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Author Data Daoud Attayi	Dates of Test August 31- Sep. 23, 2015	Report No RTS-6066-1509-19	FCC ID L6ARHK210LW

Annex A: Measurement data and plots

A.1 MIF validation plots

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Date/Time: 12:00:00 AM

Test Laboratory: BlackBerry RTS

MIF_measurements_08_31_15

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 111340110

Communication System: UID 0, CW; Frequency: 835 MHz

Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³

Phantom section: TCoil Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ; Calibrated: 1/19/2015
- Sensor-Surface: 0mm (Fix Surface), z = 2.5
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/MIF Measurements/MIF_AM80%_1KHz_Measurement

Calibration Factors: 1.096, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-1.29 dB		0.00 dB	
PMF	3.80 dB	1.549	0.00 dB	
Detector Level	4.32 dBm		0.00 dB	
RFAIP	3.03 dBm		0.00 dB	(MIF+CF+Detector Level)

Configuration/MIF Measurements/MIF_AM10%_1KHz_Measurement

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
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MIF	-9.26 dB		0.00 dB	
PMF	0.78 dB	1.094	0.00 dB	
Detector Level	4.24 dBm		0.00 dB	
RFAIP	-5.02 dBm		0.00 dB	(MIF+CF+Detector Level)

Configuration/MIF Measurements/MIF_AM1%_1KHz_Measurement

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-19.22 dB		0.01 dB	
PMF	0.09 dB	1.010	0.00 dB	
Detector Level	4.21 dBm		0.00 dB	
RFAIP	-15.01 dBm		0.01 dB	(MIF+CF+Detector Level)

Configuration/MIF Measurements/MIF_GSM_Measurement

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	3.44 dB		0.00 dB	
PMF	9.19 dB	2.881	0.01 dB	
Detector Level	-2.52 dBm		0.00 dB	
RFAIP	0.94 dBm		0.01 dB	(MIF+CF+Detector Level)

Configuration/MIF

Measurements/MIF_WCDMA_Voice_AMR12_2kps_Mute_Measurement

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-25.78 dB		0.08 dB	MIF Low
PMF	0.06 dB	1.007	0.00 dB	
Detector Level	-1.56 dBm		0.00 dB	
RFAIP	-27.34 dBm		0.08 dB	(MIF+CF+Detector Level)

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Date/Time: 12:00:00 AM

Test Laboratory: BlackBerry RTS

MIF_WiFi_measurements_08_31_15

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 111340110

Communication System: UID 0, 802.11 b (2450) (0); Frequency: 2437 MHz

Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³

Phantom section: TCoil Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ; Calibrated: 1/19/2015
- Sensor-Surface: 0mm (Fix Surface), z = 2.5
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/MIF Measurements

WiFi_VoIP/MIF_AM80%_1KHz_Measurement

Calibration Factors: 1.096, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-1.30 dB		0.00 dB	
PMF	3.81 dB	1.550	0.00 dB	
Detector Level	8.07 dBm		0.00 dB	
RFAIP	6.78 dBm		0.00 dB	(MIF+CF+Detector Level)

Configuration/MIF Measurements

WiFi_VoIP/MIF_AM10%_1KHz_Measurement

Calibration Factors: 1.096, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
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MIF	-9.30 dB		0.00 dB	
PMF	0.77 dB	1.093	0.00 dB	
Detector Level	8.09 dBm		0.00 dB	
RFAIP	-1.20 dBm		0.01 dB	(MIF+CF+Detector Level)

Configuration/MIF Measurements

WiFi_VoIP/MIF_AM1%_1KHz_Measurement

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-19.26 dB		0.01 dB	
PMF	0.09 dB	1.010	0.00 dB	
Detector Level	8.06 dBm		0.00 dB	
RFAIP	-11.20 dBm		0.01 dB	(MIF+CF+Detector Level)

Configuration/MIF Measurements WiFi_VoIP/MIF_802.11b_Rate_1Mbps

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-13.06 dB		0.09 dB	
PMF	0.44 dB	1.052	0.04 dB	
Detector Level	5.11 dBm		0.02 dB	
RFAIP	-7.95 dBm		0.11 dB	(MIF+CF+Detector Level)

Configuration/MIF Measurements WiFi_VoIP/MIF_802.11b_Rate_2Mbps

Calibration Factors: 1.096, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-12.28 dB		0.08 dB	
PMF	0.48 dB	1.056	0.03 dB	
Detector Level	5.22 dBm		0.01 dB	
RFAIP	-7.06 dBm		0.09 dB	(MIF+CF+Detector Level)

Configuration/MIF Measurements WiFi_VoIP/MIF_802.11b_Rate_5.5Mbps

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

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Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-9.76 dB		0.06 dB	
PMF	0.67 dB	1.080	0.05 dB	
Detector Level	5.41 dBm		0.01 dB	
RFAIP	-4.35 dBm		0.07 dB	(MIF+CF+Detector Level)

Configuration/MIF Measurements WiFi_VoIP/MIF_802.11b_Rate_11Mbps

Calibration Factors: 1.096, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-8.99 dB		0.11 dB	
PMF	0.80 dB	1.096	0.04 dB	
Detector Level	5.31 dBm		0.01 dB	
RFAIP	-3.68 dBm		0.12 dB	(MIF+CF+Detector Level)

Configuration/MIF Measurements WiFi_VoIP/MIF_802.11g_Rate_6Mbps

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-10.07 dB		0.04 dB	
PMF	0.89 dB	1.108	0.01 dB	
Detector Level	5.83 dBm		0.01 dB	
RFAIP	-4.24 dBm		0.05 dB	(MIF+CF+Detector Level)

Configuration/MIF Measurements WiFi_VoIP/MIF_802.11g_Rate_9Mbps

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-9.40 dB		0.08 dB	
PMF	1.05 dB	1.129	0.01 dB	
Detector Level	5.70 dBm		0.01 dB	
RFAIP	-3.70 dBm		0.09 dB	(MIF+CF+Detector Level)

Configuration/MIF Measurements WiFi_VoIP/MIF_802.11g_Rate_18Mbps

Calibration Factors: 1.096, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

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Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-8.13 dB		0.14 dB	
PMF	1.08 dB	1.132	0.03 dB	
Detector Level	5.52 dBm		0.00 dB	
RFAIP	-2.61 dBm		0.14 dB	(MIF+CF+Detector Level)

Configuration/MIF Measurements WiFi_VoIP/MIF_802.11g_Rate_54Mbps

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-8.62 dB		0.13 dB	
PMF	1.91 dB	1.246	0.05 dB	
Detector Level	2.40 dBm		0.01 dB	
RFAIP	-6.23 dBm		0.14 dB	(MIF+CF+Detector Level)

Configuration/MIF Measurements WiFi_VoIP/MIF_802.11n_Rate_6.5Mbps

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-10.94 dB		0.06 dB	
PMF	0.95 dB	1.116	0.02 dB	
Detector Level	4.13 dBm		0.01 dB	
RFAIP	-6.81 dBm		0.06 dB	(MIF+CF+Detector Level)

Configuration/MIF Measurements WiFi_VoIP/MIF_802.11n_Rate_39Mbps

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-7.94 dB		0.14 dB	
PMF	1.32 dB	1.164	0.01 dB	
Detector Level	2.02 dBm		0.01 dB	
RFAIP	-5.93 dBm		0.15 dB	(MIF+CF+Detector Level)

Configuration/MIF Measurements WiFi_VoIP/MIF_802.11n_Rate_65Mbps

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

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Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-7.91 dB		0.13 dB	
PMF	1.63 dB	1.206	0.01 dB	
Detector Level	0.90 dBm		0.01 dB	
RFAIP	-7.01 dBm		0.14 dB	(MIF+CF+Detector Level)

Configuration/MIF Measurements WiFi_VoIP/MIF_802.11a_Rate_6Mbps

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-10.19 dB		0.09 dB	
PMF	0.95 dB	1.116	0.05 dB	
Detector Level	2.92 dBm		0.10 dB	
RFAIP	-7.27 dBm		0.19 dB	(MIF+CF+Detector Level)

Configuration/MIF Measurements WiFi_VoIP/MIF_802.11a_Rate_24Mbps

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-7.98 dB		0.15 dB	
PMF	1.47 dB	1.184	0.02 dB	
Detector Level	1.95 dBm		0.01 dB	
RFAIP	-6.03 dBm		0.16 dB	(MIF+CF+Detector Level)

Configuration/MIF Measurements WiFi_VoIP/MIF_802.11a_Rate_54Mbps

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-8.92 dB		0.11 dB	
PMF	1.77 dB	1.227	0.02 dB	
Detector Level	-0.05 dBm		0.01 dB	
RFAIP	-8.97 dBm		0.12 dB	(MIF+CF+Detector Level)

Configuration/MIF Measurements WiFi_VoIP/MIF_802.11n_Rate_6.5Mbps 2

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

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Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-11.07 dB		0.03 dB	
PMF	1.04 dB	1.128	0.02 dB	
Detector Level	3.06 dBm		0.01 dB	
RFAIP	-8.01 dBm		0.04 dB	(MIF+CF+Detector Level)

Configuration/MIF Measurements WiFi_VoIP/MIF_802.11n_Rate_39Mbps 2

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-8.14 dB		0.14 dB	
PMF	1.43 dB	1.179	0.04 dB	
Detector Level	1.61 dBm		0.01 dB	
RFAIP	-6.53 dBm		0.14 dB	(MIF+CF+Detector Level)

Configuration/MIF Measurements WiFi_VoIP/MIF_802.11n_Rate_65Mbps 2

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-8.11 dB		0.14 dB	
PMF	1.67 dB	1.212	0.01 dB	
Detector Level	-0.79 dBm		0.01 dB	
RFAIP	-8.89 dBm		0.15 dB	(MIF+CF+Detector Level)

Configuration/MIF Measurements WiFi_VoIP/MIF_802.11ac_Rate_6Mbps

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-10.21 dB		0.05 dB	
PMF	0.83 dB	1.101	0.00 dB	
Detector Level	-0.89 dBm		0.02 dB	
RFAIP	-11.10 dBm		0.07 dB	(MIF+CF+Detector Level)

