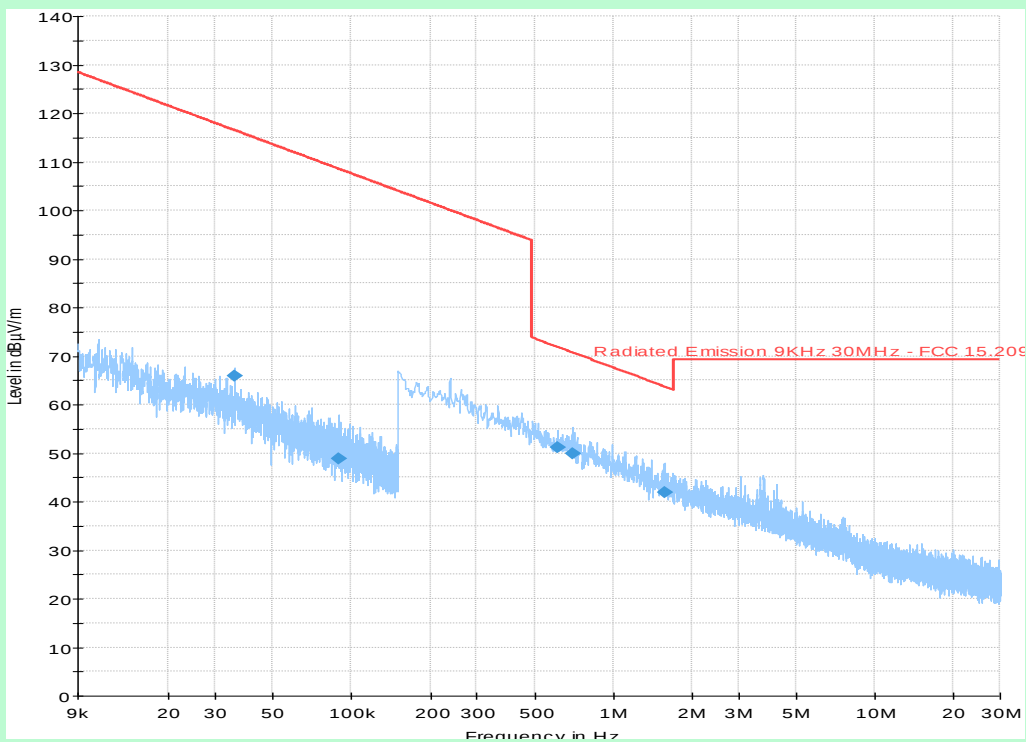
Antenna - 4, Channel - 28 (916 MHz)

Note : Peak Graph - Perpendicular



Antenna - 4, Channel - 55 (926.45 MHz)

Note : Peak Graph - Parallel

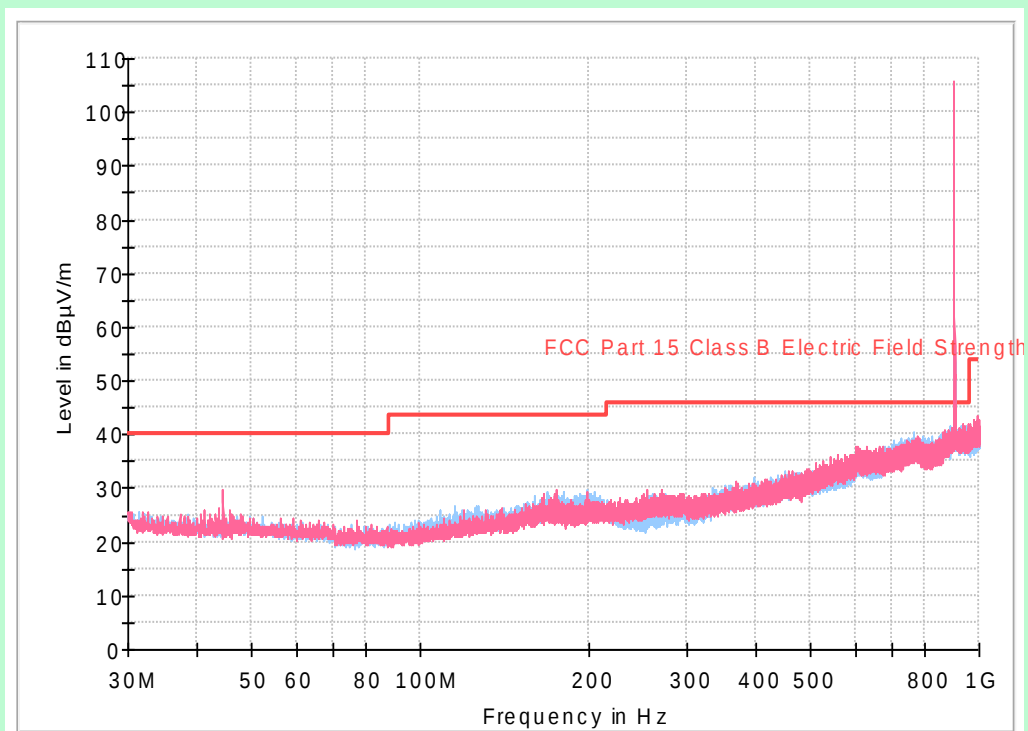


Antenna - 4, Channel - 55 (926.45 MHz)

