



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

RADIATED DATA AND GRAPH(S) TAKEN FOR

SPURIOUS EMISSION MEASUREMENTS

ZEBRA R110XiIII with ZM4e

FCC Part 15 Class B

Electric Field Strength

EUT: R110XiIII Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Rx mode; Low, Mid, High Channels
Date: 06-17-2005

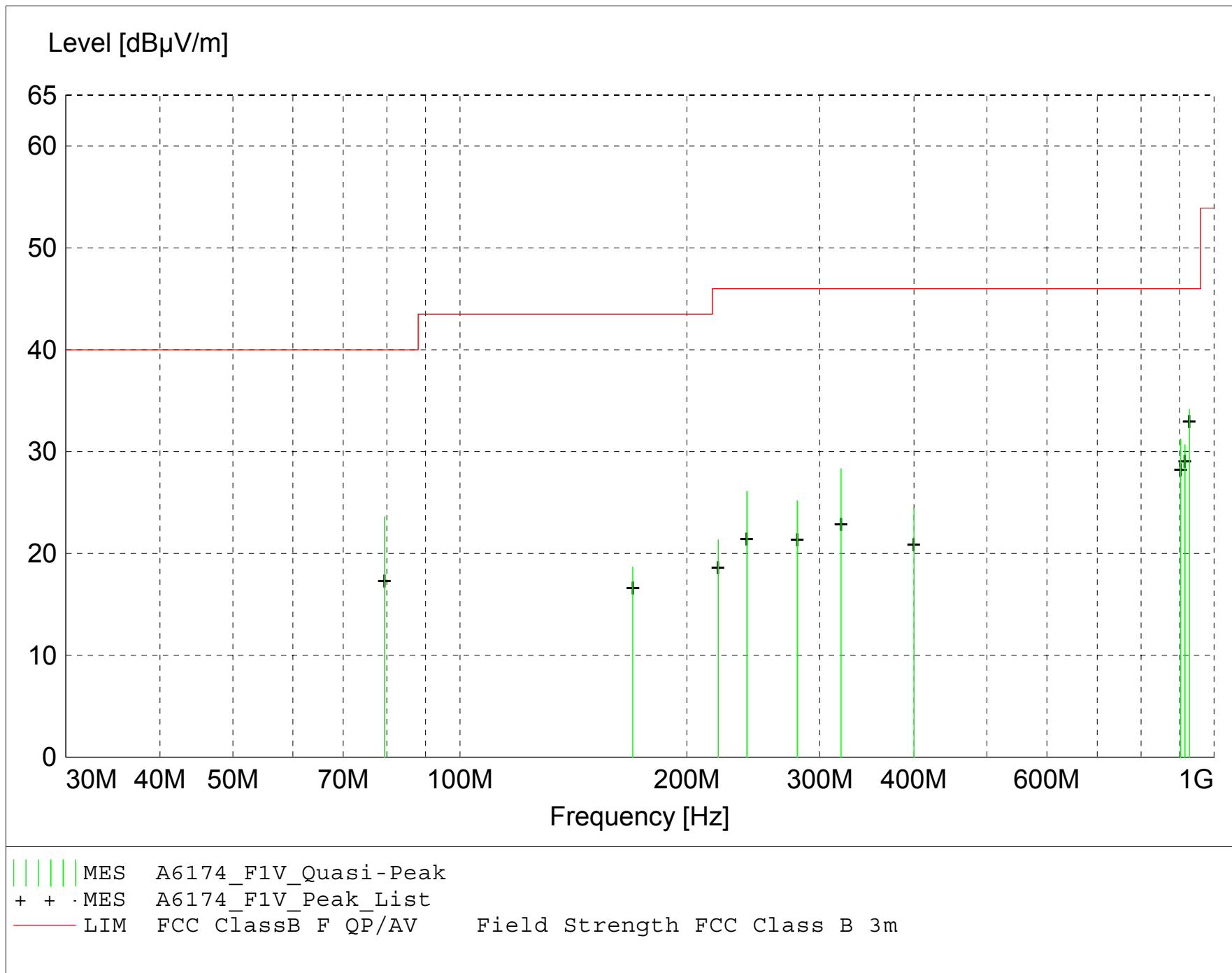
TEXT: "Site 3 MidV 3M"

Short Description: Test Set-up Vert30-1000MHz
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Antennas ---
Biconical -- EMCO 3104C SN: 9701-4785
Log Periodic -- EMCO 3146 SN: 9702-4895

Pre-Amp --- Rohde&Schwarz TS-PR10 SN: 032001/005

TEST SET-UP: EuT Measured at 3 Meters with VERTICAL Antenna Polarisation



MEASUREMENT RESULT: "A6174_F1V_Final"

6/17/2005 10:07AM

Frequency	Level	Antenna	System	Total	Limit	Margin	Height	EuT	Final	Comment
MHz	dBμV	Factor	Loss	Level			Ant.	Angle	Detector	
		dBμV/m	dB	dBμV/m	dBμV/m	dB	m	deg		
927.190000	29.60	22.78	-18.2	34.1	46.0	11.9	1.00	340	QUASI-PEAK	Receive
902.990000	27.12	22.60	-18.5	31.3	46.0	14.7	1.00	340	QUASI-PEAK	Receive
915.120000	26.49	22.54	-18.4	30.7	46.0	15.3	1.00	340	QUASI-PEAK	Receive
79.375000	40.73	6.76	-23.9	23.6	40.0	16.4	1.00	0	QUASI-PEAK	None
320.000000	34.76	15.38	-21.8	28.3	46.0	17.7	2.00	170	QUASI-PEAK	None
240.020000	36.49	12.01	-22.4	26.1	46.0	19.9	1.00	225	QUASI-PEAK	None
280.010000	33.53	13.71	-22.1	25.2	46.0	20.8	1.00	225	QUASI-PEAK	None
400.000000	30.20	15.66	-21.4	24.5	46.0	21.5	1.00	260	QUASI-PEAK	None
220.000000	32.52	11.31	-22.5	21.3	46.0	24.7	1.00	45	QUASI-PEAK	None
169.475000	27.04	14.51	-22.9	18.7	43.5	24.8	1.00	0	QUASI-PEAK	None

FCC Part 15 Class B

Electric Field Strength

EUT: R110XiIII Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Rx mode; Low, Mid, High Channels
Date: 06-17-2005

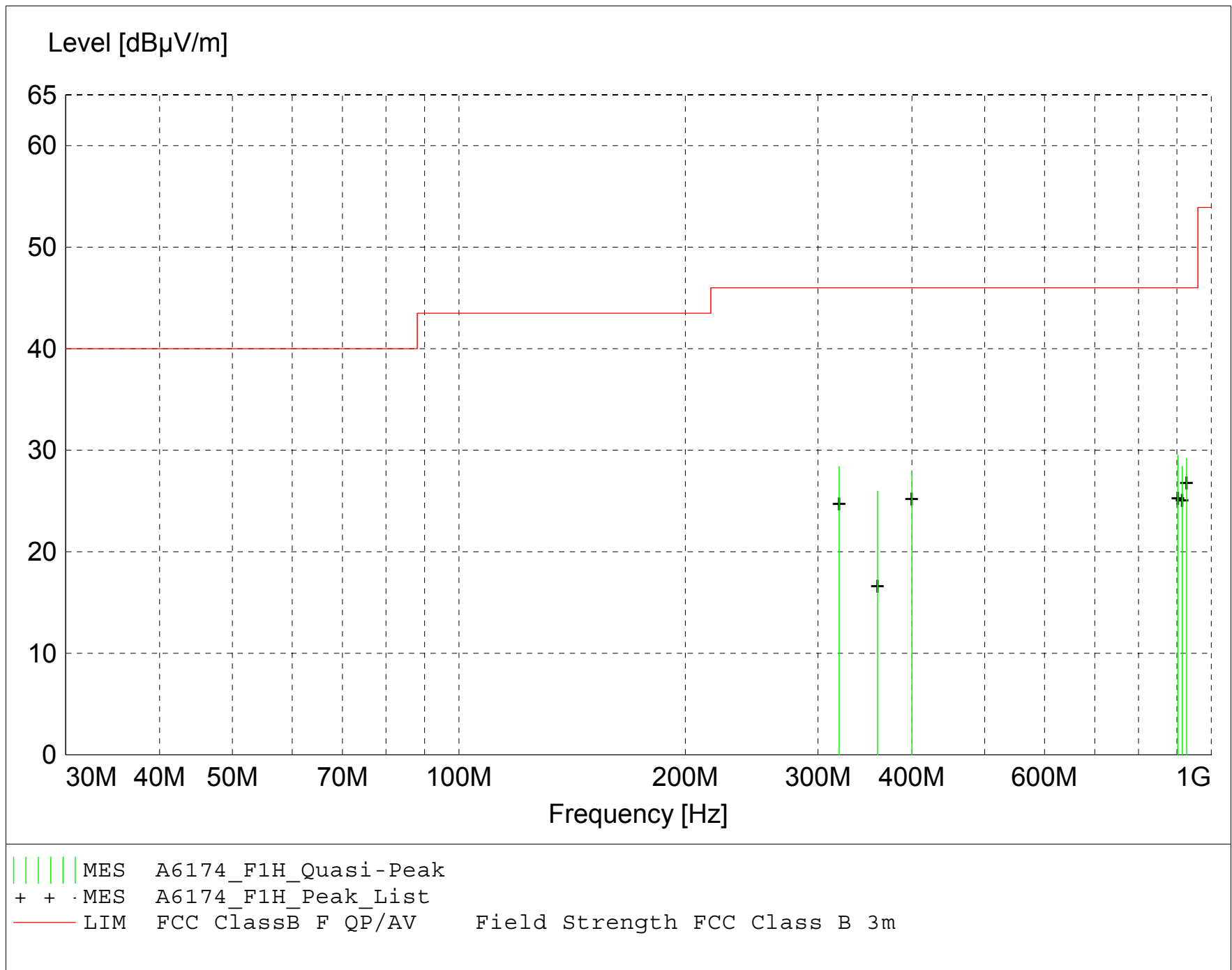
TEXT: "Site 3 MidH 3M"

Short Description: Test Set-up Horz30-1000MHz
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Antennas ---
Biconical -- EMCO 3104C SN: 9701-4785
Log Periodic -- EMCO 3146 SN: 9702-4895

Pre-Amp --- Rohde&Schwarz TS-PR10 SN: 032001/005

TEST SET-UP: EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation



MEASUREMENT RESULT: "A6174_F1H_Final"

6/17/2005 10:11AM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBμV	dBμV/m	dB	dBμV/m	dBμV/m	dB	m	deg		
902.994000	25.36	22.60	-18.5	29.5	46.0	16.5	1.00	45	QUASI-PEAK	Receive
927.180000	24.67	22.78	-18.2	29.2	46.0	16.8	1.00	315	QUASI-PEAK	Receive
915.120000	24.21	22.54	-18.4	28.4	46.0	17.6	1.00	315	QUASI-PEAK	Receive
320.010000	34.82	15.38	-21.8	28.4	46.0	17.6	3.00	350	QUASI-PEAK	None
400.010000	33.66	15.66	-21.4	27.9	46.0	18.1	3.00	225	QUASI-PEAK	None
360.000000	32.67	14.96	-21.7	26.0	46.0	20.0	3.50	45	QUASI-PEAK	None

FCC Part 15 Class B

Electric Field Strength

EUT: R110XiIII Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 51% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification: R110XiIII Printer
Comment: Tx mode; Max Power; Low Channel
Date: 06-17-2005

TEXT: "Site 3 6204&184 V3M"

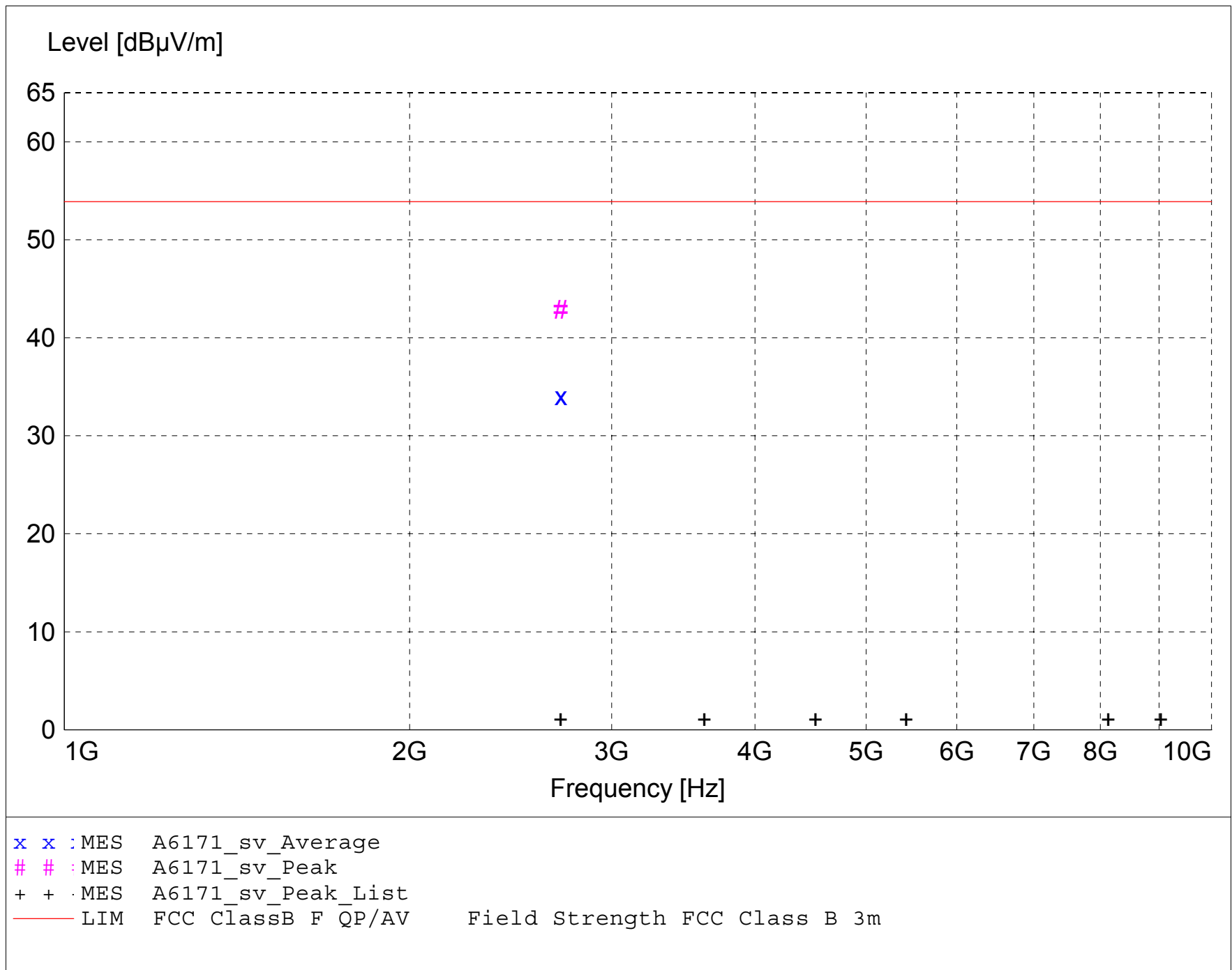
Short Description: Test Set-up Vert1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 40 SN: 837808/006

Horn Antenna --- ETS 3115 SN: 6204

Pre-Amps ---

1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with VERTICAL Antenna Polarisation



MEASUREMENT RESULT: "A6171_sv_Final"

6/17/2005 8:36AM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant. m	EuT Angle deg	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB				
2709.000000	51.80	29.28	-38.3	42.8	53.9	11.1	1.50	45	MAX PEAK	None
2709.000000	43.00	29.28	-38.3	34.0	53.9	19.9	1.50	45	AVERAGE	None

FCC Part 15 Class B

Electric Field Strength

EUT: R110XiIII Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 51% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification: R110XiIII Printer
Comment: Tx mode; Max Power; Low Channel
Date: 06-17-2005

TEXT: "Site 3 6204&184 H3M"

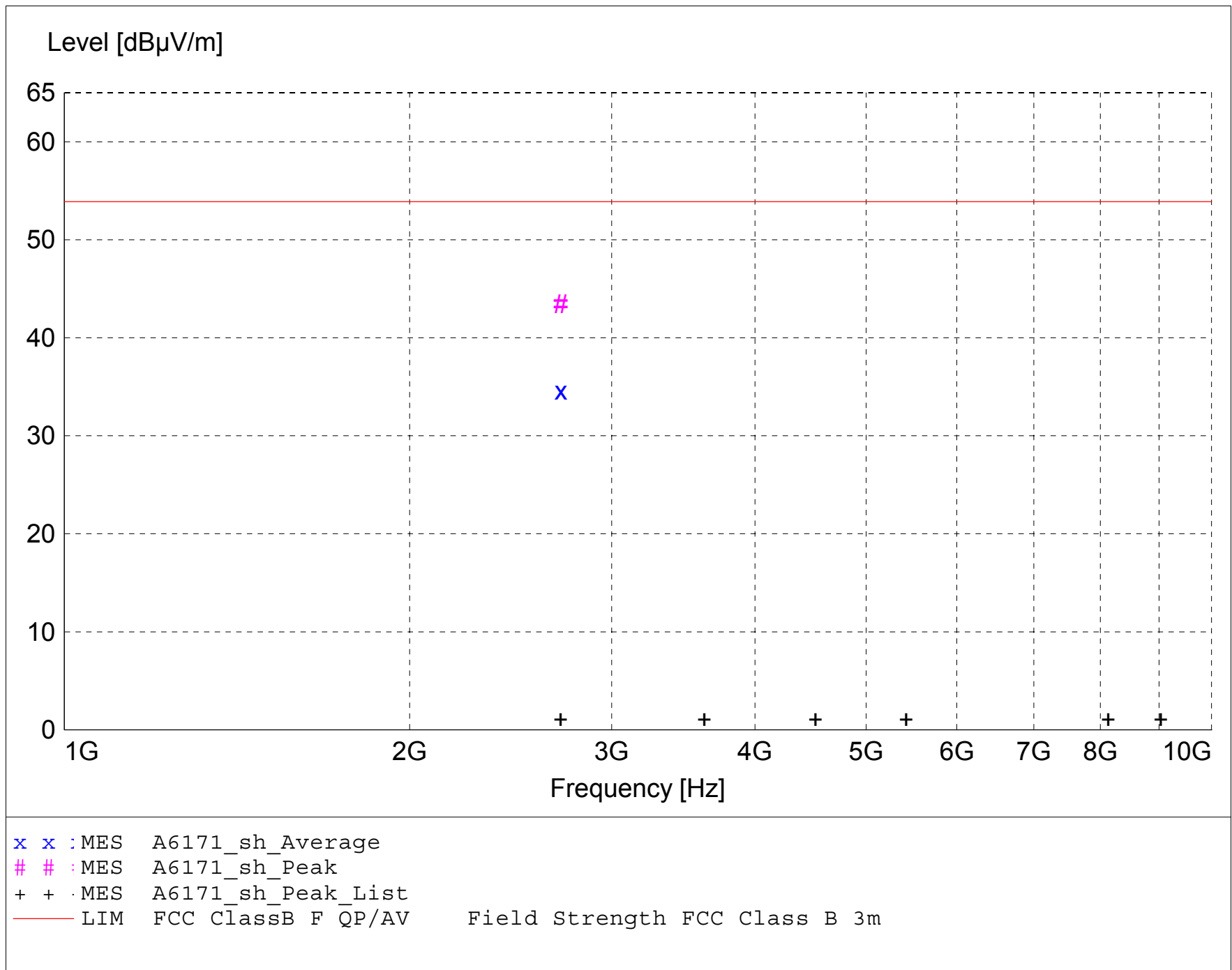
Short Description: Test Set-up Horz1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 40 SN: 837808/006

Horn Antenna --- ETS 3115 SN: 6204

Pre-Amps ---

1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation



MEASUREMENT RESULT: "A6171_sh_Final"

6/17/2005 8:39AM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBμV	dBμV/m	dB	dBμV/m	dBμV/m	dB	m	deg		
2709.000000	52.35	29.28	-38.3	43.4	53.9	10.5	1.50	135	MAX PEAK	None
2709.000000	43.58	29.28	-38.3	34.6	53.9	19.3	1.50	135	AVERAGE	None

FCC Part 15 Class B

Electric Field Strength

EUT: R110XiIII Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Max Power; Mid Channel
Date: 06-17-2005

TEXT: "Site 3 6204&184 V3M"

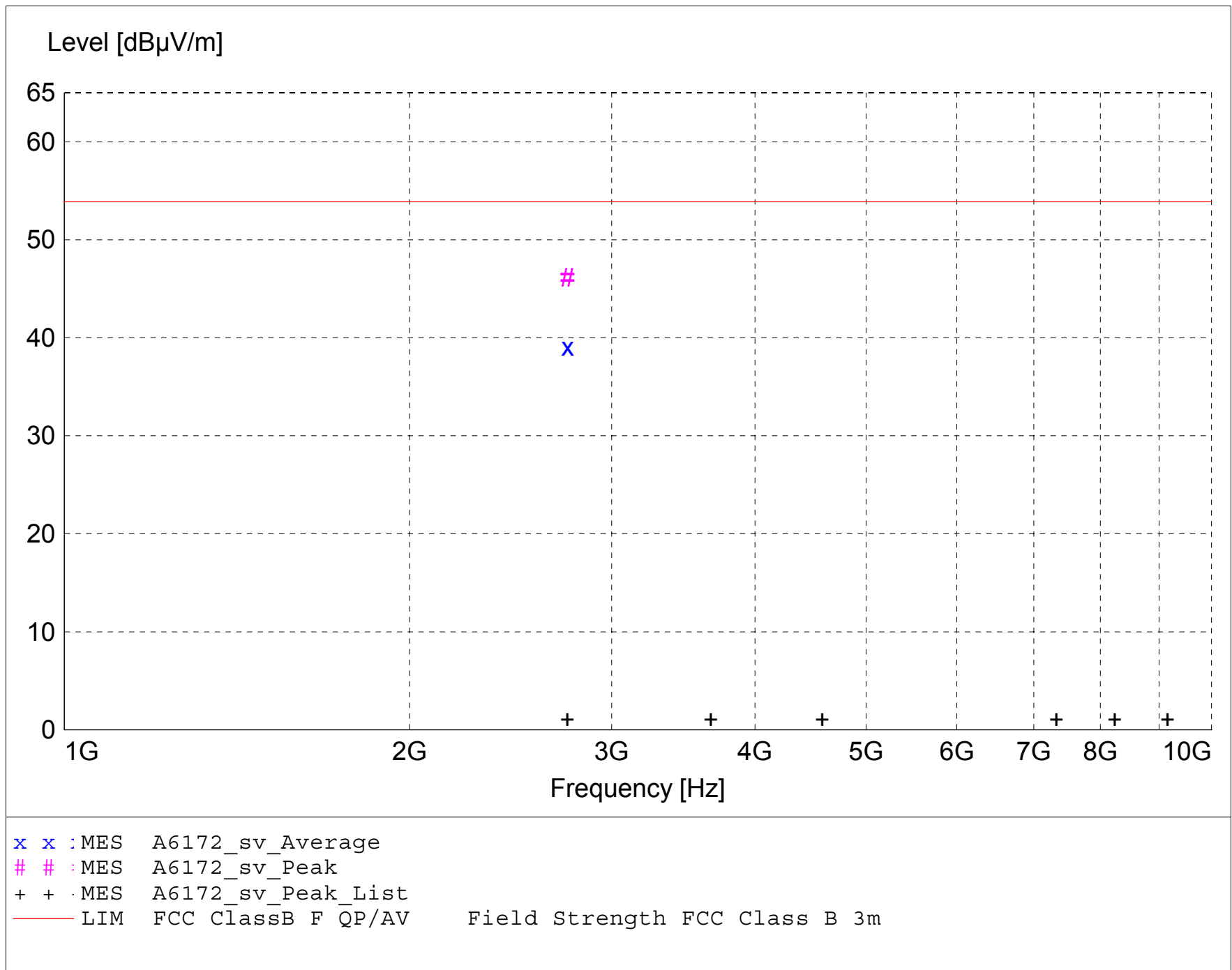
Short Description: Test Set-up Vert1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 40 SN: 837808/006

Horn Antenna --- ETS 3115 SN: 6204

Pre-Amps ---

1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with VERTICAL Antenna Polarisation



MEASUREMENT RESULT: "A6172_sv_Final"

6/17/2005 8:55AM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBμV	dBμV/m	dB	dBμV/m	dBμV/m	dB	m	deg		
2745.400000	54.79	29.40	-38.1	46.1	53.9	7.8	1.70	170	MAX PEAK	None
2745.400000	47.81	29.40	-38.1	39.1	53.9	14.8	1.70	170	AVERAGE	None

FCC Part 15 Class B

Electric Field Strength

EUT: R110XiIII Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Max Power; Mid Channel
Date: 06-17-2005

TEXT: "Site 3 6204&184 H3M"

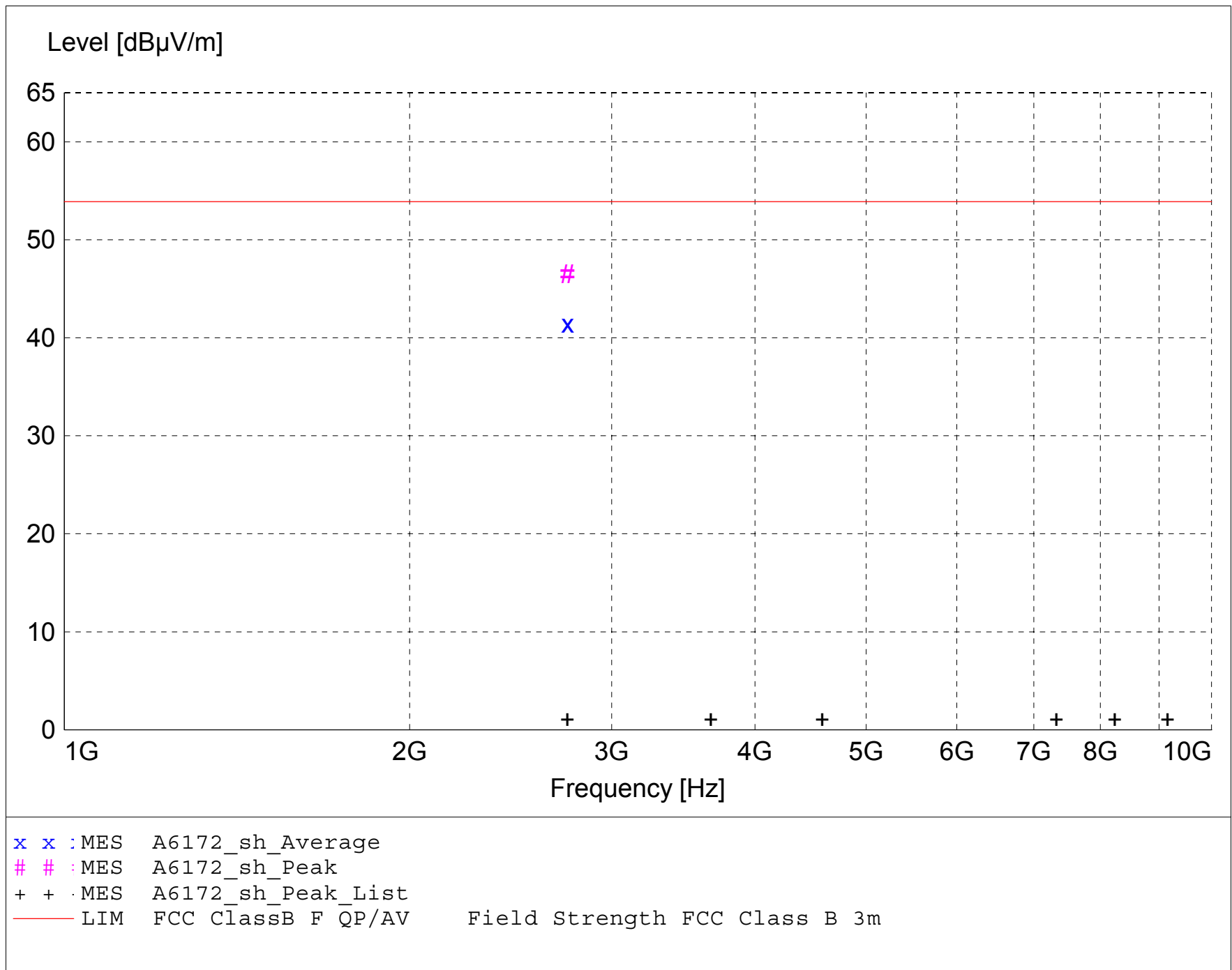
Short Description: Test Set-up Horz1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 40 SN: 837808/006

Horn Antenna --- ETS 3115 SN: 6204

Pre-Amps ---

1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation



MEASUREMENT RESULT: "A6172_sh_Final"

6/17/2005 9:00AM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant. m	EuT Angle deg	Final Detector	Comment
MHz	dBμV	dBμV/m	dB	dBμV/m	dBμV/m	dB				
2745.400000	55.19	29.40	-38.1	46.5	53.9	7.4	1.10	135	MAX PEAK	None
2745.400000	50.09	29.40	-38.1	41.4	53.9	12.5	1.10	135	AVERAGE	None

FCC Part 15 Class B

Electric Field Strength

EUT: R110XiIII Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Max Power; High Channel
Date: 06-17-2005

TEXT: "Site 3 6204&184 V3M"

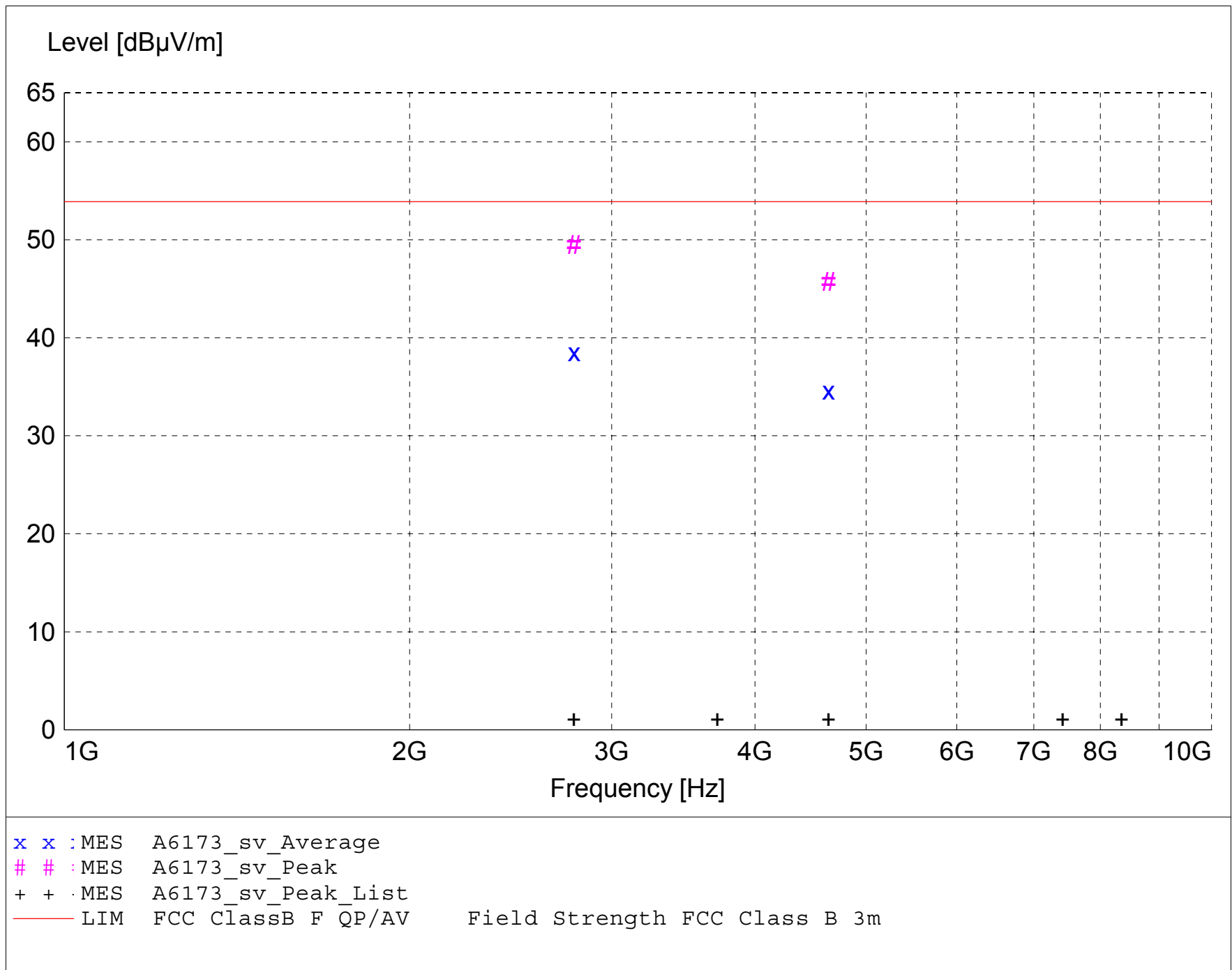
Short Description: Test Set-up Vert1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 40 SN: 837808/006

Horn Antenna --- ETS 3115 SN: 6204

Pre-Amps ---

1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with VERTICAL Antenna Polarisation



MEASUREMENT RESULT: "A6173_sv_Final"

6/17/2005 9:11AM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
2781.600000	57.93	29.51	-38.0	49.4	53.9	4.5	1.00	160	MAX PEAK	None
4636.000000	48.86	32.60	-35.8	45.7	53.9	8.2	1.30	160	MAX PEAK	None
2781.600000	47.00	29.51	-38.0	38.5	53.9	15.4	1.00	160	AVERAGE	None
4636.000000	37.78	32.60	-35.8	34.6	53.9	19.3	1.30	160	AVERAGE	None

FCC Part 15 Class B

Electric Field Strength

EUT: R110XiIII Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Max Power; High Channel
Date: 06-17-2005

TEXT: "Site 3 6204&184 H3M"