Configuration/MIF Measurements WiFi_VoIP/MIF_802.11ac_Rate_9Mbps

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

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Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-9.59 dB		0.07 dB	
PMF	0.94 dB	1.114	0.01 dB	
Detector Level	-1.09 dBm		0.01 dB	
RFAIP	-10.68 dBm		0.08 dB	(MIF+CF+Detector Level)

Configuration/MIF Measurements WiFi_VoIP/MIF_802.11ac_Rate_18Mbps

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-8.23 dB		0.16 dB	
PMF	0.99 dB	1.121	0.08 dB	
Detector Level	-1.26 dBm		0.00 dB	
RFAIP	-9.50 dBm		0.17 dB	(MIF+CF+Detector Level)

Configuration/MIF Measurements WiFi_VoIP/MIF_802.11ac_Rate_54Mbps

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-8.80 dB		0.16 dB	
PMF	1.94 dB	1.250	0.02 dB	
Detector Level	-2.07 dBm		0.01 dB	
RFAIP	-10.87 dBm		0.17 dB	(MIF+CF+Detector Level)

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Date/Time: 12:00:00 AM

Test Laboratory: BlackBerry RTS

MIF_VoLTE_measurements_09_23_15

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 1161340110

Communication System: UID 0, LTE 4 (0); Frequency: 1732.5 MHz

Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³

Phantom section: TCoil Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ; Calibrated: 1/19/2015
- Sensor-Surface: 0mm (Fix Surface), z = 2.5
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Measurements/MIF_VoLTE_20MHz_BW_QPSK_RB1_Offset0_Measurement

Calibration Factors: 1.096, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-14.84 dB		0.13 dB	
PMF	1.46 dB	1.183	0.17 dB	
Detector Level	8.98 dBm		0.04 dB	
RFAIP	-5.86 dBm		0.17 dB	(MIF+CF+Detector Level)

Measurements/MIF_VoLTE_20MHz_BW_QPSK_RB1_Offset50_Measurement

Calibration Factors: 1.096, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-14.74 dB		0.15 dB	

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PMF	1.50 dB	1.188	0.18 dB	
Detector Level	8.70 dBm		0.05 dB	
RFAIP	-6.04 dBm		0.20 dB	(MIF+CF+Detector Level)

Measurements/MIF_VoLTE_20MHz_BW_QPSK_RB1_Offset99_Measurement

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-14.68 dB		0.26 dB	
PMF	1.48 dB	1.186	0.21 dB	
Detector Level	8.60 dBm		0.06 dB	
RFAIP	-6.07 dBm		0.33 dB	(MIF+CF+Detector Level)

Measurements/MIF_VoLTE_20MHz_BW_QPSK_RB50_Offset0_Measurement

Calibration Factors: 1.096, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-21.24 dB		0.01 dB	
PMF	0.17 dB	1.020	0.00 dB	
Detector Level	8.01 dBm		0.00 dB	
RFAIP	-13.23 dBm		0.02 dB	(MIF+CF+Detector Level)

Measurements/MIF_VoLTE_20MHz_BW_QPSK_RB50_Offset50_Measurement

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-21.23 dB		0.02 dB	
PMF	0.17 dB	1.020	0.00 dB	
Detector Level	8.17 dBm		0.00 dB	
RFAIP	-13.06 dBm		0.03 dB	(MIF+CF+Detector Level)

Measurements/MIF_VoLTE_20MHz_BW_QPSK_RB100_Offset0_Measurement

Calibration Factors: 1.096, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-21.88 dB		0.02 dB	

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PMF	0.15 dB	1.018	0.00 dB	
Detector Level	8.13 dBm		0.00 dB	
RFAIP	-13.75 dBm		0.02 dB	(MIF+CF+Detector Level)

Measurements/MIF_VoLTE_20MHz_BW_16QAM_RB1_Offset0_Measurement

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-10.42 dB		0.23 dB	
PMF	2.45 dB	1.326	0.13 dB	
Detector Level	8.00 dBm		0.04 dB	
RFAIP	-2.41 dBm		0.28 dB	(MIF+CF+Detector Level)

Measurements/MIF_VoLTE_20MHz_BW_16QAM_RB1_Offset50_Measurement

Calibration Factors: 1.096, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-10.41 dB		0.17 dB	
PMF	2.46 dB	1.328	0.10 dB	
Detector Level	7.89 dBm		0.01 dB	
RFAIP	-2.53 dBm		0.18 dB	(MIF+CF+Detector Level)

Measurements/MIF_VoLTE_20MHz_BW_16QAM_RB1_Offset99_Measurement

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-10.32 dB		0.44 dB	
PMF	2.51 dB	1.335	0.12 dB	
Detector Level	7.91 dBm		0.03 dB	
RFAIP	-2.41 dBm		0.47 dB	(MIF+CF+Detector Level)

Measurements/MIF_VoLTE_20MHz_BW_16QAM_RB24_Offset0_Measurement

Calibration Factors: 1.096, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

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Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-16.54 dB		0.08 dB	
PMF	0.53 dB	1.063	0.03 dB	
Detector Level	6.78 dBm		0.01 dB	
RFAIP	-9.76 dBm		0.09 dB	(MIF+CF+Detector Level)

Measurements/MIF_VoLTE_20MHz_BW_16QAM_RB24_Offset76_Measurement

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-16.38 dB		0.09 dB	
PMF	0.57 dB	1.068	0.02 dB	
Detector Level	6.98 dBm		0.00 dB	
RFAIP	-9.39 dBm		0.09 dB	(MIF+CF+Detector Level)

Measurements/MIF_VoLTE_20MHz_BW_16QAM_RB100_Offset0_Measurement

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-17.69 dB		0.06 dB	
PMF	0.34 dB	1.040	0.01 dB	
Detector Level	6.95 dBm		0.02 dB	
RFAIP	-10.74 dBm		0.07 dB	(MIF+CF+Detector Level)

Measurements/MIF_VoLTE_15MHz_BW_16QAM_RB1_Offset74_Measurement

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-10.07 dB		0.02 dB	
PMF	2.27 dB	1.299	0.29 dB	
Detector Level	7.97 dBm		0.04 dB	
RFAIP	-2.10 dBm		0.07 dB	(MIF+CF+Detector Level)

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Measurements/MIF_VoLTE_10MHz_BW_16QAM_RB1_Offset49_Measurement

Calibration Factors: 1.096, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-10.10 dB		0.06 dB	
PMF	2.32 dB	1.307	0.11 dB	
Detector Level	8.32 dBm		0.03 dB	
RFAIP	-1.78 dBm		0.10 dB	(MIF+CF+Detector Level)

Measurements/MIF_VoLTE_5MHz_BW_16QAM_RB1_Offset24_Measurement

Calibration Factors: 1.096, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-10.74 dB		0.40 dB	
PMF	2.57 dB	1.345	0.25 dB	
Detector Level	7.99 dBm		0.04 dB	
RFAIP	-2.75 dBm		0.44 dB	(MIF+CF+Detector Level)

Measurements/MIF_VoLTE_3MHz_BW_16QAM_RB1_Offset14_Measurement

Calibration Factors: 1.096, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-10.22 dB		0.09 dB	
PMF	2.15 dB	1.281	0.19 dB	
Detector Level	7.92 dBm		0.03 dB	
RFAIP	-2.30 dBm		0.13 dB	(MIF+CF+Detector Level)

Measurements/MIF_VoLTE_1.4MHz_BW_16QAM_RB1_Offset5_Measurement

Calibration Factors: 1.096, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-14.89 dB		0.23 dB	
PMF	1.34 dB	1.167	0.16 dB	
Detector Level	8.68 dBm		0.05 dB	

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RFAIP -6.21 dBm 0.28 dB (MIF+CF+Detector Level)

Measurements/MIF_VoLTE_Narrow_Band_Codec_4.75kbits_15MHz_BW_16QAM_RB1_Offset74_Measurement

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-10.06 dB		0.03 dB	
PMF	2.28 dB	1.301	0.11 dB	
Detector Level	7.99 dBm		0.02 dB	
RFAIP	-2.07 dBm		0.06 dB	(MIF+CF+Detector Level)

Measurements/MIF_VoLTE_Narrow_Band_Codec_7.4kbits_15MHz_BW_16QAM_RB1_Offset74_Measurement

Calibration Factors: 1.096, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-10.06 dB		0.07 dB	
PMF	2.31 dB	1.305	0.14 dB	
Detector Level	7.90 dBm		0.03 dB	
RFAIP	-2.16 dBm		0.10 dB	(MIF+CF+Detector Level)

Measurements/MIF_VoLTE_Narrow_Band_Codec_12.2kbits_15MHz_BW_16QAM_RB1_Offset74_Measurement

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-10.09 dB		0.06 dB	
PMF	2.35 dB	1.310	0.09 dB	
Detector Level	7.91 dBm		0.03 dB	
RFAIP	-2.17 dBm		0.09 dB	(MIF+CF+Detector Level)

Measurements/MIF_VoLTE_Wide_Band_Codec_6.6kbits_15MHz_BW_16QAM_RB1_Offset74_Measurement

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

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Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-10.07 dB		0.04 dB	
PMF	2.30 dB	1.303	0.09 dB	
Detector Level	7.92 dBm		0.06 dB	
RFAIP	-2.15 dBm		0.10 dB	(MIF+CF+Detector Level)

Measurements/MIF_VoLTE_Wide_Band_Codec_15.85kbits_15MHz_BW_16QAM_RB1_Offset74_Measurement

Calibration Factors: 1.095, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-10.04 dB		0.06 dB	
PMF	2.34 dB	1.310	0.19 dB	
Detector Level	7.82 dBm		0.04 dB	
RFAIP	-2.22 dBm		0.10 dB	(MIF+CF+Detector Level)

Measurements/MIF_VoLTE_Wide_Band_Codec_23.85kbits_15MHz_BW_16QAM_RB1_Offset74_Measurement

Calibration Factors: 1.096, 1.095; MIF Scale: 0.00 dB; Coupling Factor (CF): 0.00 dB

Quantity	Value [log]	[linear]	Fluctuation	Remark
MIF	-10.05 dB		0.10 dB	
PMF	2.34 dB	1.309	0.22 dB	
Detector Level	7.82 dBm		0.05 dB	
RFAIP	-2.24 dBm		0.15 dB	(MIF+CF+Detector Level)

