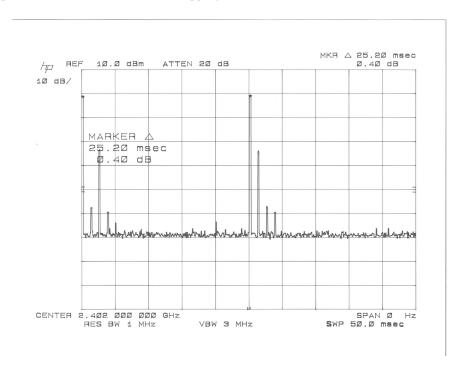


Max Time on Channel Freq

				inic on on	ummer i	- 04		
DNB Job Number	r: 060	27		Date:	15 Oct 2009		rmance	
Customer:	Cel	io Tech	nology Corporation			Standard		
Model Number:	CR	F-C8N2	2/CRF-C8v (Inclusive	of CRF-C7B)		FCC Part 15		
Description:	Sm	art Pho	ne Companion		Clause			
	3Mbps data rate					15.247	(a,1,iii)	
			Environmental	Conditions				
Ambient T	emperature		Relative Hu	ımidity	Barom	metric Pressure		
19	°C		28 %		1	101.8 kPa		
EUT performed w	vithin the re	quireme	ents of the applicable st	andard [X] Yes	[] No Le	s Payne		
Center Freq Chl	Pulse Dui	Ouration Time to Next Pulse Calculated on time Allowed C		n Time	Pass/Fail			
2402MHz	0.000200 Sec 25.20 mSec		25.20 mSec	0.2508 sec	0.4sec in 3 windo		Pass	

Single channel on time = 0.0002 sec = 0.2 msec = 200 usecCalculated on time = 31600 msec / 25.20 msec * 0.2 msec = 250.8 msec = 0.2508 secondsLimit is based upon 0.4 seconds times number of hopping channels = 0.4 * 79 = 31.6 sec



15.247 (b,2) Maximum Peak Output Power (Conducted)

Test Procedure:

Peak Output Power

Use the following spectrum analyzer settings: Span – approximately 5 times the 20 dR handw

Span = approximately 5 times the 20 dB bandwidth, centered on a hopping channel

RBW > the 20 dB bandwidth of the emission being measured

VBW RBW

Sweep = auto

Detector function = peak

Trace = max hold

Allow the trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. The indicated level is the peak output power (see the NOTE above regarding external attenuation and cable loss). The limit is specified in one of the subparagraphs of this Section. Submit this plot. A peak responding power meter may be used instead of a spectrum analyzer.

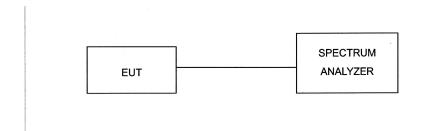
The transmitter output was connected to a spectrum analyzer.

Requirement: The maximum peak output power shall not exceed .125W (21dBm)

EUT operating conditions:

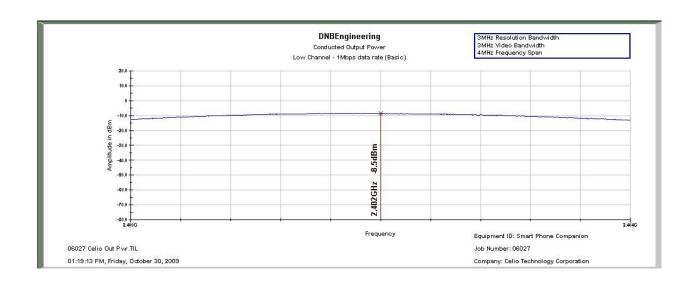
The software provided by the client to enable the EUT to transmit continuously at the low, mid, and upper channels respectively.

Test Set Up:



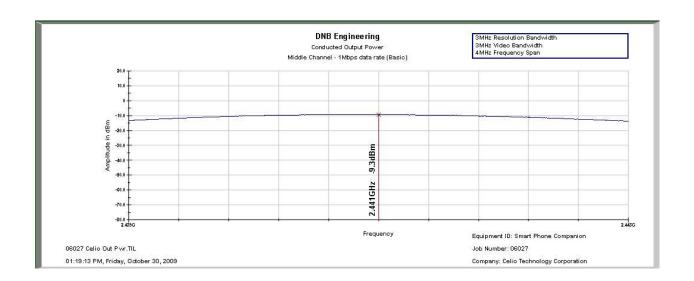


DNB Job Nu	mber: 0	06027		Date:	30 Oct 2		formance	
Customer:	C	Celio Techn	ology Corporation			Si	Standard	
Model Numb	er: C	CRF-C8N2/	CRF-C8v (Inclusiv	e of CRF-C7B)	FC	C Part 15	
Description:	S	Smart Phone	Companion				Clause	
	1	Mbps data	rate (Basic data rat	e) - Low Chan	nel	15	.247(b,1)	
	·		Environmenta	al Conditions		·		
Ambie	ent Temperatu	ire	Relative l	Humidity]	Barometric Pre	essure	
	21 °C		25	%		101.2 kPa	ı	
EUT perform	ed within the	requiremen	ts of the applicable	standard [X	X] Yes [] No	Les Payne		
Freq MHz	Meas Peak Pwr (dBm)	Limit (dBm)	Limit Delta Meas Peak Limit D (dBm) (dBm) Pwr (mW) (mW) (n				Pass/Fail	
2402	-8.5	20.97	-29.47	0.141	125	-124.859	Pass	