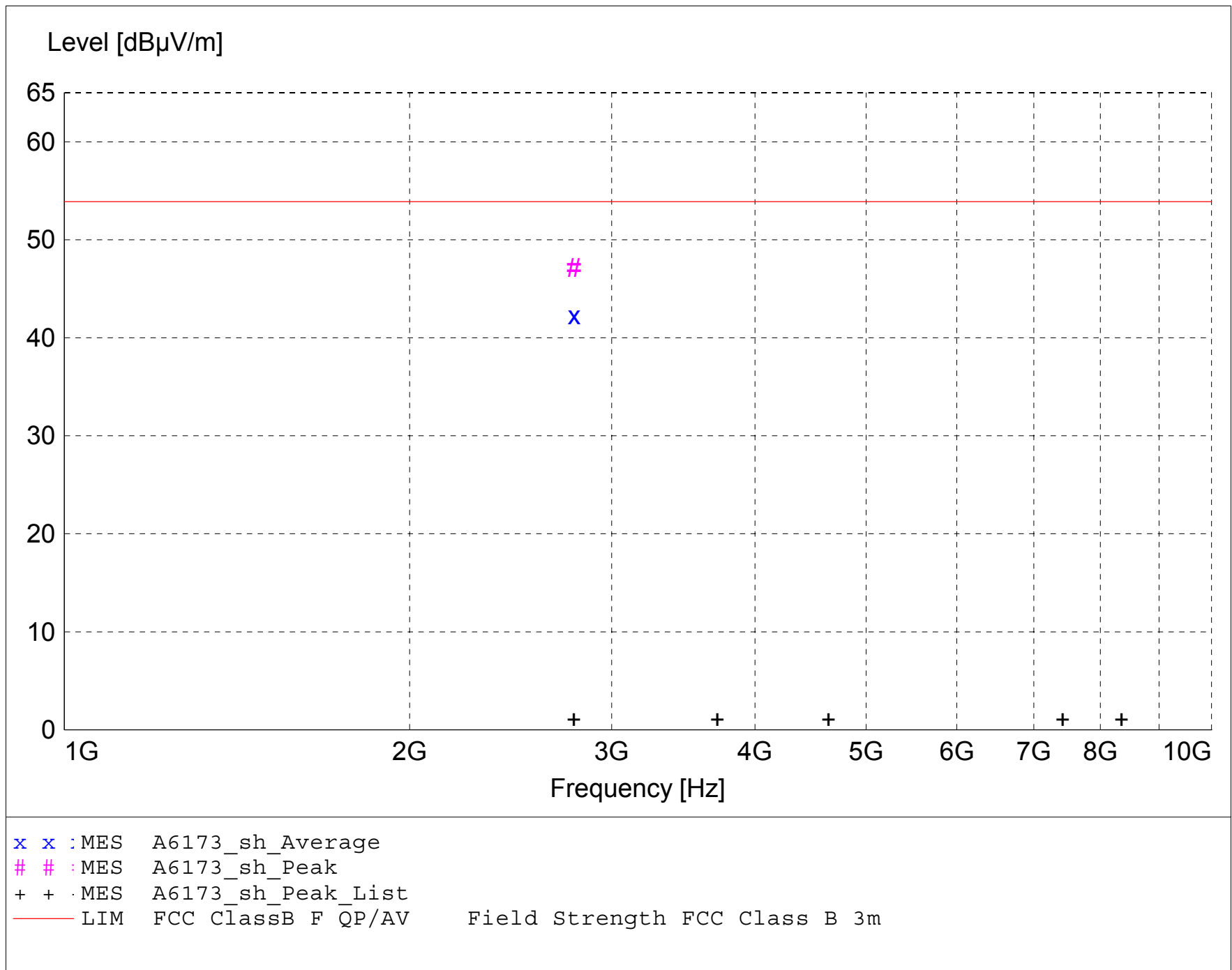
Short Description: Test Set-up Horz1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 40 SN: 837808/006

Horn Antenna --- ETS 3115 SN: 6204

Pre-Amps ---

1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation



MEASUREMENT RESULT: "A6173_sh_Final"

6/17/2005 9:15AM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
2781.600000	55.59	29.51	-38.0	47.1	53.9	6.8	1.00	90	MAX PEAK	None
2781.600000	50.73	29.51	-38.0	42.3	53.9	11.6	1.00	90	AVERAGE	None



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

RADIATED DATA AND GRAPH(S) TAKEN FOR

SPURIOUS EMISSION MEASUREMENTS

ZEBRA R170XiIII with ZM4e

FCC Part 15 Class B

Electric Field Strength

EUT: R170XiIII Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Rx mode; Low, Mid, High Channels
Date: 06-17-2005

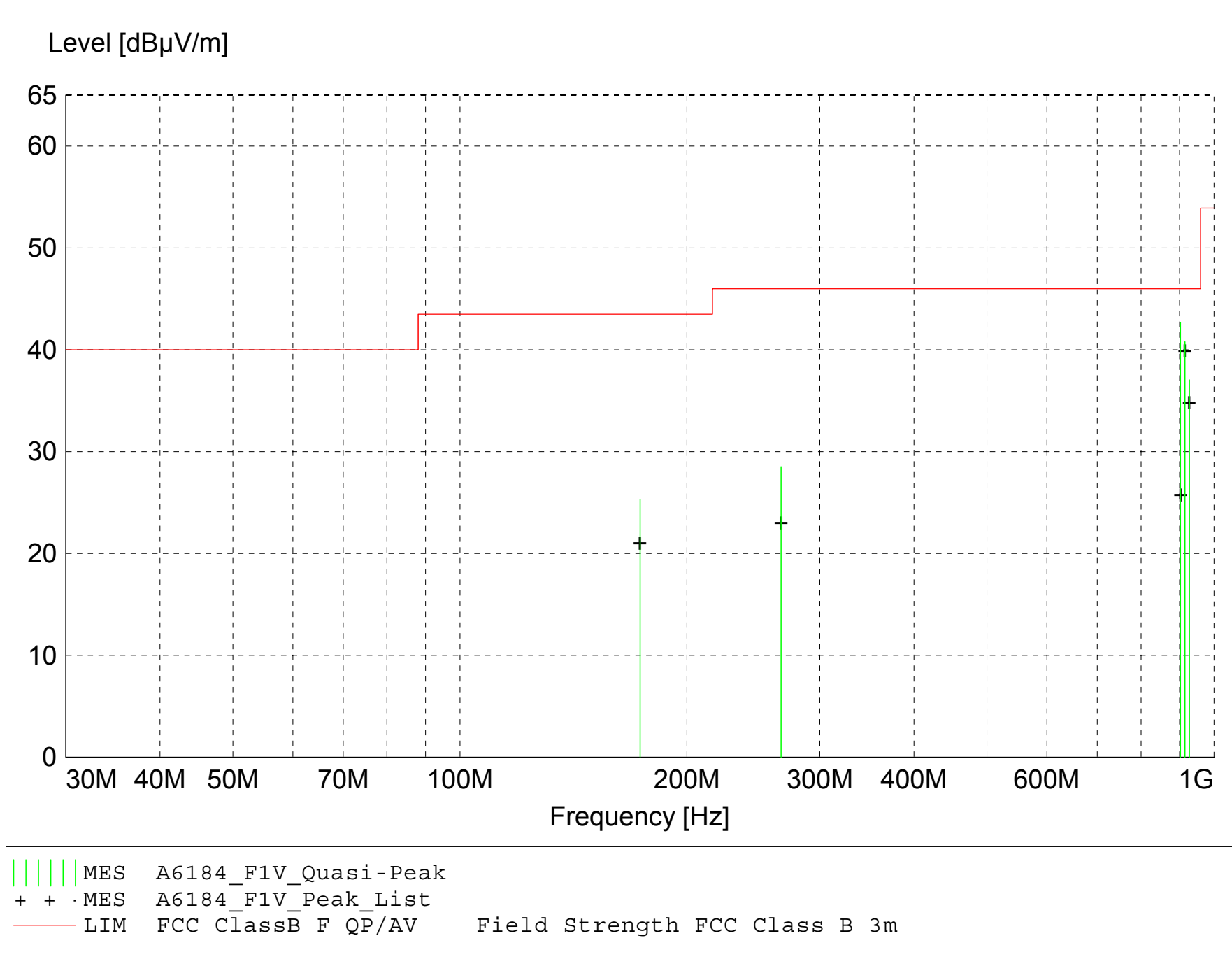
TEXT: "Site 3 MidV 3M"

Short Description: Test Set-up Vert30-1000MHz
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Antennas ---
Biconical -- EMCO 3104C SN: 9701-4785
Log Periodic -- EMCO 3146 SN: 9702-4895

Pre-Amp --- Rohde&Schwarz TS-PR10 SN: 032001/005

TEST SET-UP: EuT Measured at 3 Meters with VERTICAL Antenna Polarisation



MEASUREMENT RESULT: "A6184_F1V_Final"

6/17/2005 1:37PM

Frequency	Level	Antenna	System	Total	Limit	Margin	Height	EuT	Final	Comment
MHz	dBμV	Factor	Loss	Level			Ant.	Angle	Detector	
		dBμV/m	dB	dBμV/m	dBμV/m	dB	m	deg		
903.000000	38.58	22.60	-18.5	42.7	46.0	3.3	1.20	0	QUASI-PEAK	Receive
915.120000	36.61	22.54	-18.4	40.8	46.0	5.2	1.00	0	QUASI-PEAK	Receive
927.190000	32.50	22.78	-18.2	37.0	46.0	9.0	1.00	350	QUASI-PEAK	None
266.680000	37.66	13.02	-22.1	28.5	46.0	17.5	1.50	70	QUASI-PEAK	None
173.345000	33.05	15.12	-22.9	25.3	43.5	18.2	1.00	180	QUASI-PEAK	None

FCC Part 15 Class B

Electric Field Strength

EUT: R170XiIII Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Rx mode; Low, Mid, High Channels
Date: 06-17-2005

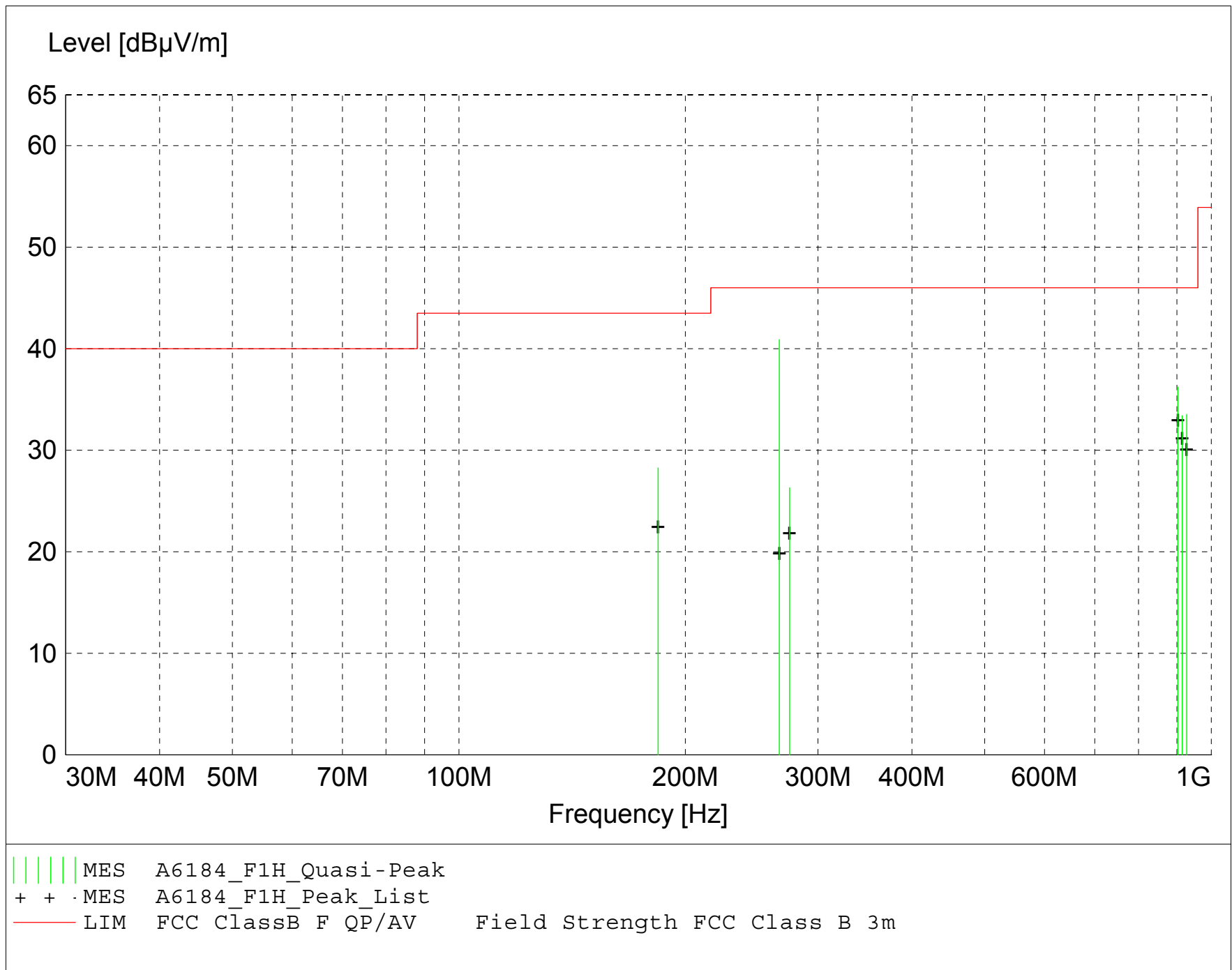
TEXT: "Site 3 MidH 3M"

Short Description: Test Set-up Horz30-1000MHz
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Antennas ---
Biconical -- EMCO 3104C SN: 9701-4785
Log Periodic -- EMCO 3146 SN: 9702-4895

Pre-Amp --- Rohde&Schwarz TS-PR10 SN: 032001/005

TEST SET-UP: EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation



MEASUREMENT RESULT: "A6184_F1H_Final"

6/17/2005 1:41PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant. m	EuT Angle deg	Final Detector	Comment
MHz	dBμV	dBμV/m	dB	dBμV/m	dBμV/m	dB				
266.660000	50.02	13.02	-22.1	40.9	46.0	5.1	1.00	270	QUASI-PEAK	None
902.990000	32.09	22.60	-18.5	36.2	46.0	9.8	1.20	160	QUASI-PEAK	Receive
927.190000	28.99	22.78	-18.2	33.5	46.0	12.5	1.20	180	QUASI-PEAK	Receive
915.120000	29.20	22.54	-18.4	33.4	46.0	12.6	1.20	190	QUASI-PEAK	Receive
183.945000	34.35	16.69	-22.8	28.3	43.5	15.2	1.60	350	QUASI-PEAK	None
275.090000	35.06	13.34	-22.1	26.3	46.0	19.7	1.00	270	QUASI-PEAK	None

FCC Part 15 Class B

Electric Field Strength

EUT: R170XiIII Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Max Power; Low Channel
Date: 06-17-2005

TEXT: "Site 3 6204&184 V3M"

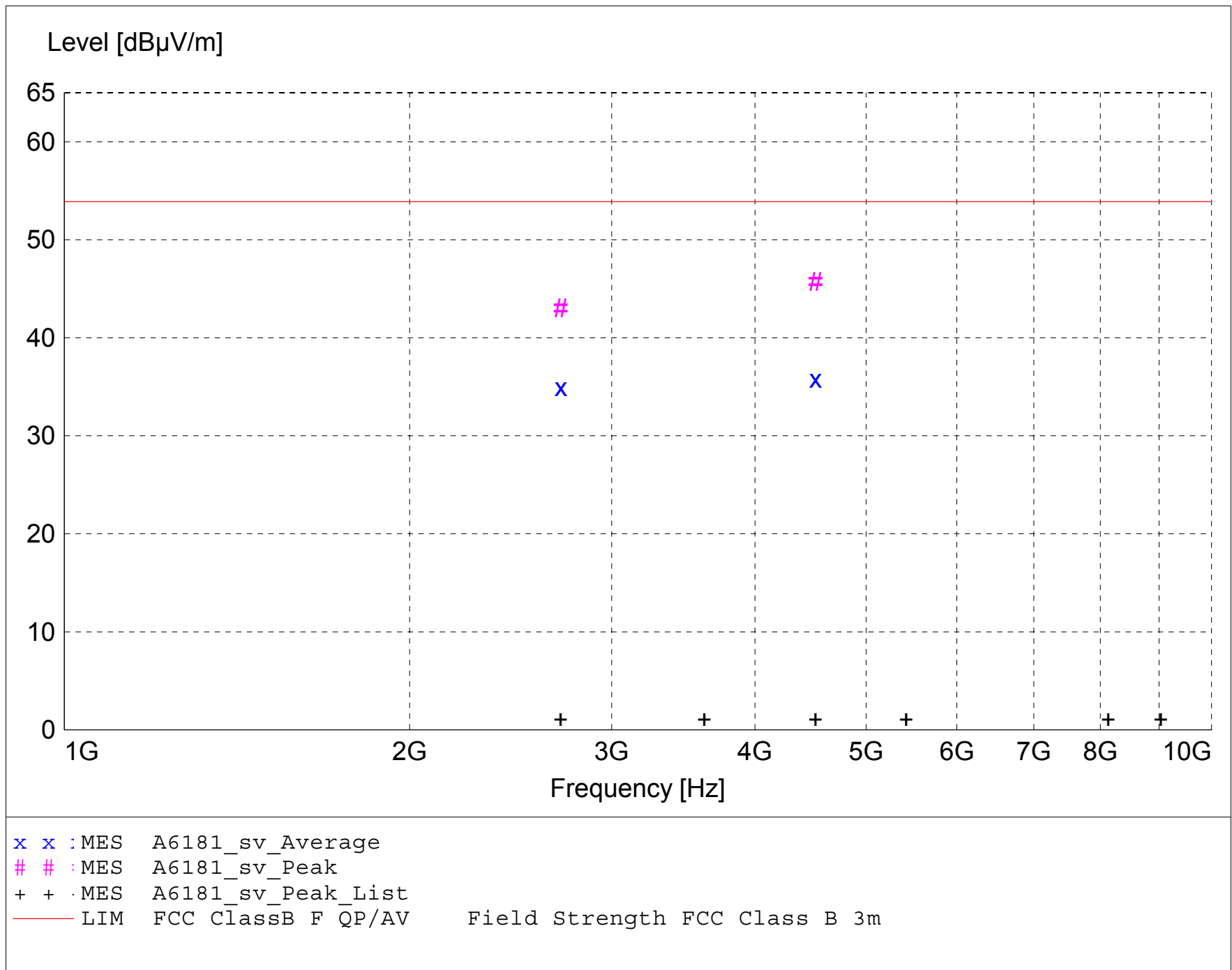
Short Description: Test Set-up Vert1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 40 SN: 837808/006

Horn Antenna --- ETS 3115 SN: 6204

Pre-Amps ---

1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with VERTICAL Antenna Polarisation



MEASUREMENT RESULT: "A6181_sv_Final"

6/17/2005 12:02PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
4514.950000	48.86	32.35	-35.6	45.6	53.9	8.3	1.50	140	MAX PEAK	None
2709.000000	51.93	29.28	-38.3	43.0	53.9	10.9	1.20	315	MAX PEAK	None
4514.950000	39.02	32.35	-35.6	35.8	53.9	18.1	1.50	140	AVERAGE	None
2709.000000	43.92	29.28	-38.3	34.9	53.9	19.0	1.20	315	AVERAGE	None

FCC Part 15 Class B

Electric Field Strength

EUT: R170XiIII Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Max Power; Low Channel
Date: 06-17-2005

TEXT: "Site 3 6204&184 H3M"

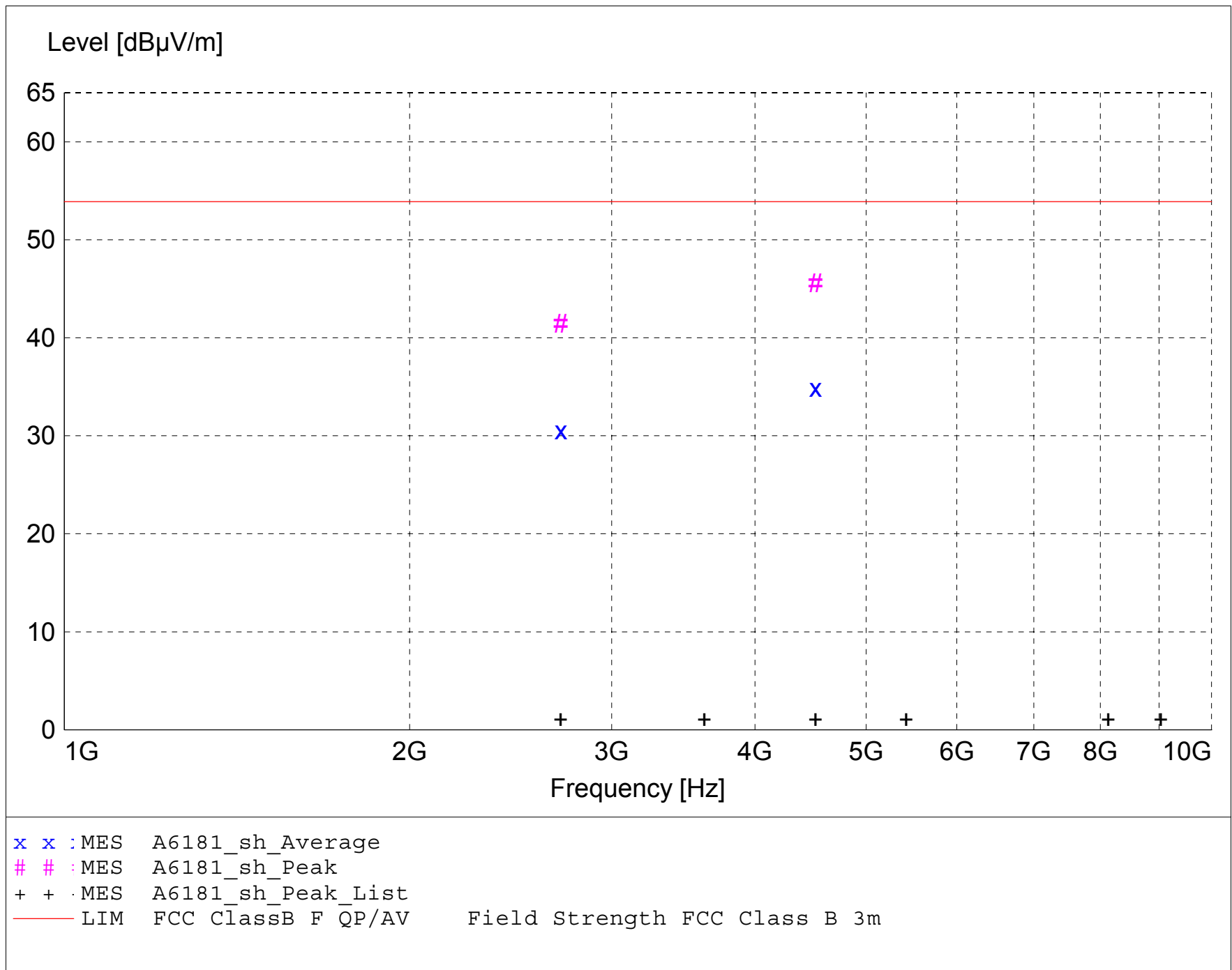
Short Description: Test Set-up Horz1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 40 SN: 837808/006

Horn Antenna --- ETS 3115 SN: 6204

Pre-Amps ---

1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation



MEASUREMENT RESULT: "A6181_sh_Final"

6/17/2005 12:06PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
4514.950000	48.73	32.35	-35.6	45.5	53.9	8.4	1.30	135	MAX PEAK	None
2709.000000	50.37	29.28	-38.3	41.4	53.9	12.5	1.10	180	MAX PEAK	None
4514.950000	38.08	32.35	-35.6	34.9	53.9	19.0	1.30	135	AVERAGE	None
2709.000000	39.47	29.28	-38.3	30.5	53.9	23.4	1.10	180	AVERAGE	None

FCC Part 15 Class B

Electric Field Strength

EUT: R170XiIII Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Max Power; Mid Channel
Date: 06-17-2005

TEXT: "Site 3 6204&184 V3M"

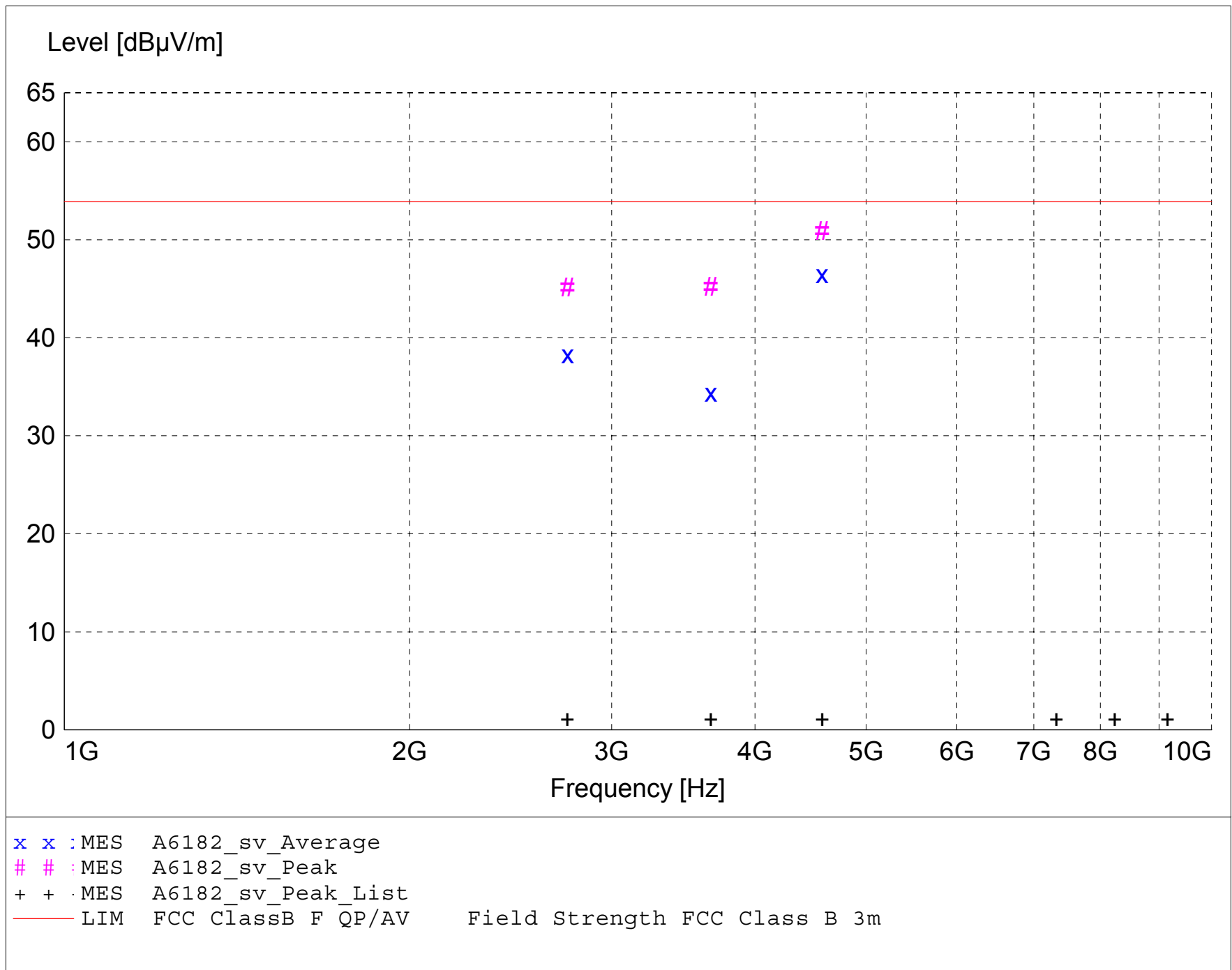
Short Description: Test Set-up Vert1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 40 SN: 837808/006

Horn Antenna --- ETS 3115 SN: 6204

Pre-Amps ---

1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with VERTICAL Antenna Polarisation



MEASUREMENT RESULT: "A6182_sv_Final"

6/17/2005 12:43PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBμV	dBμV/m	dB	dBμV/m	dBμV/m	dB	m	deg		
4575.650000	54.11	32.47	-35.7	50.9	53.9	3.0	1.20	0	MAX PEAK	None
4575.650000	49.65	32.47	-35.7	46.4	53.9	7.5	1.20	0	AVERAGE	None
3660.500000	50.11	31.63	-36.6	45.2	53.9	8.7	1.00	120	MAX PEAK	None
2745.400000	53.84	29.40	-38.1	45.1	53.9	8.8	1.00	135	MAX PEAK	None
2745.400000	46.97	29.40	-38.1	38.3	53.9	15.6	1.00	135	AVERAGE	None
3660.500000	39.31	31.63	-36.6	34.4	53.9	19.5	1.00	120	AVERAGE	None

FCC Part 15 Class B

Electric Field Strength

EUT: R170XiIII Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Max Power; Mid Channel
Date: 06-17-2005

TEXT: "Site 3 6204&184 H3M"

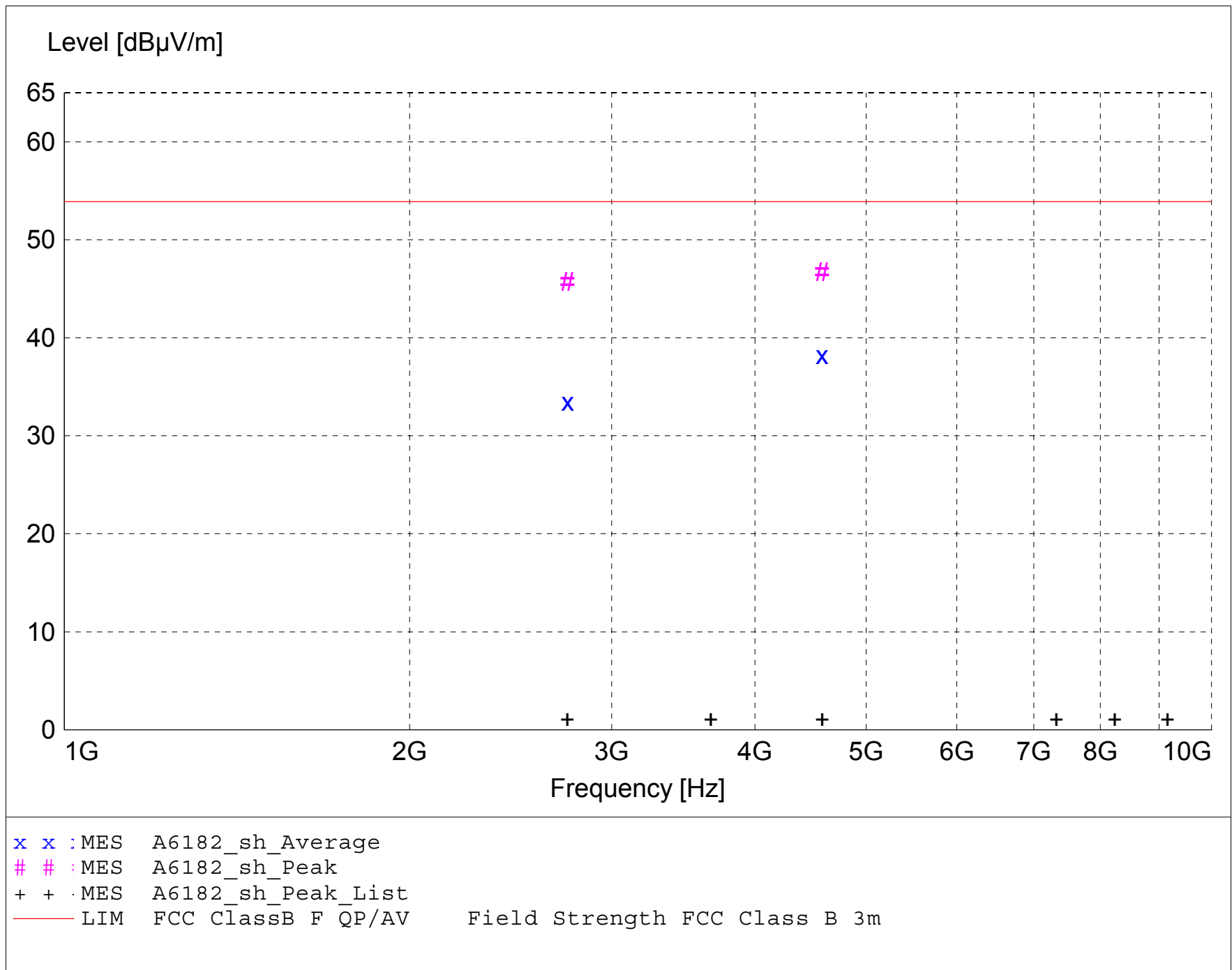
Short Description: Test Set-up Horz1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 40 SN: 837808/006

Horn Antenna --- ETS 3115 SN: 6204

Pre-Amps ---

1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation



MEASUREMENT RESULT: "A6182_sh_Final"

6/17/2005 12:46PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBμV	dBμV/m	dB	dBμV/m	dBμV/m	dB	m	deg		
4575.650000	49.85	32.47	-35.7	46.6	53.9	7.3	1.00	90	MAX PEAK	None
2745.400000	54.38	29.40	-38.1	45.7	53.9	8.2	1.00	135	MAX PEAK	None
4575.650000	41.41	32.47	-35.7	38.2	53.9	15.7	1.00	90	AVERAGE	None
2745.400000	42.14	29.40	-38.1	33.4	53.9	20.5	1.00	135	AVERAGE	None

FCC Part 15 Class B

Electric Field Strength

EUT: R170XiIII Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Max Power; High Channel
Date: 06-17-2005

TEXT: "Site 3 6204&184 V3M"