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A.2 Dipole validation

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Date/Time: 8/31/2015 9:22:38 AM

Test Laboratory: BlackBerry RTS

HAC RF_E-Field_validation_08_31_15

DUT: HAC-Dipole 835 MHz; Type: CD835V3; Serial: 1011

Communication System: UID 0, CW For MIF; Frequency: 835 MHz

Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/19/2015;
- Sensor-Surface: (Fix Surface), $z = 9.7$
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

CD835 Dipole E-Field measurement (E-field scan for ANSI C63.19-2011 compliance)/E Scan - measurement distance from the probe sensor center to CD835 = 15mm/Hearing Aid Compatibility Test at 15mm distance (41x361x1):

Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 102.2 V/m; Power Drift = 0.04 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 108.4 V/m

Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 M4 91.88 V/m	Grid 2 M4 97.19 V/m	Grid 3 M4 97.22 V/m
Grid 4 M4 57.74 V/m	Grid 5 M4 59.11 V/m	Grid 6 M4 58.88 V/m

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Grid 7 M4 103.4 V/m	Grid 8 M4 108.4 V/m	Grid 9 M4 108.1 V/m
--------------------------------------	--------------------------------------	--------------------------------------

Cursor:

Total = 108.4 V/m

E Category: M4

Location: -2.5, 78, 9.7 mm

Date/Time: 8/31/2015 9:35:14 AM

Test Laboratory: BlackBerry RTS

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1008

Communication System: UID 0, CW For MIF; Frequency: 1880 MHz

Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/19/2015;
- Sensor-Surface: (Fix Surface), z = 9.7
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

CD1880 Dipole E-Field measurement (E-field scan for ANSI C63.19-2011 compliance)/E Scan - measurement distance from the probe sensor center to CD1880 = 15mm/Hearing Aid Compatibility Test at 15mm distance (41x181x1):

Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 141.3 V/m; Power Drift = -0.04 dB

PMR not calibrated. PMF = 1.000 is applied.

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E-field emissions = 85.24 V/m

Near-field category: M3 (AWF 0 dB)

PMF scaled E-field

Grid 1 M3 81.03 V/m	Grid 2 M3 85.24 V/m	Grid 3 M3 85.24 V/m
Grid 4 M3 66.62 V/m	Grid 5 M3 68.42 V/m	Grid 6 M3 68.32 V/m
Grid 7 M3 78.93 V/m	Grid 8 M3 83.76 V/m	Grid 9 M3 83.76 V/m

Cursor:

Total = 85.24 V/m

E Category: M3

Location: -3.5, -31, 9.7 mm

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Test Laboratory: BlackBerry RTS

HAC RF_E-Field_validation_08_31_15_2300-2600

Date/Time: 8/31/2015 10:47:02 AM

Test Laboratory: BlackBerry RTS

DUT: HAC Dipole 2450 MHz; Type: CD2450V3;

Communication System: UID 0, CW (0); Frequency: 2300 MHz

Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³

Phantom section: RF Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/19/2015;
- Sensor-Surface: (Fix Surface), $z = 9.7$
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

2300 MHz Dipole E-Field measurement (E-field scan for ANSI C63.19-2011 compliance) 2/E Scan - measurement distance from the probe sensor center to CD2450 = 15mm/Hearing Aid Compatibility Test at 15mm distance (41x181x1):

Interpolated grid: $dx=0.5000$ mm, $dy=0.5000$ mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 90.25 V/m; Power Drift = -0.00 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 91.28 V/m

Near-field category: M3 (AWF 0 dB)

PMF scaled E-field

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Grid 1 M3 86.12 V/m	Grid 2 M3 90.18 V/m	Grid 3 M3 90.13 V/m
Grid 4 M3 82.52 V/m	Grid 5 M3 85.15 V/m	Grid 6 M3 84.87 V/m
Grid 7 M3 85.62 V/m	Grid 8 M3 91.28 V/m	Grid 9 M3 91.27 V/m

Cursor:

Total = 91.28 V/m

E Category: M3

Location: -3, 27.5, 9.7 mm

Date/Time: 8/31/2015 9:50:09 AM

DUT: HAC Dipole 2450 MHz; Type: CD2450V3

Communication System: UID 0, CW; Frequency: 2450 MHz

Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/19/2015;
- Sensor-Surface: (Fix Surface), z = 9.7
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

CD2450 Dipole E-Field measurement (E-field scan for ANSI C63.19-2011 compliance)/E Scan - measurement distance from the probe sensor center to CD2450 = 15mm/Hearing Aid Compatibility Test at 15mm distance (41x181x1):

Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

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Reference Value = 90.18 V/m; Power Drift = 0.03 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 88.96 V/m

Near-field category: M3 (AWF 0 dB)

PMF scaled E-field

Grid 1 M3 85.44 V/m	Grid 2 M3 88.92 V/m	Grid 3 M3 88.80 V/m
Grid 4 M3 81.31 V/m	Grid 5 M3 83.63 V/m	Grid 6 M3 83.16 V/m
Grid 7 M3 83.07 V/m	Grid 8 M3 88.96 V/m	Grid 9 M3 88.96 V/m

Cursor:

Total = 88.96 V/m

E Category: M3

Location: -3.5, 28, 9.7 mm

Date/Time: 8/31/2015 10:51:04 AM

Test Laboratory: BlackBerry RTS

DUT: HAC Dipole 2450 MHz; Type: CD2450V3

Communication System: UID 0, CW (0); Frequency: 2600 MHz

Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³

Phantom section: RF Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/19/2015;
- Sensor-Surface: (Fix Surface), z = 9.7
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;

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- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

2600 MHz Dipole E-Field measurement (E-field scan for ANSI C63.19-2011 compliance) 2 2/E Scan - measurement distance from the probe sensor center to CD2450 = 15mm/Hearing Aid Compatibility Test at 15mm distance (41x181x1):

Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 79.05 V/m; Power Drift = -0.03 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 84.83 V/m

Near-field category: M3 (AWF 0 dB)

PMF scaled E-field

Grid 1 M3 82.39 V/m	Grid 2 M3 84.83 V/m	Grid 3 M3 84.55 V/m
Grid 4 M3 79.04 V/m	Grid 5 M3 80.48 V/m	Grid 6 M3 79.82 V/m
Grid 7 M3 76.16 V/m	Grid 8 M3 81.51 V/m	Grid 9 M3 81.51 V/m

Cursor:

Total = 84.83 V/m

E Category: M3

Location: -1.5, -22, 9.7 mm



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Author Data

Daoud Attayi

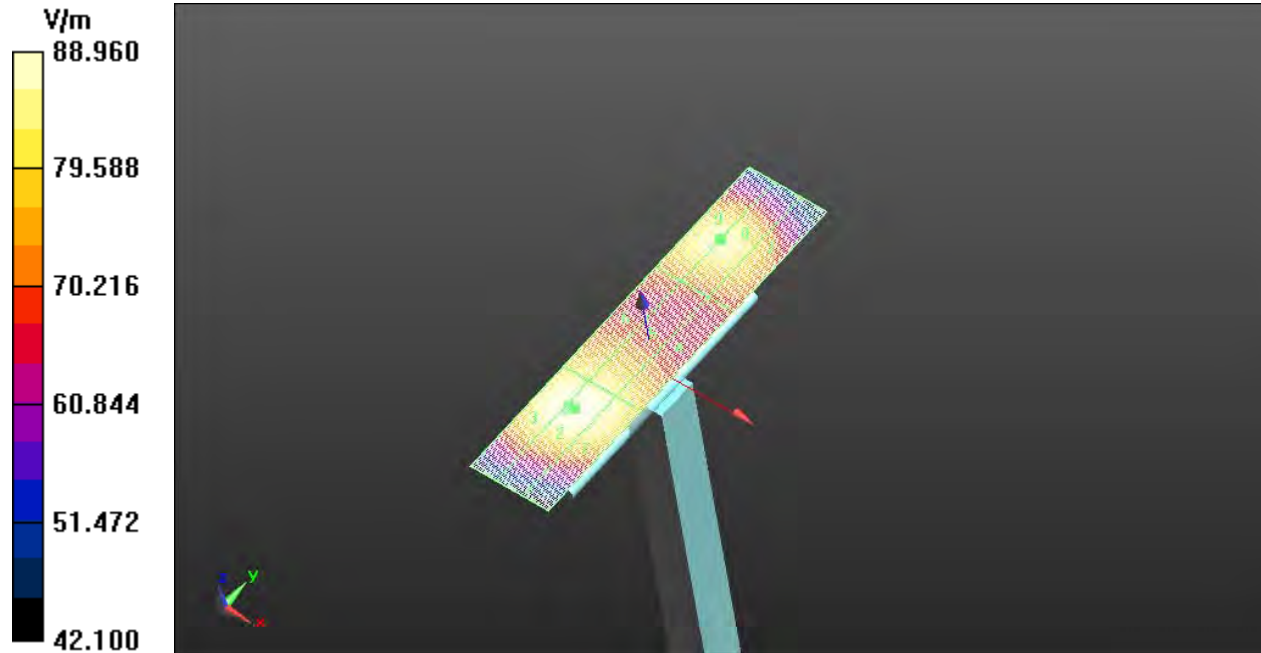
Dates of Test

August 31- Sep. 23, 2015

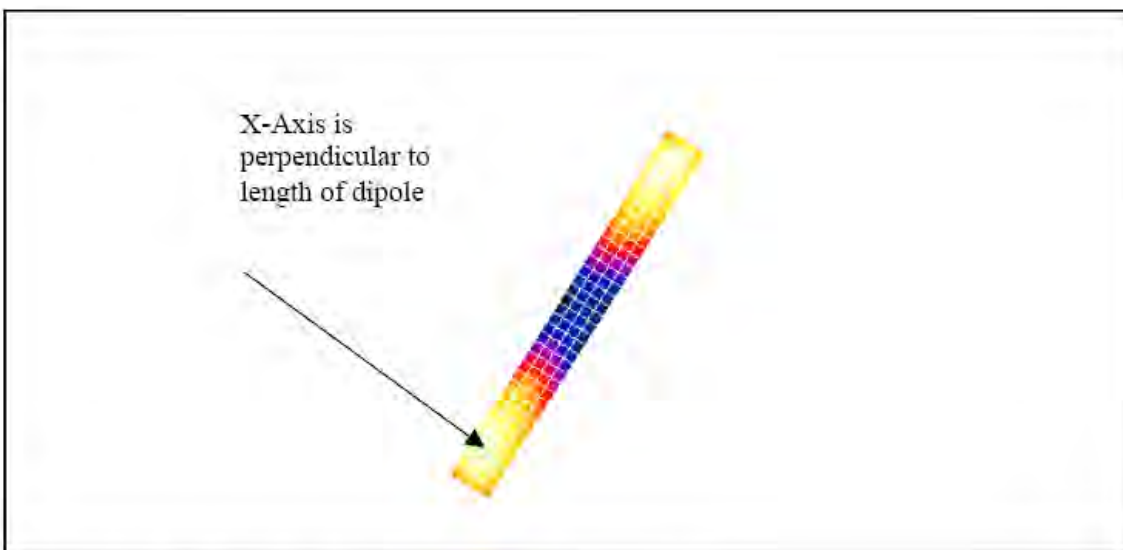
Report No

RTS-6066-1509-19

FCC ID

L6ARHK210LW

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The green line in this figure shows the axis along which the points lie.