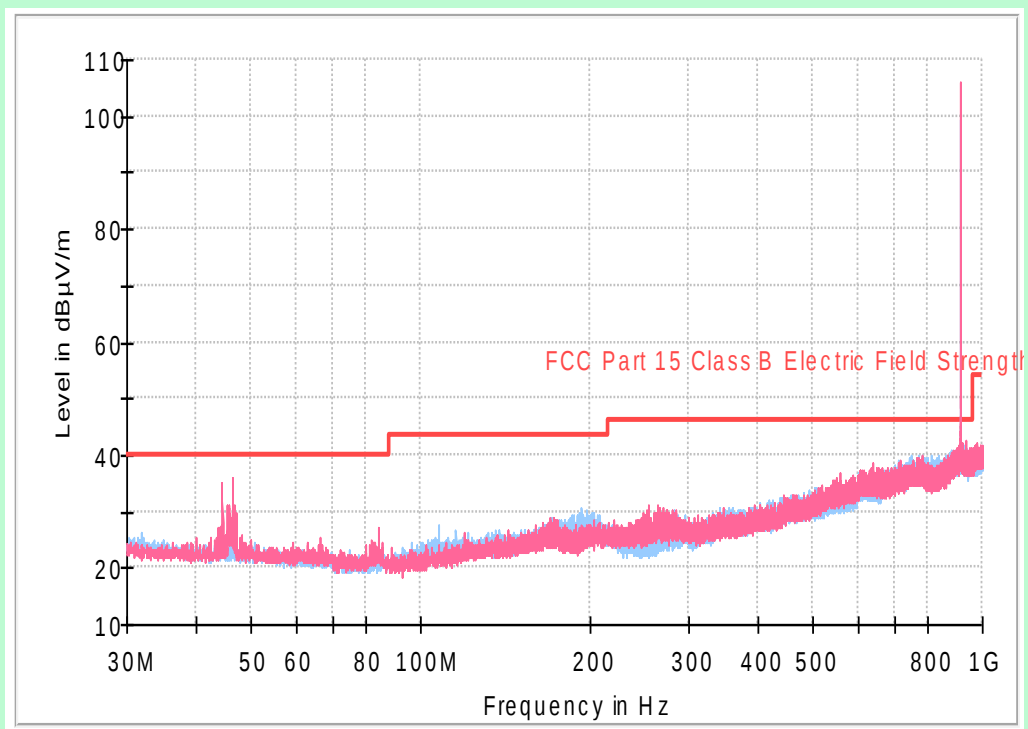
Note : Peak Graph - Perpendicular

TEST RESULT – 9 KHz to 30 MHz									
Channel	Channel Frequency	Measured Spurious	Quasi Peak	Height	Ant Pol	Azimuth	Margin	Limit @ 3m Distance	Results
#	MHz	MHz	dBµV/m	cm	Parallel / Perpendicular	deg	dB	dBµV/m	
No Emissions found									
Note : Measured Field Strength –dBuV/m = Receiver Readings (dBuV) + Antenna Factor (dB/m) + Cable loss (dB)									