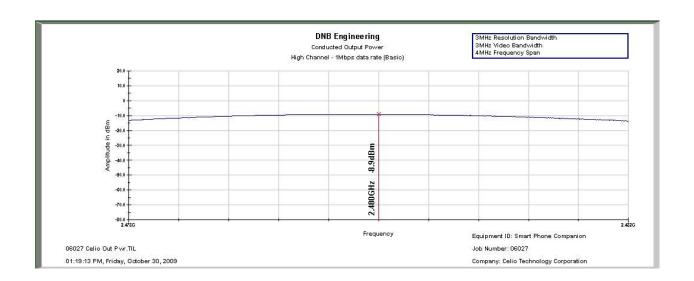


					an output	0 1 0 11 01 (0	
DNB Job Nu	mber: 0	06027		Date:	30 Oct 2		formance
Customer:	(Celio Techno	ology Corporation	St	Standard		
Model Numb	er: C	CRF-C8N2/C	FC	C Part 15			
Description:	S	Smart Phone	Companion				Clause
	1	Mbps data 1	rate (Basic data rate	e) - Mid Chanı	nel	15.	.247(b,1)
			Environmenta	al Conditions			
Ambie	ent Temperatu	ire	Relative I	Humidity]	Barometric Pre	essure
	21 °C		25	%		101.2 kPa	ı
EUT perform	ned within the	requirement	ts of the applicable	standard [X	[]Yes []No	Les Payne	
Freq MHz	Meas Peak Pwr (dBm)	Limit (dBm)	Delta (dBm)	Delta (mW)	Pass/Fail		
2441	-9.3	20.97	-30.27	0.117	125	-124.883	Pass



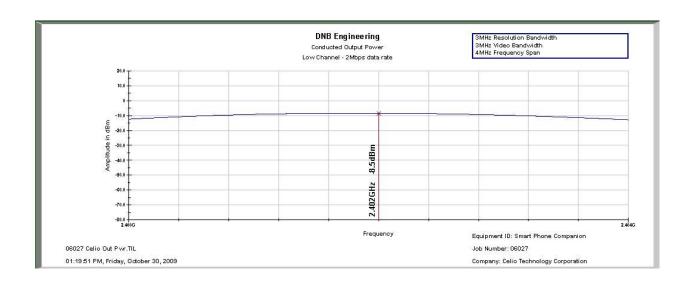


				- 0	an output	(()	0 0 11 40)	
DNB Job Nu	mber: 0	6027		Date:	30 Oct 2		Conformance	
Customer:	C	Celio Techno	ology Corporation		Standard			
Model Numb	er: C	CRF-C8N2/C	CRF-C8v (Inclusive	F	FCC Part 15			
Description:	S	mart Phone		Clause				
	1	Mbps data 1	1:	5.247(b,1)				
			Environmenta	l Conditions				
Ambie	ent Temperatu	re	Relative H	Iumidity]	Barometric P	ressure	
	21 °C		25 9	%		101.2 kF	' a	
EUT perform	ned within the	requirement	ts of the applicable	standard [X	X] Yes [] No	Les Payn	e	
Freq MHz	Meas Peak Pwr (dBm)	Limit (dBm)	Delta (dBm)	Meas Peak Pwr (mW)	Limit (mW)	Delta (mW)	Pass/Fail	
2480	-8.9	9 20.97 -29.87 0.129 125 -12		-124.871	Pass			



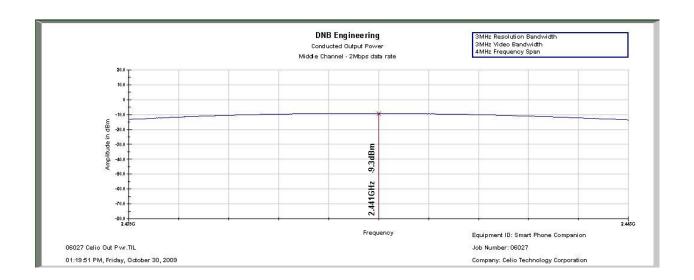


		`			10	an	Output	LIU	wei (C	onu)		
DNB Job Nu	mber: 0	6027			Date:		30 Oct 2	2009		formance		
Customer:	C	Celio Technology Corporation								Standard		
Model Numb	er: C	CRF-C8N2/CRF-C8v (Inclusive of CRF-C7B)							FCC Part 15			
Description:	S	mart Phone	e Coi	mpanion						Clause		
	2	Mbps data	rate	- Low Channel	[15.	247(b,1)		
				Environmenta	al Conditions							
Ambie	ent Temperatu	re		Relative l	Humidity]	Barom	etric Pre	ssure		
	21 °C	25 %			1	01.2 kPa						
EUT perform	ed within the	requiremen	ıts of	the applicable	standard [X	X] Ye	s []No) Le	s Payne			
Freq MHz	Meas Peak Pwr (dBm)	Limit (dBm)		Delta (dBm)	Meas Peak Pwr (mW)		Limit (mW)	Pass/Fail				
2402	-8.5	20.97		-29.47	0.141		125	-12	4.859	Pass		