Comparison of 5mm and 2mm step sizes

An additional set of measurements was taken: dipole validations were performed using 5mm and 2mm step sizes. The delta between the two readings is insignificant for both field types ($< 0.4\%$ for E and 0% for H), demonstrating that 5mm is sufficient. The plots follow.

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Date/Time: 14/07/2005 11:35:24 AM

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Date/Time: 14/07/2005 11:35:24 AM

Lab: RIM Testing Services (RTS)

Dipole Validation 1880 MHz_E-Field 07_14_05

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: CW; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³

Phantom section: H Device Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2285; ConvF(1, 1, 1); Calibrated: 10/12/2004
- Sensor-Surface: 0mm (Fix Surface) Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 03/01/2005
- Phantom: HAC Test Arch; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

E Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (5x19x1):

Measurement grid: dx=5mm, dy=5mm

Maximum value of Total (measured) = 134.8 V/m

E Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (41x181x1):

Measurement grid: dx=5mm, dy=5mm

Maximum value of Total field (slot averaged) = 131.0 V/m

Hearing Aid Near-Field Category: M2 (AWF 0 dB)

E in V/m (Time averaged) E in V/m (Slot averaged)

Grid 1	Grid 2	Grid 3	Grid 1	Grid 2	Grid 3
123.2	138.1	138.4	123.2	138.1	138.4
Grid 4	Grid 5	Grid 6	Grid 4	Grid 5	Grid 6
80.9	92.3	92.2	80.9	92.3	92.2
Grid 7	Grid 8	Grid 9	Grid 7	Grid 8	Grid 9
119.8	131.0	130.7	119.8	131.0	130.7

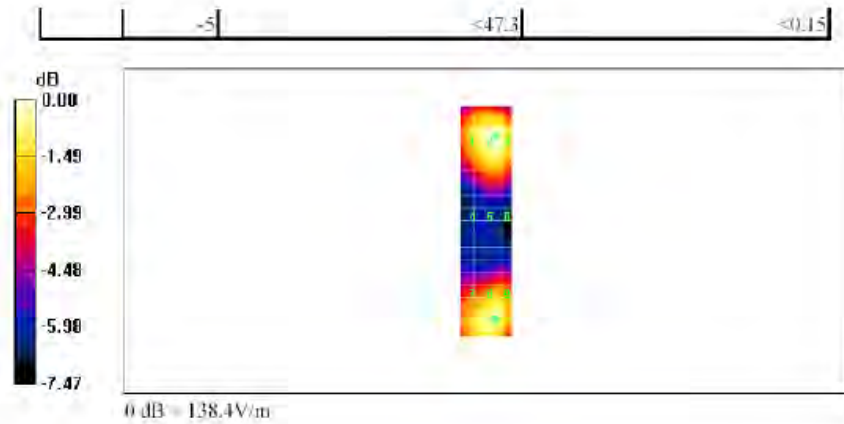
Category	AWF (dB)	Limits for E-Field Emissions (V/m)	Limits for H-Field Emissions (A/m)
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34
	-5	47.3 - 84.1	0.15 - 0.25
M4	0	<63.1	<0.19

file://C:\Program%20Files\DASY4\Print_Templates\Dipole%20Validation%201880%20... 14/07/2005

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Date/Time: 14/07/2005 11:35:24 AM

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Lab: RIM Testing Services (RTS)

Dipole Validation 1880 MHz_2mm step_E-Field 07_14_05

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: CW; Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³
Phantom section: H Device Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2285; ConvF(1, 1, 1); Calibrated: 10/12/2004
- Sensor-Surface: 0mm (Fix Surface) Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 03/01/2005
- Phantom: HAC Test Arch; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

E Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (11x46x1):

Measurement grid: dx=2mm, dy=2mm
Maximum value of Total (measured) = 138.0 V/m

E Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (101x451x1):

Measurement grid: dx=2mm, dy=2mm
Maximum value of Total field (slot averaged) = 131.2 V/m

Hearing Aid Near-Field Category: M2 (AWF 0 dB)

E in V/m (Time averaged) E in V/m (Slot averaged)

Grid 1	Grid 2	Grid 3	Grid 1	Grid 2	Grid 3
123.1	138.6	138.6	123.1	138.6	138.6
Grid 4	Grid 5	Grid 6	Grid 4	Grid 5	Grid 6
81.4	92.1	91.6	81.4	92.1	91.6
Grid 7	Grid 8	Grid 9	Grid 7	Grid 8	Grid 9
121.3	131.2	131.0	121.3	131.2	131.0

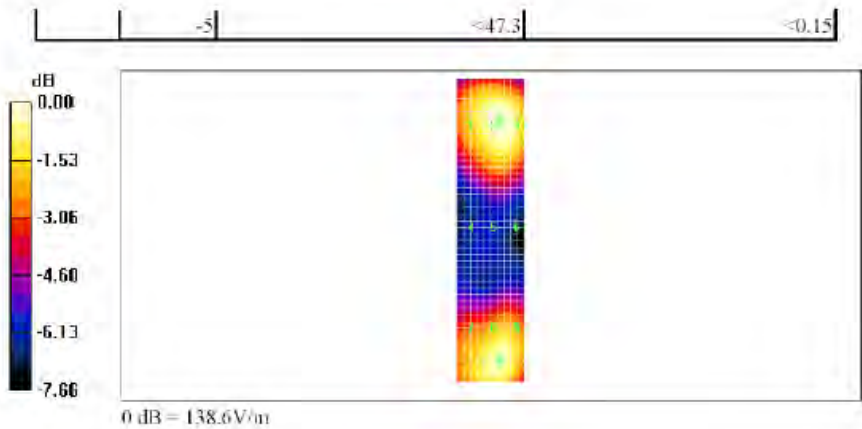
Category	AWF (dB)	Limits for E-Field Emissions (V/m)	Limits for H-Field Emissions (A/m)
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34
	-5	47.3 - 84.1	0.15 - 0.25
M4	0	<63.1	<0.19

file://C:\Program%20Files\DASY4\Print_Templates\Dipole%20Validation%201880%20... 14/07/2005

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Date/Time: 14/07/2005 11:44:51 AM

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A.3 RF emission field plots

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Date/Time: 8/31/2015 2:28:02 PM

Test Laboratory: BlackBerry RTS

HAC RF_E-Field_GSM 850_slider closed

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 1161504665

Communication System: UID 0, GSM 850; Frequency: 824.2 MHz, Frequency: 836.8 MHz,
Frequency: 848.8 MHz

Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/19/2015;
- Sensor-Surface: (Fix Surface), $z = 8.7$
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Device E-Field GSM850 measurement with ER probe_slider closed/E Scan -
ER3D - 2011: 15 mm from Probe Center to the Device_Low_Chan/Hearing Aid
Compatibility Test (101x101x1):** Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 54.07 V/m; Power Drift = -0.23 dB

Applied MIF = 3.44 dB

RF audio interference level = 37.65 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 35.04 dBV/m	Grid 2 M4 36 dBV/m	Grid 3 M4 36.58 dBV/m
Grid 4 M4	Grid 5 M4	Grid 6 M4

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35.11 dBV/m	37.65 dBV/m	36.1 dBV/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
35.01 dBV/m	37.11 dBV/m	35.87 dBV/m

Cursor:

Total = 37.65 dBV/m

E Category: M4

Location: -5, 0, 8.7 mm

Device E-Field GSM850 measurement with ER probe_slider closed/E Scan - ER3D - 2011: 15 mm from Probe Center to the Device_Mid_Chan/Hearing Aid Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 59.58 V/m; Power Drift = -0.14 dB

Applied MIF = 3.44 dB

RF audio interference level = 37.89 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
36.88 dBV/m	37.78 dBV/m	36.83 dBV/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
36.96 dBV/m	37.89 dBV/m	37.74 dBV/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
36.64 dBV/m	37.97 dBV/m	36.78 dBV/m

Cursor:

Total = 37.97 dBV/m

E Category: M4

Location: -4, 10, 8.7 mm

Device E-Field GSM850 measurement with ER probe_slider closed/E Scan - ER3D - 2011: 15 mm from Probe Center to the Device_High_Chan/Hearing Aid

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Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 64.94 V/m; Power Drift = 0.01 dB

Applied MIF = 3.44 dB

RF audio interference level = 38.20 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 36.59 dBV/m	Grid 2 M4 38.15 dBV/m	Grid 3 M4 38.19 dBV/m
Grid 4 M4 36.54 dBV/m	Grid 5 M4 38.2 dBV/m	Grid 6 M4 38.23 dBV/m
Grid 7 M4 36.27 dBV/m	Grid 8 M4 37.42 dBV/m	Grid 9 M4 37.32 dBV/m