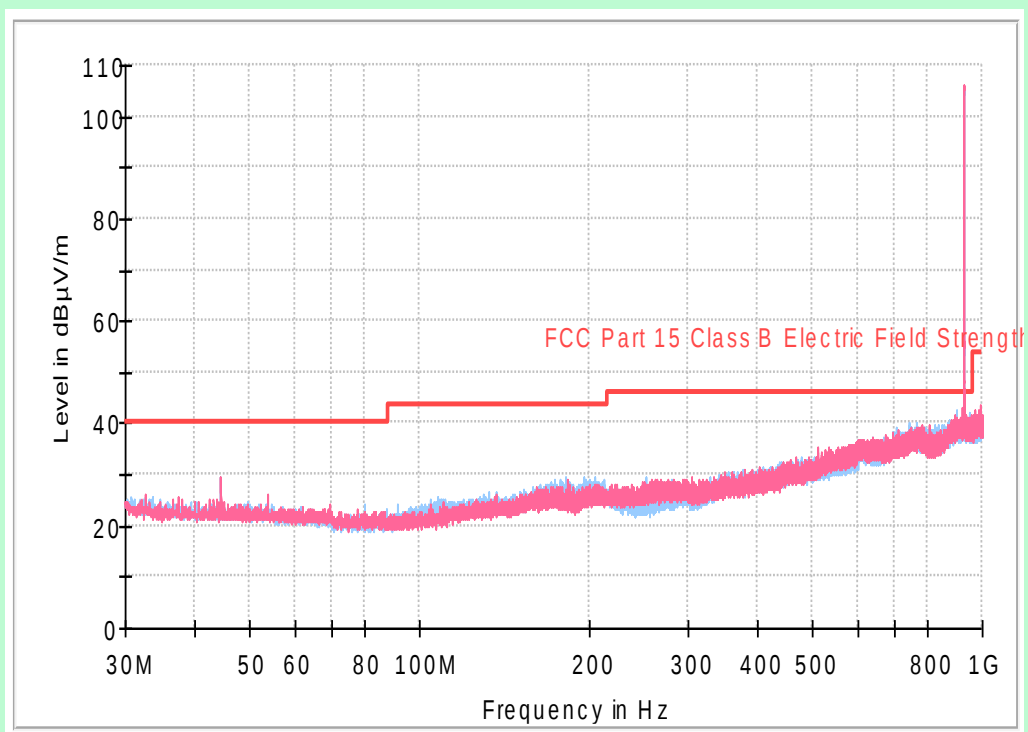
TEST GRAPHS – 30 MHz to 1 GHz

**Antenna-1, Channel 1 (903.55 MHz)**

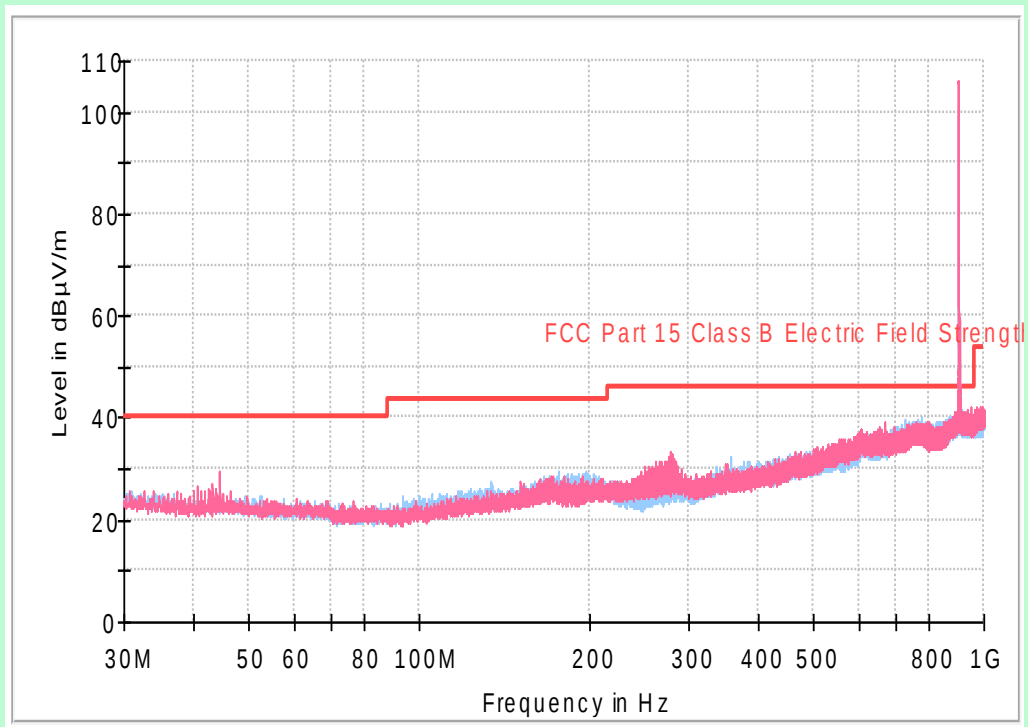
Note : Peak Graph Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB attenuator

**Antenna-1, Channel 28 (916 MHz)**

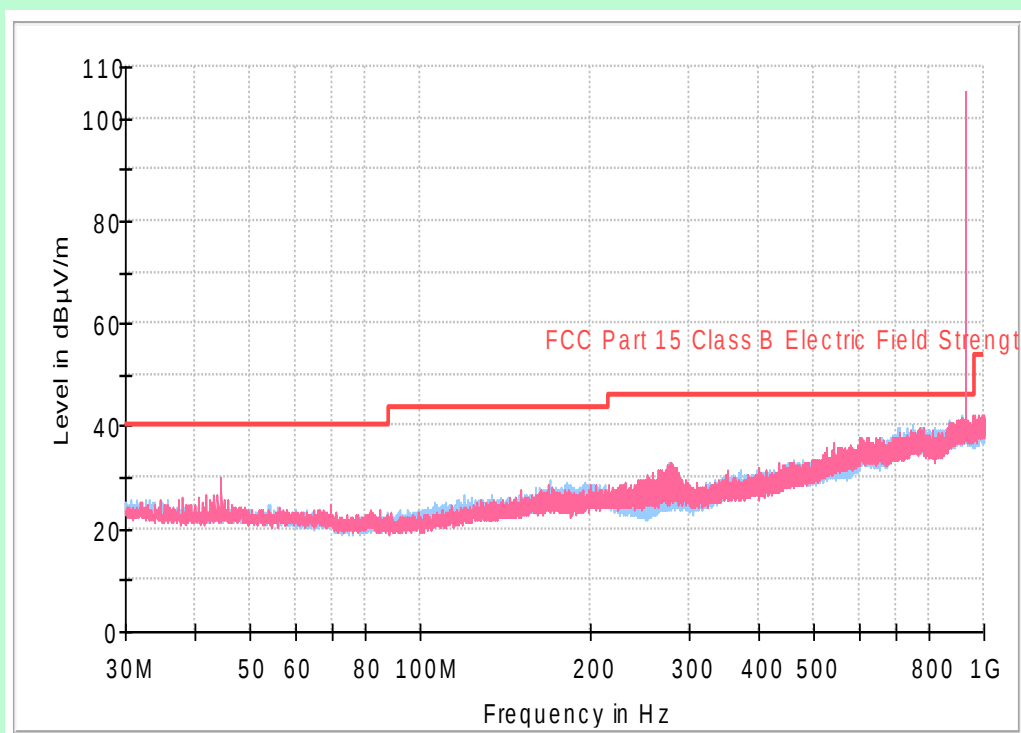
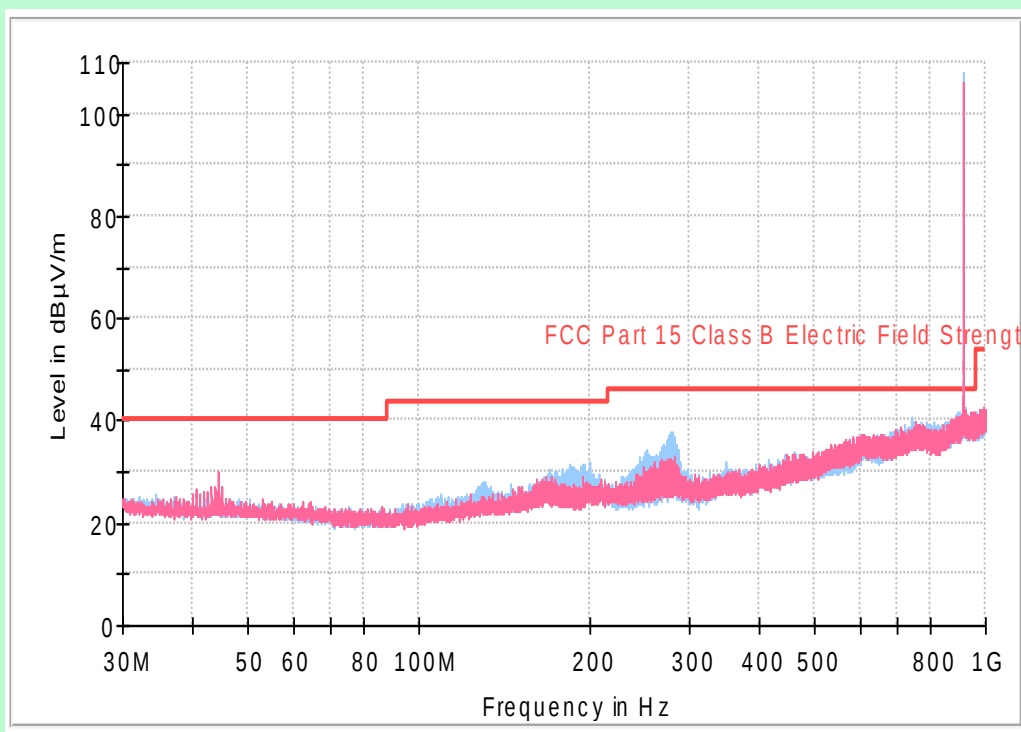
Note : Peak Graph Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB attenuator