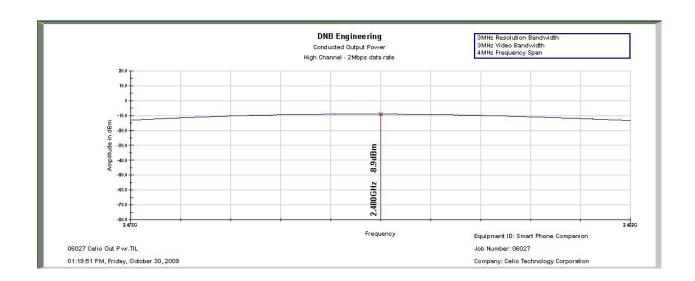


					an output	0 2 0 11 02 (
DNB Job Nu	mber: 0	6027		Date:	30 Oct 2		nformance
Customer:	C	Celio Techno	S	Standard			
Model Numb	er: C	CRF-C8N2/C	FC	C Part 15			
Description:	S	mart Phone	Companion				Clause
	2	Mbps data ra	ate - Mid Channel			15	.247(b,1)
			Environmenta	al Conditions			
Ambie	ent Temperatu	re	Relative I	Humidity]	Barometric Pr	essure
	21 °C		25	%		101.2 kP	a
EUT perform	ned within the	requirements	s of the applicable	standard [X	X] Yes [] No	Les Payne	
Freq MHz	Meas Peak Pwr (dBm)	Limit (dBm)	Delta (dBm)	Meas Peak Pwr (mW)	Delta (mW)	Pass/Fail	
2441	-9.3	20.97	-30.27	0.117	125	-124.883	Pass



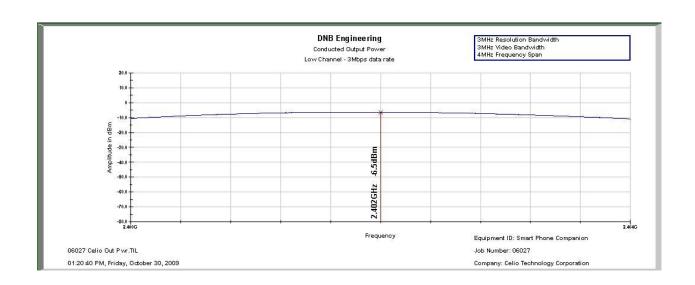


			(/				
DNB Job Nu	mber: 0	6027		Date:	30 Oct 2		nformance	
Customer:	C	elio Technolo	S	Standard				
Model Numb	er: C	RF-C8N2/CR	FC	FCC Part 15				
Description:	S	mart Phone C	ompanion				Clause	
	2	Mbps data rat	15	5.247(b,1)				
			Environmenta	al Conditions				
Ambie	ent Temperatui	re	Relative I	Humidity]	Barometric Pı	essure	
	21 °C		25	%		101.2 kP	a	
EUT perform	ned within the	requirements	of the applicable	standard [X	X]Yes []No	Les Payne	2	
Freq MHz	Meas Peak Pwr (dBm)					Delta (mW)	Pass/Fail	
2480	-8.9	20.97	-29.87	0.129	125	-124.871	Pass	



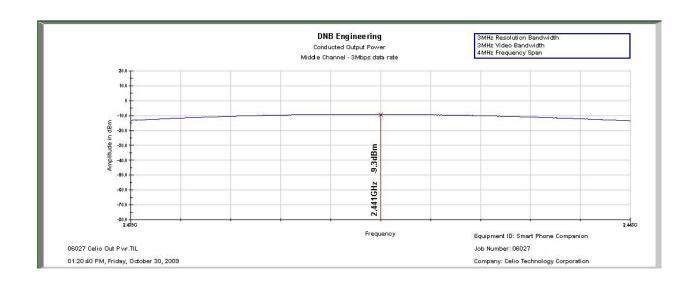


					_	`	,
DNB Job Nu	mber: 00	6027		Date:	30 Oct 2		formance
Customer:	С	elio Techno	ology Corporation	S	Standard		
Model Numb	er: C	RF-C8N2/C	CRF-C8v (Inclusive	FC	C Part 15		
Description:	S	mart Phone	Companion				Clause
	31	Mbps data 1	ate - Low Channel			15	.247(b,1)
			Environmenta	l Conditions			
Ambie	ent Temperatui	re	Relative H	Iumidity]	Barometric Pro	essure
	21 °C		25 9	%		101.2 kPa	ı
EUT perform	ned within the	requirement	ts of the applicable	standard [X	X] Yes [] No	Les Payne	
Freq MHz	Meas Peak Pwr (dBm)	Limit (dBm)	Delta (dBm)	Meas Peak Pwr (mW)	Limit (mW)	Delta (mW)	Pass/Fail
2402	-6.5	20.97	-27.47	0.224	125	-124.776	Pass