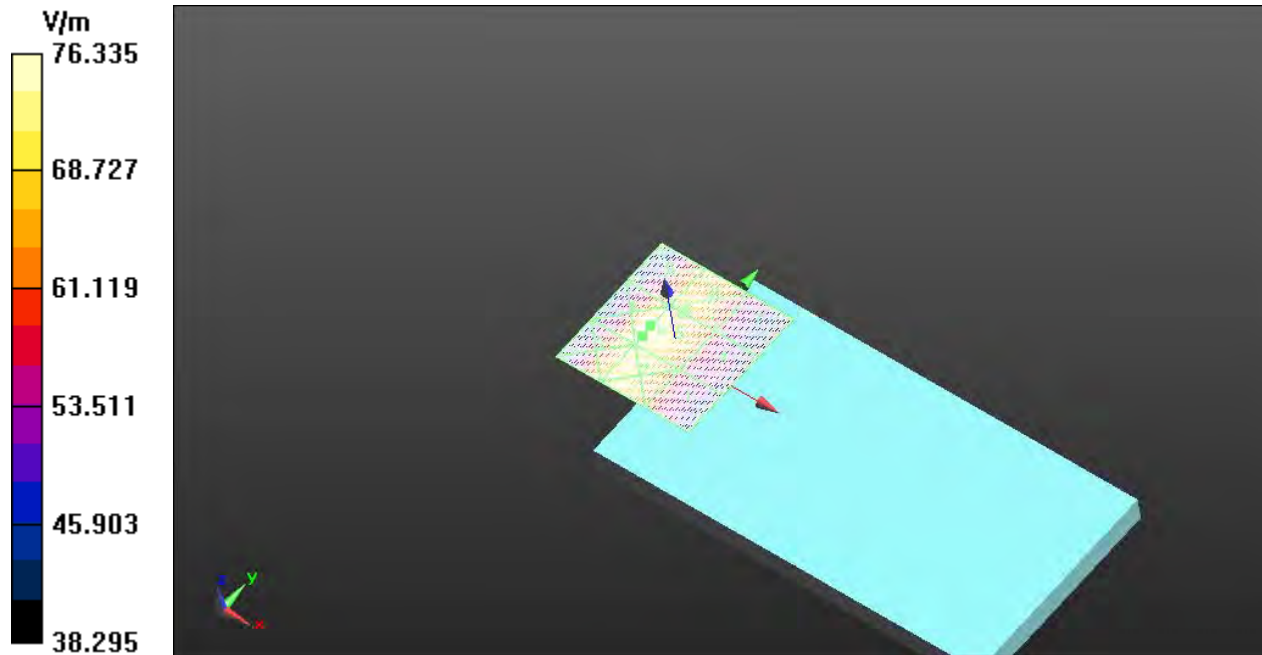
Category	Limits for E-Field Emissions < 960MHz	Limits for E-Field Emissions > 960MHz
M1	50 dBV/m - 55 dB V/m	40 dBV/m - 45 dB V/m
M2	45 dBV/m - 50 dB V/m	35 dBV/m - 40 dB V/m
M3	40 dBV/m - 45 dB V/m	30 dBV/m - 35 dB V/m
M4	<40 dBV/m	<30 dBV/m

Cursor:

Total = 38.23 dBV/m

E Category: M4

Location: -9, -0.5, 8.7 mm



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Date/Time: 8/31/2015 2:47:33 PM

Test Laboratory: BlackBerry RTS

HAC RF_E-Field_GSM 850_slider closed_telecoil center

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 1161504665

Communication System: UID 0, GSM 850; Frequency: 848.8 MHz

Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/19/2015;
- Sensor-Surface: (Fix Surface), $z = 8.7$
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Device E-Field GSM850 measurement with ER probe_slider closed/E Scan - ER3D - 2011: 15 mm from Probe Center to the Device_High_Chan_Telecoil_center/Hearing Aid Compatibility Test

(101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 65.07 V/m; Power Drift = -0.11 dB

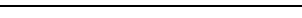
Applied MIF = 3.44 dB

RF audio interference level = 37.63 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 36.6 dBV/m	Grid 2 M4 37.56 dBV/m	Grid 3 M4 37.34 dBV/m
Grid 4 M4 36.54 dBV/m	Grid 5 M4 37.63 dBV/m	Grid 6 M4 37.48 dBV/m

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Grid 7 M4 36.53 dBV/m	Grid 8 M4 37.64 dBV/m	Grid 9 M4 37.48 dBV/m
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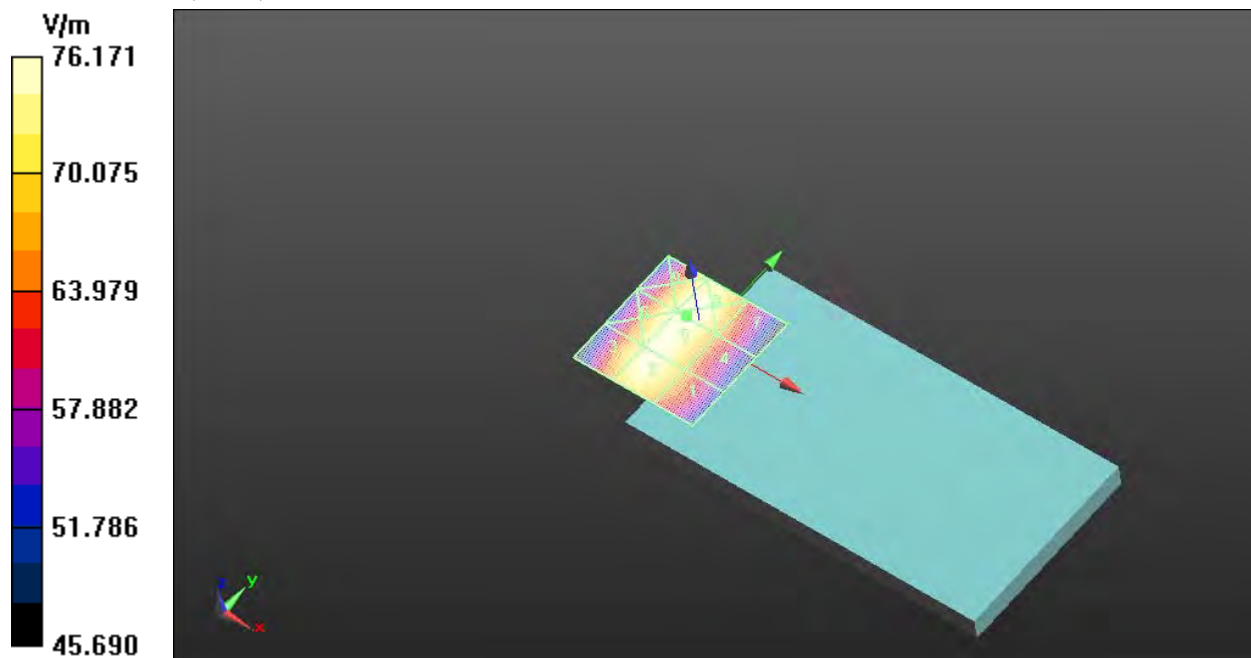
Category	Limits for E-Field Emissions < 960MHz	Limits for E-Field Emissions > 960MHz
M1	50 dBV/m - 55 dB V/m	40 dBV/m - 45 dB V/m
M2	45 dBV/m - 50 dB V/m	35 dBV/m - 40 dB V/m
M3	40 dBV/m - 45 dB V/m	30 dBV/m - 35 dB V/m
M4	<40 dBV/m	<30 dBV/m

Cursor:

Total = 37.64 dBV/m

E Category: M4

Location: -4.5, -0.5, 8.7 mm



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Date/Time: 8/31/2015 2:53:01 PM

Test Laboratory: BlackBerry RTS

HAC RF_E-Field_GSM 1900_slider closed

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 1161504665

Communication System: UID 0, GSM 1900; Frequency: 1850.2 MHz, Frequency: 1880 MHz,
Frequency: 1909.8 MHz

Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/19/2015;
- Sensor-Surface: (Fix Surface), $z = 8.7$
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Device E-Field GSM 1900 measurement with ER probe_slider closed/E Scan -
ER3D - 2011: 15 mm from Probe Center to the Device_Low_Chan/Hearing Aid
Compatibility Test (101x101x1):** Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 19.49 V/m; Power Drift = 0.11 dB

Applied MIF = 3.44 dB

RF audio interference level = 31.81 dBV/m

Emission category: M3

MIF scaled E-field

Grid 1 M3 31.81 dBV/m	Grid 2 M3 32.37 dBV/m	Grid 3 M3 31.92 dBV/m
Grid 4 M4 27.78 dBV/m	Grid 5 M4 29.39 dBV/m	Grid 6 M4 29.39 dBV/m

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Grid 7 M4 26.6 dBV/m	Grid 8 M3 30.84 dBV/m	Grid 9 M3 30.86 dBV/m
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Cursor:

Total = 32.37 dBV/m

E Category: M3

Location: 0, -25, 8.7 mm

Device E-Field GSM 1900 measurement with ER probe_slider closed/E Scan - ER3D - 2011: 15 mm from Probe Center to the Device_Mid_Chan/Hearing Aid Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 21.57 V/m; Power Drift = 0.09 dB

Applied MIF = 3.44 dB

RF audio interference level = 32.94 dBV/m

Emission category: M3

MIF scaled E-field

Grid 1 M3 32.94 dBV/m	Grid 2 M3 34.17 dBV/m	Grid 3 M3 33.91 dBV/m
Grid 4 M4 28.99 dBV/m	Grid 5 M3 31.37 dBV/m	Grid 6 M3 31.37 dBV/m
Grid 7 M4 25.88 dBV/m	Grid 8 M4 28.92 dBV/m	Grid 9 M4 29.01 dBV/m

Cursor:

Total = 34.17 dBV/m

E Category: M3

Location: -3, -25, 8.7 mm

Device E-Field GSM 1900 measurement with ER probe_slider closed/E Scan - ER3D - 2011: 15 mm from Probe Center to the Device_High_Chan/Hearing Aid Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

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Author Data Daoud Attayi	Dates of Test August 31- Sep. 23, 2015	Report No RTS-6066-1509-19	FCC ID L6ARHK210LW

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 20.81 V/m; Power Drift = 0.06 dB

Applied MIF = 3.44 dB

RF audio interference level = 31.09 dBV/m

Emission category: M3

MIF scaled E-field

Grid 1 M3 31.09 dBV/m	Grid 2 M3 32.99 dBV/m	Grid 3 M3 32.9 dBV/m
Grid 4 M4 27.71 dBV/m	Grid 5 M3 31.07 dBV/m	Grid 6 M3 31.11 dBV/m
Grid 7 M4 27.83 dBV/m	Grid 8 M4 29.03 dBV/m	Grid 9 M4 29.64 dBV/m