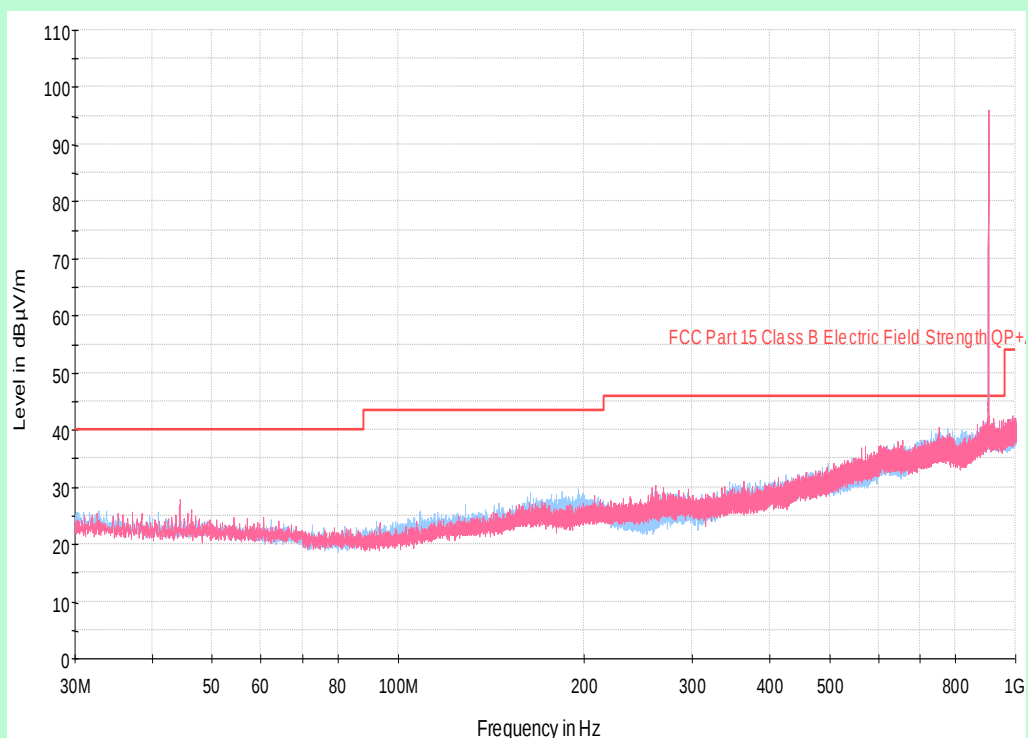
**Antenna-1, Channel 55 (926.45 MHz)**

Note : Peak Graph Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB attenuator

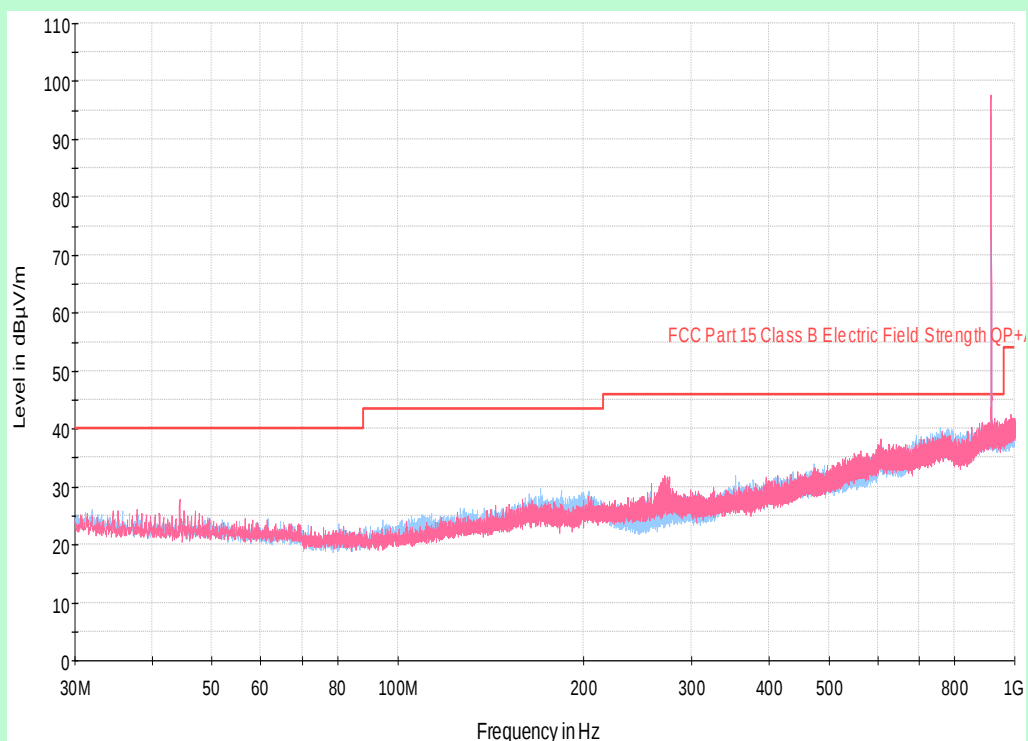
**Antenna-2, Channel 1 (903.55 MHz)**

Note : Peak Graph Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB attenuator