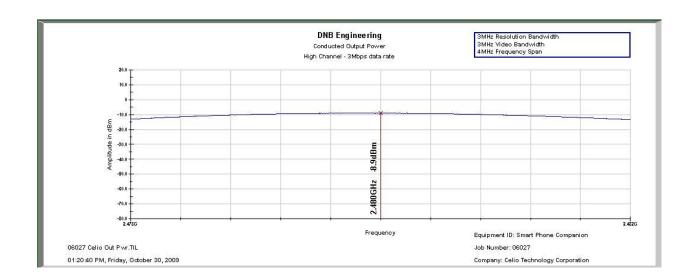


				/			
DNB Job Nu	mber: 0	6027		Date:	30 Oct 2		onformance
Customer:	C	elio Technolo		Standard			
Model Numb	er: C	RF-C8N2/CR	F	FCC Part 15			
Description:	S	mart Phone C	ompanion				Clause
	33	Mbps data rat		5.247(b,1)			
			Environmenta	al Conditions			
Ambie	ent Temperatui	re	Relative I	Humidity]	Barometric P	ressure
	21 °C		25	%		101.2 k	Pa
EUT perform	ned within the	requirements	of the applicable	standard [X	X] Yes [] No	Les Payr	ie e
Freq MHz	Meas Peak Pwr (dBm)						Pass/Fail
2441	-9.3	20.97	-30.27	0.117	125	-124.883	Pass





					an output	0 1 0 11 01 (30114)
DNB Job Nu	mber: 0	6027		Date:	30 Oct 2		formance
Customer:	C	elio Technolog	gy Corporation	St	Standard		
Model Numb	per: C	RF-C8N2/CRI	FC	FCC Part 15			
Description:	S	mart Phone Co		Clause			
	3	Mbps data rate	- High Channe	1		15	.247(b,1)
			Environmenta	al Conditions			
Ambie	ent Temperatu	re	Relative l	Humidity]	Barometric Pre	essure
	21 °C		25	%		101.2 kPa	ı
EUT perform	ned within the	requirements o	f the applicable	standard [X	[]Yes []No	Les Payne	
Freq MHz	Meas Peak Pwr (dBm)	Limit (dBm)	Delta (dBm)	Meas Peak Pwr (mW)	Limit (mW)	Delta (mW)	Pass/Fail
2480	-8.9	20.97	-29.87	0.129	125	-124.871	Pass



15.247 (d) Conducted Band Edge Measurements and Out of Band Emissions

Band-edge Compliance of RF Conducted Emissions

Use the following spectrum analyzer settings:

Span = wide enough to capture the peak level of the emission operating on the channel closest to the bandedge, as well as any modulation products which fall outside of the authorized band of operation

RBW 1% of the span VBW RBW Sweep = auto Detector function = peak Trace = max hold

Allow the trace to stabilize. Set the marker on the emission at the bandedge, or on the highest modulation product outside of the band, if this level is greater than that at the bandedge. Enable the marker-delta function, then use the marker-to-peak function to move the marker to the peak of the in-band emission. The marker-delta value now displayed must comply with the limit specified in this Section. Submit this plot.

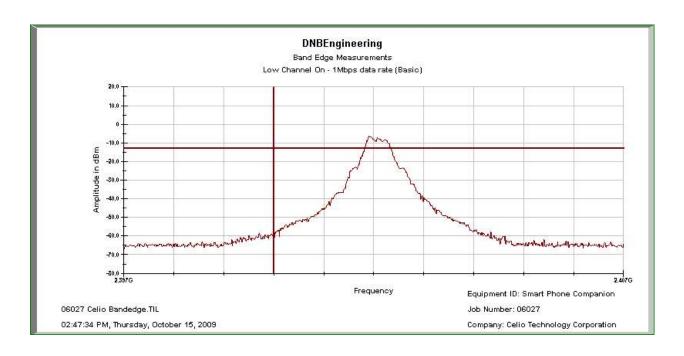
Now, using the same instrument settings, enable the hopping function of the EUT. Allow the trace to stabilize. Follow the same procedure listed above to determine if any spurious emissions caused by the hopping function also comply with the specified limit. Submit this plot.

Test Set Up: Same as 15.247 (a,2) 20 dB Emission Bandwidth



Band Edge Measurements

					٠,	4114	Luger	· I C u	bul CII	
DNB Job Nu	mber:	6027			Date:		15 Oct 2	009		formance
Customer:	(Celio Techr	nolog	y Corporation					Standard	
Model Numb	er: (CRF-C8N2/CRF-C8v (Inclusive of CRF-C7B)							FC	C Part 15
Description:	S	mart Phon	e Co	mpanion					Clause	
	1	Mbps data	rate	(Basic data rat	e)				15	5.247(d)
Ambie	ent Temperatu	re		Relative l	Humidity		I	Baron	ometric Pressure	
	19 °C			28	%			1	01.8 kPa	
EUT perform	ned within the	requireme	nts of	the applicable	standard [X	(] Ye	s [] No	Le	es Payne	
Conducted	Band Edge M	leasuremer	ıt	Radiated Co	rrected Edge N	Aeast	irement		_	
Limit	Lower Upper (MHz)			AVE Limit (dBuV/m)	Measured (Peak) (dBuV/m)	(Peak)		Γ	Freq Oelta MHz)	Pass/Fail
2400	2401.820	20		54.0	39.2		-14.8	1	.820	Pass