Category	Limits for E-Field Emissions < 960MHz	Limits for E-Field Emissions > 960MHz
M1	50 dBV/m - 55 dB V/m	40 dBV/m - 45 dB V/m
M2	45 dBV/m - 50 dB V/m	35 dBV/m - 40 dB V/m
M3	40 dBV/m - 45 dB V/m	30 dBV/m - 35 dB V/m
M4	<40 dBV/m	<30 dBV/m

Cursor:

Total = 32.99 dBV/m

E Category: M3

Location: -5.5, -25, 8.7 mm



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Author Data

Daoud Attayi

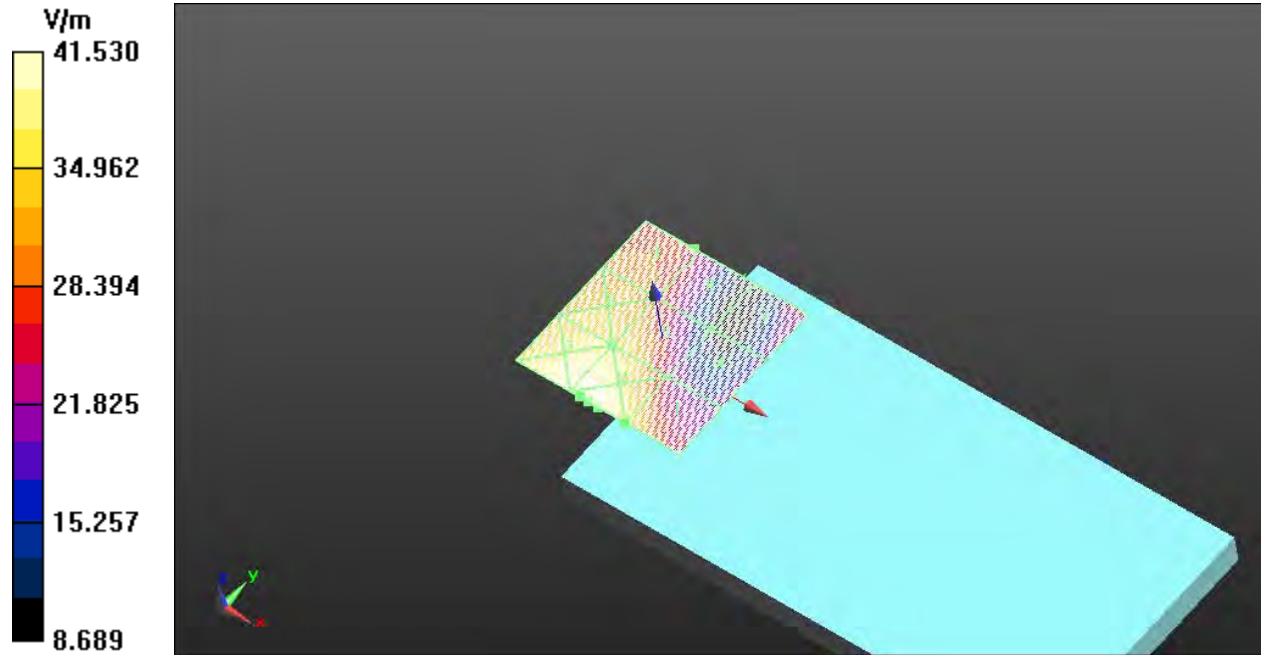
Dates of Test

August 31- Sep. 23, 2015

Report No

RTS-6066-1509-19

FCC ID

L6ARHK210LW

		Document Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone RHK211LW (STV100-1)	Page 43 (56)
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Date/Time: 8/31/2015 3:04:33 PM

Test Laboratory: BlackBerry RTS

HAC RF_E-Field_GSM 1900_slider closed_Telecoil center

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 1161504665

Communication System: UID 0, GSM 1900; Frequency: 1880 MHz

Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/19/2015;
- Sensor-Surface: (Fix Surface), $z = 8.7$
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Device E-Field GSM 1900 measurement with ER probe_slider closed/E Scan - ER3D - 2011: 15 mm from Probe Center to the Device_Mid_Chan_Telecoil center/Hearing Aid Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 21.32 V/m; Power Drift = 0.12 dB

Applied MIF = 3.44 dB

RF audio interference level = 33.74 dBV/m

Emission category: M3

MIF scaled E-field

Grid 1 M3 33.74 dBV/m	Grid 2 M3 34.83 dBV/m	Grid 3 M3 34.52 dBV/m
Grid 4 M3 31.62 dBV/m	Grid 5 M3 33.23 dBV/m	Grid 6 M3 33.08 dBV/m

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Grid 7 M4 26.35 dBV/m	Grid 8 M3 30.06 dBV/m	Grid 9 M3 30.13 dBV/m
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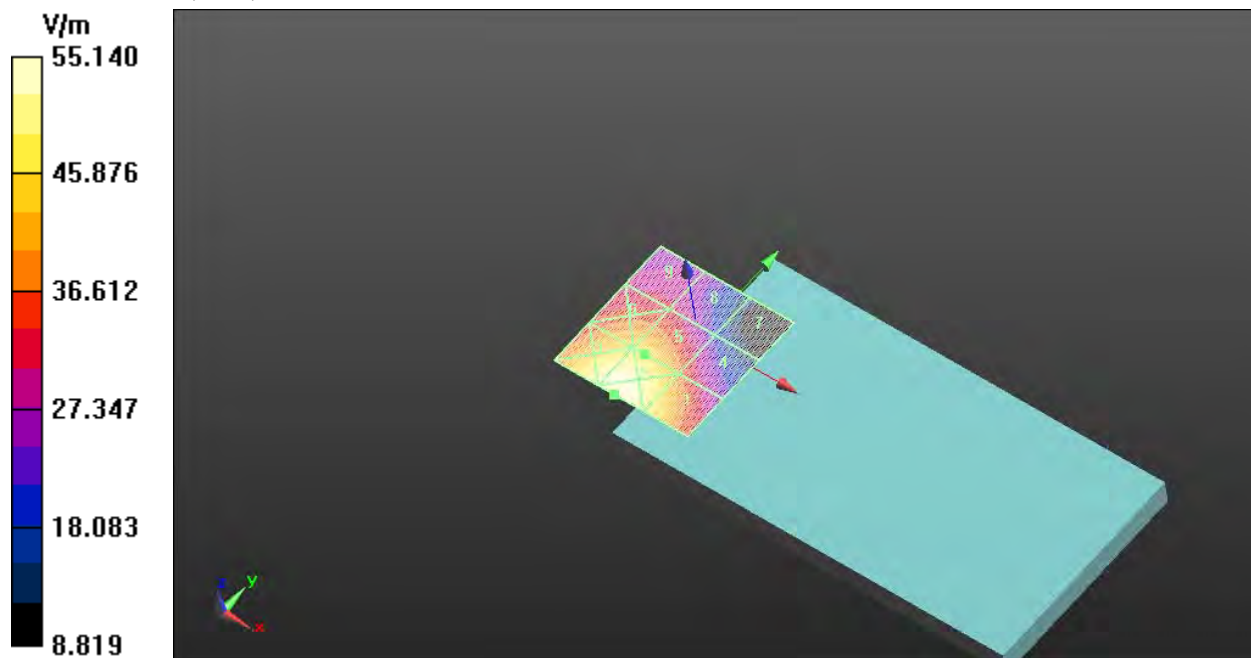
Category	Limits for E-Field Emissions < 960MHz	Limits for E-Field Emissions > 960MHz
M1	50 dBV/m - 55 dB V/m	40 dBV/m - 45 dB V/m
M2	45 dBV/m - 50 dB V/m	35 dBV/m - 40 dB V/m
M3	40 dBV/m - 45 dB V/m	30 dBV/m - 35 dB V/m
M4	<40 dBV/m	<30 dBV/m

Cursor:

Total = 34.83 dBV/m

E Category: M3

Location: -2.5, -35, 8.7 mm



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Date/Time: 8/31/2015 3:45:56 PM

Test Laboratory: BlackBerry RTS

HAC RF_E-Field_GSM 850_slider open

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 1161504665

Communication System: UID 0, GSM 850; Frequency: 824.2 MHz, Frequency: 836.8 MHz,
Frequency: 848.8 MHz

Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/19/2015;
- Sensor-Surface: (Fix Surface), $z = 8.7$
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Device E-Field GSM850 measurement with ER probe_slider open/E Scan -
ER3D - 2011: 15 mm from Probe Center to the Device_Low_Chan/Hearing Aid
Compatibility Test (101x101x1):** Interpolated grid: $dx=0.5000$ mm, $dy=0.5000$ mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 56.86 V/m; Power Drift = -0.06 dB

Applied MIF = 3.44 dB

RF audio interference level = 36.46 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 35.46 dBV/m	Grid 2 M4 36.42 dBV/m	Grid 3 M4 36.27 dBV/m
Grid 4 M4 35.55 dBV/m	Grid 5 M4 36.46 dBV/m	Grid 6 M4 36.31 dBV/m

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Grid 7 M4 35.31 dBV/m	Grid 8 M4 36.32 dBV/m	Grid 9 M4 36.1 dBV/m
--	--	---------------------------------------

Cursor:

Total = 36.46 dBV/m

E Category: M4

Location: -4, -1, 8.7 mm

Device E-Field GSM850 measurement with ER probe_slider open/E Scan - ER3D - 2011: 15 mm from Probe Center to the Device_Mid_Chan/Hearing Aid Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 44.85 V/m; Power Drift = -0.05 dB

Applied MIF = 3.44 dB

RF audio interference level = 34.56 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 33.3 dBV/m	Grid 2 M4 34.43 dBV/m	Grid 3 M4 34.37 dBV/m
Grid 4 M4 33.4 dBV/m	Grid 5 M4 34.56 dBV/m	Grid 6 M4 34.47 dBV/m
Grid 7 M4 33.22 dBV/m	Grid 8 M4 34.43 dBV/m	Grid 9 M4 34.34 dBV/m

Cursor:

Total = 34.56 dBV/m

E Category: M4

Location: -5, 0.5, 8.7 mm

Device E-Field GSM850 measurement with ER probe_slider open/E Scan - ER3D - 2011: 15 mm from Probe Center to the Device_High_Chan/Hearing Aid Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