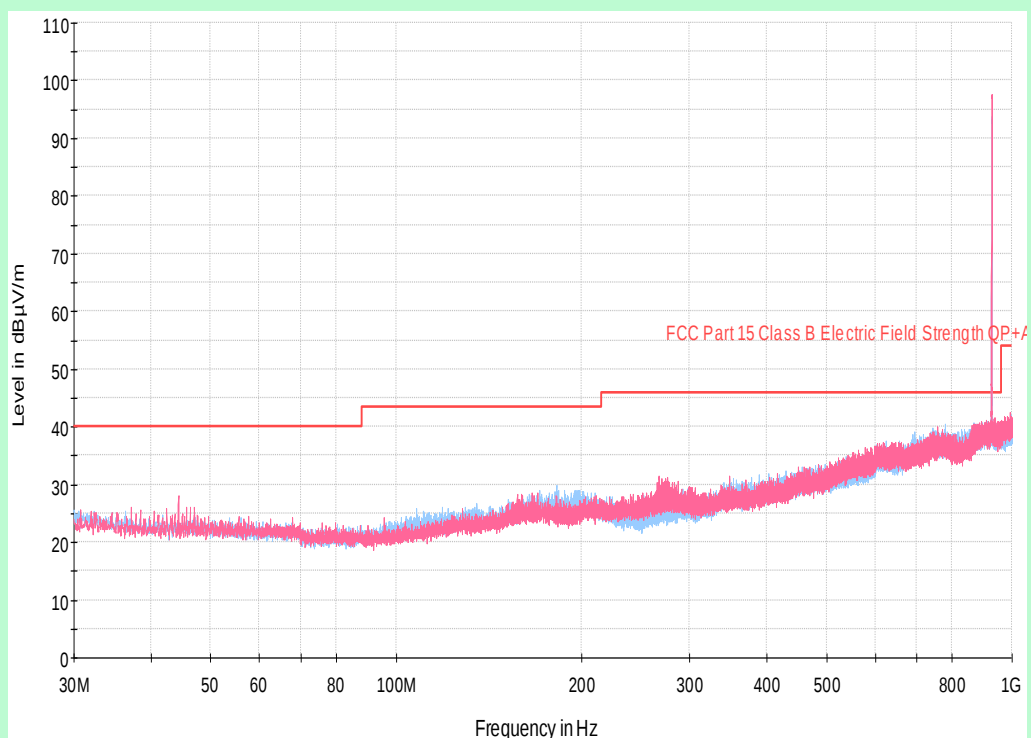


**Antenna-3, Channel 1 (903.55 MHz)**

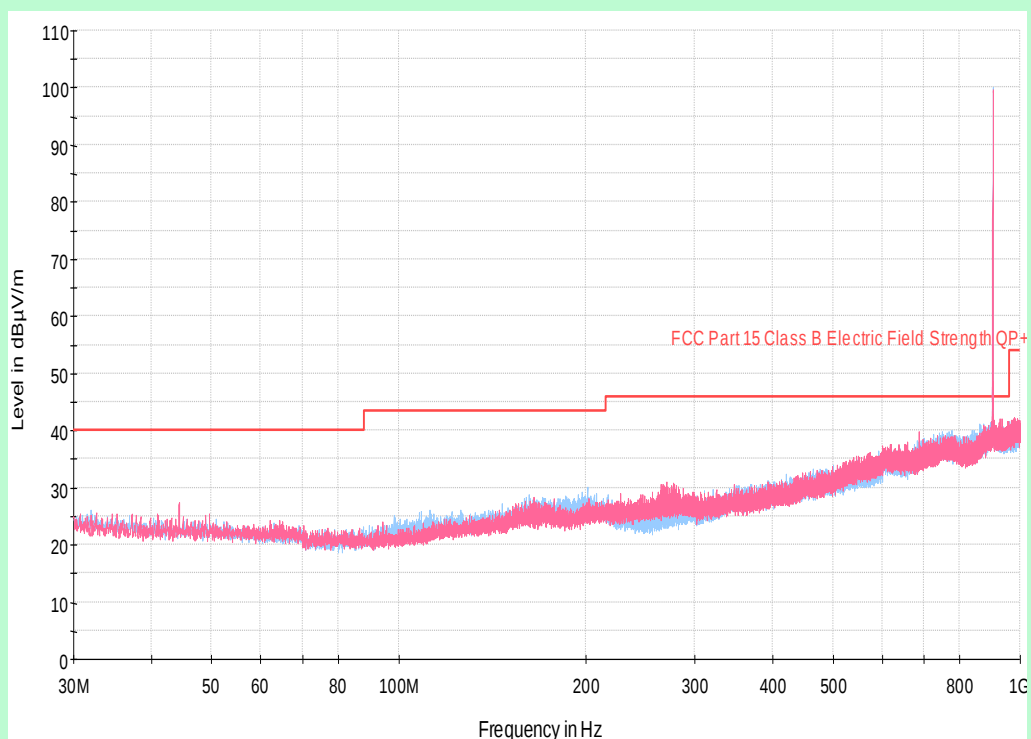
Note : Peak Graph Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB attenuator