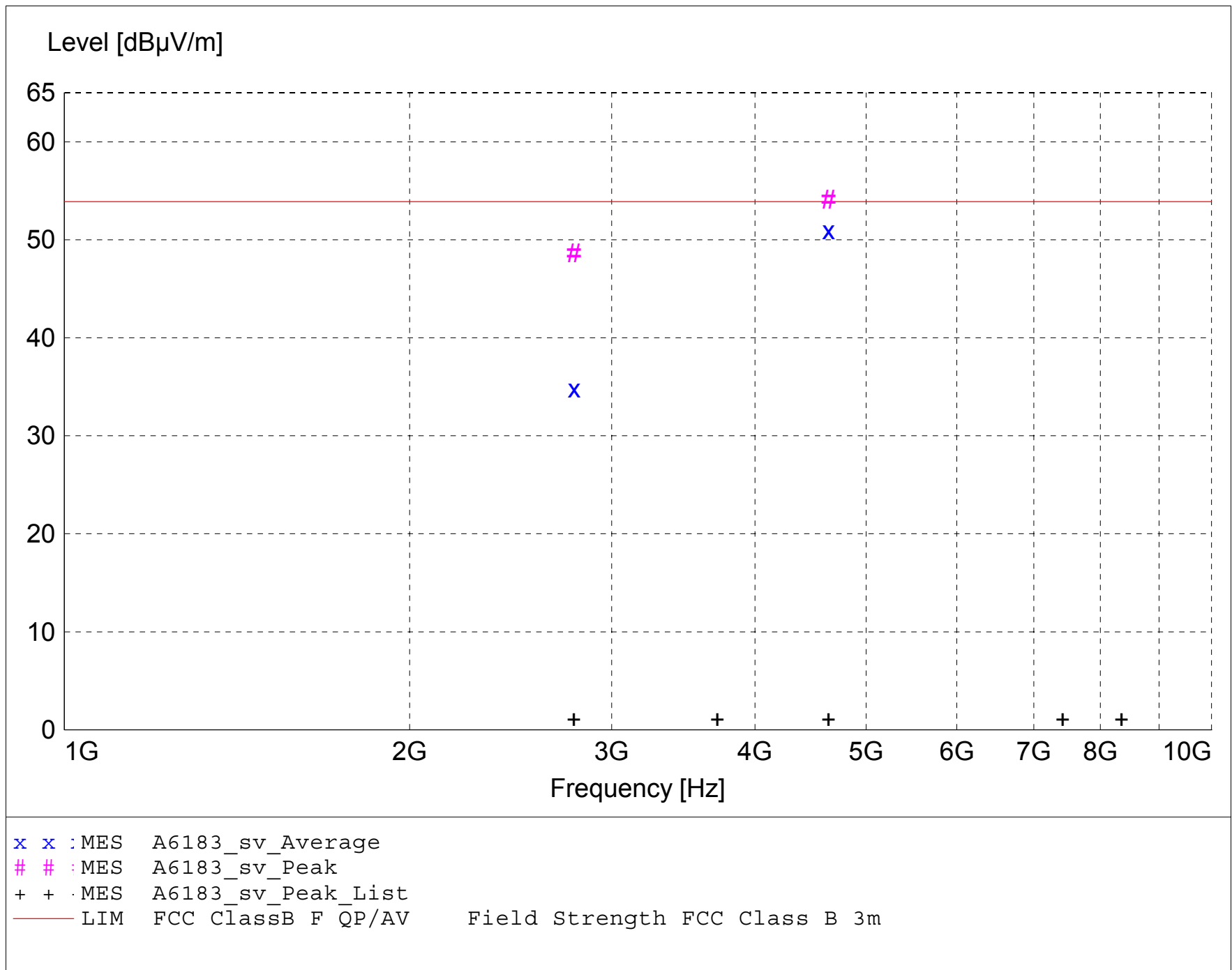
Short Description: Test Set-up Vert1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 40 SN: 837808/006

Horn Antenna --- ETS 3115 SN: 6204

Pre-Amps ---

1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with VERTICAL Antenna Polarisation



MEASUREMENT RESULT: "A6183_sv_Final"

6/17/2005 12:51PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
4636.000000	57.30	32.60	-35.8	54.1	53.9	-0.2	1.00	10	MAX PEAK	None
4636.000000	54.16	32.60	-35.8	51.0	53.9	2.9	1.00	10	AVERAGE	None
2781.600000	57.05	29.51	-38.0	48.6	53.9	5.3	1.00	135	MAX PEAK	None
2781.600000	43.28	29.51	-38.0	34.8	53.9	19.1	1.00	135	AVERAGE	None

FCC Part 15 Class B

Electric Field Strength

EUT: R170XiIII Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Max Power; High Channel
Date: 06-17-2005

TEXT: "Site 3 6204&184 H3M"

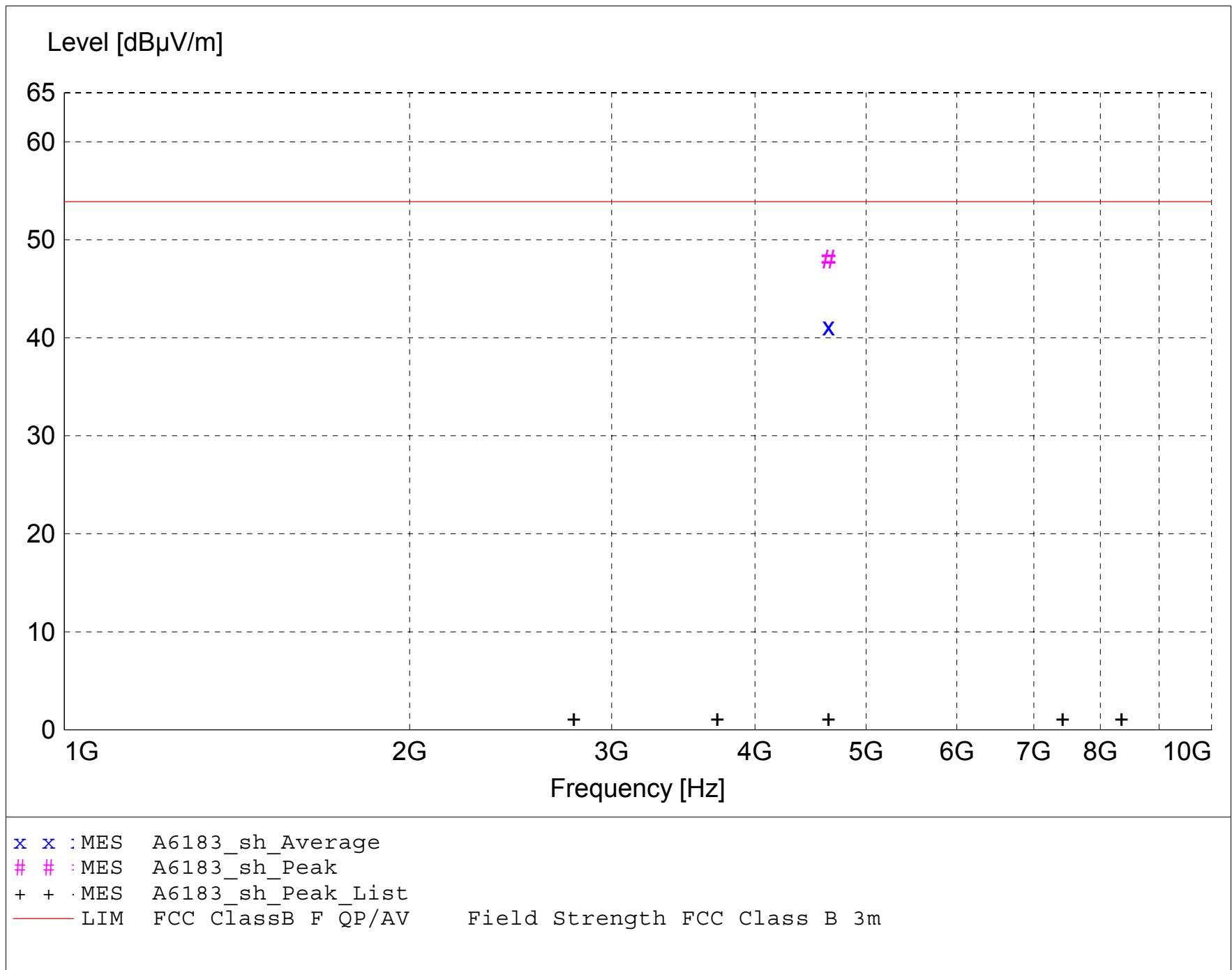
Short Description: Test Set-up Horz1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 40 SN: 837808/006

Horn Antenna --- ETS 3115 SN: 6204

Pre-Amps ---

1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation



MEASUREMENT RESULT: "A6183_sh_Final"

6/17/2005 12:54PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBμV	dBμV/m	dB	dBμV/m	dBμV/m	dB	m	deg		
4636.000000	51.14	32.60	-35.8	47.9	53.9	6.0	2.00	90	MAX PEAK	None
4636.000000	44.30	32.60	-35.8	41.1	53.9	12.8	2.00	90	AVERAGE	None



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

RADIATED DATA AND GRAPH(S) TAKEN FOR

SPURIOUS EMISSION MEASUREMENTS

ZEBRA R4M with ZM4e

FCC Part 15 Class B

Electric Field Strength

EUT: R4M Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Rx mode; Low, Mid, High Channels
Date: 06-17-2005

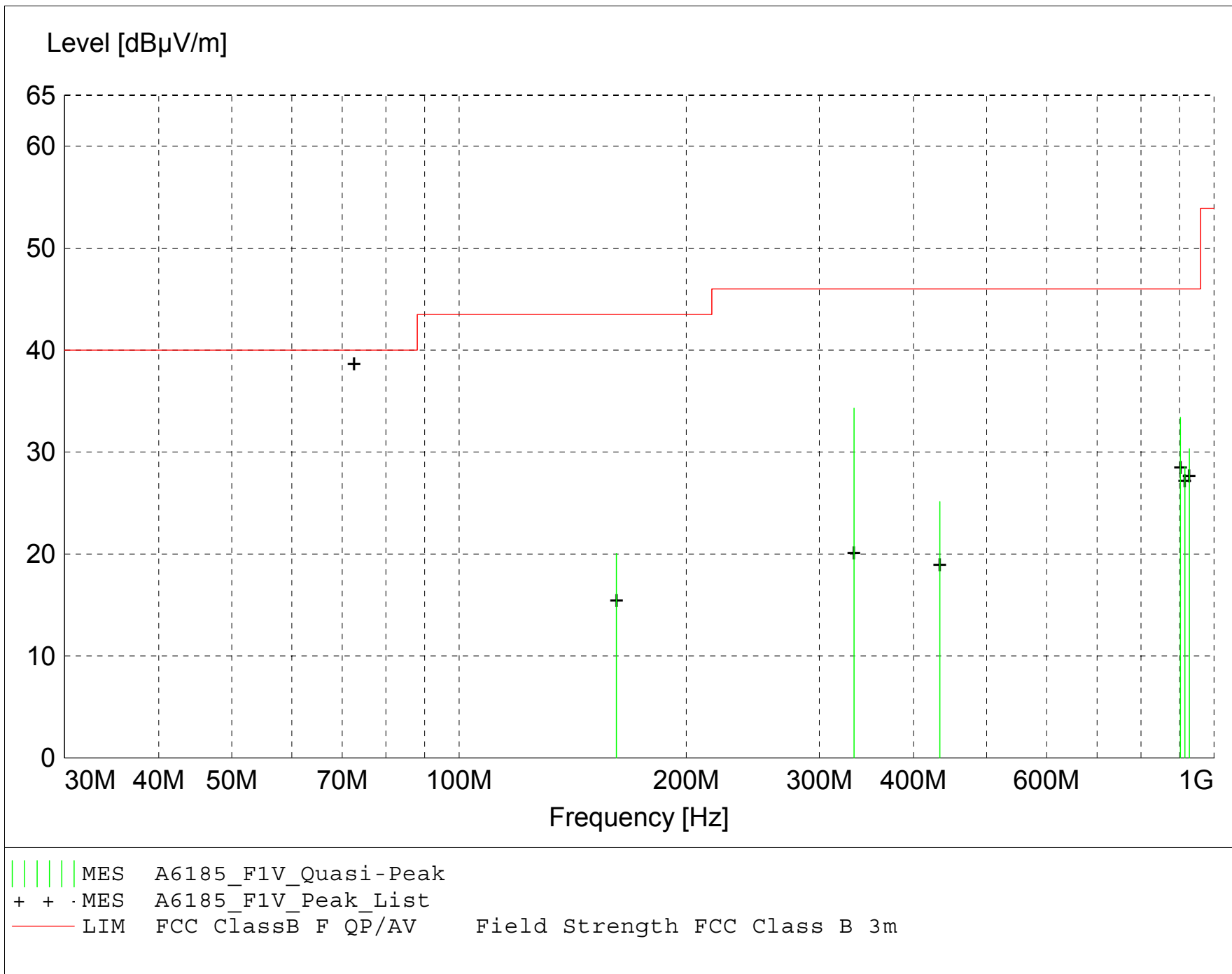
TEXT: "Site 3 MidV 3M"

Short Description: Test Set-up Vert30-1000MHz
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Antennas ---
Biconical -- EMCO 3104C SN: 9701-4785
Log Periodic -- EMCO 3146 SN: 9702-4895

Pre-Amp --- Rohde&Schwarz TS-PR10 SN: 032001/005

TEST SET-UP: EuT Measured at 3 Meters with VERTICAL Antenna Polarisation



MEASUREMENT RESULT: "A6185_F1V_Final"

6/17/2005 2:26PM

Frequency	Level	Antenna	System	Total	Limit	Margin	Height	EuT	Final	Comment
MHz	dBμV	Factor	Loss	Level			Ant.	Angle	Detector	
		dBμV/m	dB	dBμV/m	dBμV/m	dB	m	deg		
333.350000	41.24	14.82	-21.8	34.3	46.0	11.7	1.70	30	QUASI-PEAK	None
902.990000	29.28	22.60	-18.5	33.4	46.0	12.6	1.50	100	QUASI-PEAK	Receive
927.190000	25.79	22.78	-18.2	30.3	46.0	15.7	1.40	100	QUASI-PEAK	None
915.110000	24.38	22.55	-18.4	28.6	46.0	17.4	1.50	100	QUASI-PEAK	Receive
433.330000	30.24	16.12	-21.2	25.1	46.0	20.9	1.50	10	QUASI-PEAK	None
161.570000	29.89	13.10	-22.9	20.0	43.5	23.5	1.00	0	QUASI-PEAK	None

FCC Part 15 Class B

Electric Field Strength

EUT: R4M Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Rx mode; Low, Mid, High Channels
Date: 06-17-2005

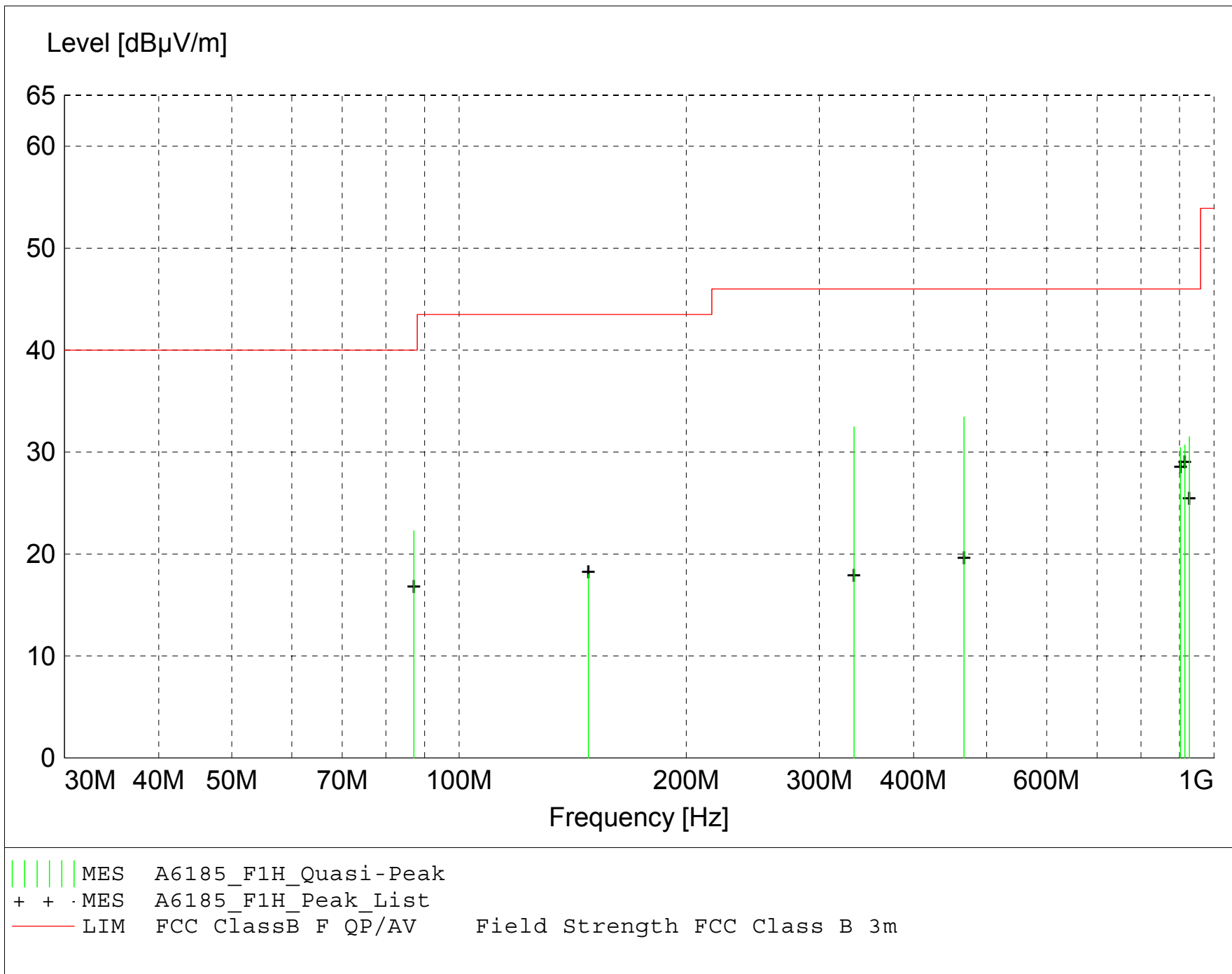
TEXT: "Site 3 MidH 3M"

Short Description: Test Set-up Horz30-1000MHz
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Antennas ---
Biconical -- EMCO 3104C SN: 9701-4785
Log Periodic -- EMCO 3146 SN: 9702-4895

Pre-Amp --- Rohde&Schwarz TS-PR10 SN: 032001/005

TEST SET-UP: EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation



MEASUREMENT RESULT: "A6185_F1H_Final"

6/17/2005 2:32PM

Frequency	Level	Antenna	System	Total	Limit	Margin	Height	EuT	Final	Comment
MHz	dBμV	Factor	Loss	Level			Ant.	Angle	Detector	
		dBμV/m	dB	dBμV/m	dBμV/m	dB	m	deg		
466.680000	37.67	16.86	-21.1	33.4	46.0	12.6	2.20	350	QUASI-PEAK	None
333.350000	39.41	14.82	-21.8	32.5	46.0	13.5	2.80	225	QUASI-PEAK	None
927.180000	26.98	22.78	-18.2	31.5	46.0	14.5	1.30	45	QUASI-PEAK	Receive
915.130000	26.51	22.54	-18.4	30.7	46.0	15.3	1.30	45	QUASI-PEAK	Receive
902.990000	26.33	22.60	-18.5	30.5	46.0	15.5	1.30	45	QUASI-PEAK	Receive
87.100000	37.42	8.60	-23.7	22.3	40.0	17.7	2.10	135	QUASI-PEAK	None
148.340000	29.07	12.07	-23.1	18.0	43.5	25.5	2.10	270	QUASI-PEAK	None

FCC Part 15 Class B

Electric Field Strength

EUT: R4M Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Max Power; Low Channel
Date: 06-17-2005

TEXT: "Site 3 6204&184 V3M"

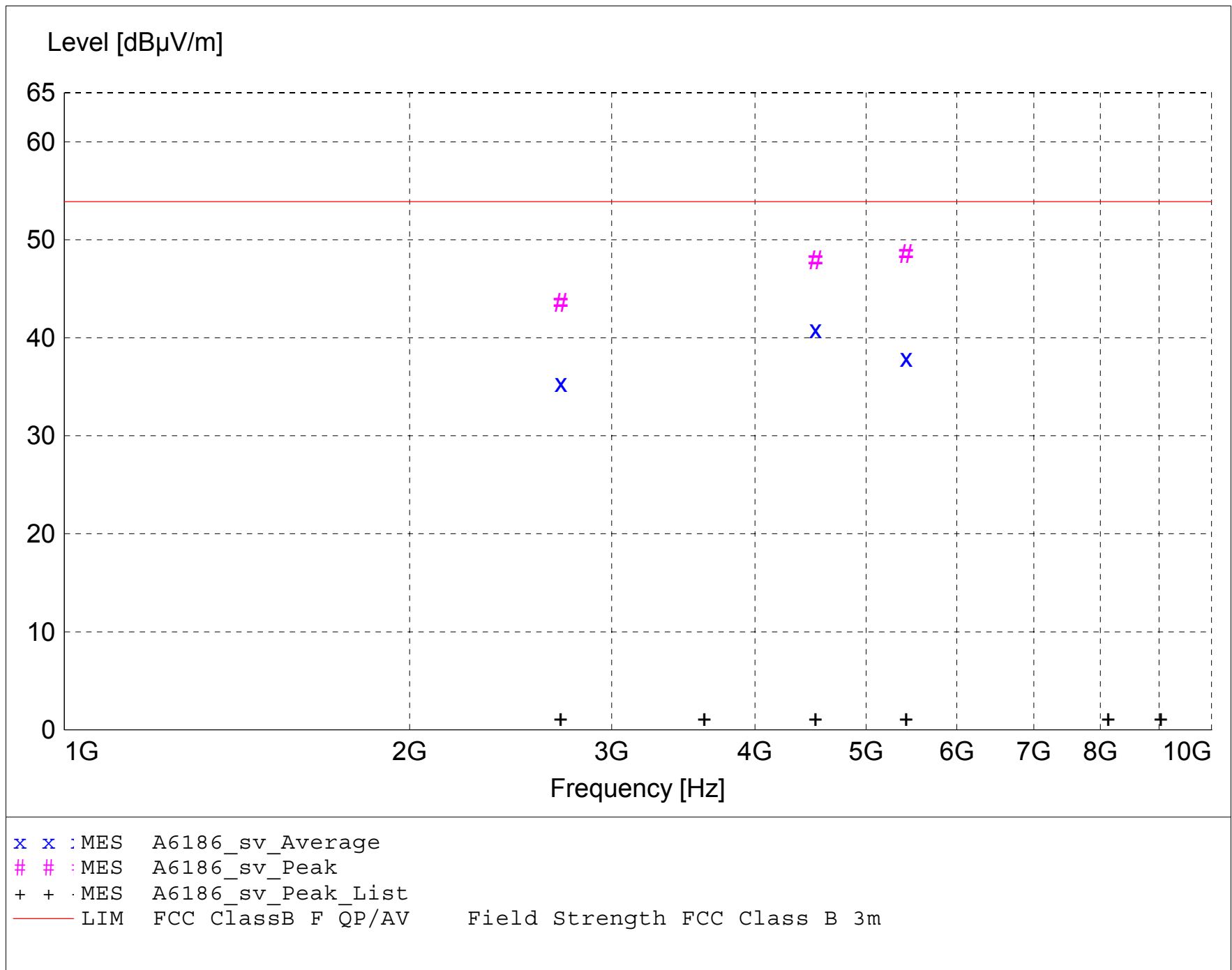
Short Description: Test Set-up Vert1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 40 SN: 837808/006

Horn Antenna --- ETS 3115 SN: 6204

Pre-Amps ---

1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with VERTICAL Antenna Polarisation



MEASUREMENT RESULT: "A6186_sv_Final"

6/17/2005 2:39PM

Frequency	Level	Antenna	System	Total	Limit	Margin	Height	EuT	Final	Comment
MHz	dBµV	Factor	Loss	Level			Ant.	Angle	Detector	
		dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
5417.950000	49.71	33.97	-35.2	48.5	53.9	5.4	1.40	110	MAX PEAK	None
4514.950000	51.14	32.35	-35.6	47.9	53.9	6.0	1.10	135	MAX PEAK	None
2709.000000	52.49	29.28	-38.3	43.5	53.9	10.4	1.50	0	MAX PEAK	None
4514.950000	44.06	32.35	-35.6	40.8	53.9	13.1	1.10	135	AVERAGE	None
5417.950000	39.16	33.97	-35.2	38.0	53.9	15.9	1.40	110	AVERAGE	None
2709.000000	44.33	29.28	-38.3	35.4	53.9	18.5	1.50	0	AVERAGE	None

FCC Part 15 Class B

Electric Field Strength

EUT: R4M Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Max Power; Low Channel
Date: 06-17-2005

TEXT: "Site 3 6204&184 H3M"

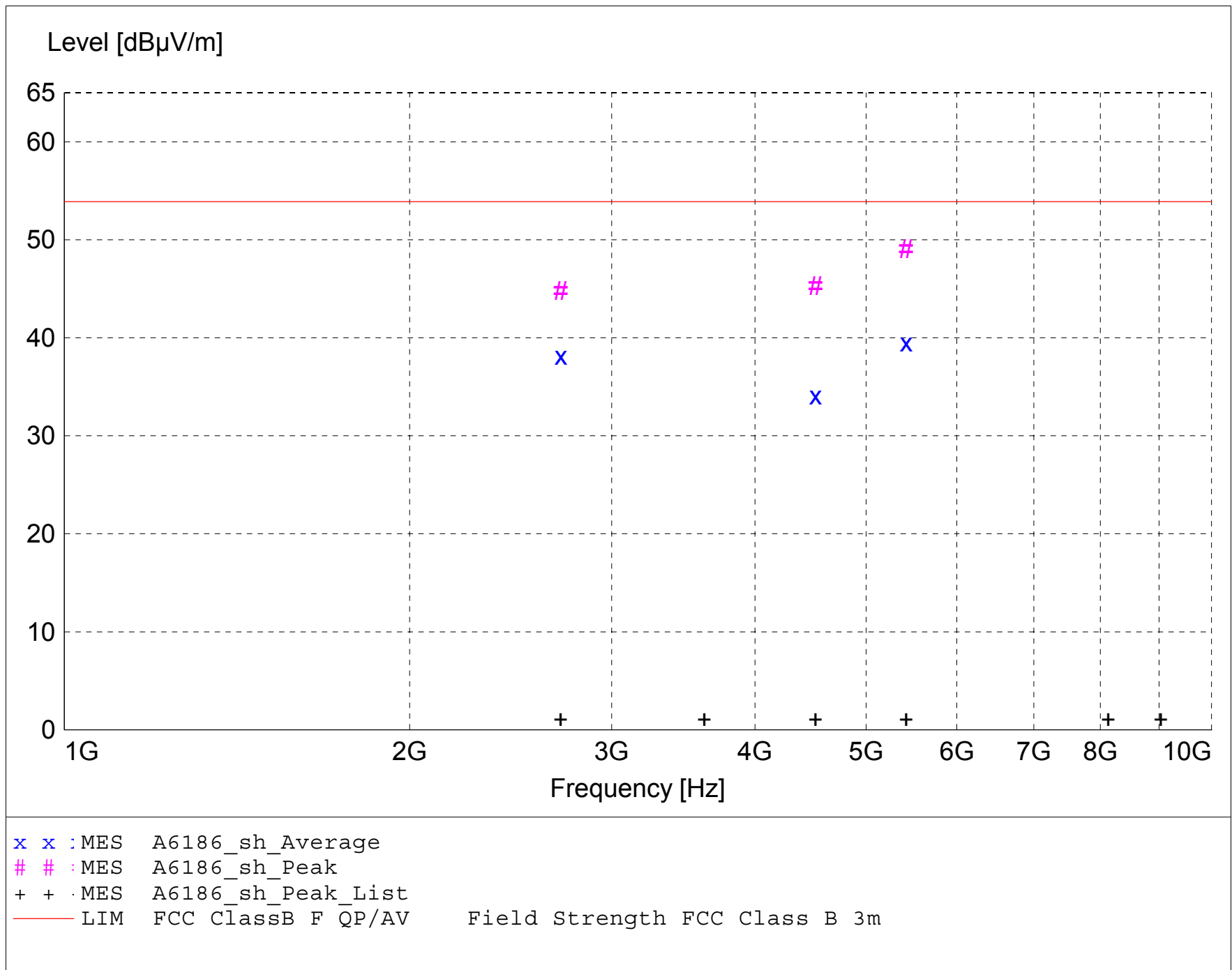
Short Description: Test Set-up Horz1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 40 SN: 837808/006

Horn Antenna --- ETS 3115 SN: 6204

Pre-Amps ---

1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation



MEASUREMENT RESULT: "A6186_sh_Final"

6/17/2005 2:44PM

Frequency	Level	Antenna	System	Total	Limit	Margin	Height	EuT	Final	Comment
MHz	dBμV	Factor	Loss	Level			Ant.	Angle	Detector	
		dBμV/m	dB	dBμV/m	dBμV/m	dB	m	deg		
5417.950000	50.24	33.97	-35.2	49.0	53.9	4.9	2.00	30	MAX PEAK	None
4514.950000	48.46	32.35	-35.6	45.2	53.9	8.7	2.00	135	MAX PEAK	None
2709.000000	53.71	29.28	-38.3	44.7	53.9	9.2	2.00	45	MAX PEAK	None
5417.950000	40.73	33.97	-35.2	39.5	53.9	14.4	2.00	30	AVERAGE	None
2709.000000	47.12	29.28	-38.3	38.1	53.9	15.8	2.00	45	AVERAGE	None
4514.950000	37.32	32.35	-35.6	34.1	53.9	19.8	2.00	135	AVERAGE	None

FCC Part 15 Class B

Electric Field Strength

EUT: R4M Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Max Power; Mid Channel
Date: 06-17-2005

TEXT: "Site 3 6204&184 V3M"

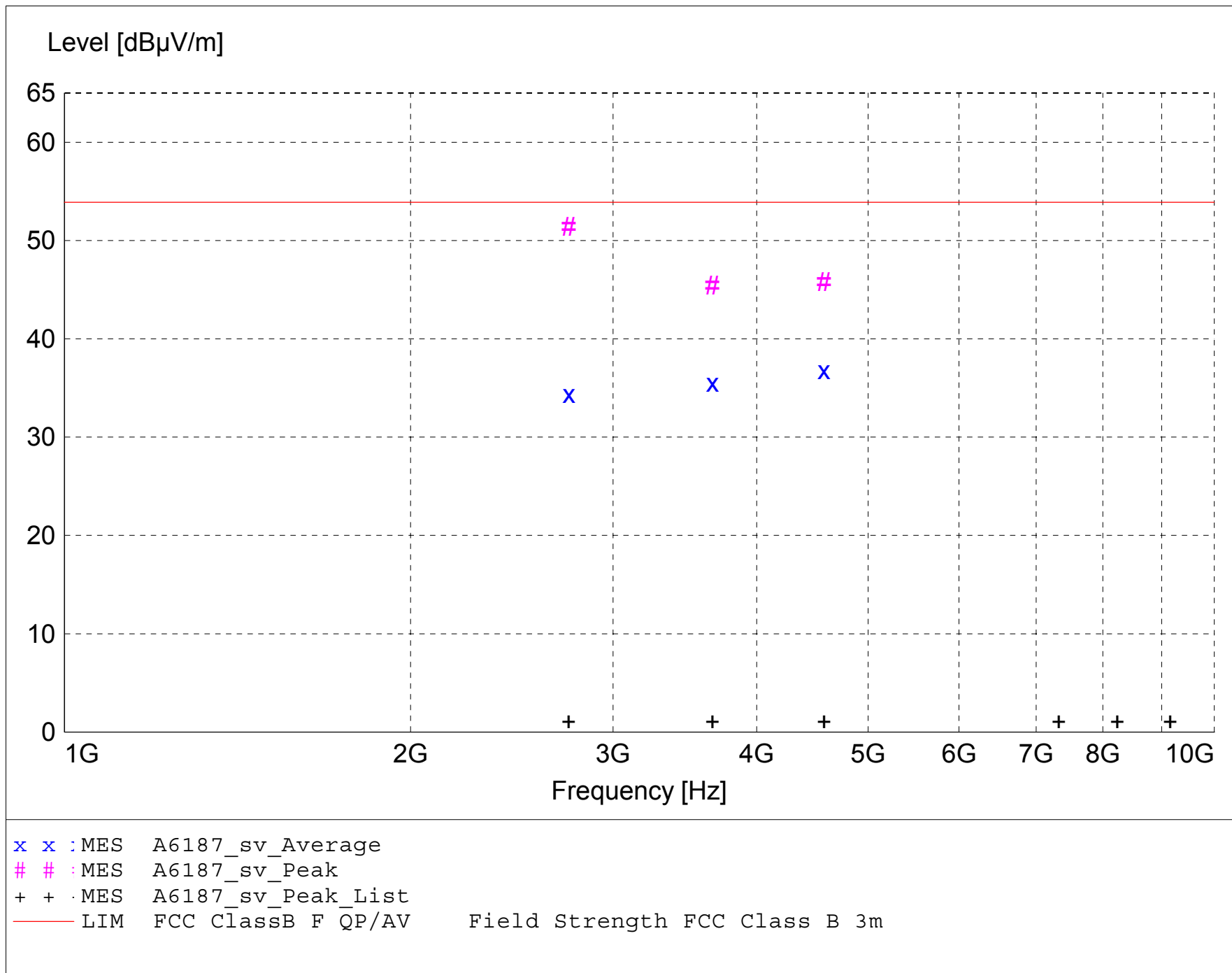
Short Description: Test Set-up Vert1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 40 SN: 837808/006

Horn Antenna --- ETS 3115 SN: 6204

Pre-Amps ---

1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with VERTICAL Antenna Polarisation



MEASUREMENT RESULT: "A6187_sv_Final"

6/17/2005 2:50PM

Frequency	Level	Antenna	System	Total	Limit	Margin	Height	EuT	Final	Comment
MHz	dBμV	Factor	Loss	Level			Ant.	Angle	Detector	
		dBμV/m	dB	dBμV/m	dBμV/m	dB	m	deg		
2745.400000	60.10	29.40	-38.1	51.4	53.9	2.5	1.00	0	MAX PEAK	None
4575.650000	49.00	32.47	-35.7	45.8	53.9	8.1	1.10	135	MAX PEAK	None
3660.500000	50.37	31.63	-36.6	45.4	53.9	8.5	1.20	135	MAX PEAK	None
4575.650000	39.98	32.47	-35.7	36.8	53.9	17.1	1.10	135	AVERAGE	None
3660.500000	40.46	31.63	-36.6	35.5	53.9	18.4	1.20	135	AVERAGE	None
2745.400000	43.05	29.40	-38.1	34.3	53.9	19.6	1.00	0	AVERAGE	None