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Author Data Daoud Attayi	Dates of Test August 31- Sep. 23, 2015	Report No RTS-6066-1509-19	FCC ID L6ARHK210LW

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 63.69 V/m; Power Drift = 0.03 dB

Applied MIF = 3.44 dB

RF audio interference level = 37.56 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 36.52 dBV/m	Grid 2 M4 37.51 dBV/m	Grid 3 M4 37.37 dBV/m
Grid 4 M4 36.61 dBV/m	Grid 5 M4 37.56 dBV/m	Grid 6 M4 37.47 dBV/m
Grid 7 M4 36.25 dBV/m	Grid 8 M4 37.43 dBV/m	Grid 9 M4 37.3 dBV/m

Category	Limits for E-Field Emissions < 960MHz	Limits for E-Field Emissions > 960MHz
M1	50 dBV/m - 55 dB V/m	40 dBV/m - 45 dB V/m
M2	45 dBV/m - 50 dB V/m	35 dBV/m - 40 dB V/m
M3	40 dBV/m - 45 dB V/m	30 dBV/m - 35 dB V/m
M4	<40 dBV/m	<30 dBV/m

Cursor:

Total = 37.56 dBV/m

E Category: M4

Location: -5, 0, 8.7 mm



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Author Data

Daoud Attayi

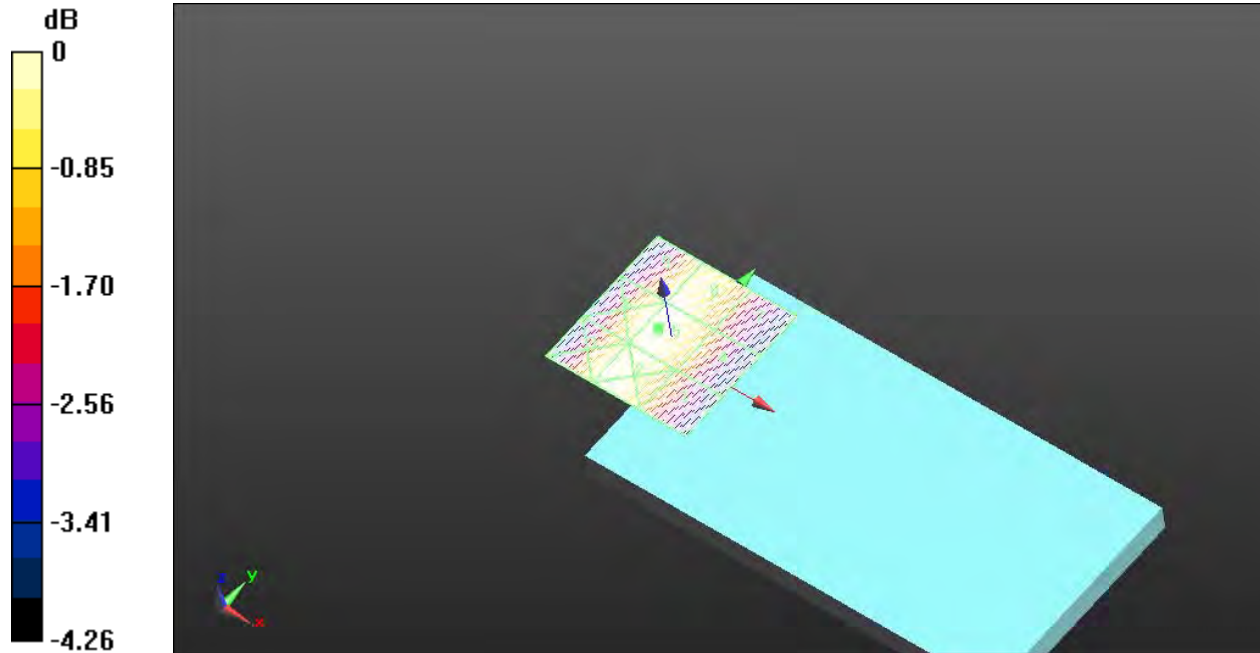
Dates of Test

August 31- Sep. 23, 2015

Report No

RTS-6066-1509-19

FCC ID

L6ARHK210LW

0 dB = 66.56 V/m = 36.46 dBV/m

		Document Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone RHK211LW (STV100-1)		Page 49 (56)
Author Data Daoud Attayi	Dates of Test August 31- Sep. 23, 2015	Report No RTS-6066-1509-19	FCC ID L6ARHK210LW	

Date/Time: 8/31/2015 4:01:48 PM

Test Laboratory: BlackBerry RTS

HAC RF_E-Field_GSM 850_slider open_telecoil center

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 1161504665

Communication System: UID 0, GSM 850; Frequency: 848.8 MHz

Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/19/2015;
- Sensor-Surface: (Fix Surface), $z = 8.7$
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Device E-Field GSM850 measurement with ER probe_slider open/E Scan - ER3D - 2011: 15 mm from Probe Center to the Device_High_Chan_Telecoil center/Hearing Aid Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 64.43 V/m; Power Drift = 0.01 dB

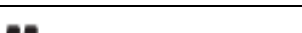
Applied MIF = 3.44 dB

RF audio interference level = 37.60 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 36.41 dBV/m	Grid 2 M4 37.61 dBV/m	Grid 3 M4 37.35 dBV/m
Grid 4 M4 36.44 dBV/m	Grid 5 M4 37.6 dBV/m	Grid 6 M4 37.49 dBV/m

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Grid 7 M4	Grid 8 M4	Grid 9 M4
36.45 dBV/m	37.52 dBV/m	37.41 dBV/m

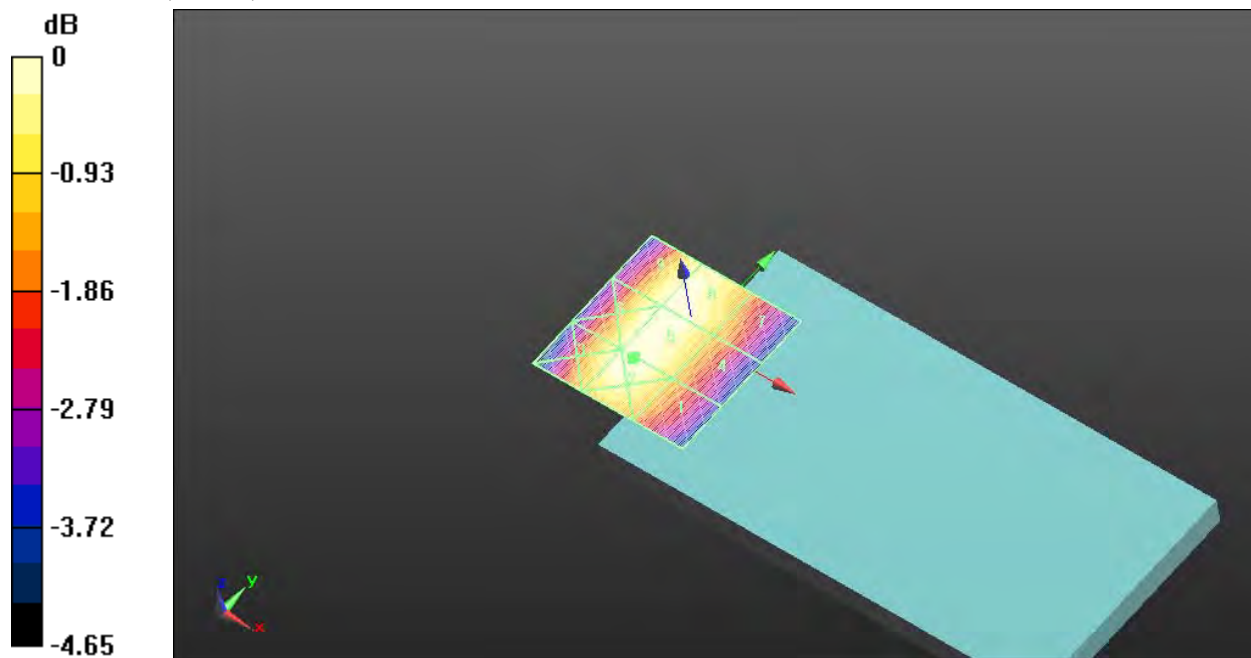
Category	Limits for E-Field Emissions < 960MHz	Limits for E-Field Emissions > 960MHz
M1	50 dBV/m - 55 dB V/m	40 dBV/m - 45 dB V/m
M2	45 dBV/m - 50 dB V/m	35 dBV/m - 40 dB V/m
M3	40 dBV/m - 45 dB V/m	30 dBV/m - 35 dB V/m
M4	<40 dBV/m	<30 dBV/m

Cursor:

Total = 37.61 dBV/m

E Category: M4

Location: -4, -19.5, 8.7 mm



0 dB = 75.92 V/m = 37.61 dBV/m

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Date/Time: 8/31/2015 3:16:45 PM

Test Laboratory: BlackBerry RTS

HAC RF_E-Field_GSM 1900_slider open

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 1161504665

Communication System: UID 0, GSM 1900; Frequency: 1850.2 MHz, Frequency: 1880 MHz,
Frequency: 1909.8 MHz

Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³

Phantom section: RF Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/19/2015;
- Sensor-Surface: (Fix Surface), $z = 8.7$
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Device E-Field GSM 1900 measurement with ER probe_slider open/E Scan -
ER3D - 2011: 15 mm from Probe Center to the Device_Low_Chan/Hearing Aid
Compatibility Test (101x101x1):** Interpolated grid: $dx=0.5000$ mm, $dy=0.5000$ mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 34.07 V/m; Power Drift = -0.03 dB

Applied MIF = 3.44 dB

RF audio interference level = 33.64 dBV/m

Emission category: M3

MIF scaled E-field

Grid 1 M3 31.45 dBV/m	Grid 2 M3 33.03 dBV/m	Grid 3 M3 33.05 dBV/m
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Author Data Daoud Attayi	Dates of Test August 31- Sep. 23, 2015	Report No RTS-6066-1509-19	FCC ID L6ARHK210LW

Grid 4 M4 29.93 dBV/m	Grid 5 M3 33.53 dBV/m	Grid 6 M3 33.57 dBV/m
Grid 7 M4 28.83 dBV/m	Grid 8 M3 33.61 dBV/m	Grid 9 M3 33.64 dBV/m