**Antenna-3, Channel 28 (916 MHz)**

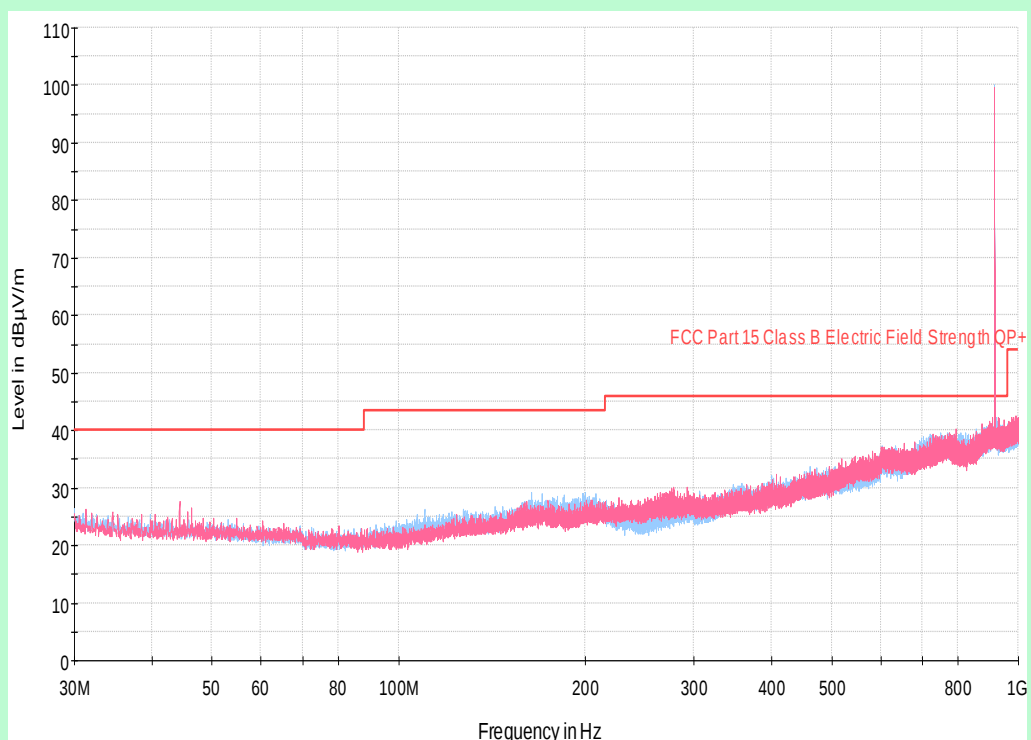
Note : Peak Graph Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB attenuator

**Antenna-3, Channel 55 (926.45 MHz)**

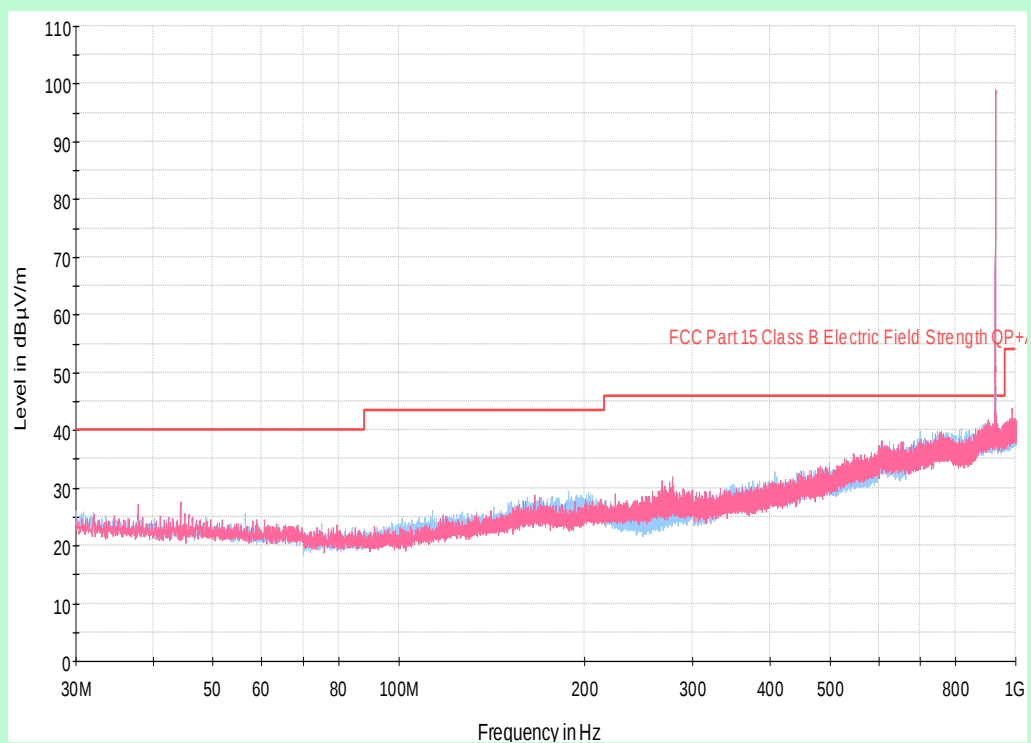
Note : Peak Graph Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB attenuator

**Antenna-4, Channel 1 (903.55 MHz)**

Note : Peak Graph Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB attenuator



Note : Peak Graph Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB attenuator