FCC Part 15 Class B

Electric Field Strength

EUT: R4M Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Max Power; Mid Channel
Date: 06-17-2005

TEXT: "Site 3 6204&184 H3M"

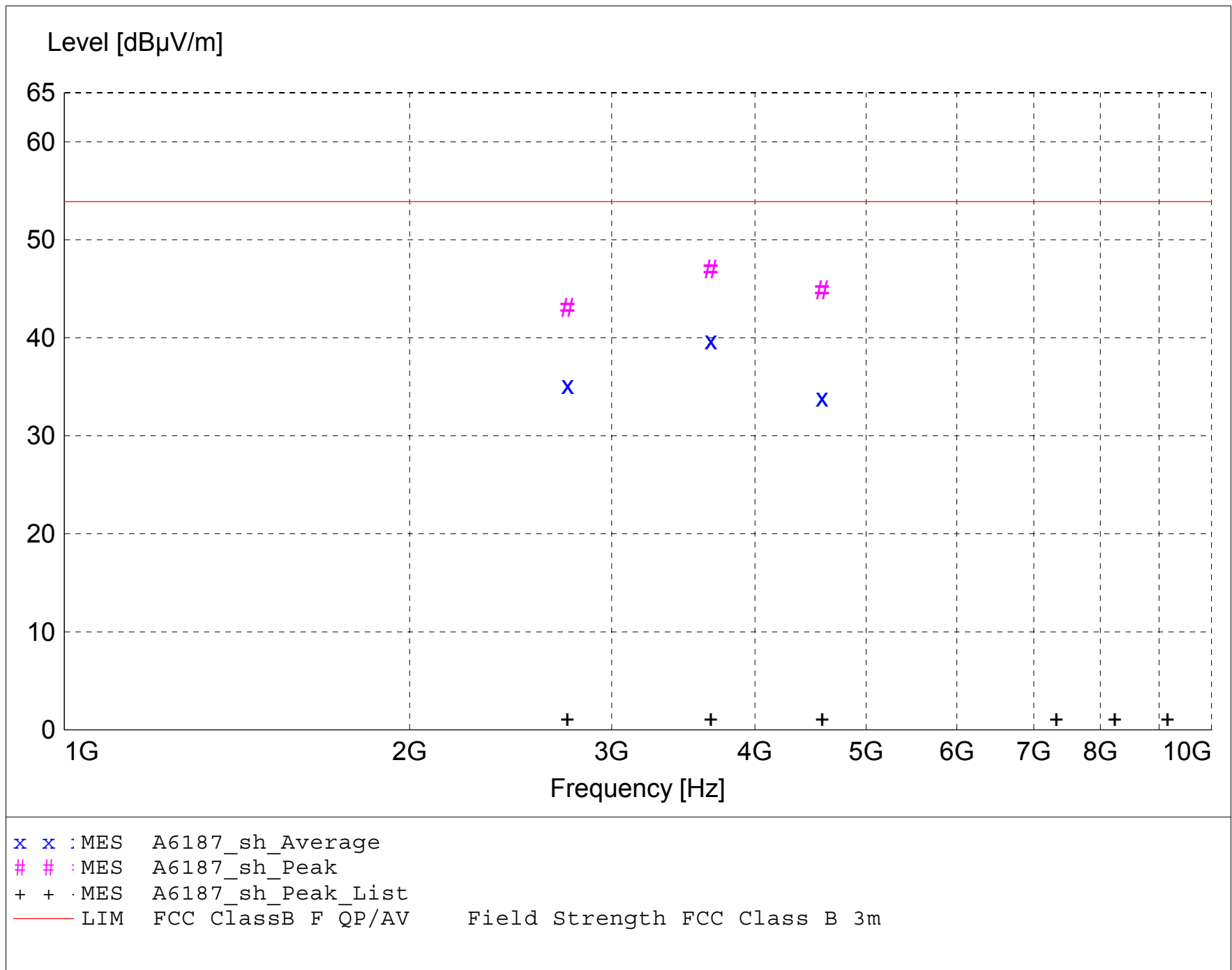
Short Description: Test Set-up Horz1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 40 SN: 837808/006

Horn Antenna --- ETS 3115 SN: 6204

Pre-Amps ---

1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation



MEASUREMENT RESULT: "A6187_sh_Final"

6/17/2005 2:54PM

Frequency	Level	Antenna	System	Total	Limit	Margin	Height	EuT	Final	Comment
MHz	dBμV	Factor	Loss	Level			Ant.	Angle	Detector	
		dBμV/m	dB	dBμV/m	dBμV/m	dB	m	deg		
3660.500000	51.93	31.63	-36.6	47.0	53.9	6.9	1.00	330	MAX PEAK	None
4575.650000	48.06	32.47	-35.7	44.9	53.9	9.0	1.10	170	MAX PEAK	None
2745.400000	51.80	29.40	-38.1	43.1	53.9	10.8	1.20	0	MAX PEAK	None
3660.500000	44.60	31.63	-36.6	39.7	53.9	14.2	1.00	330	AVERAGE	None
2745.400000	43.86	29.40	-38.1	35.1	53.9	18.8	1.20	0	AVERAGE	None
4575.650000	37.07	32.47	-35.7	33.9	53.9	20.0	1.10	170	AVERAGE	None

FCC Part 15 Class B

Electric Field Strength

EUT: R4M Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Max Power; High Channel
Date: 06-17-2005

TEXT: "Site 3 6204&184 V3M"

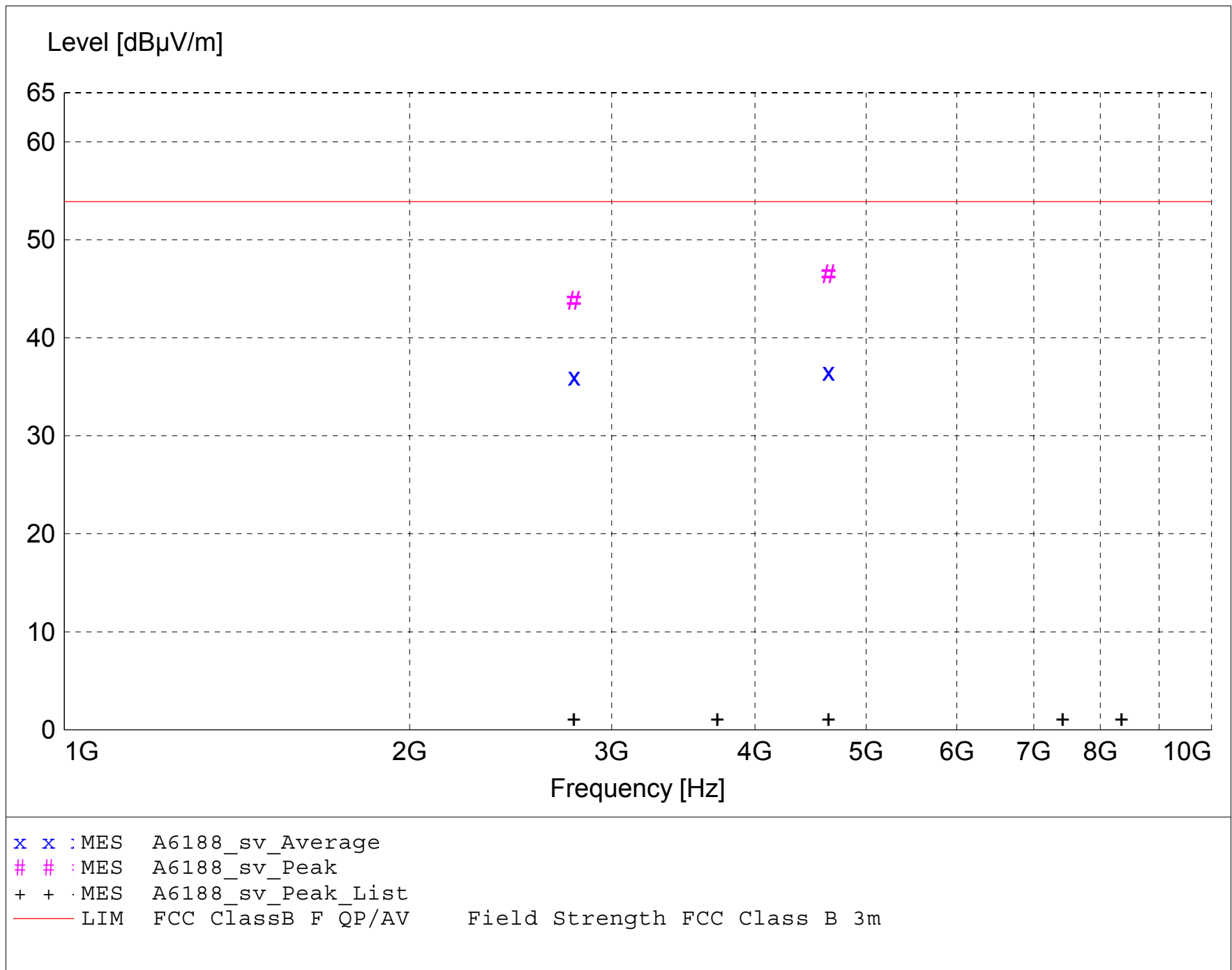
Short Description: Test Set-up Vert1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 40 SN: 837808/006

Horn Antenna --- ETS 3115 SN: 6204

Pre-Amps ---

1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with VERTICAL Antenna Polarisation



MEASUREMENT RESULT: "A6188_sv_Final"

6/17/2005 2:59PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
4636.000000	49.71	32.60	-35.8	46.5	53.9	7.4	1.30	135	MAX PEAK	None
2781.600000	52.21	29.51	-38.0	43.7	53.9	10.2	1.70	45	MAX PEAK	None
4636.000000	39.67	32.60	-35.8	36.5	53.9	17.4	1.30	135	AVERAGE	None
2781.600000	44.46	29.51	-38.0	36.0	53.9	17.9	1.70	45	AVERAGE	None

FCC Part 15 Class B

Electric Field Strength

EUT: R4M Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Max Power; High Channel
Date: 06-17-2005

TEXT: "Site 3 6204&184 H3M"

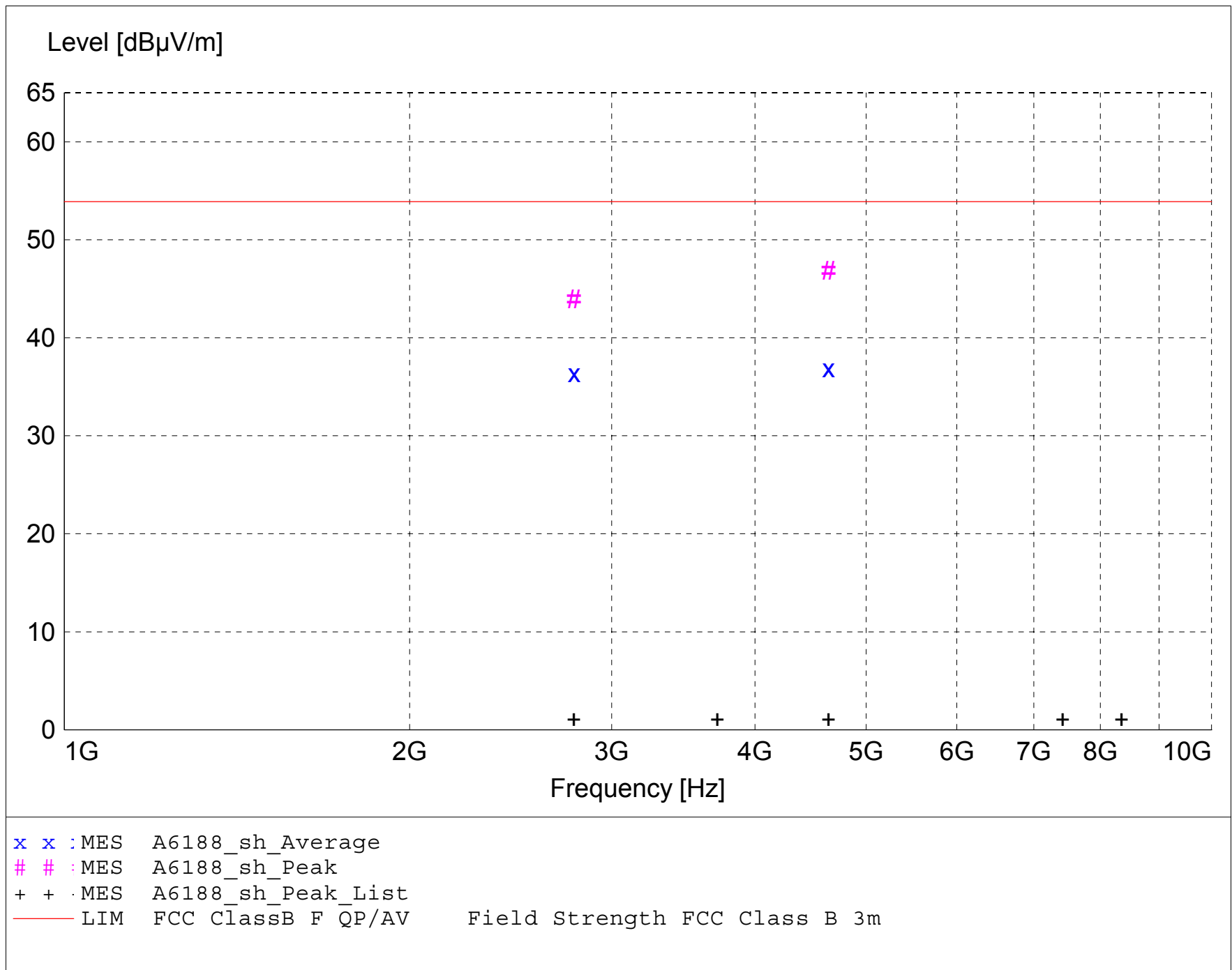
Short Description: Test Set-up Horz1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 40 SN: 837808/006

Horn Antenna --- ETS 3115 SN: 6204

Pre-Amps ---

1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation



MEASUREMENT RESULT: "A6188_sh_Final"

6/17/2005 3:02PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBμV	dBμV/m	dB	dBμV/m	dBμV/m	dB	m	deg		
4636.000000	49.99	32.60	-35.8	46.8	53.9	7.1	2.20	135	MAX PEAK	None
2781.600000	52.35	29.51	-38.0	43.9	53.9	10.0	1.90	0	MAX PEAK	None
4636.000000	40.09	32.60	-35.8	36.9	53.9	17.0	2.20	135	AVERAGE	None
2781.600000	44.84	29.51	-38.0	36.4	53.9	17.5	1.90	0	AVERAGE	None



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

RADIATED DATA AND GRAPH(S) TAKEN FOR

SPURIOUS EMISSION MEASUREMENTS

ZEBRA Rpax with ZM4e

FCC Part 15 Class B

Electric Field Strength

EUT: Rpax110 Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Rx mode; Low, Mid, High Channels
Date: 06-17-2005

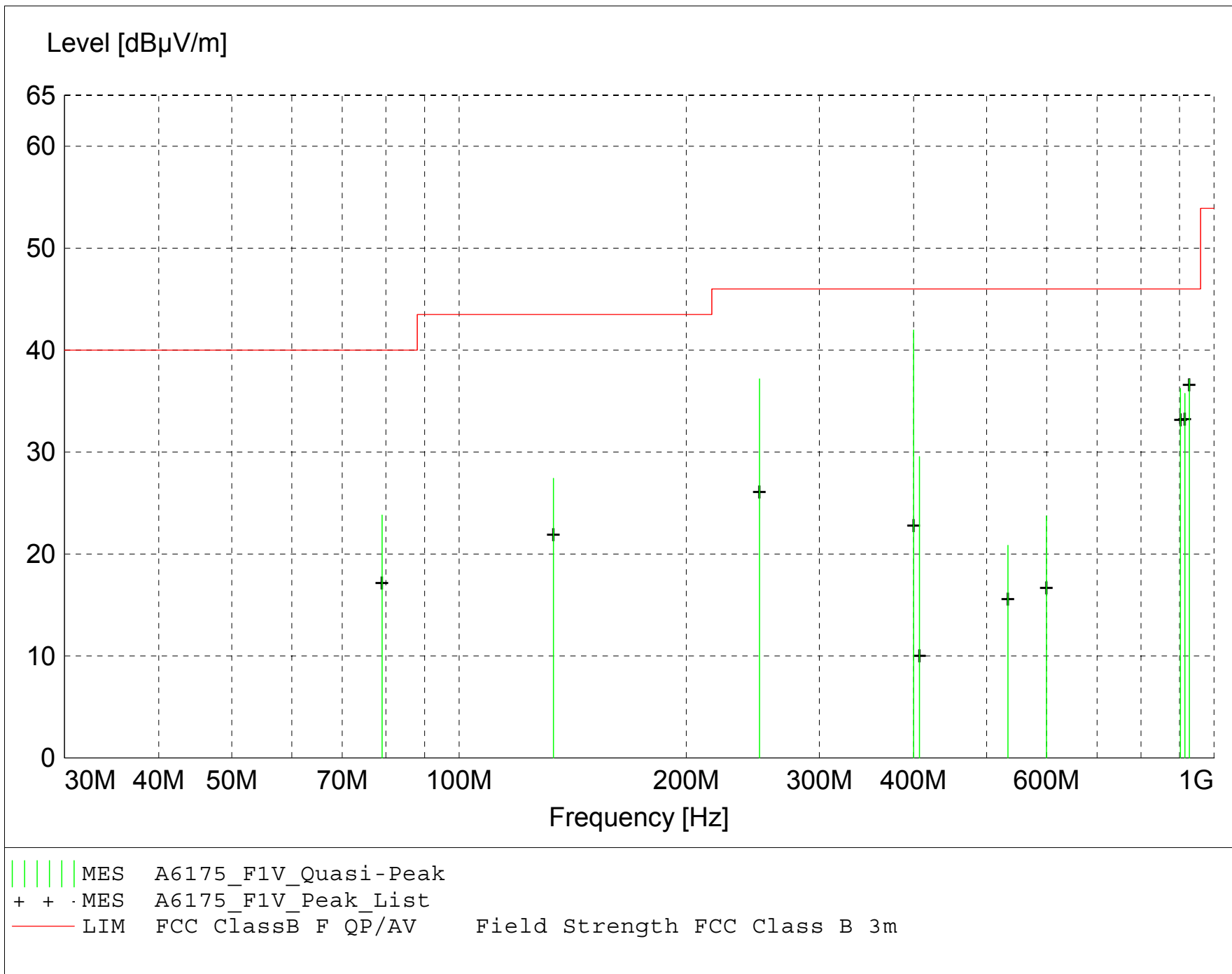
TEXT: "Site 3 MidV 3M"

Short Description: Test Set-up Vert30-1000MHz
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Antennas ---
Biconical -- EMCO 3104C SN: 9701-4785
Log Periodic -- EMCO 3146 SN: 9702-4895

Pre-Amp --- Rohde&Schwarz TS-PR10 SN: 032001/005

TEST SET-UP: EuT Measured at 3 Meters with VERTICAL Antenna Polarisation



MEASUREMENT RESULT: "A6175_F1V_Final"

6/17/2005 11:12AM

Frequency	Level	Antenna	System	Total	Limit	Margin	Height	EuT	Final	Comment
MHz	dBμV	Factor	Loss	Level			Ant.	Angle	Detector	
		dBμV/m	dB	dBμV/m	dBμV/m	dB	m	deg		
399.990000	47.72	15.66	-21.4	42.0	46.0	4.0	1.00	180	QUASI-PEAK	None
250.000000	46.94	12.46	-22.2	37.2	46.0	8.8	1.00	135	QUASI-PEAK	None
927.190000	32.58	22.78	-18.2	37.1	46.0	8.9	1.00	225	QUASI-PEAK	Receive
902.990000	32.09	22.60	-18.5	36.2	46.0	9.8	1.00	225	QUASI-PEAK	Receive
915.120000	31.55	22.54	-18.4	35.7	46.0	10.3	1.00	225	QUASI-PEAK	Receive
133.325000	38.38	12.30	-23.3	27.4	43.5	16.1	1.00	45	QUASI-PEAK	None
79.055000	41.03	6.70	-23.9	23.8	40.0	16.2	1.00	180	QUASI-PEAK	None
407.140000	35.15	15.76	-21.4	29.5	46.0	16.5	1.00	180	QUASI-PEAK	None
599.990000	25.10	18.95	-20.3	23.7	46.0	22.3	1.00	315	QUASI-PEAK	None
533.350000	23.81	17.86	-20.8	20.9	46.0	25.1	1.00	225	QUASI-PEAK	None

FCC Part 15 Class B

Electric Field Strength

EUT: Rpax110 Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Rx mode; Low, Mid, High Channels
Date: 06-17-2005

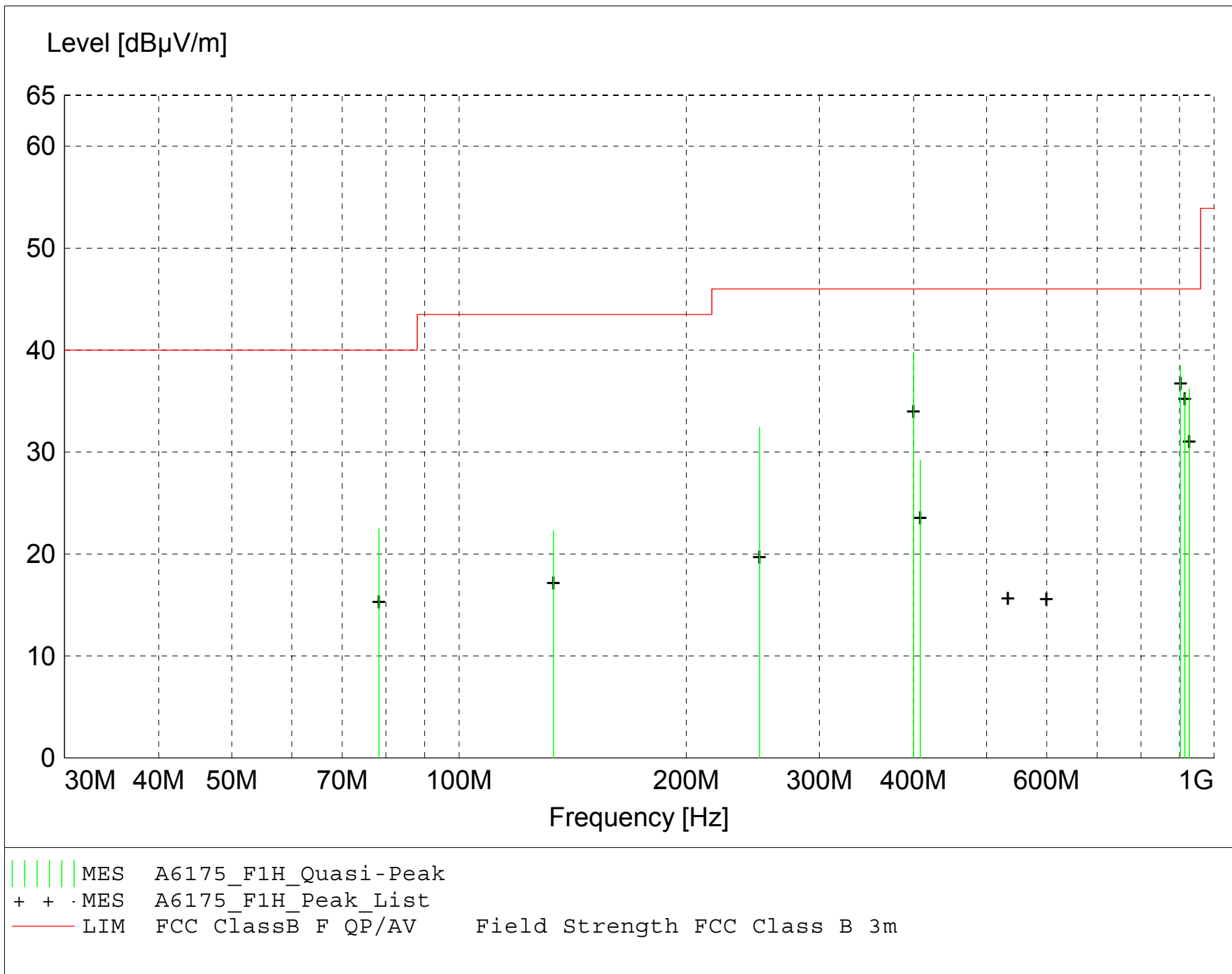
TEXT: "Site 3 MidH 3M"

Short Description: Test Set-up Horz30-1000MHz
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Antennas ---
Biconical -- EMCO 3104C SN: 9701-4785
Log Periodic -- EMCO 3146 SN: 9702-4895

Pre-Amp --- Rohde&Schwarz TS-PR10 SN: 032001/005

TEST SET-UP: EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation



MEASUREMENT RESULT: "A6175_F1H_Final"

6/17/2005 11:19AM

Frequency	Level	Antenna	System	Total	Limit	Margin	Height	EuT	Final	Comment
MHz	dBμV	Factor	Loss	Level			Ant.	Angle	Detector	
		dBμV/m	dB	dBμV/m	dBμV/m	dB	m	deg		
0.000000	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0		
400.000000	45.52	15.66	-21.4	39.8	46.0	6.2	2.00	135	QUASI-PEAK	None
902.990000	34.32	22.60	-18.5	38.4	46.0	7.6	1.30	135	QUASI-PEAK	Receive
927.190000	31.68	22.78	-18.2	36.2	46.0	9.8	1.70	150	QUASI-PEAK	Receive
915.120000	31.46	22.54	-18.4	35.7	46.0	10.3	1.70	150	QUASI-PEAK	Receive
249.960000	42.20	12.46	-22.2	32.4	46.0	13.6	1.80	90	QUASI-PEAK	None
408.350000	34.79	15.78	-21.4	29.2	46.0	16.8	2.00	135	QUASI-PEAK	None
78.300000	39.85	6.55	-23.9	22.5	40.0	17.5	2.20	270	QUASI-PEAK	None
133.325000	33.24	12.30	-23.3	22.3	43.5	21.2	2.20	90	QUASI-PEAK	None

FCC Part 15 Class B

Electric Field Strength

EUT: Rpax110 Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Max Power; Low Channel
Date: 06-17-2005

TEXT: "Site 3 6204&184 V3M"

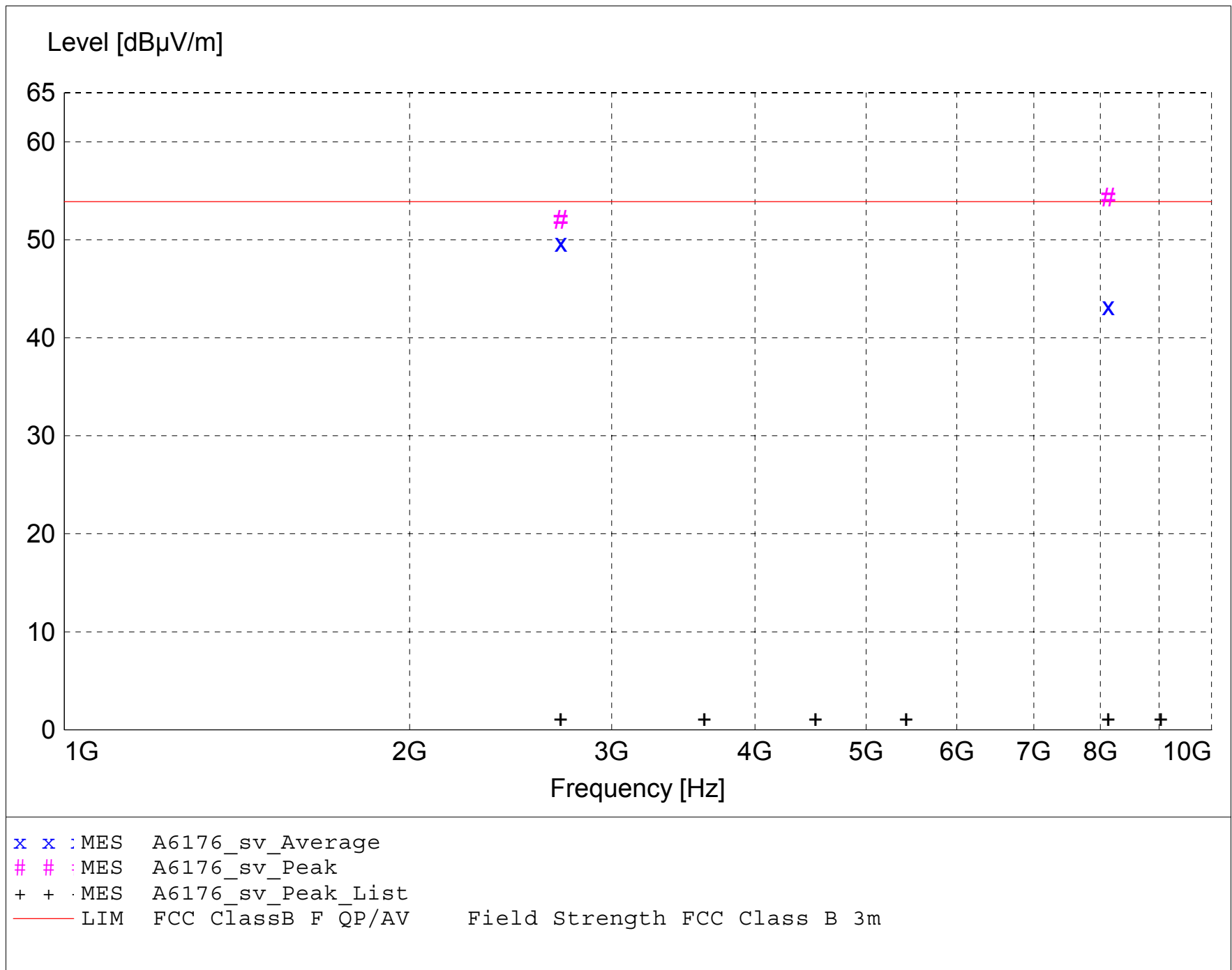
Short Description: Test Set-up Vert1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 40 SN: 837808/006

Horn Antenna --- ETS 3115 SN: 6204

Pre-Amps ---

1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with VERTICAL Antenna Polarisation



MEASUREMENT RESULT: "A6176_sv_Final"

6/17/2005 11:26AM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
8126.950000	49.99	36.98	-32.7	54.3	53.9	-0.4	1.00	225	MAX PEAK	None
2709.000000	61.02	29.28	-38.3	52.0	53.9	1.9	1.00	55	MAX PEAK	None
2709.000000	58.62	29.28	-38.3	49.7	53.9	4.2	1.00	55	AVERAGE	None
8126.950000	38.88	36.98	-32.7	43.2	53.9	10.7	1.00	225	AVERAGE	None

FCC Part 15 Class B

Electric Field Strength

EUT: Rpax110 Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Max Power; Low Channel
Date: 06-17-2005

TEXT: "Site 3 6204&184 H3M"

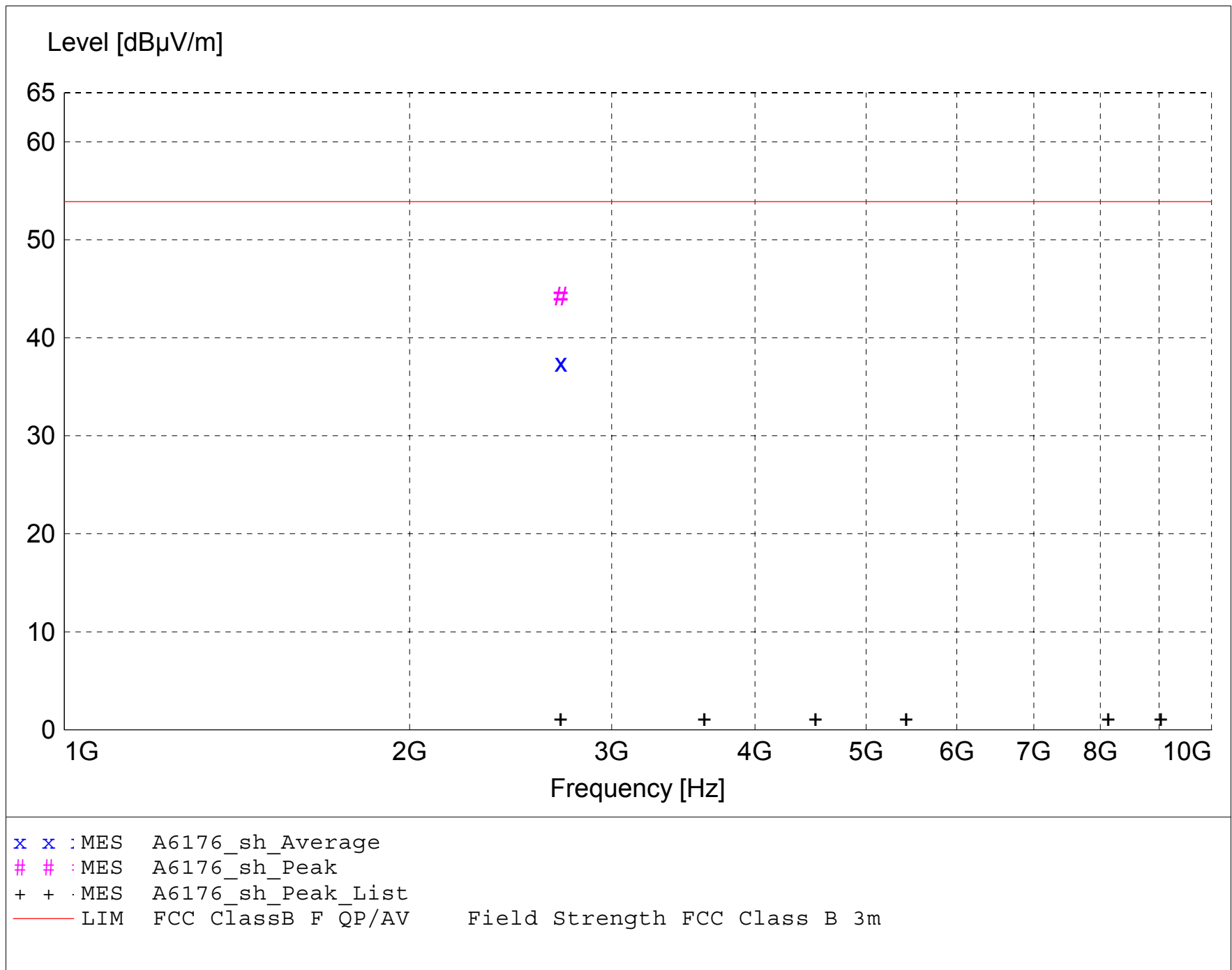
Short Description: Test Set-up Horz1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 40 SN: 837808/006