Cursor:

Total = 33.64 dBV/m

E Category: M3

Location: -10, 15, 8.7 mm

Device E-Field GSM 1900 measurement with ER probe_slider open/E Scan - ER3D - 2011: 15 mm from Probe Center to the Device_Mid_Chan/Hearing Aid Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 34.08 V/m; Power Drift = -0.08 dB

Applied MIF = 3.44 dB

RF audio interference level = 33.25 dBV/m

Emission category: M3

MIF scaled E-field

Grid 1 M3 31.83 dBV/m	Grid 2 M3 33.41 dBV/m	Grid 3 M3 33.36 dBV/m
Grid 4 M4 29.93 dBV/m	Grid 5 M3 33.25 dBV/m	Grid 6 M3 33.29 dBV/m
Grid 7 M4 28.61 dBV/m	Grid 8 M3 33.2 dBV/m	Grid 9 M3 33.24 dBV/m

Cursor:

Total = 33.41 dBV/m

E Category: M3

Location: -6.5, -25, 8.7 mm

Device E-Field GSM 1900 measurement with ER probe_slider open/E Scan -

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ER3D - 2011: 15 mm from Probe Center to the Device_High_Chan/Hearing Aid Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 29.78 V/m; Power Drift = 0.10 dB

Applied MIF = 3.44 dB

RF audio interference level = 33.35 dBV/m

Emission category: M3

MIF scaled E-field

Grid 1 M4 29.9 dBV/m	Grid 2 M3 32.1 dBV/m	Grid 3 M3 32.22 dBV/m
Grid 4 M4 28.15 dBV/m	Grid 5 M3 33.12 dBV/m	Grid 6 M3 33.21 dBV/m
Grid 7 M4 28.11 dBV/m	Grid 8 M3 33.35 dBV/m	Grid 9 M3 33.4 dBV/m

Category	Limits for E-Field Emissions < 960MHz	Limits for E-Field Emissions > 960MHz
M1	50 dBV/m - 55 dB V/m	40 dBV/m - 45 dB V/m
M2	45 dBV/m - 50 dB V/m	35 dBV/m - 40 dB V/m
M3	40 dBV/m - 45 dB V/m	30 dBV/m - 35 dB V/m
M4	<40 dBV/m	<30 dBV/m

Cursor:

Total = 33.40 dBV/m

E Category: M3

Location: -10.5, 19, 8.7 mm



Document

**Annex A to Hearing Aid Compatibility RF Emissions Test Report
for the BlackBerry® Smartphone RHK211LW (STV100-1)**

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Author Data

Daoud Attayi

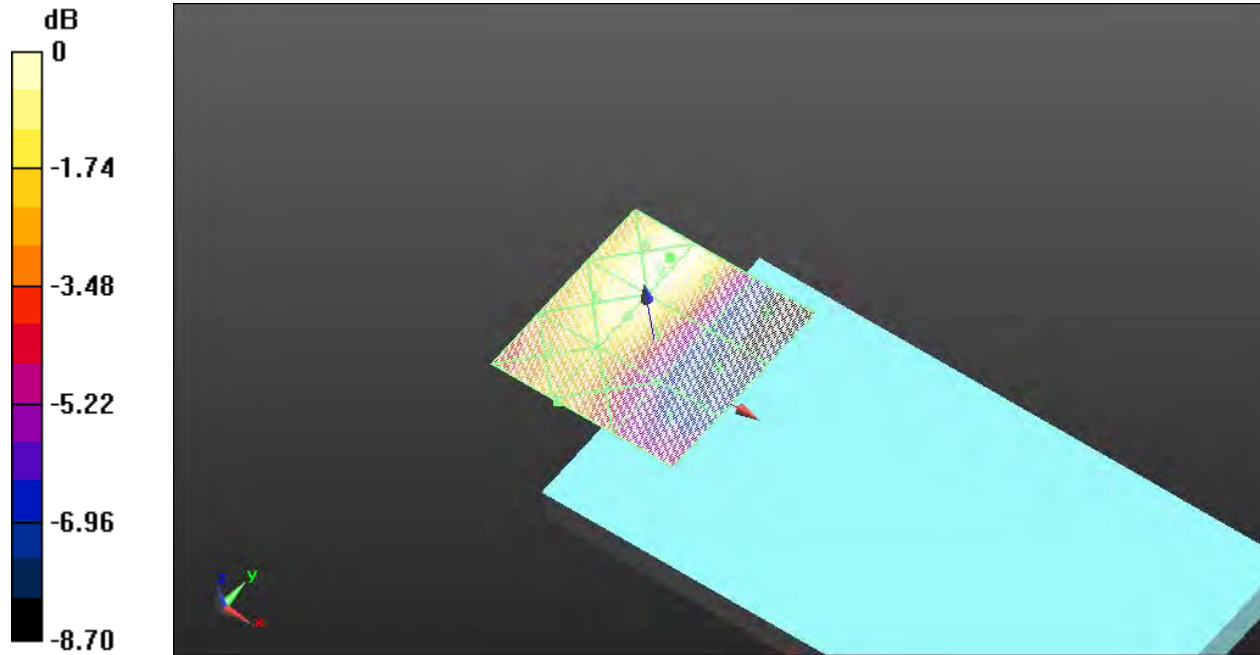
Dates of Test

August 31- Sep. 23, 2015

Report No

RTS-6066-1509-19

FCC ID

L6ARHK210LW

0 dB = 48.11 V/m = 33.64 dBV/m

		Document Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone RHK211LW (STV100-1)	Page 55 (56)
Author Data Daoud Attayi	Dates of Test August 31- Sep. 23, 2015	Report No RTS-6066-1509-19	FCC ID L6ARHK210LW

Date/Time: 8/31/2015 4:06:50 PM

Test Laboratory: BlackBerry RTS

HAC RF_E-Field_GSM 1900_slider open_telecoil center

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 1161504665

Communication System: UID 0, GSM 1900; Frequency: 1850.2 MHz

Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/19/2015;
- Sensor-Surface: (Fix Surface), $z = 8.7$
- Electronics: DAE4 Sn881; Calibrated: 1/13/2015
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Device E-Field GSM 1900 measurement with ER probe_slider open/E Scan - ER3D - 2011: 15 mm from Probe Center to the Device_Low_Chan_Telecoil center/Hearing Aid Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 32.95 V/m; Power Drift = 0.09 dB

Applied MIF = 3.44 dB

RF audio interference level = 33.38 dBV/m

Emission category: M3

MIF scaled E-field

Grid 1 M3 31.92 dBV/m	Grid 2 M3 32.91 dBV/m	Grid 3 M3 32.76 dBV/m
Grid 4 M3 30.87 dBV/m	Grid 5 M3 33.15 dBV/m	Grid 6 M3 33.16 dBV/m

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Grid 7 M4 29.49 dBV/m	Grid 8 M3 33.34 dBV/m	Grid 9 M3 33.38 dBV/m
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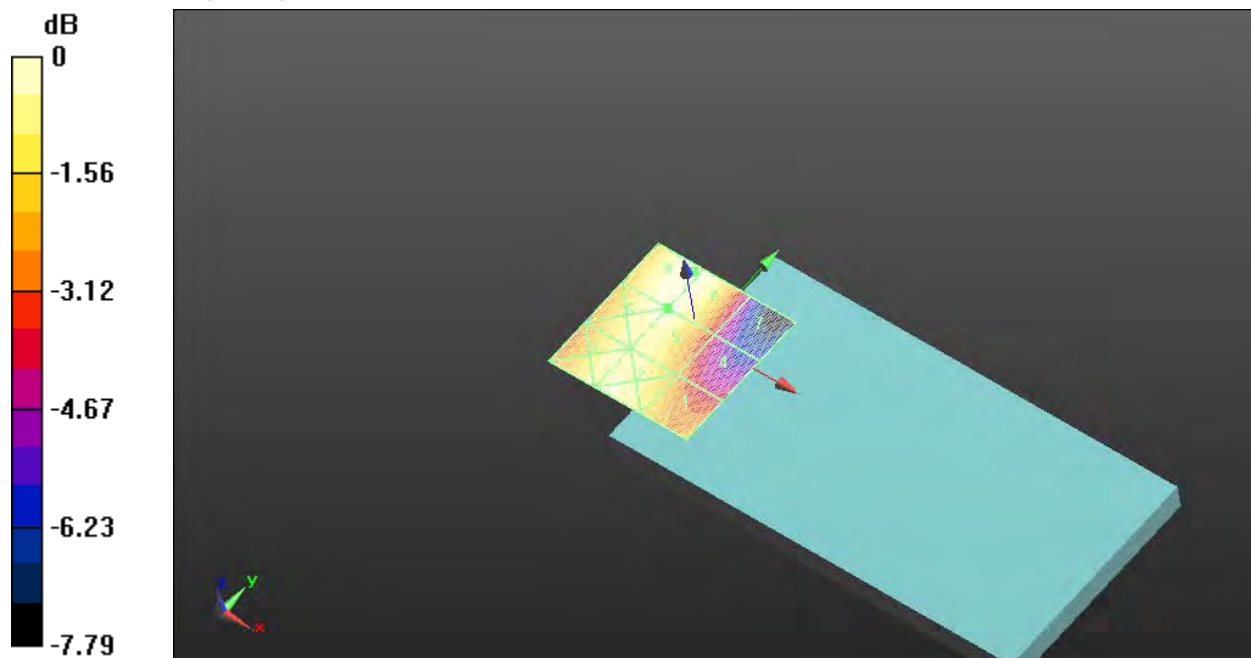
Category	Limits for E-Field Emissions < 960MHz	Limits for E-Field Emissions > 960MHz
M1	50 dBV/m - 55 dB V/m	40 dBV/m - 45 dB V/m
M2	45 dBV/m - 50 dB V/m	35 dBV/m - 40 dB V/m
M3	40 dBV/m - 45 dB V/m	30 dBV/m - 35 dB V/m
M4	<40 dBV/m	<30 dBV/m

Cursor:

Total = 33.38 dBV/m

E Category: M3

Location: -10.5, 12.5, 8.7 mm



0 dB = 46.65 V/m = 33.38 dBV/m