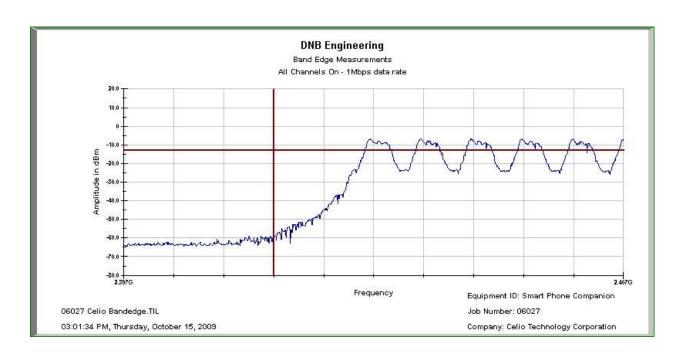
Frequency Span = 10 MHz

Resolution Bandwidth = 100 kHz = 1% of the Frequency Span



Band Edge Measurements

DNB Job Nu	ımber: 0	6027		Date:	15 Oct 2		nformance	
Customer:	C	elio Techno	ology Corporation			S	Standard	
Model Numl	ber: C	RF-C8N2/	CRF-C8v (Inclusiv	e of CRF-C7B)	FC	CC Part 15	
Description:	S	mart Phone	Companion				Clause	
	1	Mbps data	rate (Basic data rat	te)		1	5.247(d)	
Ambi	ent Temperatu	ature Relative Humidity Barom					essure	
	19 °C		28	%		101.8 kPa		
EUT perform	ned within the	requiremen	ts of the applicable	e standard [X	X] Yes [] No	Les Payne	,	
Conducted	l Band Edge M	easurement	Radiated Co	rrected Edge N	1easurement			
Limit	Lower (MHz)	Upper (MHz)		Measured (Peak) (dBuV/m)	Delta (dBuV)	Freq Delta (MHz)	Pass/Fail	
2400	2401.820		54.0	39.4	-14.6	1.820	Pass	



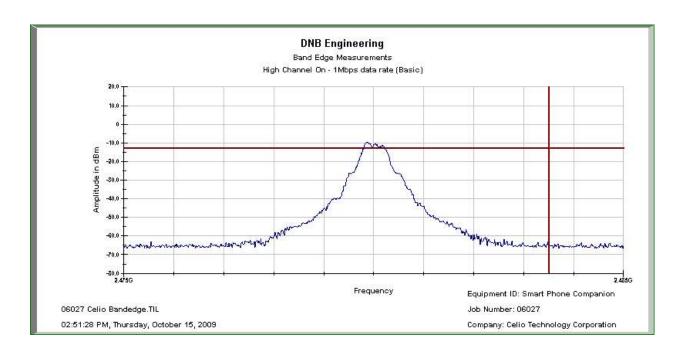
Frequency Span = 10 MHz

Resolution Bandwidth = 100 kHz = 1% of the Frequency Span



Band Edge Measurements

						a La,	, 0 1,10,	abul ciii	
DNB Job Nu	mber:	6027			Date:	15 C	ct 2009		formance
Customer:	(Celio Technology Corporation							andard
Model Numb	er: (CRF-C8N2/CRF-C8v (Inclusive of CRF-C7B) FCC Part							C Part 15
Description:	S						Clause		
	1	Mbps data rate (Basic data rate)						15	5.247(d)
Ambie	ent Temperatu	re	Re	lative H	umidity		Barometric Pressure		
	19 °C			28 %	6			101.8 kPa	
EUT perform	ed within the	requiremen	ts of the app	licable	standard [X	Yes [] No L	es Payne	
Conducted	Band Edge M	leasuremen	t Radia	ted Corı	rected Edge M	1easureme		_	
Limit	Lower (MHz)	Upper (MHz)			Measured (Peak) (dBuV/m)	Delta (dBuV)		Freq Delta MHz)	Pass/Fail
2483.5	83.5 2480.23		0 54.	0	38.7	-15.3	3	3.250	Pass



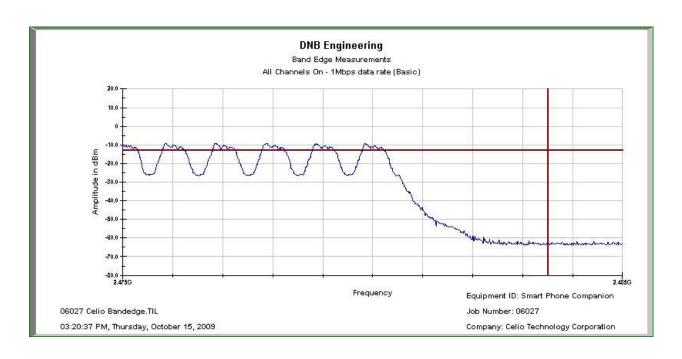
Frequency Span = 10 MHz

Resolution Bandwidth = 100 kHz = 1% of the Frequency Span



Band Edge Measurements

				2,	ina Bage	vi cubul cii			
DNB Job Nu	mber: 0	6027		Date:	15 Oct 2		nformance		
Customer:	C	Celio Technology Corporation Standa							
Model Numb	er: C	CRF-C8N2/CRF-C8v (Inclusive of CRF-C7B) FCC Part							
Description:							Clause		
	1	Mbps data r	1	5.247(d)					
Ambie	ent Temperatu	re	Relative I	Humidity	nidity Barometric Pressure				
	19 °C		28	%		101.8 kP	101.8 kPa		
EUT perform	ned within the	requirement	s of the applicable	standard [X	X] Yes [] No	Les Payne			
Conducted	Band Edge M	easurement	Radiated Con	rrected Edge N	1easurement	_			
Limit	Lower (MHz)	Upper (MHz)	AVE Limit (dBuV/m)	Measured (Peak) (dBuV/m)	Delta (dBuV)	Freq Delta (MHz)	Pass/Fail		
2483.5	83.5 2480.2		54.0	39.5	-14.5	3.230	Pass		