Horn Antenna --- ETS 3115 SN: 6204

Pre-Amps ---

1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation



MEASUREMENT RESULT: "A6176_sh_Final"

6/17/2005 11:35AM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant. m	EuT Angle deg	Final Detector	Comment
MHz	dBμV	dBμV/m	dB	dBμV/m	dBμV/m	dB				
2709.000000	53.19	29.28	-38.3	44.2	53.9	9.7	1.00	0	MAX PEAK	None
2709.000000	46.42	29.28	-38.3	37.4	53.9	16.5	1.00	0	AVERAGE	None

FCC Part 15 Class B

Electric Field Strength

EUT: Rpax110 Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Max Power; Mid Channel
Date: 06-17-2005

TEXT: "Site 3 6204&184 V3M"

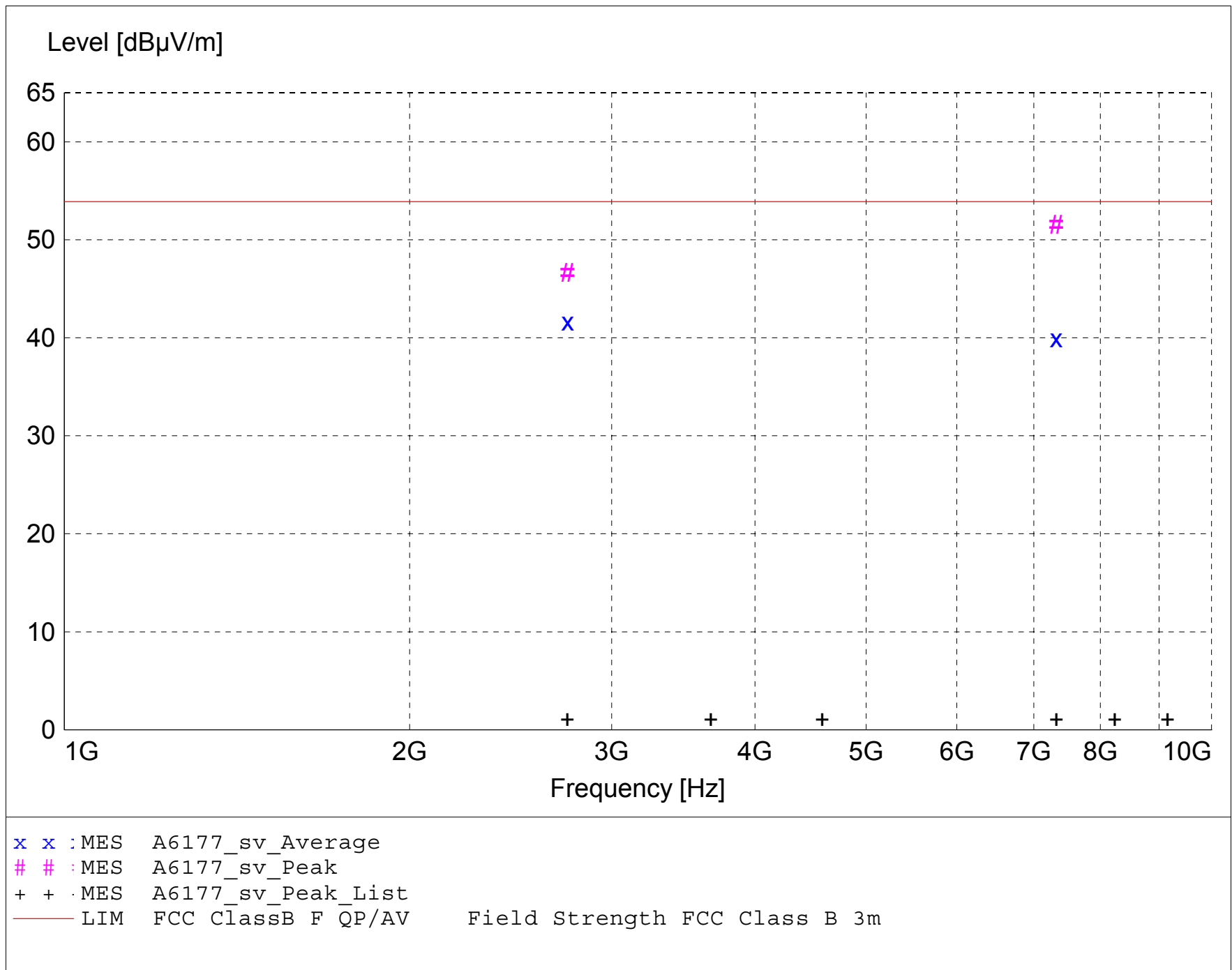
Short Description: Test Set-up Vert1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 40 SN: 837808/006

Horn Antenna --- ETS 3115 SN: 6204

Pre-Amps ---

1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with VERTICAL Antenna Polarisation



MEASUREMENT RESULT: "A6177_sv_Final"

6/17/2005 11:40AM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
7321.000000	49.00	36.09	-33.6	51.5	53.9	2.4	1.00	225	MAX PEAK	None
2745.400000	55.32	29.40	-38.1	46.6	53.9	7.3	1.80	45	MAX PEAK	None
2745.400000	50.34	29.40	-38.1	41.6	53.9	12.3	1.80	45	AVERAGE	None
7321.000000	37.36	36.09	-33.6	39.9	53.9	14.0	1.00	225	AVERAGE	None

FCC Part 15 Class B

Electric Field Strength

EUT: Rpax110 Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Max Power; Mid Channel
Date: 06-17-2005

TEXT: "Site 3 6204&184 H3M"

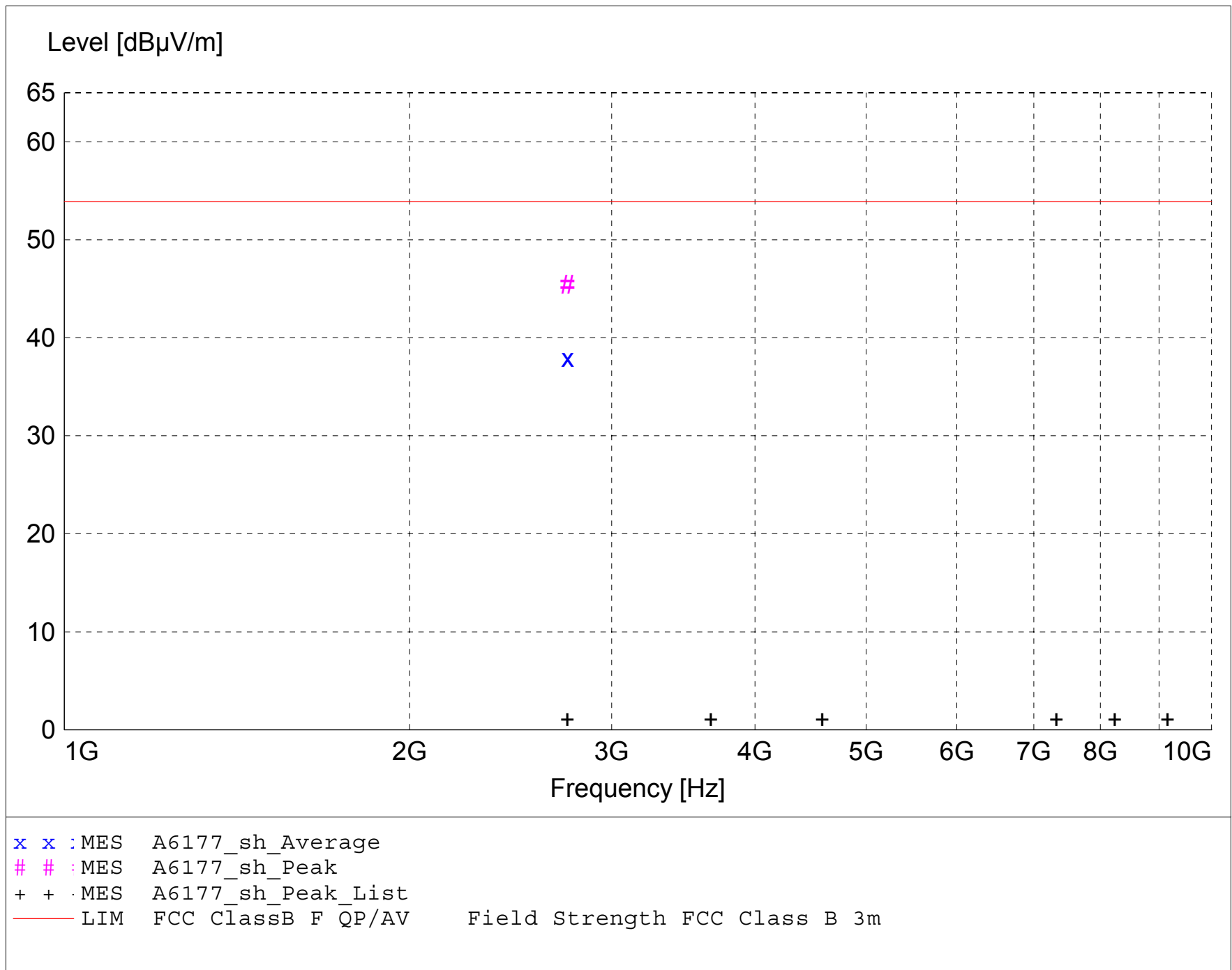
Short Description: Test Set-up Horz1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 40 SN: 837808/006

Horn Antenna --- ETS 3115 SN: 6204

Pre-Amps ---

1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation



MEASUREMENT RESULT: "A6177_sh_Final"

6/17/2005 11:42AM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBμV	dBμV/m	dB	dBμV/m	dBμV/m	dB	m	deg		
2745.400000	54.11	29.40	-38.1	45.4	53.9	8.5	1.20	90	MAX PEAK	None
2745.400000	46.62	29.40	-38.1	37.9	53.9	16.0	1.20	90	AVERAGE	None

FCC Part 15 Class B

Electric Field Strength

EUT: Rpax110 Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Max Power; High Channel
Date: 06-17-2005

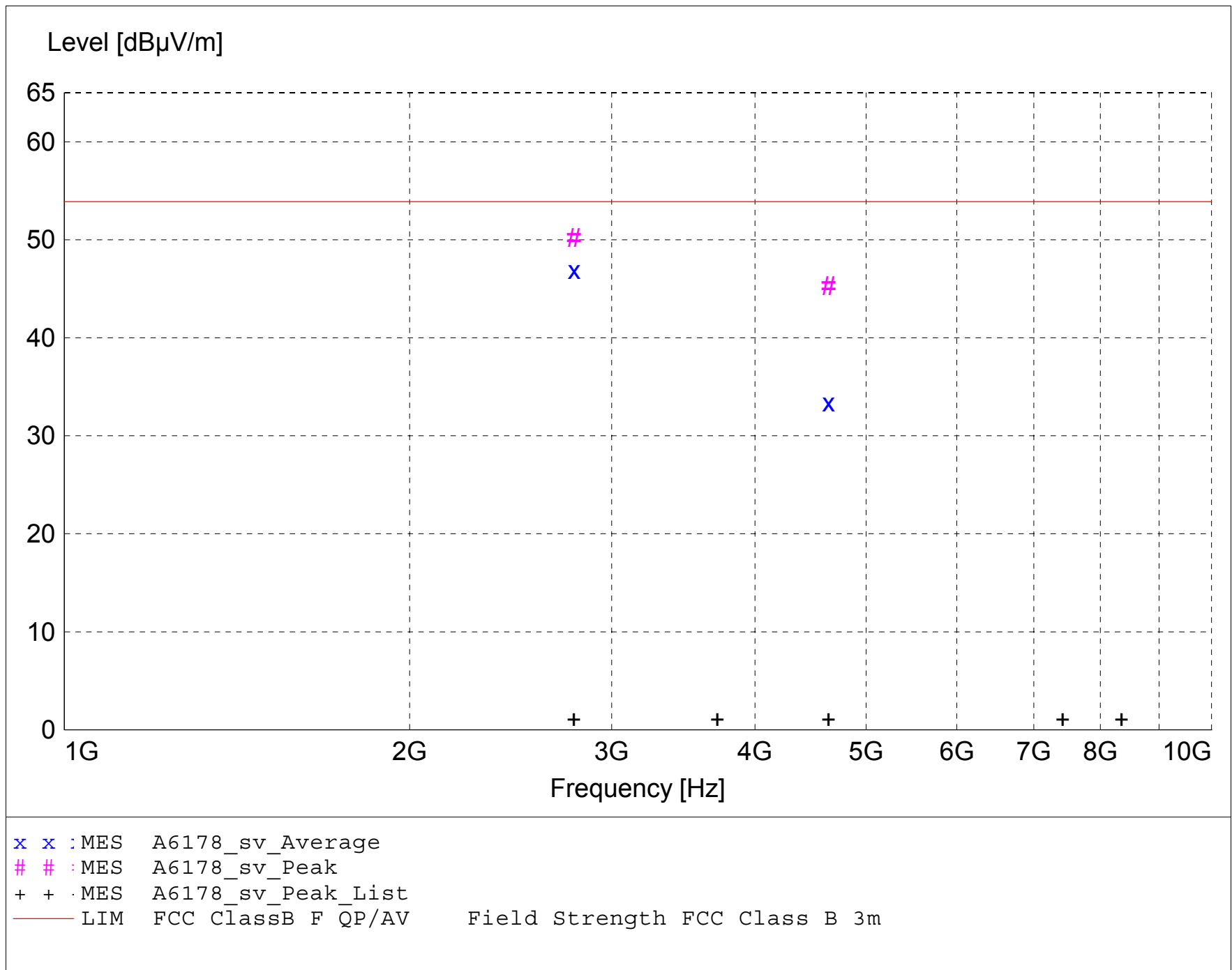
TEXT: "Site 3 6204&184 V3M"

Short Description: Test Set-up Vert1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 40 SN: 837808/006

Horn Antenna --- ETS 3115 SN: 6204

Pre-Amps ---
1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with VERTICAL Antenna Polarisation



MEASUREMENT RESULT: "A6178_sv_Final"

6/17/2005 11:47AM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
2781.600000	58.60	29.51	-38.0	50.1	53.9	3.8	1.30	120	MAX PEAK	None
2781.600000	55.37	29.51	-38.0	46.9	53.9	7.0	1.30	120	AVERAGE	None
4636.000000	48.46	32.60	-35.8	45.3	53.9	8.6	1.20	90	MAX PEAK	None
4636.000000	36.54	32.60	-35.8	33.3	53.9	20.6	1.20	90	AVERAGE	None

FCC Part 15 Class B

Electric Field Strength

EUT: Rpax110 Printer with ZM4e
Manufacturer: Zebra Technologies
Operating Condition: 72 deg. F; 50% R.H.
Test Site: DLS OF Site 3
Operator: Craig Brandt
Test Specification:
Comment: Tx mode; Max Power; High Channel
Date: 06-17-2005

TEXT: "Site 3 6204&184 H3M"

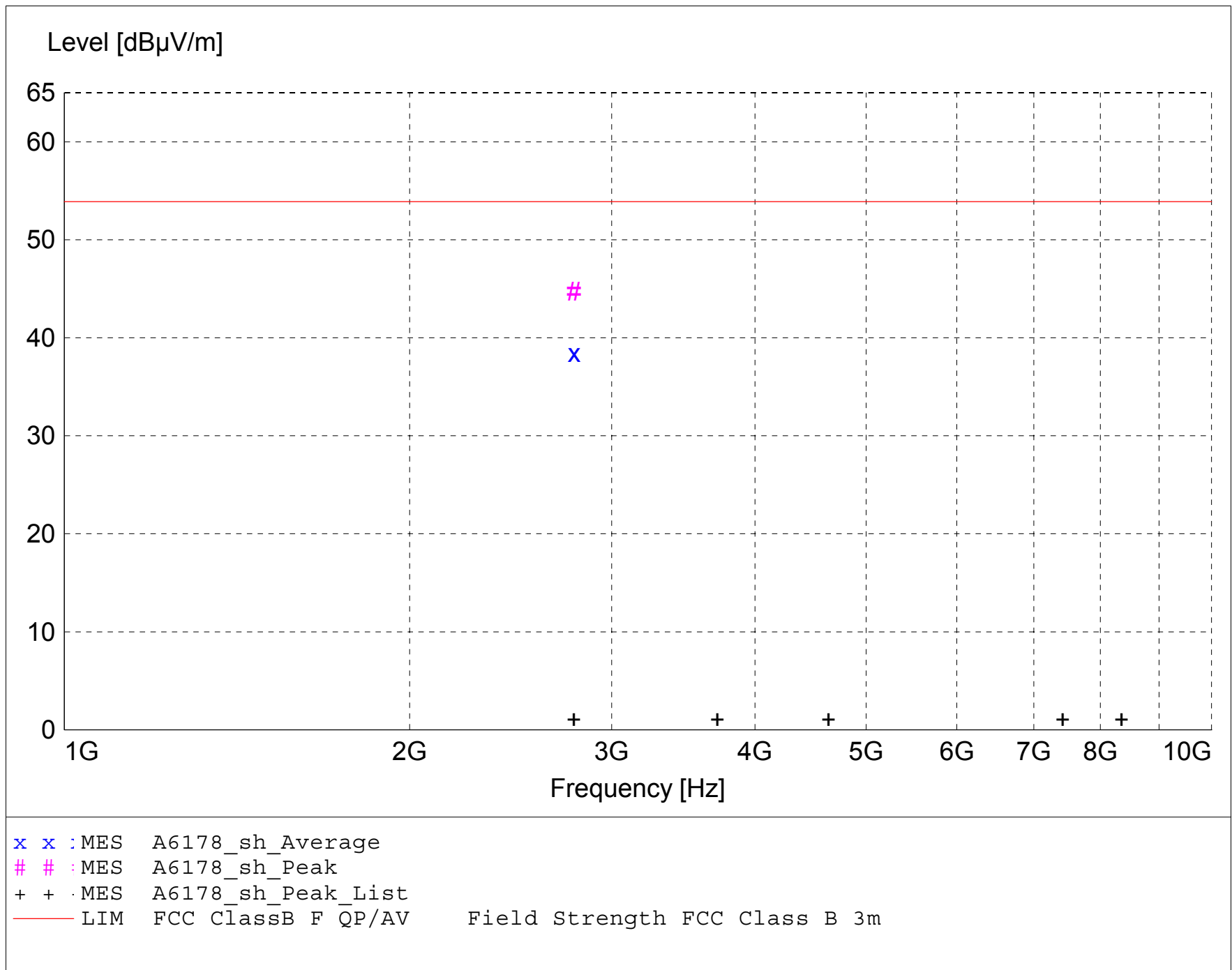
Short Description: Test Set-up Horz1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 40 SN: 837808/006

Horn Antenna --- ETS 3115 SN: 6204

Pre-Amps ---

1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation



MEASUREMENT RESULT: "A6178_sh_Final"

6/17/2005 11:50AM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBμV	dBμV/m	dB	dBμV/m	dBμV/m	dB	m	deg		
2781.600000	53.19	29.51	-38.0	44.7	53.9	9.2	1.30	350	MAX PEAK	None
2781.600000	46.90	29.51	-38.0	38.4	53.9	15.5	1.30	350	AVERAGE	None



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

20 dB BANDWIDTH GRAPHS

PART 15.247



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

RF CONDUCTED 20 dBm

20 dB BANDWIDTH



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

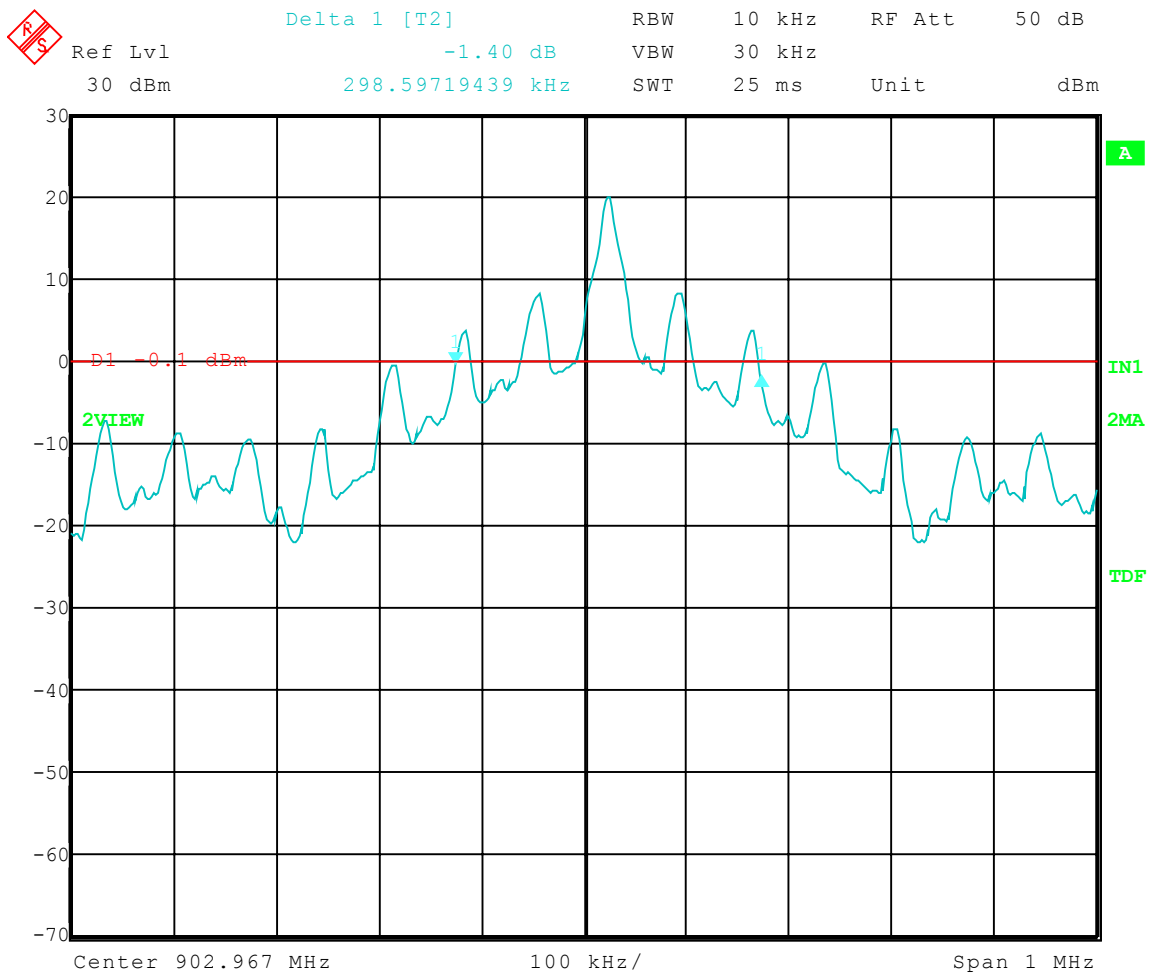
1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: 20 dB Bandwidth - Conducted
Operator: Craig Brandt

Comment: **Low Channel:** Frequency – 902.967 MHz
Modulation: EPC C1

20 dB Bandwidth = 298.60 kHz



Date: 16.JUN.2005 12:23:06



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

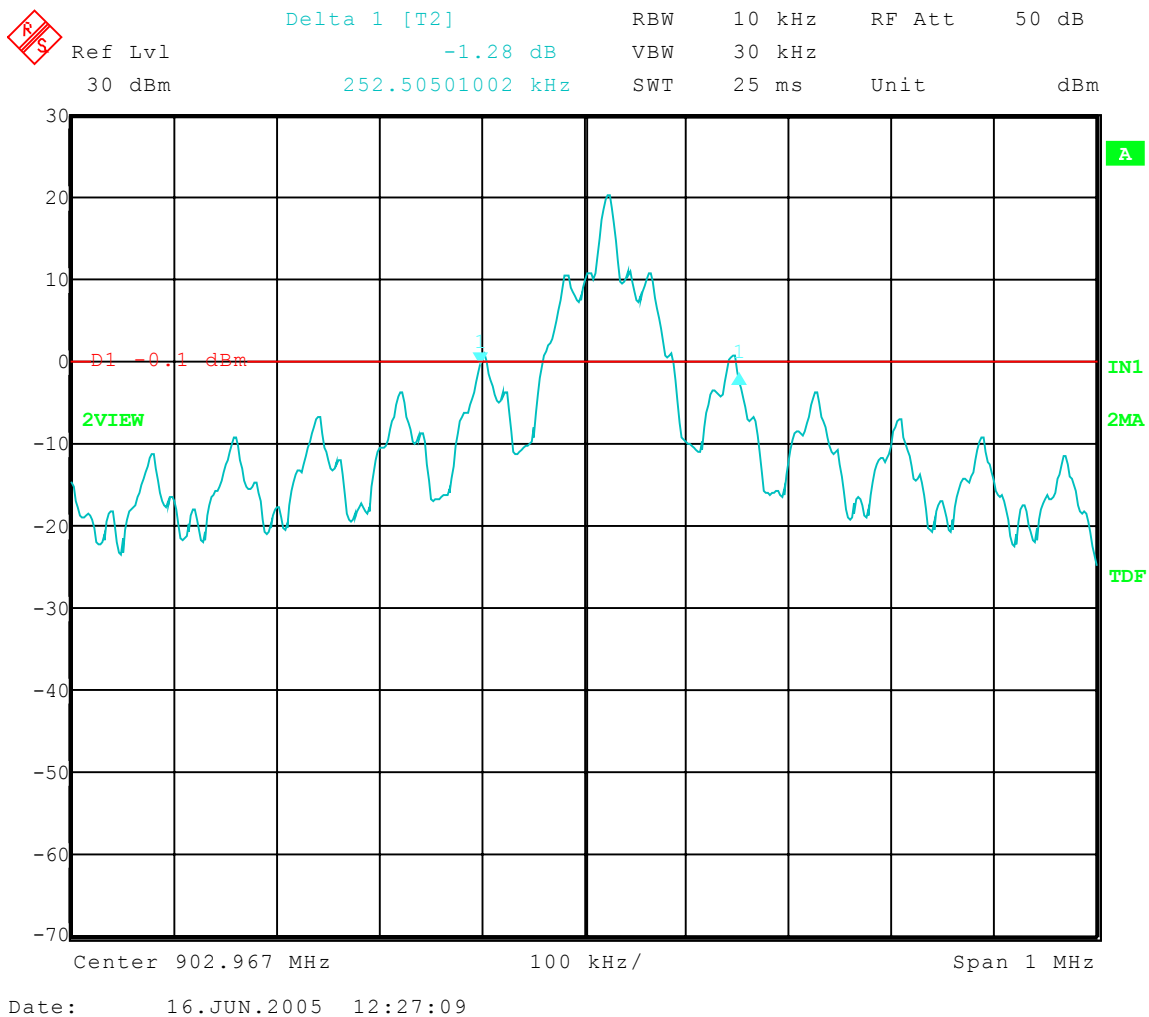
1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: 20 dB Bandwidth - Conducted
Operator: Craig Brandt

Comment: **Low Channel:** Frequency – 902.967 MHz
Modulation: EPC C0+

20 dB Bandwidth = 252.51 kHz





Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

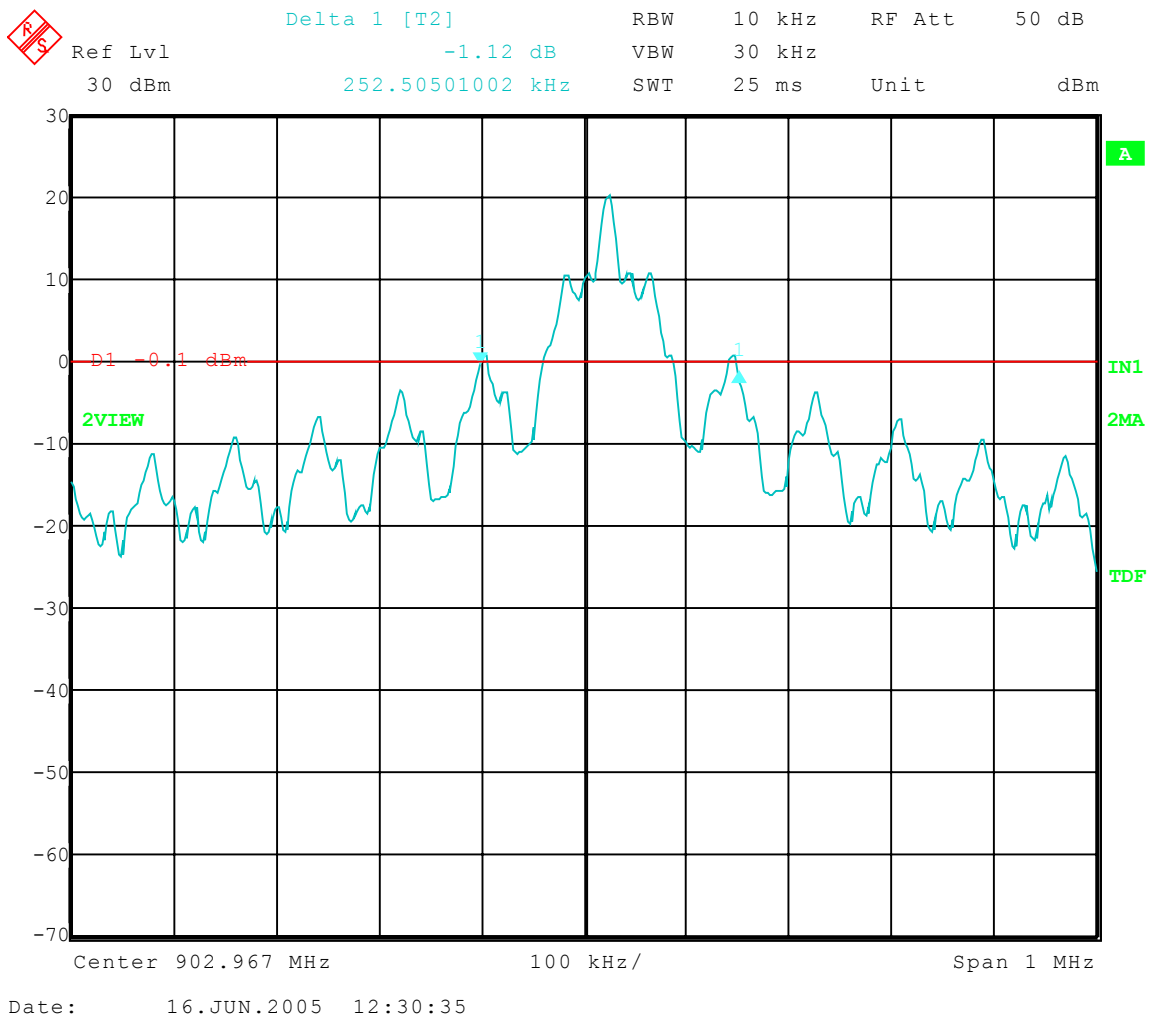
1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: 20 dB Bandwidth - Conducted
Operator: Craig Brandt

Comment: **Low Channel:** Frequency – 902.967 MHz
Modulation: EPC ISO18000-6B

20 dB Bandwidth = 252.51 kHz





Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

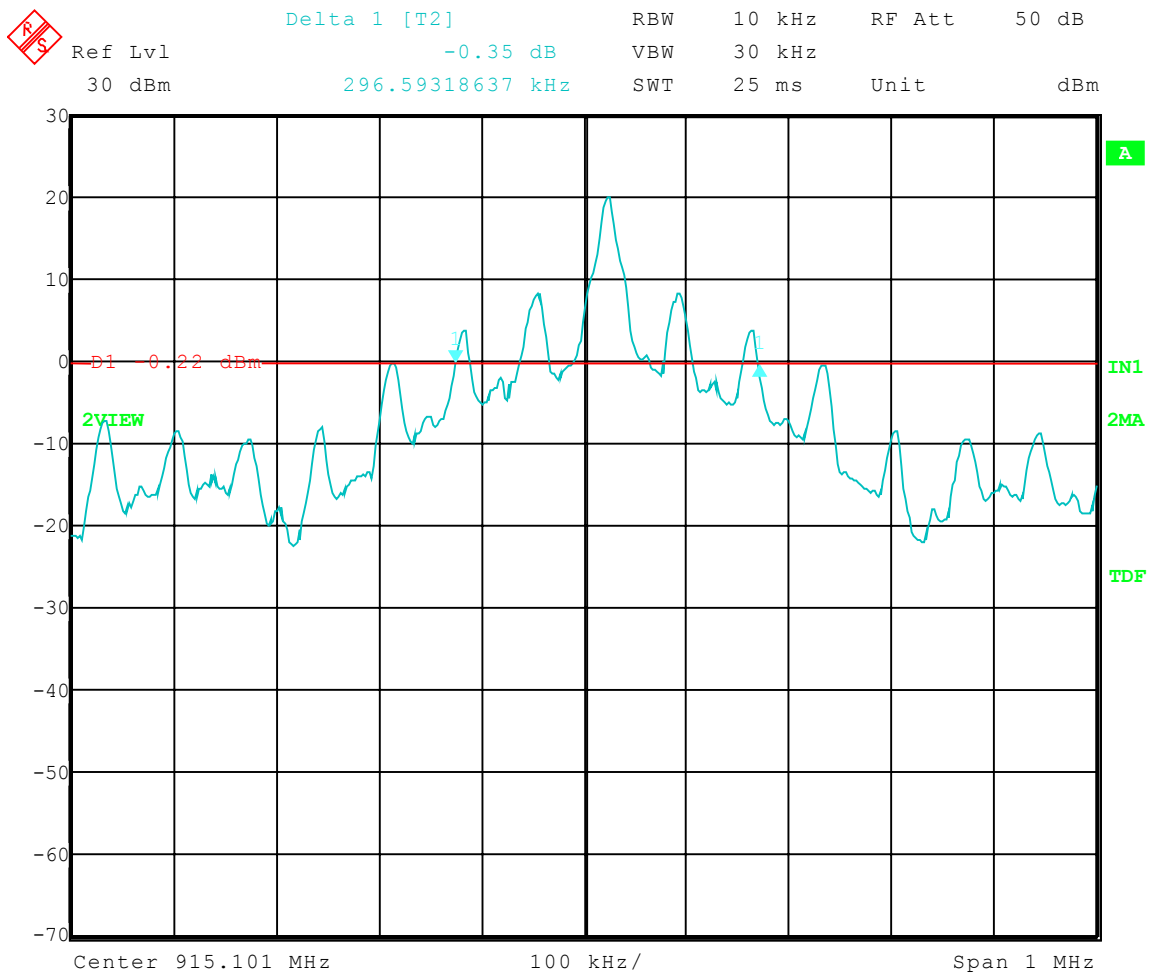
1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: 20 dB Bandwidth - Conducted
Operator: Craig Brandt