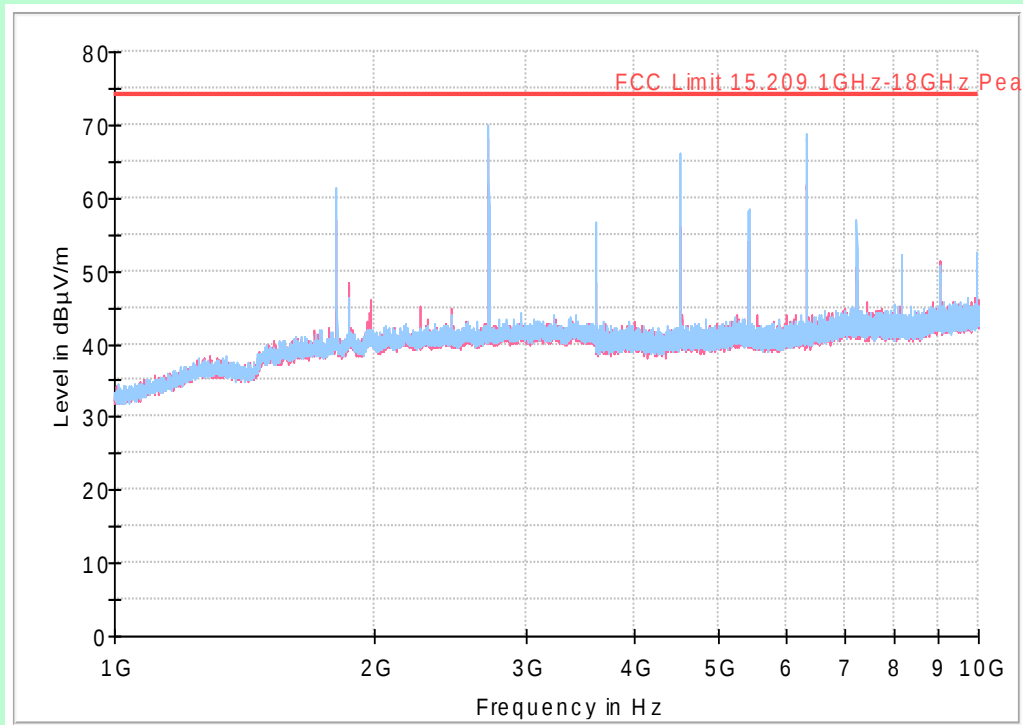
Note : Peak Graph Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB attenuator

TEST RESULT – 30 MHz to 1 GHz								
Channel	Measured Spurious	Quasi Peak	Height	Ant Pol	Azimuth	Margin	Limit @ 3m Distance	Results
#	MHz	dBµV/m	cm	H / V	deg	dB	dBµV/m	
Antenna - 1								
CH1	603.14	32.38	100	V	182	13.62	46.00	Pass
CH1	605.73	32.26	300	V	60	13.74	46.00	Pass
CH1	701.82	33.44	200	H	291	12.56	46.00	Pass
CH1	762.12	34.19	200	H	95	11.81	46.00	Pass
CH1	765.29	34.24	200	H	188	11.77	46.00	Pass
CH1	888.97	35.59	200	H	275	10.42	46.00	Pass
CH1	903.52	109.60	100	V	150	-	-	Intentional Frequency
CH-28	46.33	26.03	100	V	0	13.97	40.00	Pass
CH-28	605.60	32.24	300	V	153	13.76	46.00	Pass
CH-28	611.19	32.11	200	V	105	13.89	46.00	Pass
CH-28	640.68	31.98	100	V	300	14.02	46.00	Pass
CH-28	697.75	33.20	200	H	348	12.80	46.00	Pass
CH-28	767.94	34.08	300	H	26	11.92	46.00	Pass
CH-28	778.71	34.15	100	H	63	11.85	46.00	Pass
CH-28	878.88	35.19	300	H	285	10.81	46.00	Pass
CH-28	879.66	35.17	300	H	259	10.83	46.00	Pass
CH-28	916.00	110.25	100	V	212	-	-	Intentional Frequency
CH-55	600.30	32.41	300	V	30	13.59	46.00	Pass
CH28	607.12	31.66	100	H	68	14.35	46.00	Pass
CH28	691.80	32.84	100	H	193	13.16	46.00	Pass
CH28	701.30	33.27	300	H	136	12.73	46.00	Pass
CH28	739.13	34.00	200	H	203	12.00	46.00	Pass
CH28	764.55	34.11	100	H	4	11.89	46.00	Pass
CH28	875.97	35.13	200	H	273	10.87	46.00	Pass
CH28	879.17	35.30	300	V	280	10.70	46.00	Pass
CH28	926.41	98.67	100	V	341	-	-	Intentional Frequency
Antenna - 2								
CH1	44.36	27.31	100	V	34	12.69	40.00	Pass
CH1	604.30	32.32	100	V	286	13.68	46.00	Pass
CH1	605.53	32.22	200	V	80	13.78	46.00	Pass
CH1	669.17	31.78	100	V	220	14.22	46.00	Pass
CH1	691.44	32.18	200	V	222	13.82	46.00	Pass
CH1	765.62	34.08	200	H	133	11.92	46.00	Pass
CH1	775.35	34.05	200	H	177	11.95	46.00	Pass
CH1	886.09	35.34	100	H	74	10.66	46.00	Pass
CH1	888.90	35.57	100	H	285	10.43	46.00	Pass
CH1	903.55	110.15	100	V	3	-	-	Intentional Frequency
CH-28	692.19	32.26	100	V	175	13.74	46.00	Pass