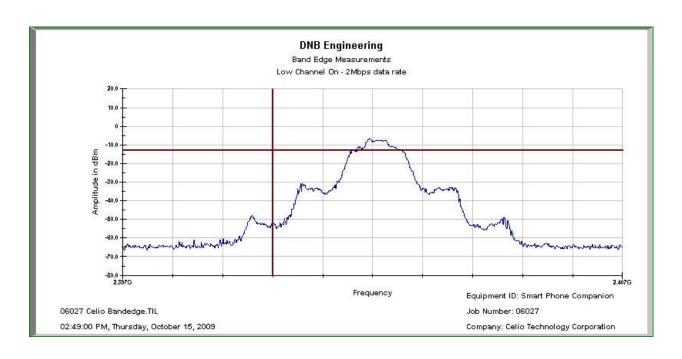
Frequency Span = 10 MHz

Resolution Bandwidth = 100 kHz = 1% of the Frequency Span



Band Edge Measurements

					۵,	4114	Lugu	·I·Cu	our cir	
DNB Job Nu	mber:	6027	Date:			15 Oct 2	009		formance	
Customer:	(Celio Techr	olog	y Corporation					St	andard
Model Numb	Number: CRF-C8N2/CRF-C8v (Inclusive of CRF-C7B) FCC Part						C Part 15			
Description:	The state of the s					Clause				
	2	2Mbps data rate						15	.247(d)	
Ambie	ent Temperatu	re		Relative l	Humidity	ity Barometric Pressure				ssure
	19 °C			28	%			1	01.8 kPa	
EUT perform	ned within the	requireme	nts of	the applicable	standard [X	(] Yes	s []No	Le	s Payne	
Conducted	Band Edge M	Ieasuremen	ıt	Radiated Co	rrected Edge N	Лeasu	rement			
Limit	Lower (MHz)	Uppe: (MHz		AVE Limit (dBuV/m)	Measured (Peak) (dBuV/m)	_	Delta dBuV)		Freq Oelta MHz)	Pass/Fail
2400	2401.156	.01.156		54.0	38.9	-	-15.1		.156	Pass



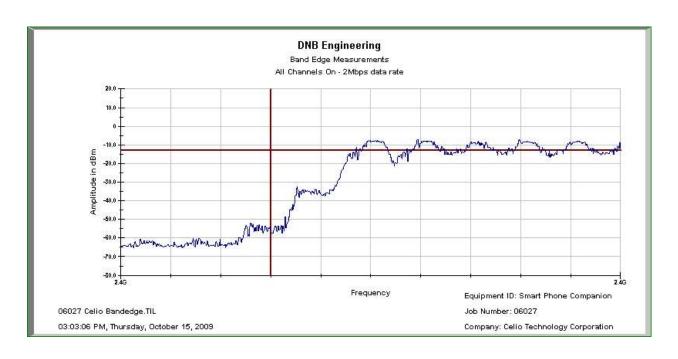
Frequency Span = 10 MHz

Resolution Bandwidth = 100 kHz = 1% of the Frequency Span



Band Edge Measurements

					0			
DNB Job Nu	mber: 0	6027		Date:	15 Oct 2		Conformance Standard	
Customer:	C	Celio Technology Corporation						
Model Numb	Number: CRF-C8N2/CRF-C8v (Inclusive of CRF-C7B) FCC Part						C Part 15	
Description: Smart Phone Companion						Clause		
	2	Mbps data 1	rate			1	5.247(d)	
Ambie	ent Temperatu	re	Relative I	Barometric Pr	netric Pressure			
	19 °C		28	101.8 kP	a			
EUT perform	ned within the	requiremen	s of the applicable standard [X] Yes [] No Le				Les Payne	
Conducted	Band Edge M	easurement	Radiated Con	rrected Edge N	1easurement	_		
Limit	Lower (MHz)	Upper (MHz)	AVE Limit (dBuV/m)	(Peak)		Freq Delta (MHz)	Pass/Fail	
2400	2401.660		54.0 39.3 -14.7		-14.7	1.660	Pass	