Comment: **Middle Channel**: Frequency – 915.101 MHz
Modulation: EPC C1

20 dB Bandwidth = 296.59 kHz



Date: 16.JUN.2005 12:32:45



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

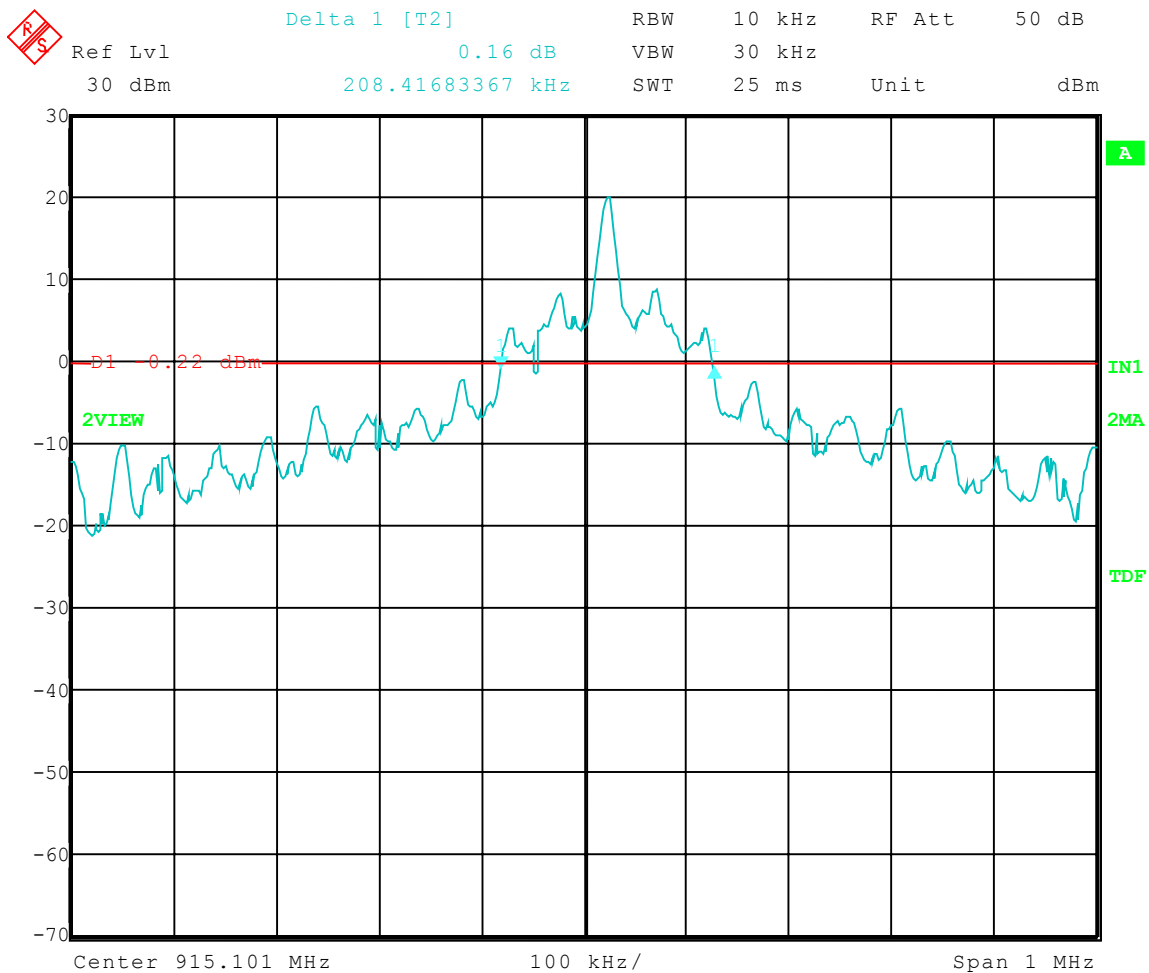
1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: 20 dB Bandwidth - Conducted
Operator: Craig Brandt

Comment: **Middle Channel**: Frequency – 915.101 MHz
Modulation: EPC C0+

20 dB Bandwidth = 208.42 kHz



Date: 16.JUN.2005 12:35:03



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

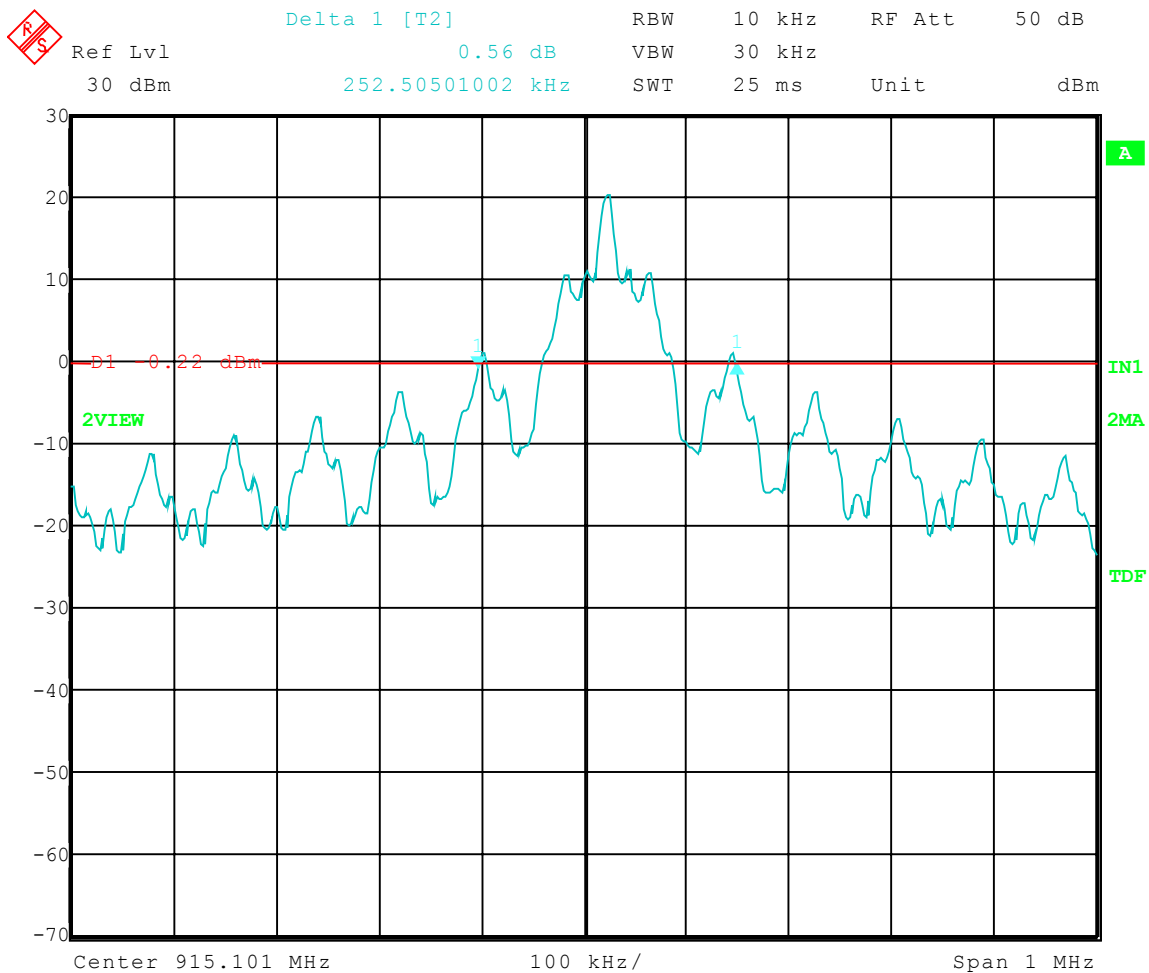
1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: 20 dB Bandwidth - Conducted
Operator: Craig Brandt

Comment: **Middle Channel**: Frequency – 915.101 MHz
Modulation: EPC ISO18000-6B

20 dB Bandwidth = 252.51 kHz



Date: 16.JUN.2005 12:37:04



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

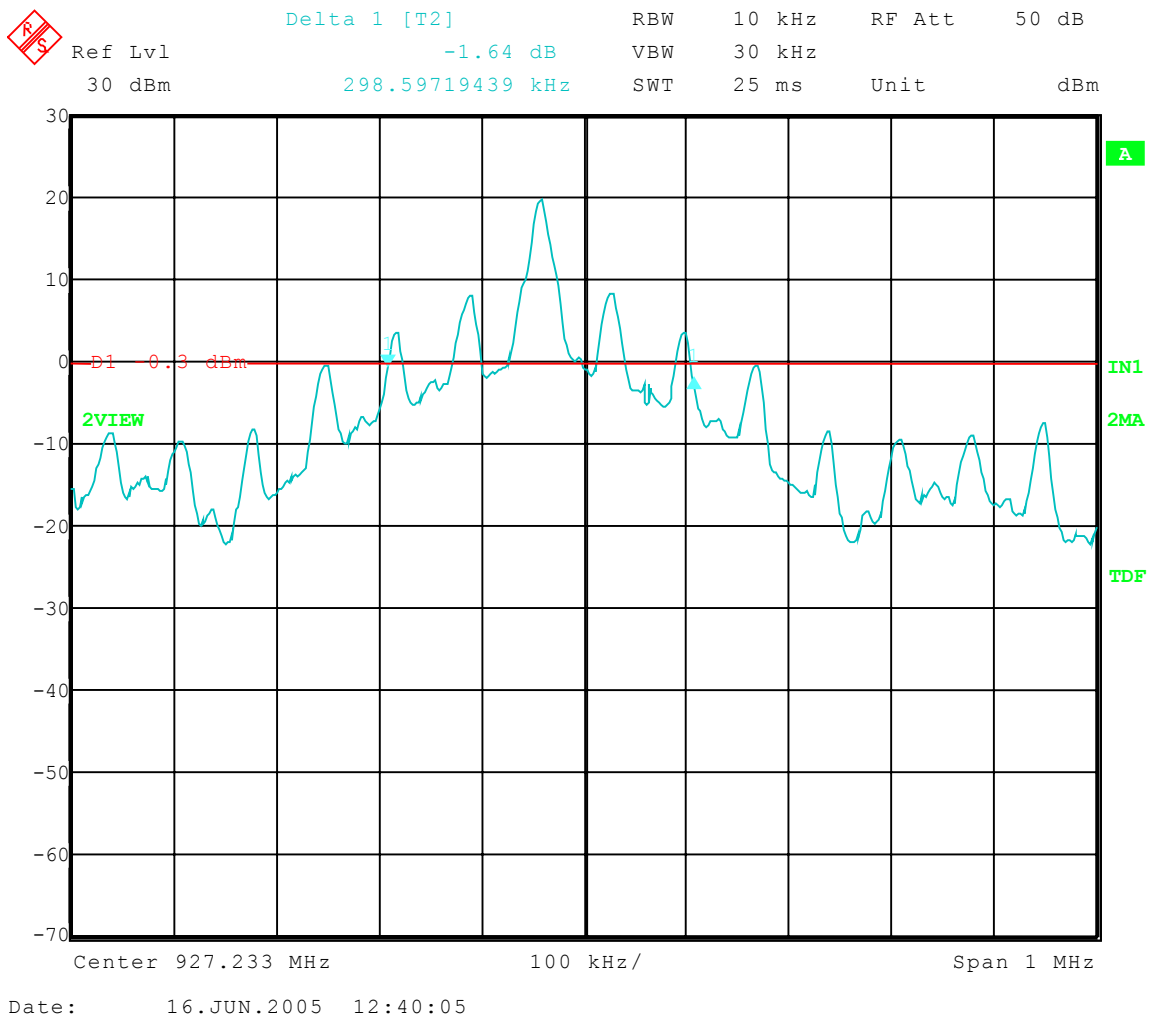
1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: 20 dB Bandwidth - Conducted
Operator: Craig Brandt

Comment: **High Channel**: Frequency – 927.233 MHz
Modulation: EPC C1

20 dB Bandwidth = 298.60 kHz





Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

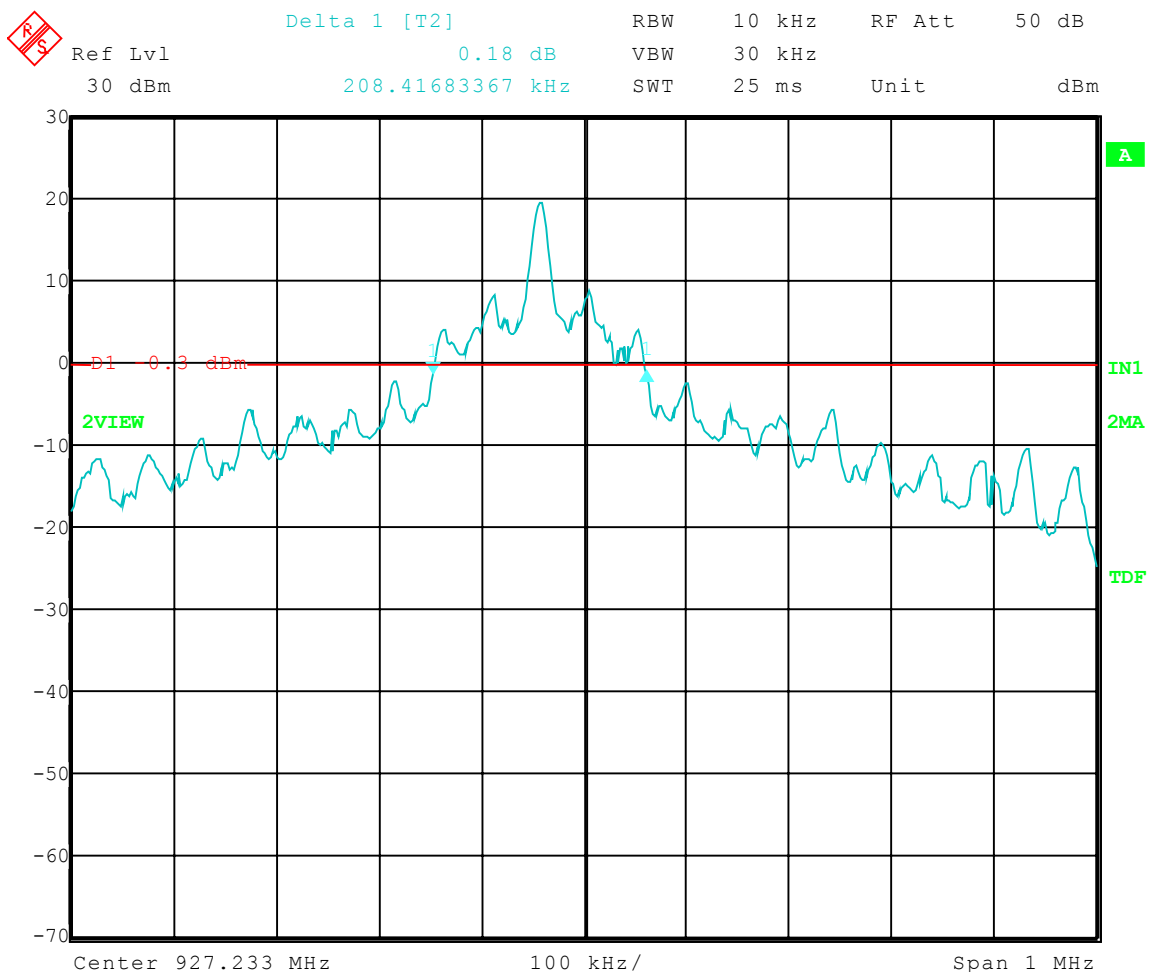
1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: 20 dB Bandwidth - Conducted
Operator: Craig Brandt

Comment: **High Channel**: Frequency – 927.233 MHz
Modulation: EPC C0+

20 dB Bandwidth = 208.42 kHz



Date: 16.JUN.2005 12:42:17



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

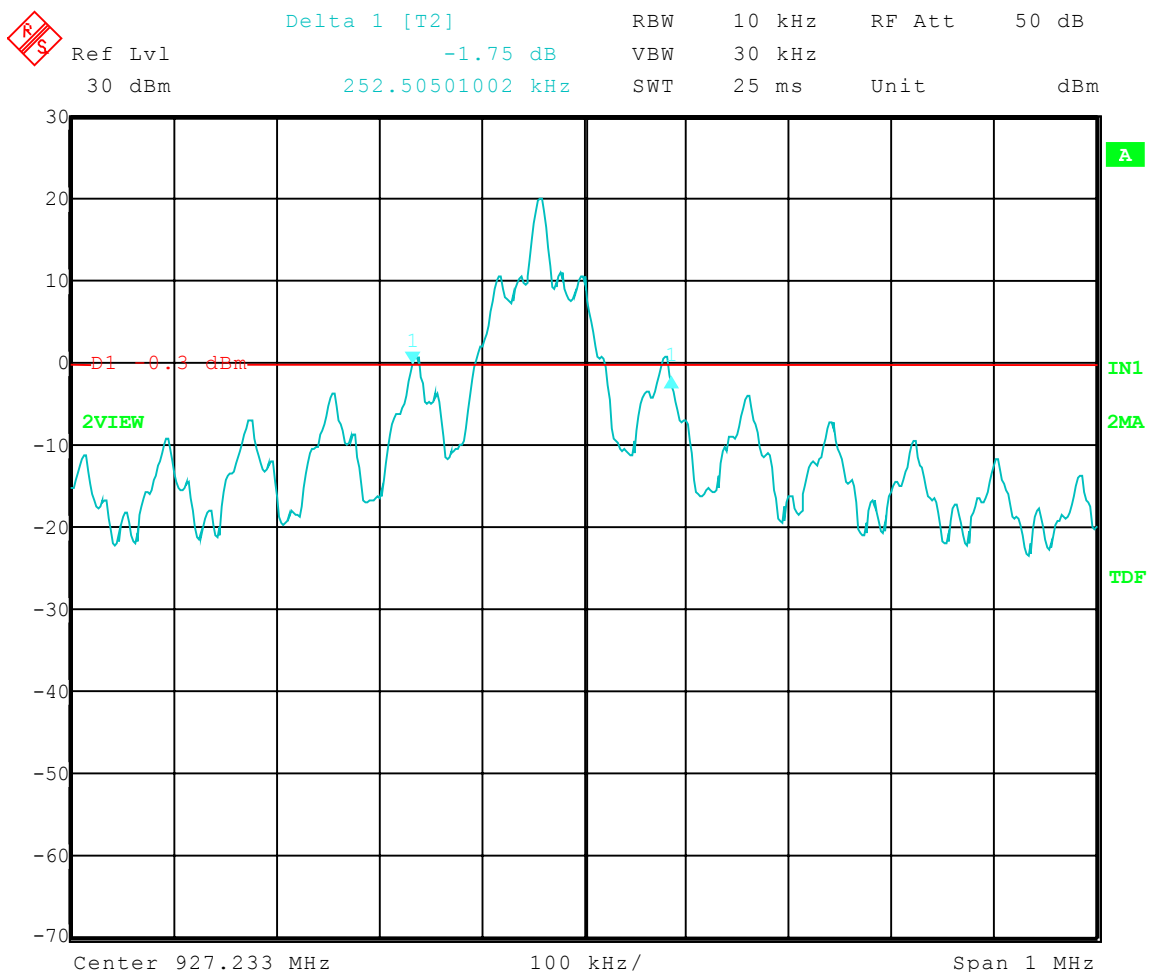
1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: 20 dB Bandwidth - Conducted
Operator: Craig Brandt

Comment: **High Channel**: Frequency – 927.233 MHz
Modulation: EPC ISO18000-6B

20 dB Bandwidth = 252.51 kHz



Date: 16.JUN.2005 12:44:03



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

RF Conducted 20 dBm

CONDUCTED PEAK OUTPUT POWER



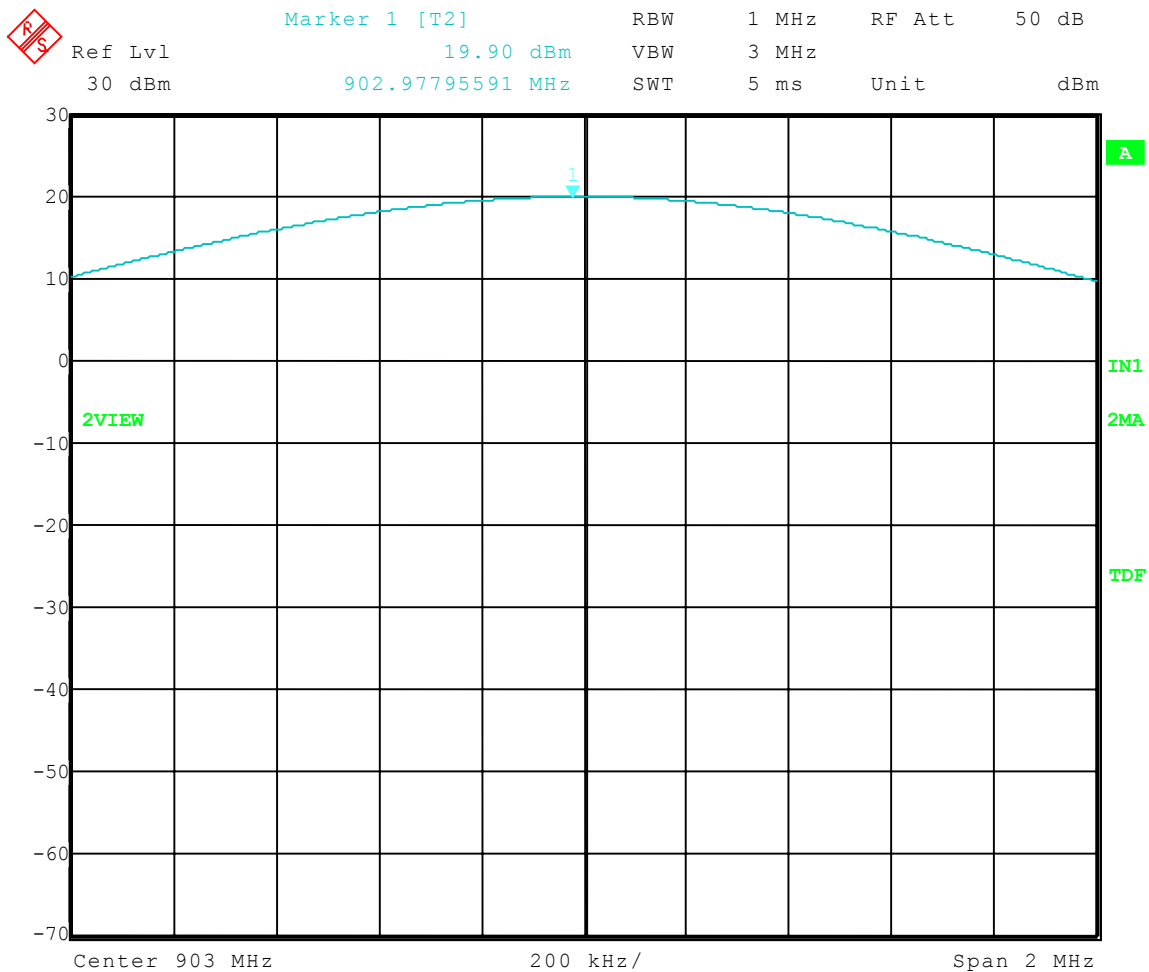
Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: Peak Output Power - Conducted
Operator: Craig Brandt
Comment: **Low Channel**: Frequency – 902.967 MHz Output: 20 dBm

Peak Output Power = 19.9 dBm = 97.72 mW



Date: 16.JUN.2005 12:15:15



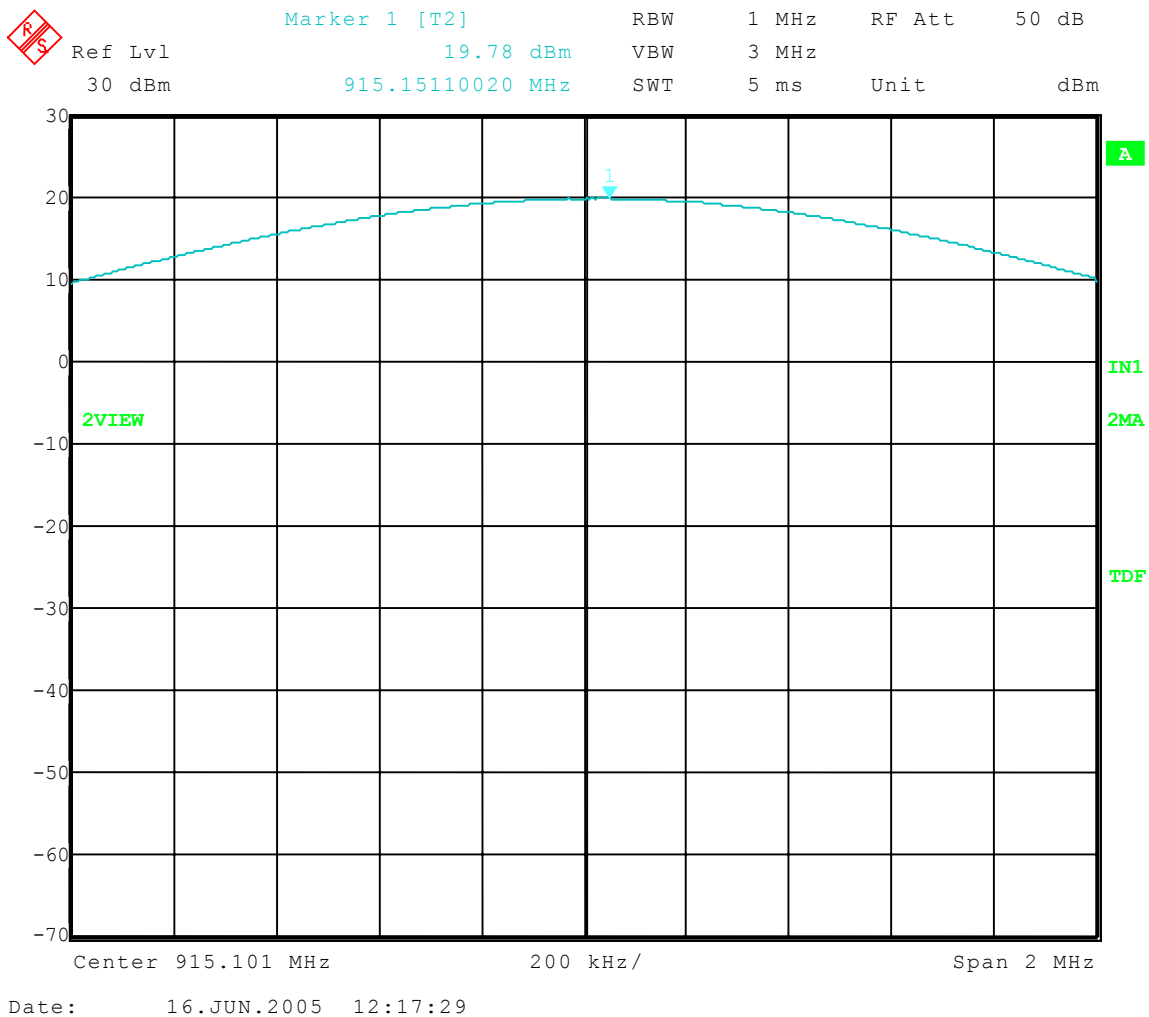
Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: Peak Output Power - Conducted
Operator: Craig Brandt
Comment: **Mid Channel**: Frequency – 915.101 MHz Output: 20 dBm

Peak Output Power = 19.78 dBm = 95.06 mW





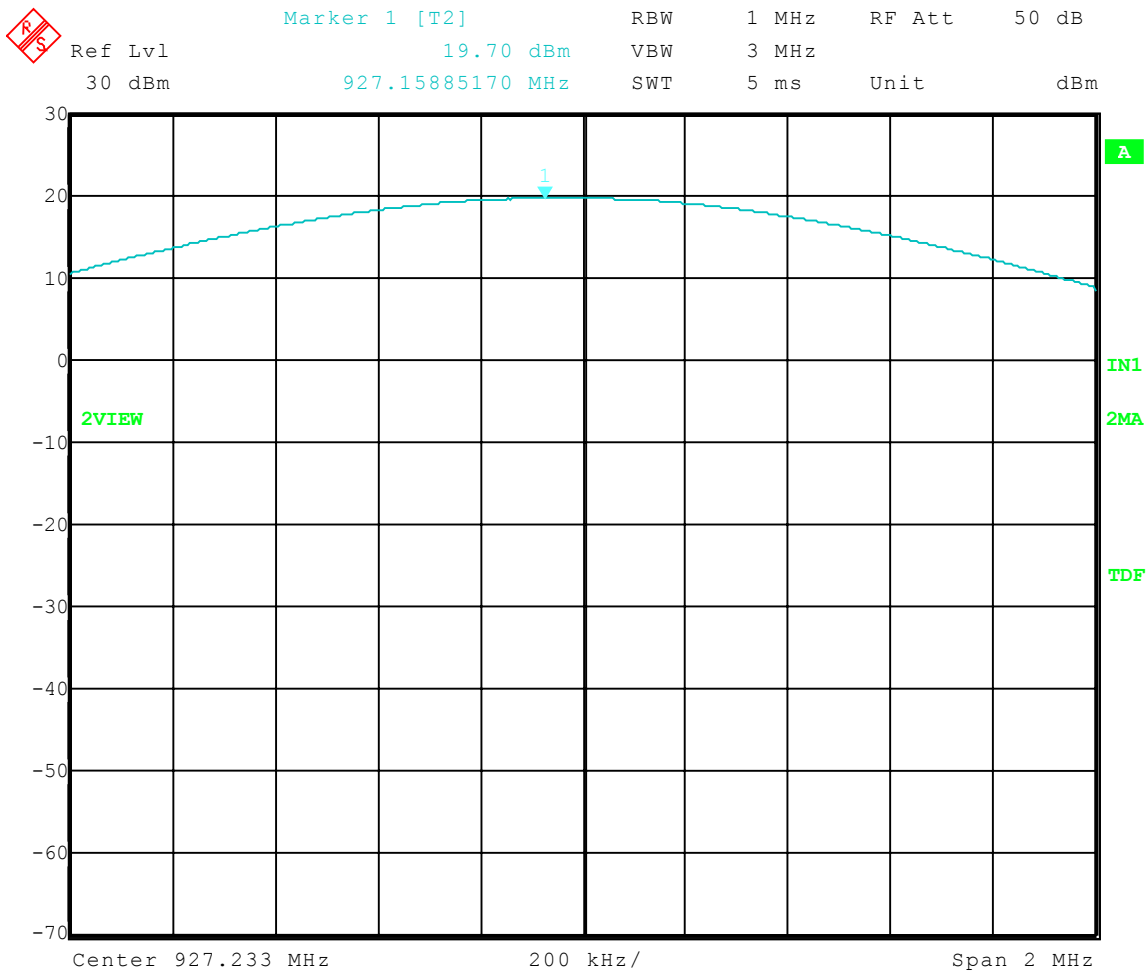
Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: Peak Output Power - Conducted
Operator: Craig Brandt
Comment: **High Channel**: Frequency – 927.190 MHz Output: 20 dBm

Peak Output Power = 19.70 dBm = 93.33 mW



Date: 16.JUN.2005 12:18:42



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

RF CONDUCTED 30 dBm

20 dB BANDWIDTH



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

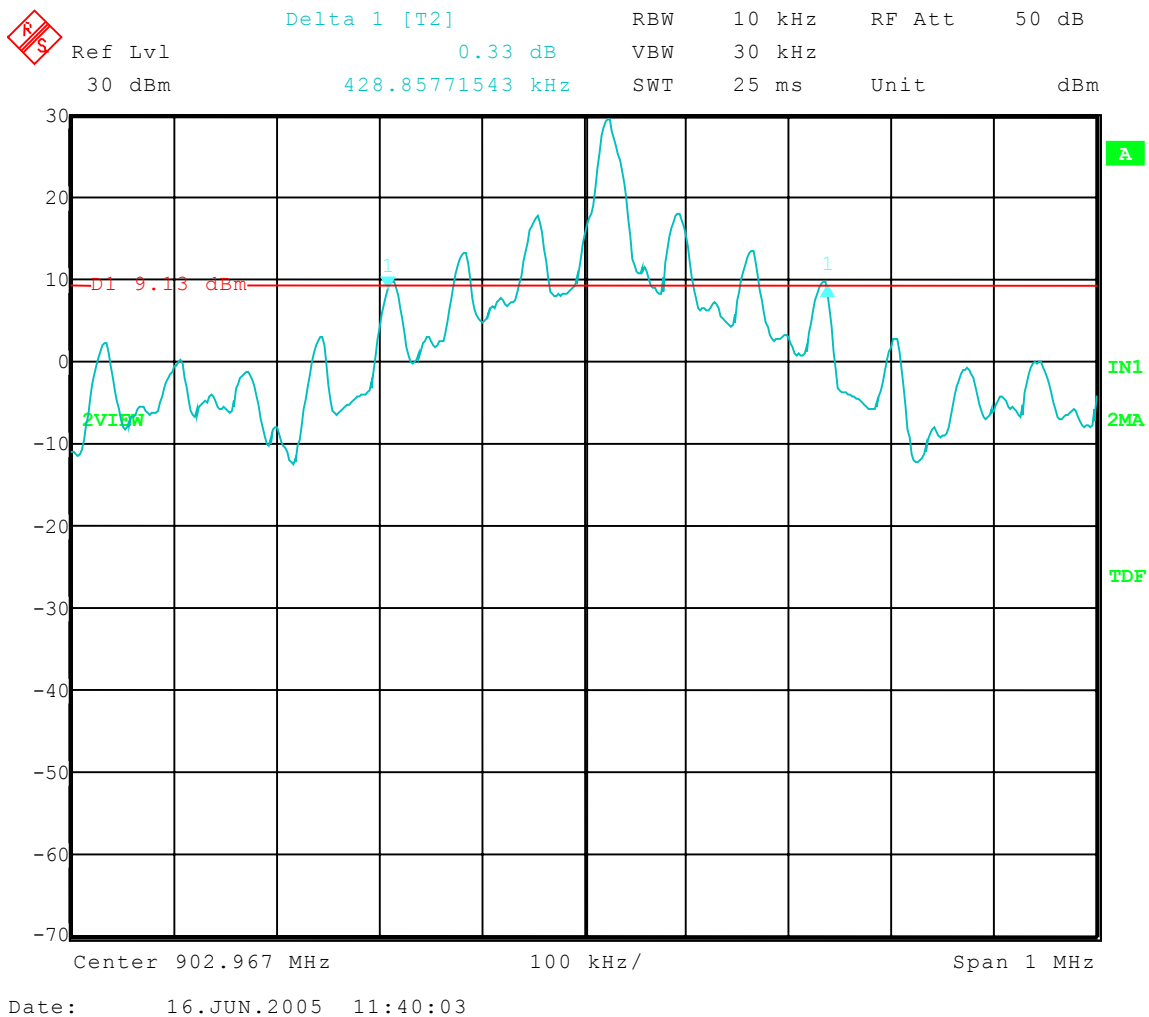
1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: 20 dB Bandwidth - Conducted
Operator: Craig Brandt