CH-28	704.05	33.46	200	H	22	12.54	46.00	Pass
CH-28	743.31	34.14	200	H	210	11.86	46.00	Pass
CH-28	767.91	34.12	200	H	189	11.88	46.00	Pass
CH-28	916.00	104.97	100	H	219	-	-	Intentional Frequency
CH-55	44.36	27.49	100	V	14	12.51	40.00	Pass
CH-55	601.14	32.36	100	V	71	13.64	46.00	Pass
CH-55	617.88	32.00	100	V	71	14.00	46.00	Pass
CH-55	701.53	33.32	200	H	0	12.68	46.00	Pass
CH-55	704.28	33.25	300	H	304	12.75	46.00	Pass
CH-55	746.28	34.42	200	H	40	11.58	46.00	Pass
CH-55	746.77	34.40	100	H	99	11.60	46.00	Pass
CH-55	866.53	34.59	300	V	334	11.41	46.00	Pass
CH-55	869.79	34.80	300	H	102	11.20	46.00	Pass
CH-55	926.41	109.81	100	V	218	-	-	Intentional Frequency
Antenna – 3								
CH1	605.66	32.15	100	V	199	13.85	46.00	Pass
CH1	620.89	31.46	200	H	276	14.54	46.00	Pass
CH1	702.92	33.18	300	H	276	12.83	46.00	Pass
CH1	703.12	33.24	200	H	102	12.77	46.00	Pass
CH1	752.81	33.69	200	V	76	12.31	46.00	Pass
CH1	775.02	34.04	200	H	178	11.96	46.00	Pass
CH1	886.87	35.40	200	V	358	10.60	46.00	Pass
CH1	903.58	101.15	100	V	315	-	-	Intentional Frequency
CH-28	605.82	32.19	200	V	40	13.81	46.00	Pass
CH-28	607.15	32.18	300	V	11	13.82	46.00	Pass
CH-28	693.00	32.81	100	H	266	13.19	46.00	Pass
CH-28	693.09	32.79	200	H	0	13.21	46.00	Pass
CH-28	758.18	33.99	100	H	136	12.01	46.00	Pass
CH-28	779.97	34.01	100	H	136	11.99	46.00	Pass
CH-28	882.02	35.16	200	H	70	10.84	46.00	Pass
CH-28	886.03	35.37	300	V	348	10.63	46.00	Pass
CH-28	916.00	101.77	100	V	107	-	-	Intentional Frequency
CH-55	170.97	25.21	200	H	271	14.79	40.00	Pass
CH-55	616.72	31.94	300	V	290	14.06	46.00	Pass
CH-55	625.19	31.35	100	H	66	14.65	46.00	Pass
CH-55	689.05	32.57	100	H	285	13.43	46.00	Pass
CH-55	693.87	32.92	200	H	59	13.08	46.00	Pass
CH-55	757.40	33.70	300	V	203	12.30	46.00	Pass
CH-55	780.36	34.04	300	H	148	11.96	46.00	Pass
CH-55	868.02	34.69	100	H	270	11.31	46.00	Pass
CH-55	885.35	35.39	100	V	289	10.61	46.00	Pass
CH-55	926.51	102.30	100	V	154	-	-	Intentional Frequency
Antenna – 4								

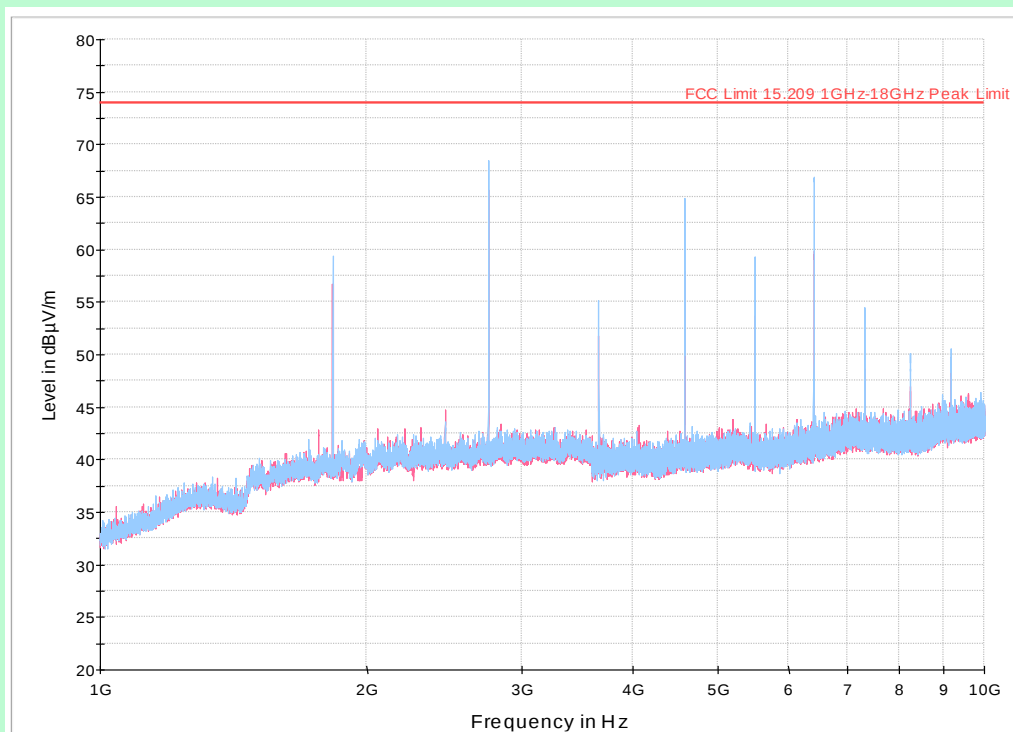
CH1	750.26	34.53	200	H	258	11.47	46.00	Pass
CH1	776.61	34.07	300	H	322	11.93	46.00	Pass
CH1	866.50	34.54	200	V	19	11.46	46.00	Pass
CH1	903.55	104.07	100	H	186	-	-	Intentional Frequency
CH-28	750.10	34.56	300	H	134	11.44	46.00	Pass
CH-28	772.57	34.07	100	H	76	11.93	46.00	Pass
CH-28	867.14	34.61	300	V	102	11.39	46.00	Pass
CH-28	916.06	104.20	100	H	0	-	-	Intentional Frequency
CH-55	700.82	33.33	300	H	33	12.67	46.00	Pass
CH-55	755.85	33.77	100	V	156	12.23	46.00	Pass
CH-55	882.69	35.20	200	H	56	10.80	46.00	Pass
CH-55	887.29	35.37	100	H	97	10.64	46.00	Pass
CH-55	926.41	103.65	100	V	67	-	-	Intentional Frequency
NOTE: Measured Field Strength –dBuV/m (9 KHz to 1GHz) = Receiver Readings (dBuV) + Antenna Factor (dB/m) + Cable loss (dB)								

TEST GRAPHS – 1 GHz to 10 GHz



Antenna-1, Channel 1 (903.55 MHz)

Note : Peak Graph Vertical (Red), Peak Graph Horizontal (Blue)



Antenna-1, Channel 28 (916 MHz)

Note : Peak Graph Vertical (Red), Peak Graph Horizontal (Blue)