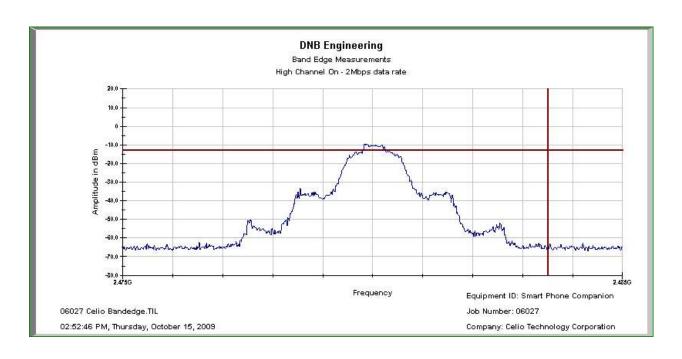
Frequency Span = 10 MHz

Resolution Bandwidth = 100 kHz = 1% of the Frequency Span



Band Edge Measurements

				۵,	mu Luge	VI CUBUI CII			
DNB Job Nu	mber: 0	6027		Date:	15 Oct 2		ıformance		
Customer:	C	Celio Technology Corporation Standa							
Model Numb	er: C	CRF-C8N2/CRF-C8v (Inclusive of CRF-C7B)							
Description:	S						Clause		
	2	Mbps data 1	1	5.247(d)					
Ambie	ent Temperatu	re	Relative I	Humidity]	Barometric Pr	ometric Pressure		
	19 °C		28	%		101.8 kP	a		
EUT perform	ned within the	requiremen	ts of the applicable	standard [X	X] Yes [] No	Les Payne			
Conducted	Band Edge M	easurement	Radiated Co	rrected Edge N	Aeasurement	_			
Limit	Lower (MHz)	Upper (MHz)	AVE Limit (dBuV/m)	Measured (Peak) (dBuV/m)	Delta (dBuV)	Freq Delta (MHz)	Pass/Fail		
2483.5	5 2480.33		0 54.0	39.2	-14.8	3.170	Pass		



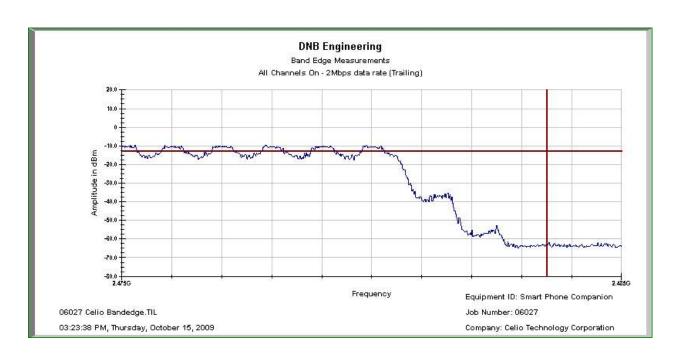
Frequency Span = 10 MHz

Resolution Bandwidth = 100 kHz = 1% of the Frequency Span



Band Edge Measurements

				۵,	mu Luge	vi cubul cii			
DNB Job Nu	mber: 0	6027		Date:	15 Oct 2		formance		
Customer:	C	Celio Technology Corporation Standa							
Model Numb	er: C	CRF-C8N2/CRF-C8v (Inclusive of CRF-C7B) FCC Part							
Description:	The state of the s					Clause			
	2	Mbps data 1	1.	5.247(d)					
Ambi	ent Temperatu	re	Relative I	Humidity]	Barometric Pr	ometric Pressure		
	19 °C		28	%		101.8 kPa	ì		
EUT perform	ned within the	requiremen	ts of the applicable	standard [X	X] Yes [] No	Les Payne			
Conducted	Band Edge M	easurement	Radiated Co.	rrected Edge N	Aeasurement	_			
Limit	Lower (MHz)	Upper (MHz)	AVE Limit (dBuV/m)	Measured (Peak) (dBuV/m)	Delta (dBuV)	Freq Delta (MHz)	Pass/Fail		
2483.5	2480.35		0 54.0	39.8	-14.2	3.150	Pass		



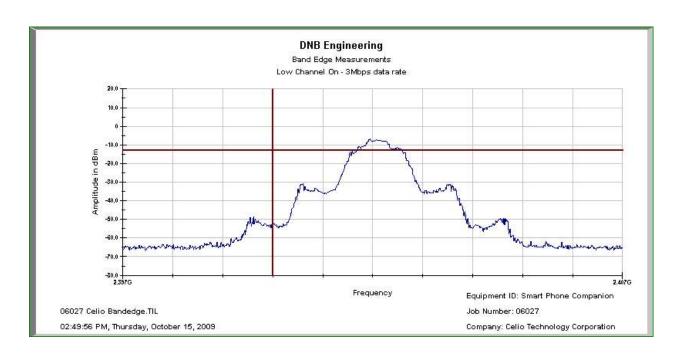
Frequency Span = 10 MHz

Resolution Bandwidth = 100 kHz = 1% of the Frequency Span



Band Edge Measurements

					٠,	4114	Luge	·I·Cu	our cir		
DNB Job Nu	mber: (06027			Date:		15 Oct 2	009		formance	
Customer:	(Celio Techr	nolog	y Corporation					St	andard	
Model Numb	er: CRF-C8N2/CRF-C8v (Inclusive of CRF-C7B) FCC Part						C Part 15				
Description:						Clause					
	3	Mbps data	Mbps data rate						15	5.247(d)	
Ambie	ent Temperatı	ire		Relative l	Humidity		1	Barom	rometric Pressure		
	19 °C			28	%			1	01.8 kPa		
EUT perform	ned within the	requireme	nts of	the applicable	standard [X	(] Ye	s []No	Le	s Payne		
Conducted	Band Edge M	1easuremer	nt	Radiated Co	rrected Edge N	Лeasu	rement				
Limit	Lower (MHz)	Uppe (MHz		AVE Limit (dBuV/m)	Measured (Peak) (dBuV/m)	_	Delta dBuV)		Freq Oelta MHz)	Pass/Fail	
2400	2401.540	.01.540		54.0	39.0		-15	1	.540	Pass	