Comment: **Low Channel**: Frequency – 902.967 MHz
Modulation: EPC C1

20 dB Bandwidth = 428.86 kHz





Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

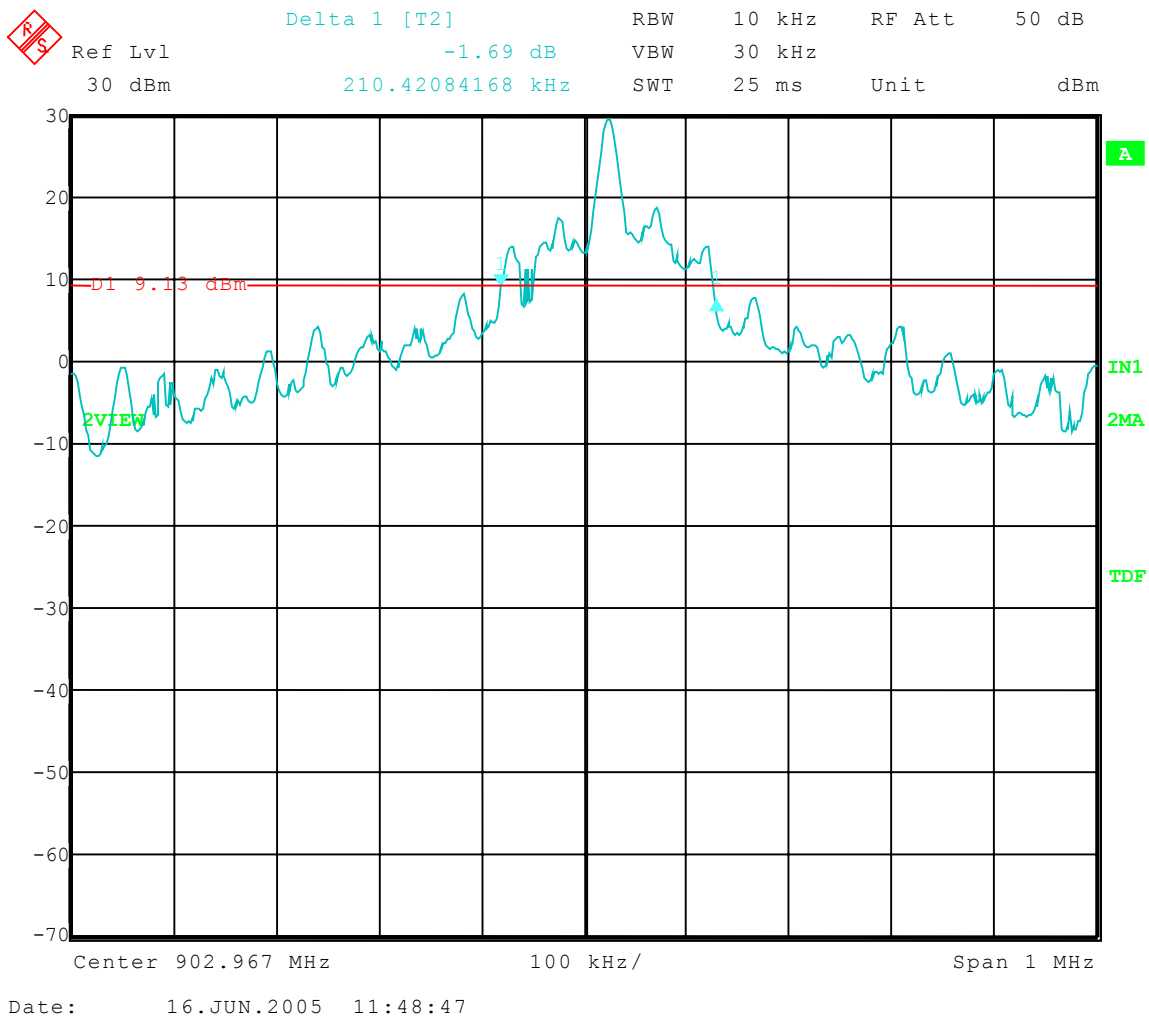
1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: 20 dB Bandwidth - Conducted
Operator: Craig Brandt

Comment: **Low Channel**: Frequency – 902.967 MHz
Modulation: EPC C0+

20 dB Bandwidth = 210.42 kHz





Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

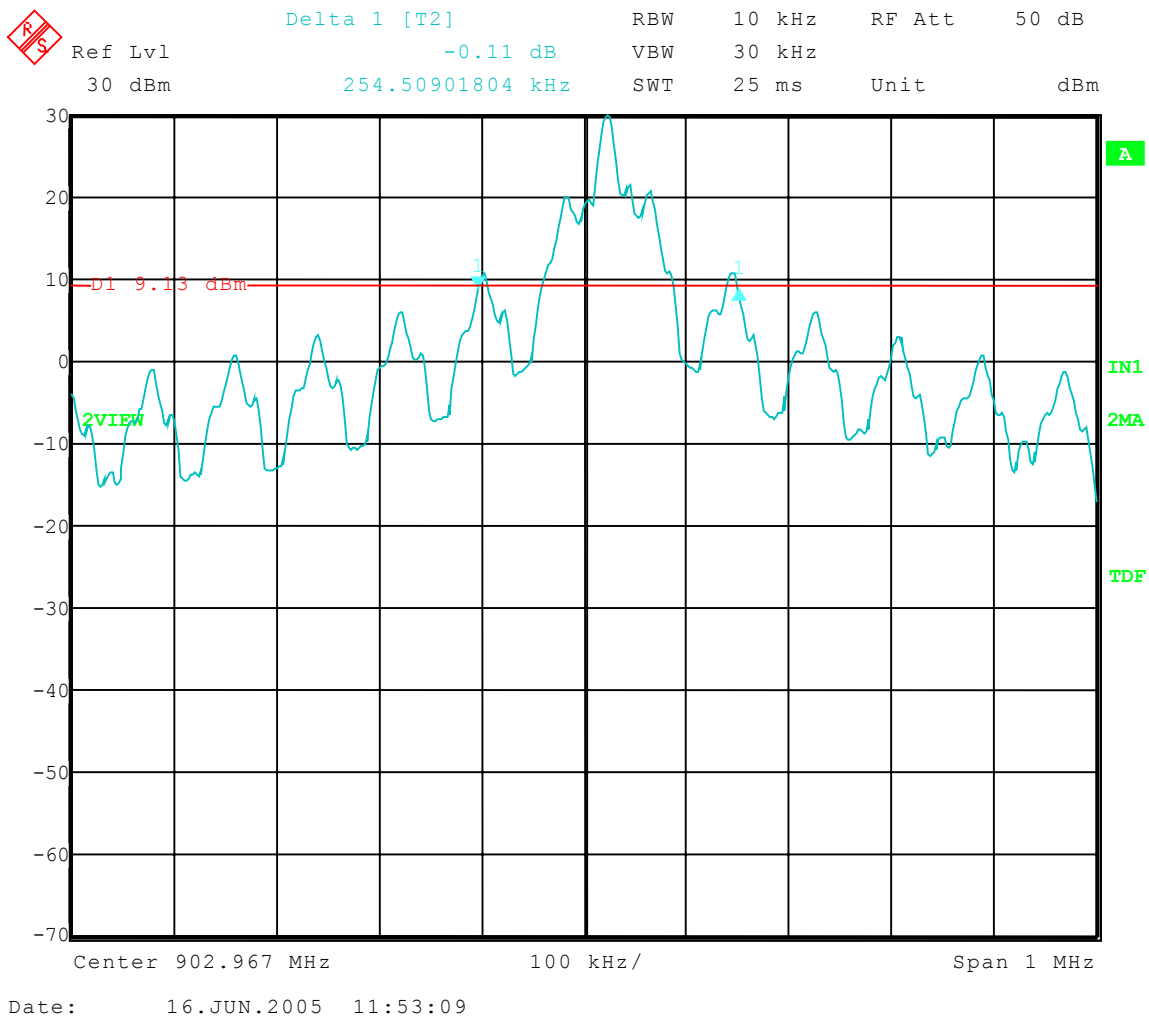
1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: 20 dB Bandwidth - Conducted
Operator: Craig Brandt

Comment: **Low Channel**: Frequency – 902.967 MHz
Modulation: EPC ISO18000-6B

20 dB Bandwidth = 254.51 kHz





Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

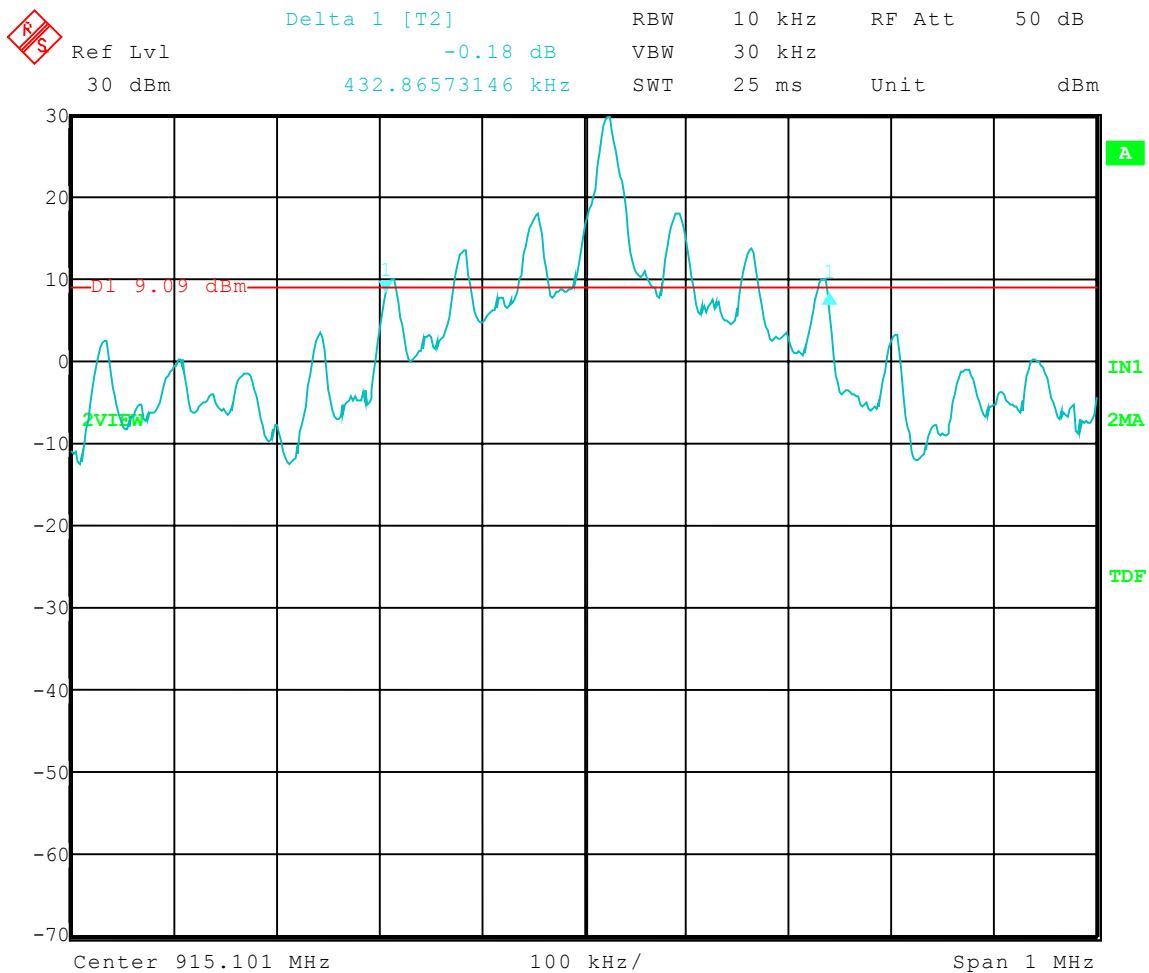
1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: 20 dB Bandwidth - Conducted
Operator: Craig Brandt

Comment: **Middle Channel**: Frequency – 915.101 MHz
Modulation: EPC C1

20 dB Bandwidth = 432.87 kHz



Date: 16.JUN.2005 12:01:38



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

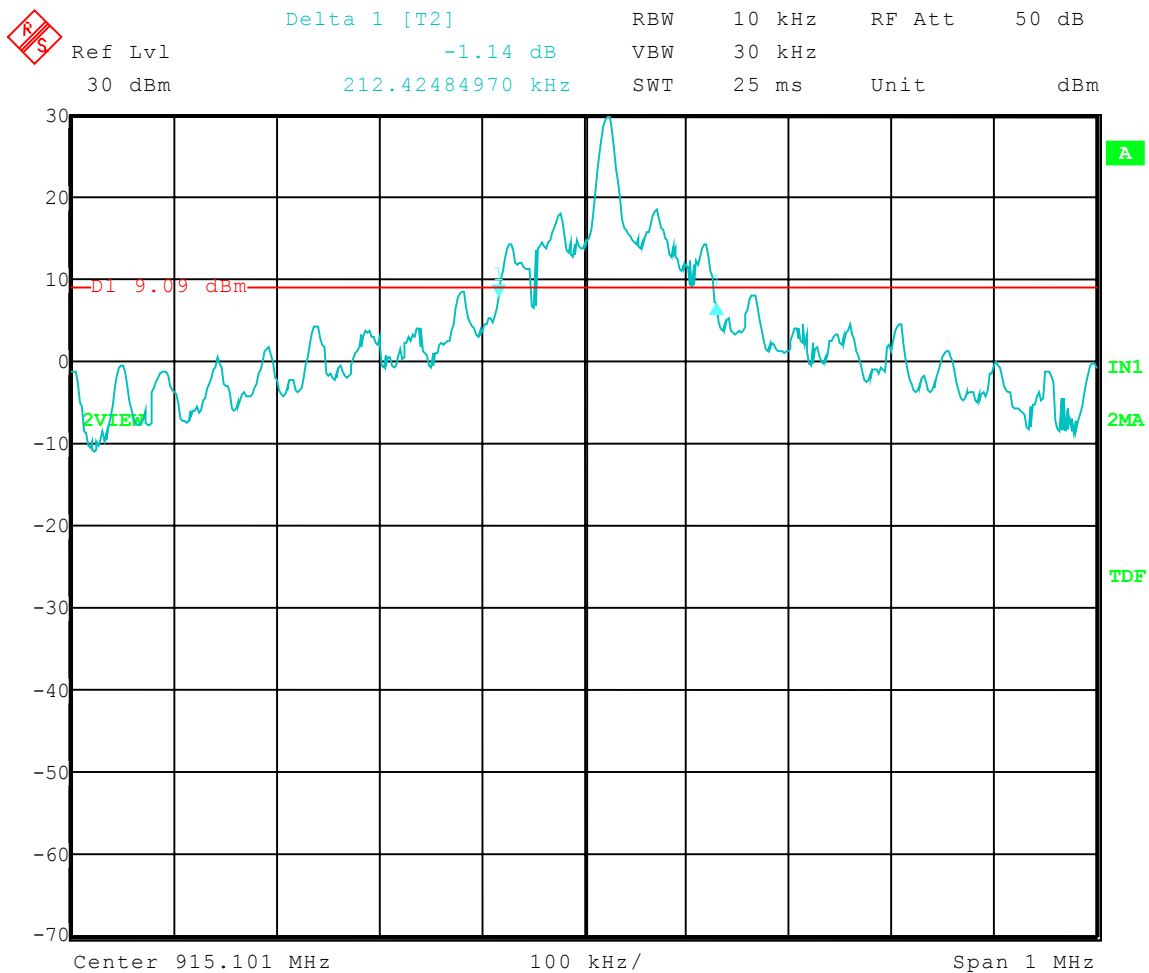
1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: 20 dB Bandwidth - Conducted
Operator: Craig Brandt

Comment: **Middle Channel**: Frequency – 915.101 MHz
Modulation: EPC C0+

20 dB Bandwidth = 212.42 kHz



Date: 16.JUN.2005 11:57:56



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

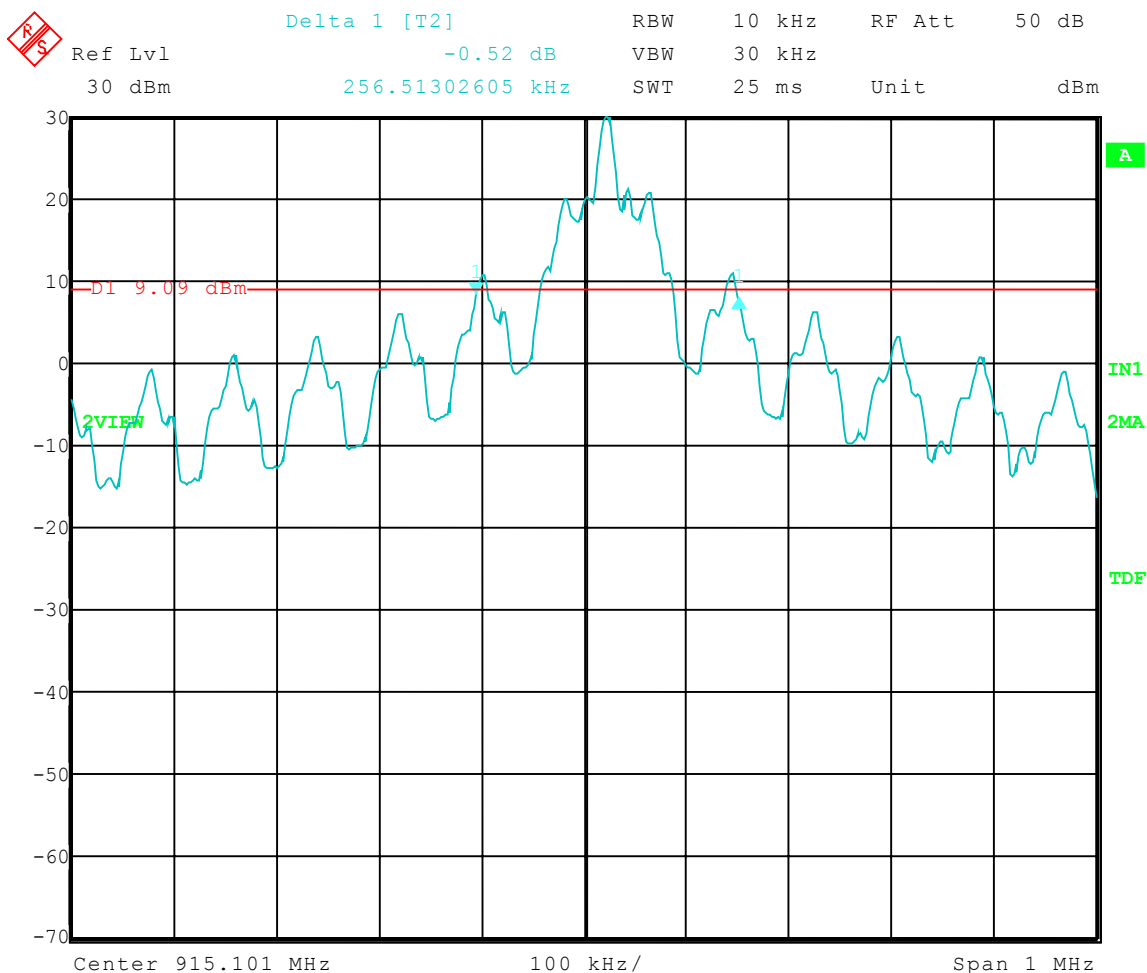
1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: 20 dB Bandwidth - Conducted
Operator: Craig Brandt

Comment: **Middle Channel**: Frequency – 915.101 MHz
Modulation: EPC ISO18000-6B

20 dB Bandwidth = 256.51 kHz



Date: 16.JUN.2005 12:00:06



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

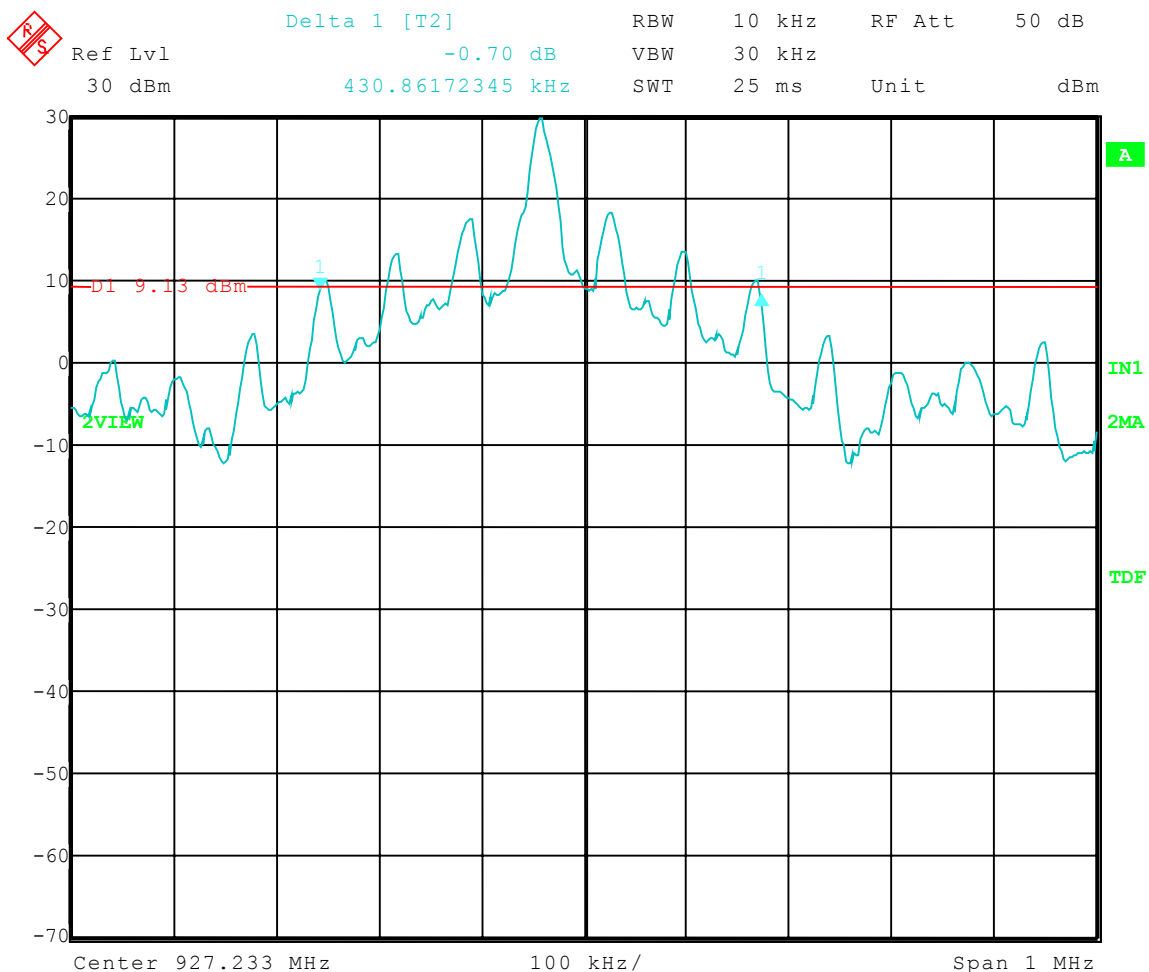
1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: 20 dB Bandwidth - Conducted
Operator: Craig Brandt

Comment: **High Channel**: Frequency – 927.233 MHz
Modulation: EPC C1

20 dB Bandwidth = 430.86 kHz



Date: 16.JUN.2005 12:05:14



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

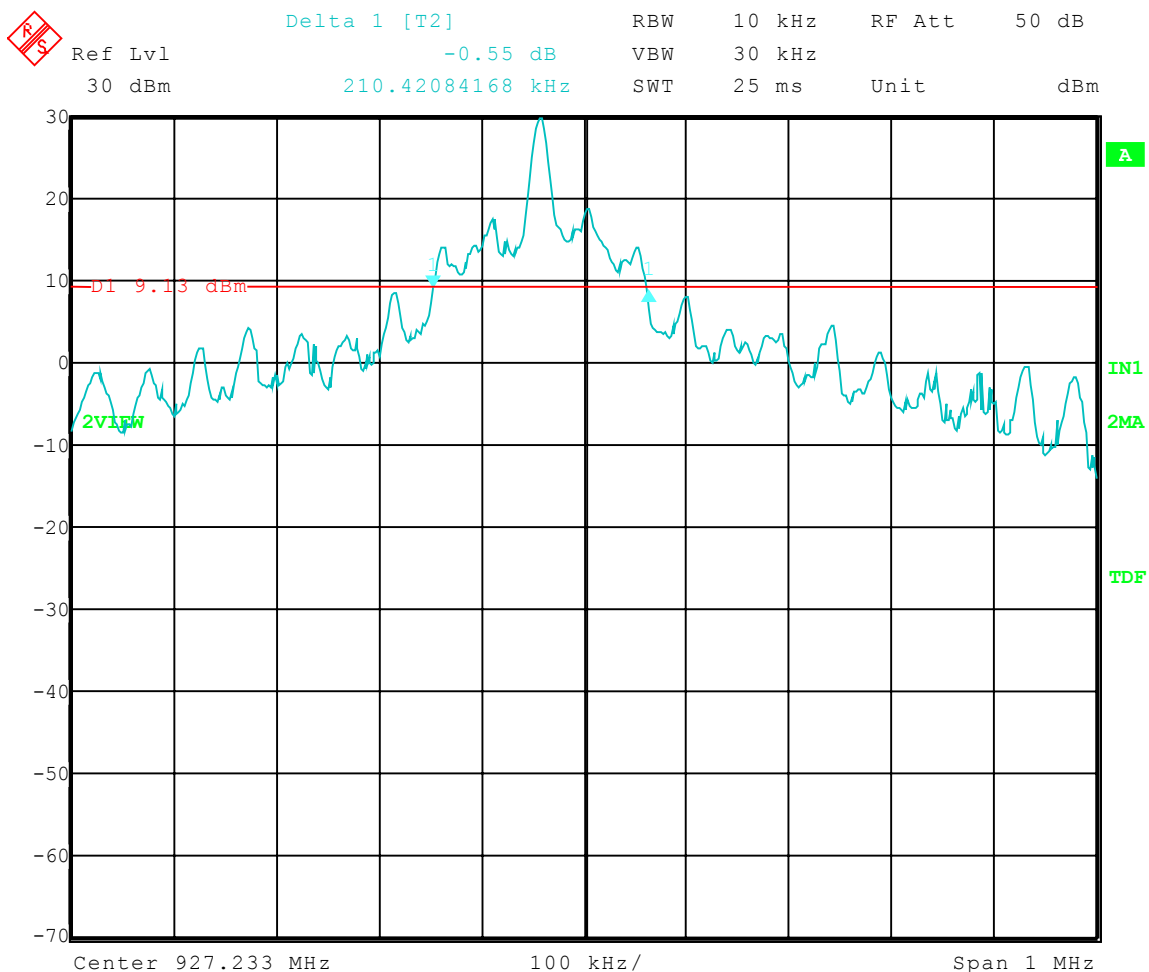
1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: 20 dB Bandwidth - Conducted
Operator: Craig Brandt

Comment: **High Channel**: Frequency – 927.233 MHz
Modulation: EPC C0+

20 dB Bandwidth = 210.42 kHz



Date: 16.JUN.2005 12:07:39



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

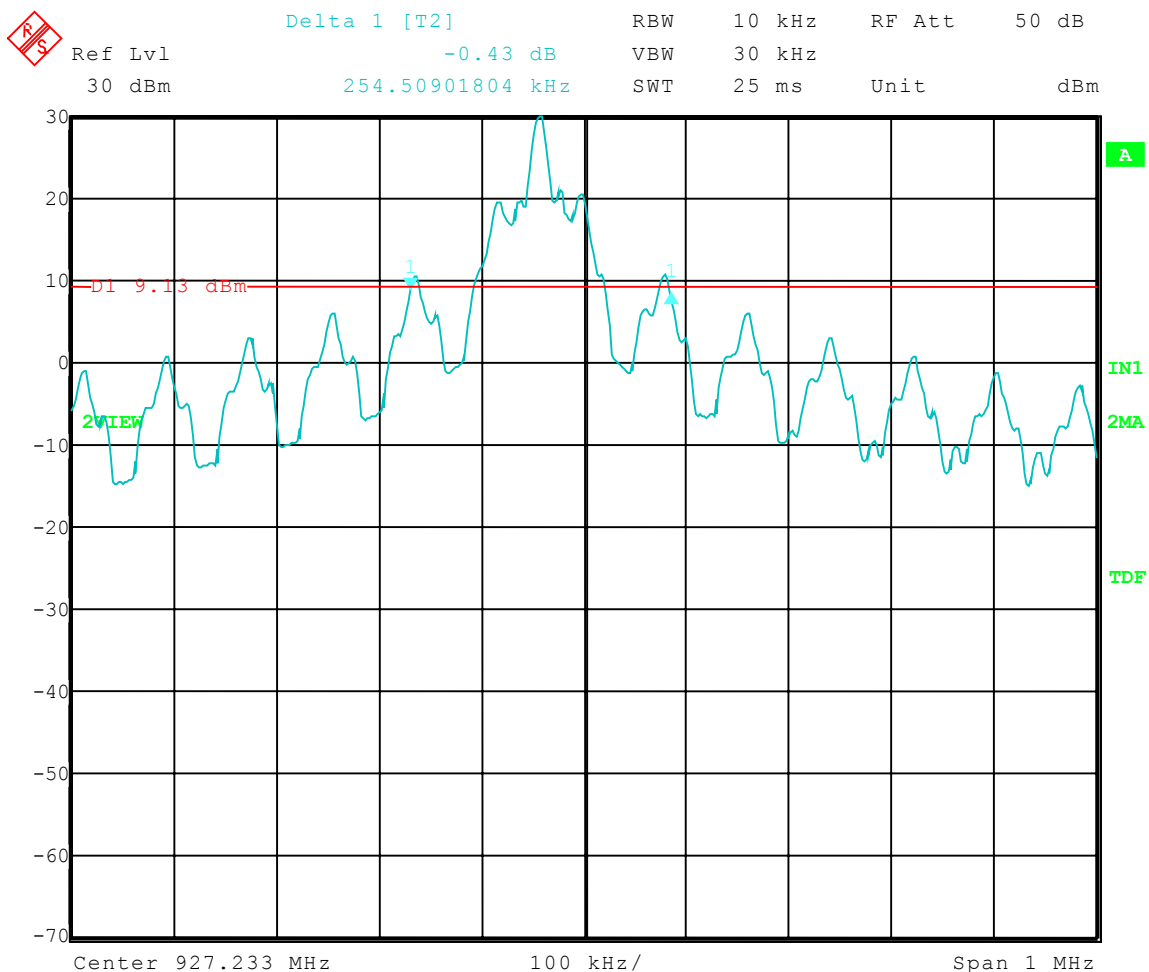
1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: 20 dB Bandwidth - Conducted
Operator: Craig Brandt

Comment: **High Channel**: Frequency – 927.233 MHz
Modulation: EPC ISO18000-6B

20 dB Bandwidth = 254.51 kHz



Date: 16.JUN.2005 12:09:46



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

RF Conducted 30 dBm

CONDUCTED PEAK OUTPUT POWER



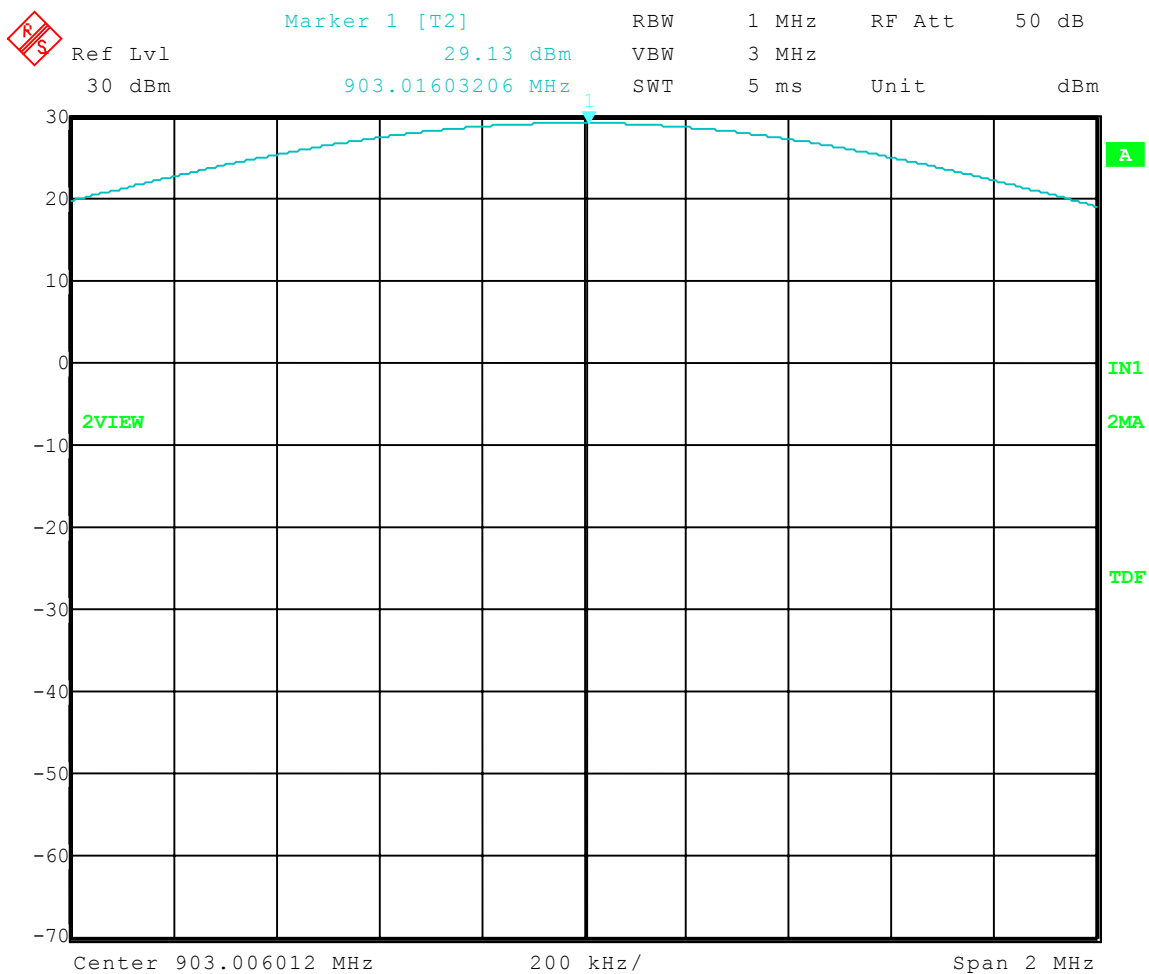
Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: Peak Output Power - Conducted
Operator: Craig Brandt
Comment: **Low Channel**: Frequency – 902.967 MHz Output: 30 dBm

Peak Output Power = 29.13 dBm = 818.46 mW



Date: 16.JUN.2005 09:34:22



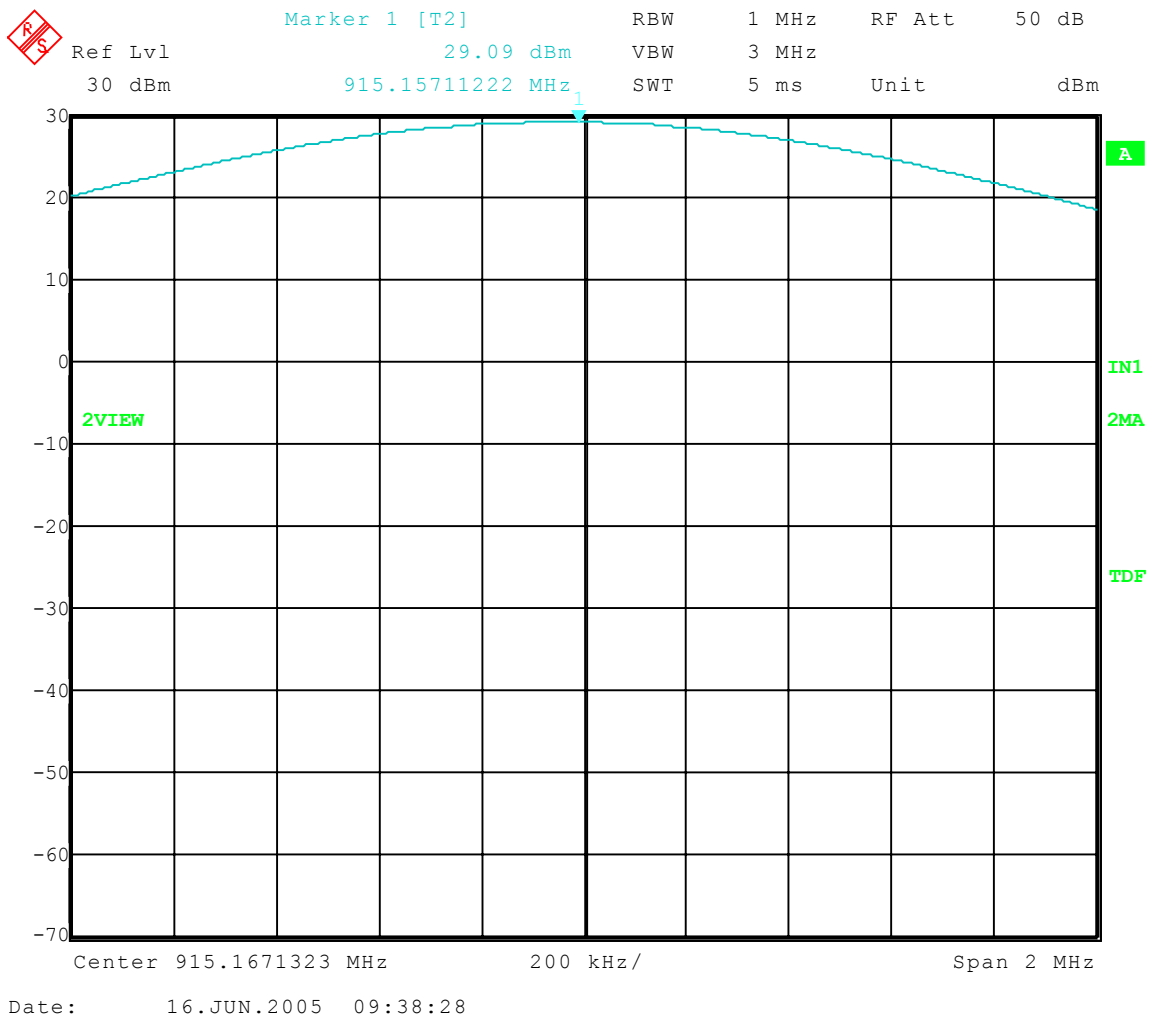
Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: Peak Output Power - Conducted
Operator: Craig Brandt
Comment: **Mid Channel**: Frequency – 915.101 MHz Output: 30 dBm

Peak Output Power = 29.09 dBm = 810.96 mW





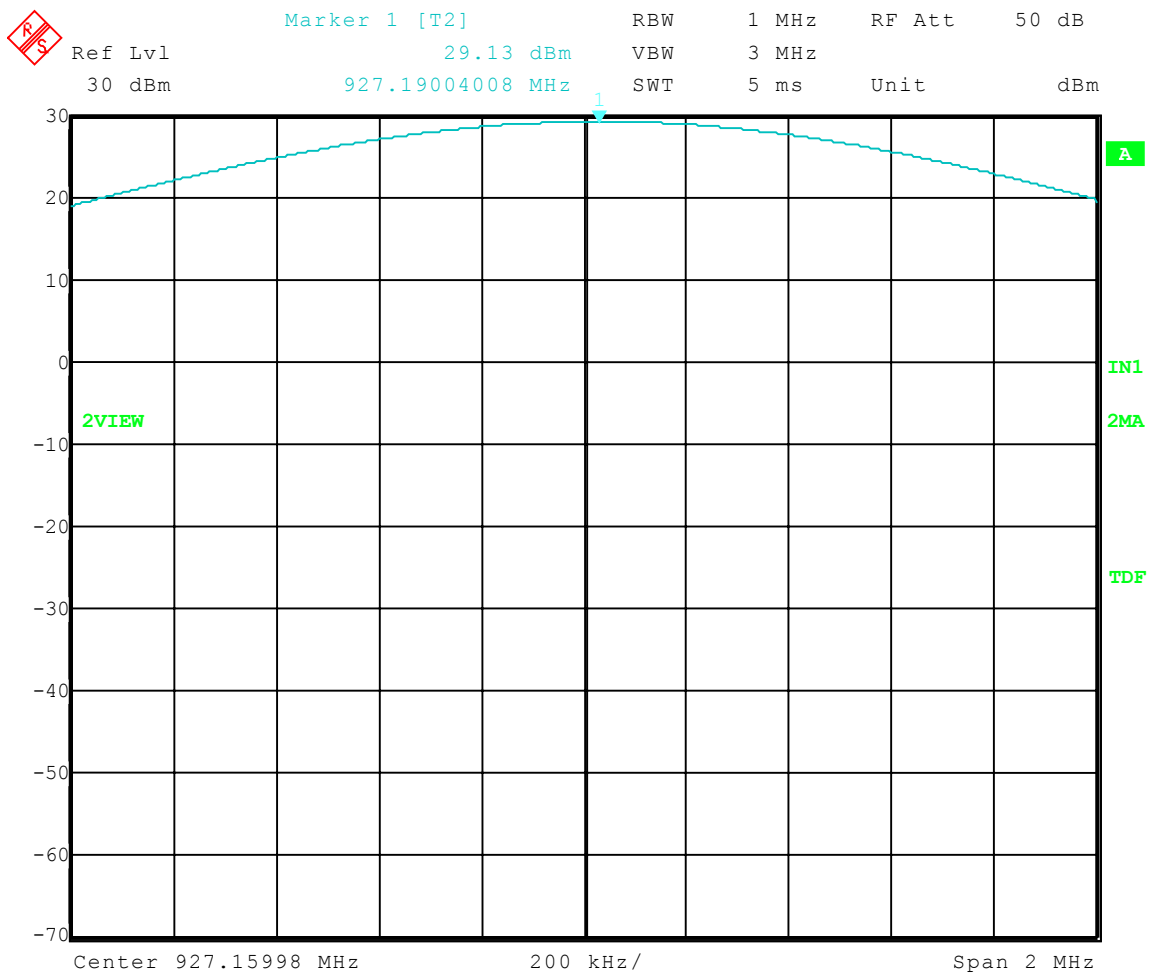
Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: Peak Output Power - Conducted
Operator: Craig Brandt
Comment: **High Channel**: Frequency – 927.190 MHz Output: 30 dBm

Peak Output Power = 29.13 dBm = 818.46 mW



Date: 16.JUN.2005 09:41:04



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

CARRIER FREQUENCY SEPARATION



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

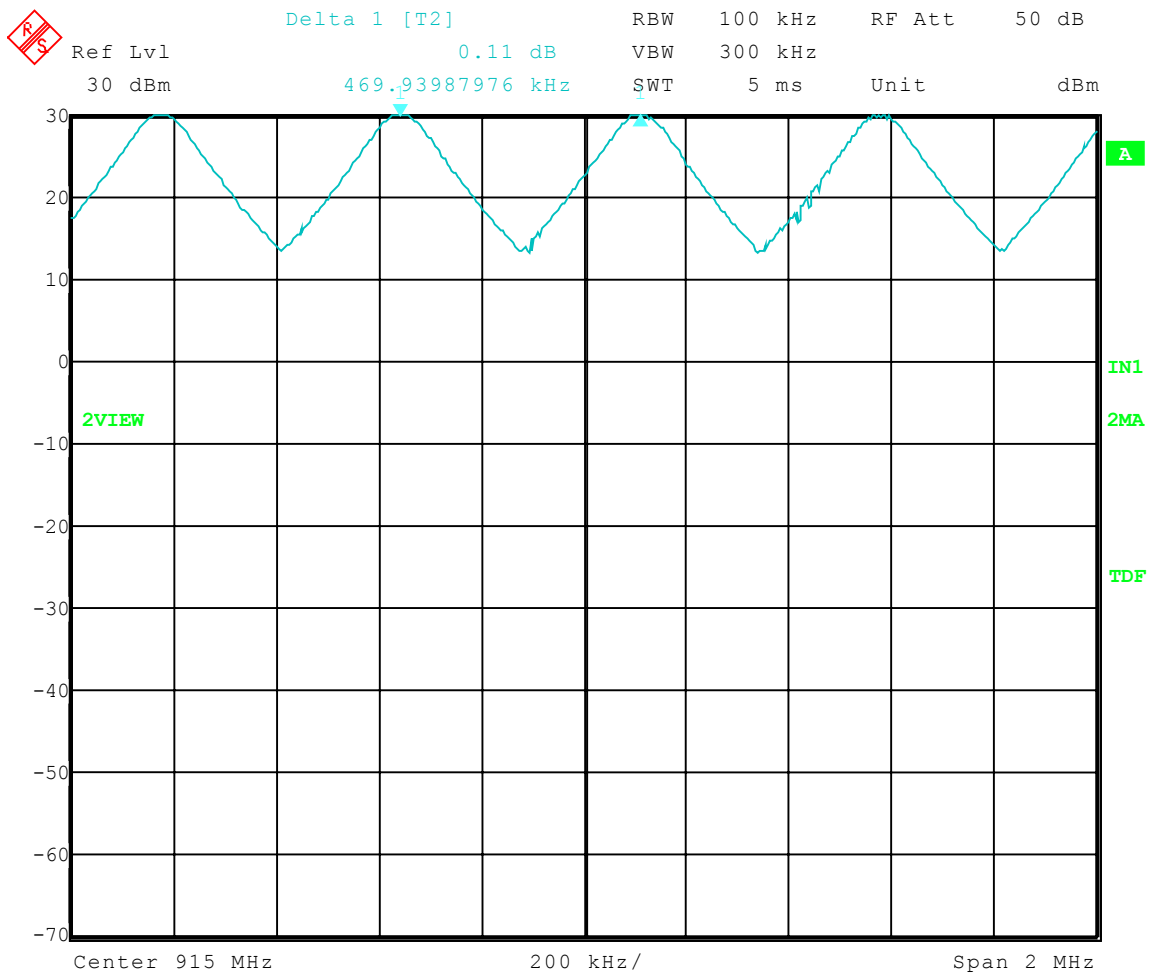
1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: Carrier Frequency Separation - Conducted
Operator: Craig Brandt

Comment: Frequency Hopping On

Carrier Freq Separation = 469.9 kHz



Date: 16.JUN.2005 10:13:16



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

NUMBER OF HOPPING FREQUENCIES



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

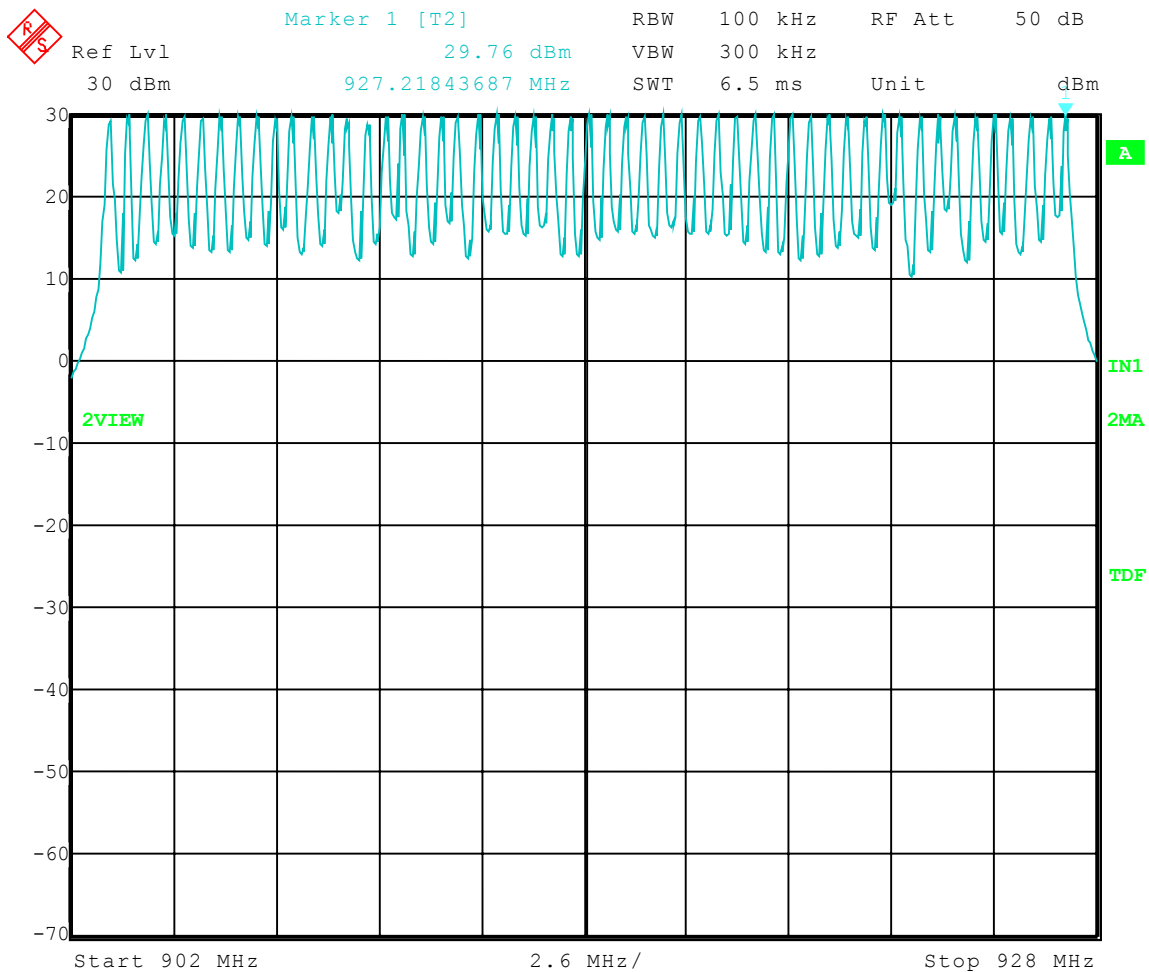
1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: Number of Hopping Frequencies - Conducted
Operator: Craig Brandt

Comment: Hopping Mode

Frequency Range = 902 MHz to 928 MHz
Number of Frequencies in Range = 53



Date: 16.JUN.2005 10:16:25



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

TIME OF OCCUPANCY



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

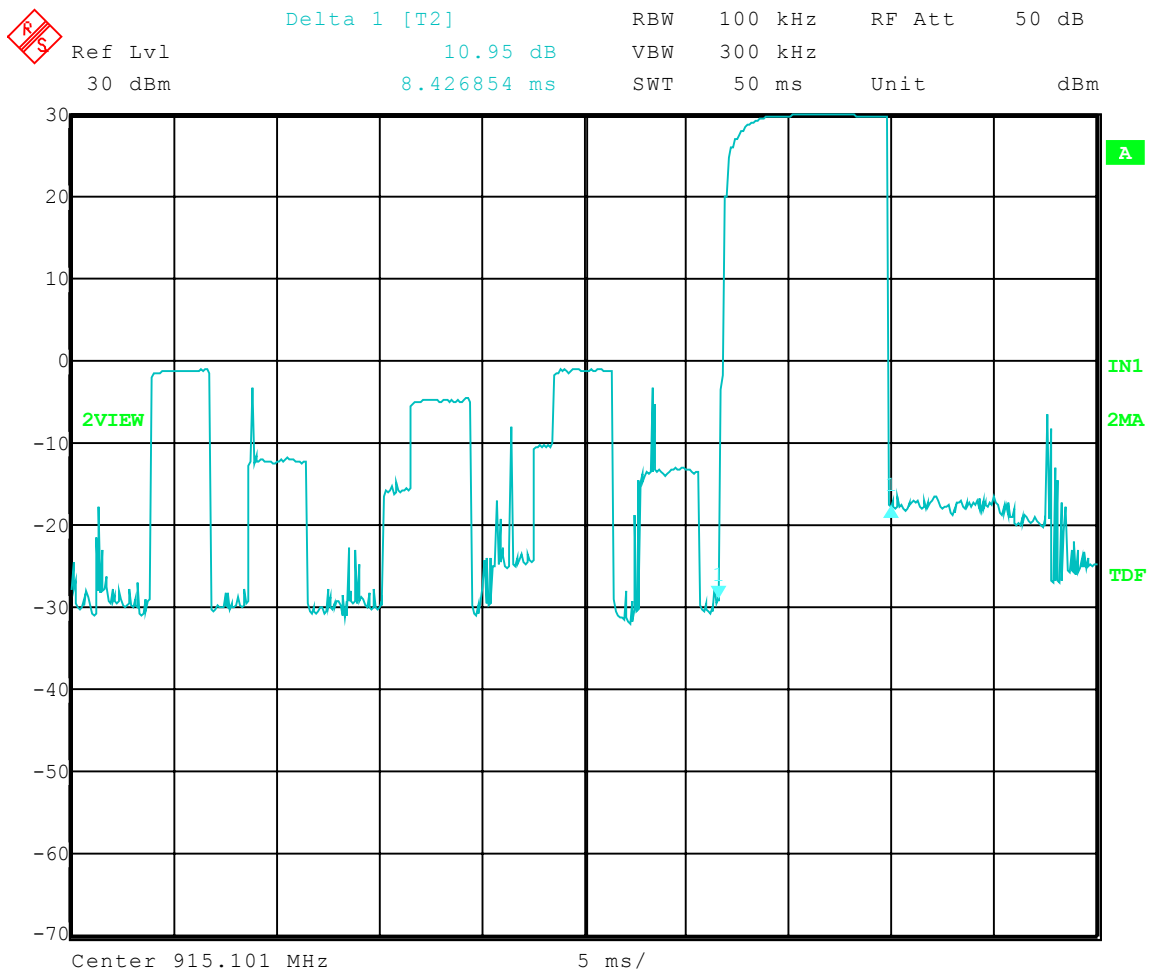
1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: Dwell Time - Conducted
Operator: Craig Brandt

Comment: **Middle Channel** - Hopping Mode On

Dwell Time = 8.43 mS



Date: 16.JUN.2005 10:21:23



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 06-16-2005
Company: Zebra Technologies
EUT: ZM4e
Test: Dwell Time in 20 Seconds - Conducted
Operator: Craig Brandt

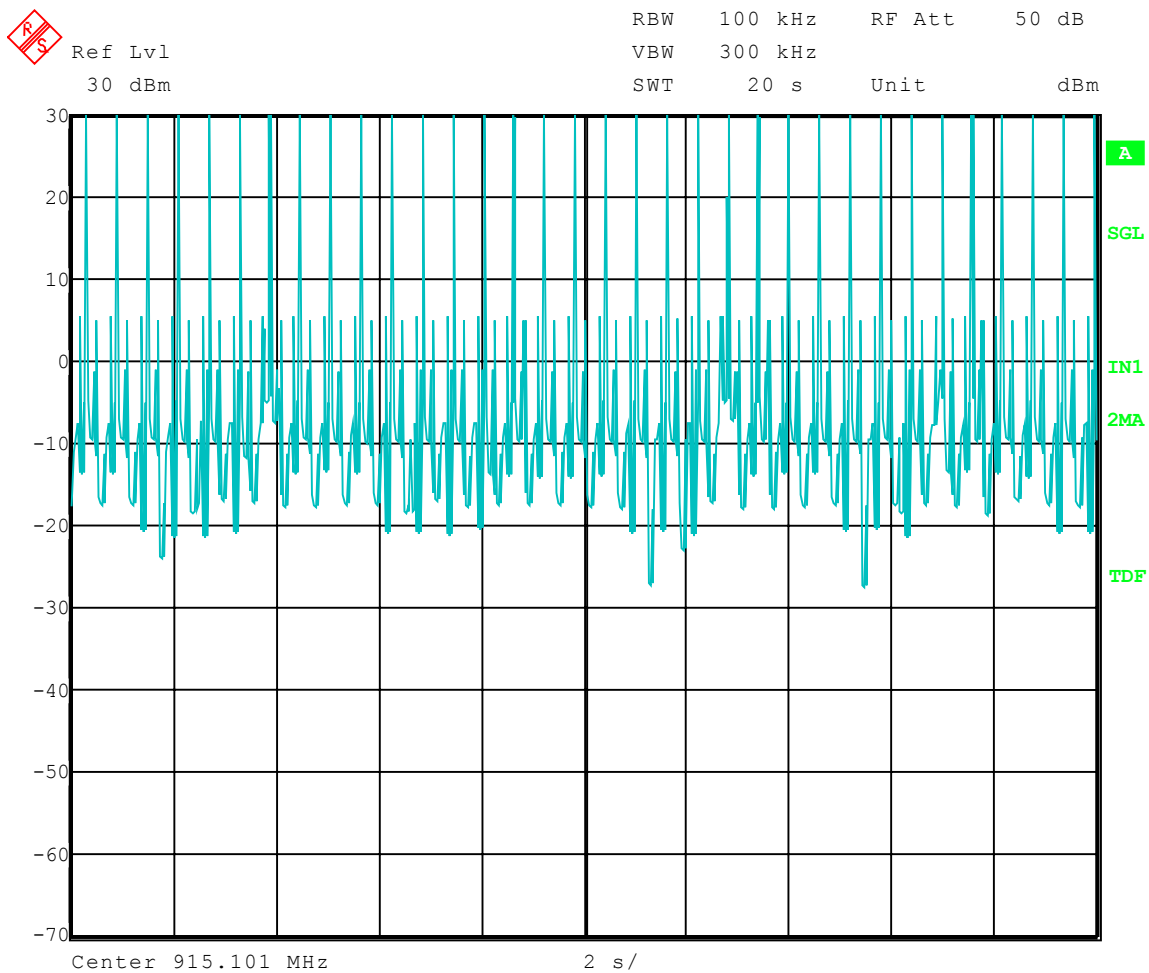
Comment: **Middle Channel** – Hopping Mode On

Dwell Time Limit = 0.4 Seconds in 20 Seconds

Times ON in 20 Sec = 34

Dwell Time in 20 Sec = Time Slot Length X Times On in 20 s

0.287 Seconds = 8.43 ms X 34



Date: 16.JUN.2005 10:28:25

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

8.0 PHOTOS TAKEN DURING TESTING



ZEBRA R110XiIII with ZM4e (FRONT)

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

8.0 PHOTOS TAKEN DURING TESTING



ZEBRA R110XiIII with ZM4e (REAR)

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

8.0 PHOTOS TAKEN DURING TESTING



ZEBRA R170XiIII with ZM4e (FRONT)

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

8.0 PHOTOS TAKEN DURING TESTING



ZEBRA R170XiIII with ZM4e (REAR)

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

8.0 PHOTOS TAKEN DURING TESTING

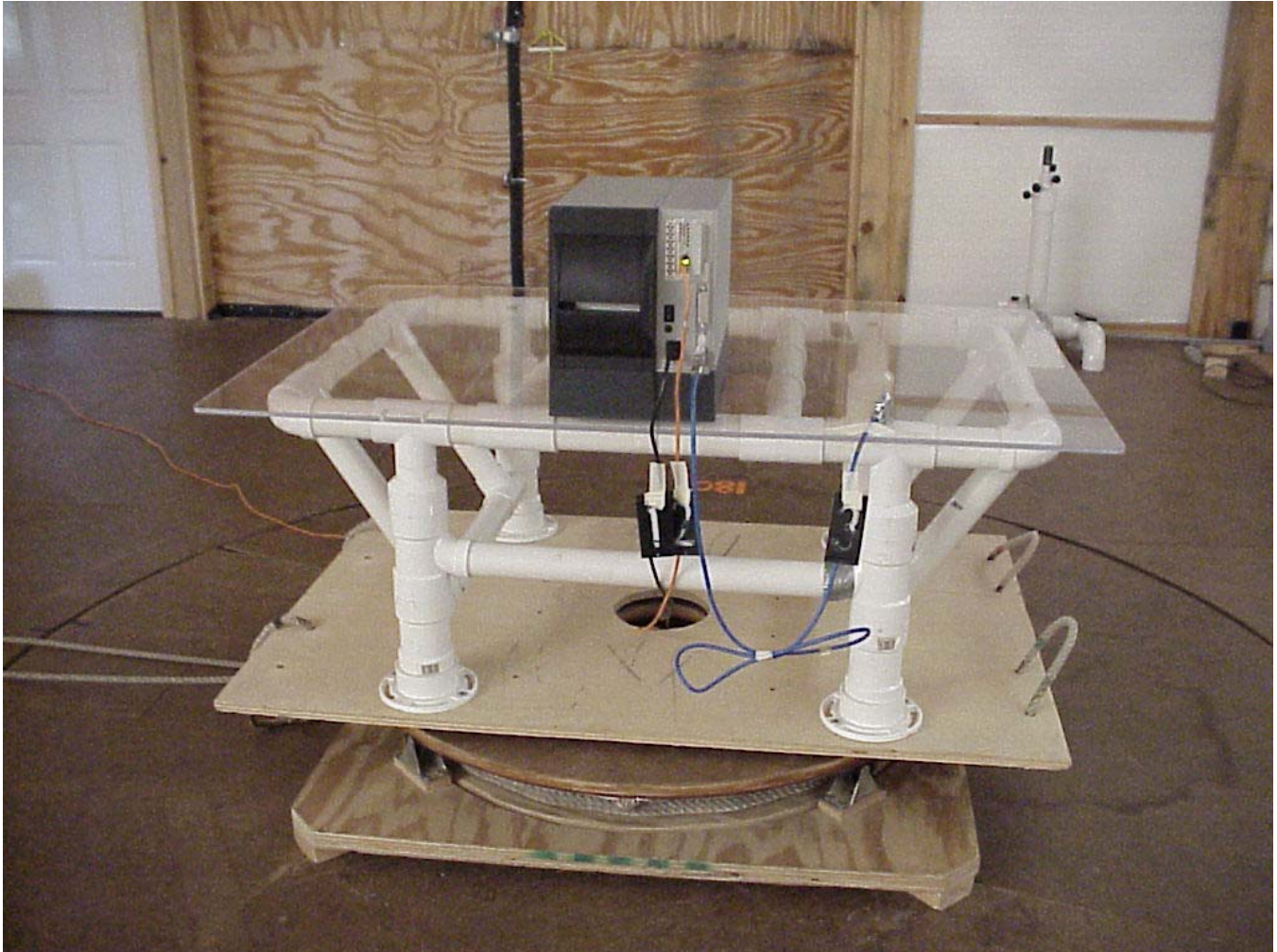


ZEBRA R4M with ZM4e (FRONT)

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

8.0 PHOTOS TAKEN DURING TESTING

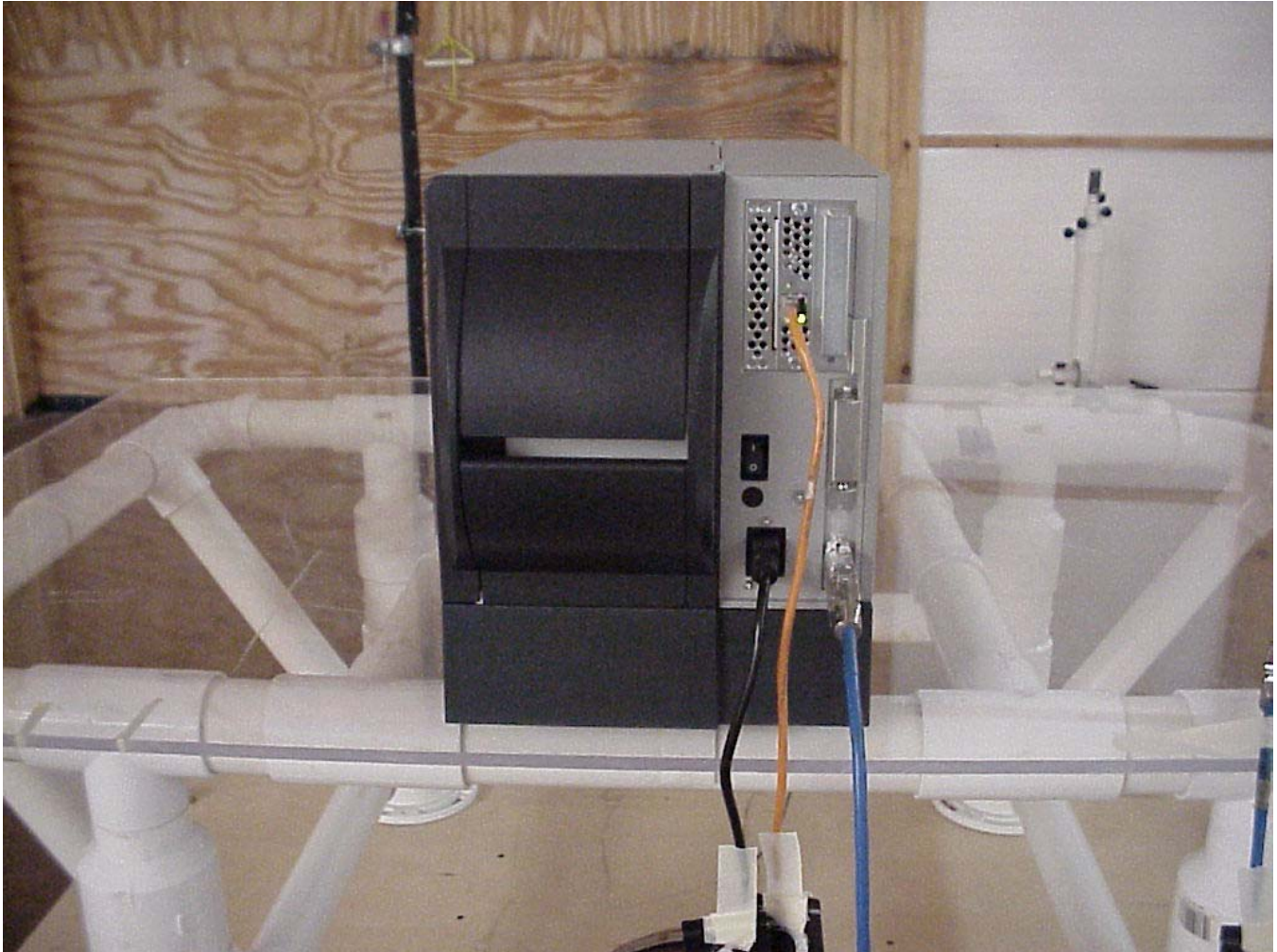


ZEBRA R4M with ZM4e (REAR)

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

8.0 PHOTOS TAKEN DURING TESTING



ZEBRA R4M with ZM4e (REAR)



Company: Zebra Technologies Corporation
Model Tested: ZM4e
Report Number: 11475

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

8.0 PHOTOS TAKEN DURING TESTING

NOTE:

Test setup photos for the Rpax110 with ZM4e are not available.