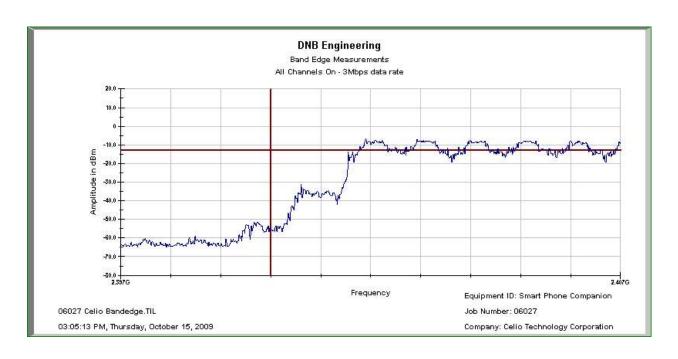
Frequency Span = 10 MHz

Resolution Bandwidth = 100 kHz = 1% of the Frequency Span



Band Edge Measurements

					0			
DNB Job Nu	mber: 0	6027		Date:	15 Oct 2		nformance	
Customer:	C	Celio Technology Corporation Standard						
Model Numb	er: C	:: CRF-C8N2/CRF-C8v (Inclusive of CRF-C7B) FCC Part 1						
Description: Smart Phone Companion						Clause		
	3	Mbps data 1	rate			1	5.247(d)	
Ambie	ent Temperatu	re	Relative I	Barometric Pr	netric Pressure			
	19 °C		28	101.8 kP	a			
EUT perform	ned within the	requiremen	ts of the applicable	standard [X	X] Yes [] No	Les Payne	•	
Conducted	Band Edge M	easurement	Radiated Cor	rrected Edge N	1easurement			
Limit	Lower (MHz)	Upper (MHz)	AVE Limit (dBuV/m)	(Peak)		Freq Delta (MHz)	Pass/Fail	
2400	2401.640		54.0 39.4 -14.6		1.640	Pass		



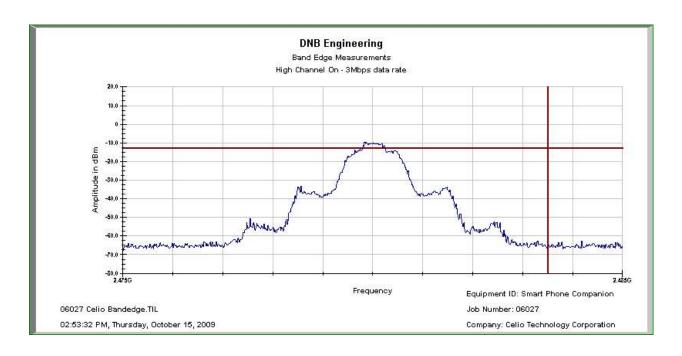
Frequency Span = 10 MHz

Resolution Bandwidth = 100 kHz = 1% of the Frequency Span



Band Edge Measurements

DNB Job Nu	mber: 0	6027		Date:	15 Oct 2		ıformance		
Customer:	C	elio Techno	logy Corporation			S	tandard		
Model Numb	er: C	CRF-C8N2/CRF-C8v (Inclusive of CRF-C7B)							
Description:	S	Smart Phone Companion					Clause		
	3	3Mbps data rate					5.247(d)		
Ambient Temperature Relative Humidity					Barometric Pressure				
	19 °C		28	%		101.8 kP	101.8 kPa		
EUT perform	ned within the	requirement	s of the applicable	e standard [X	X] Yes [] No	Les Payne			
Conducted	Band Edge M	easurement	Radiated Co	rrected Edge N	Aeasurement (
Limit	Lower (MHz)	Upper (MHz)	AVE Limit (dBuV/m)	Measured (Peak) (dBuV/m)	Delta (dBuV)	Freq Delta (MHz)	Pass/Fail		
2483.500		2480.250	54.0	38.9	-15.1	3.250	Pass		



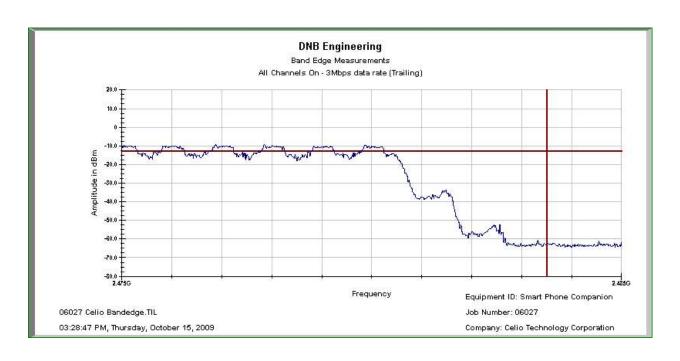
Frequency Span = 10 MHz

Resolution Bandwidth = 100 kHz = 1% of the Frequency Span



Band Edge Measurements

						ma Lage	11 1 Cu	bul CII	
DNB Job Nu	mber: (6027			Date:	15 Oct	2009		formance
Customer:	(Celio Technology Corporation							andard
Model Numb	er: (CRF-C8N2/CRF-C8v (Inclusive of CRF-C7B) FCC Part							C Part 15
Description:	\$						Clause		
	3	Mbps data rate						15	5.247(d)
Ambie	ent Temperatı	re	F	Relative I	Humidity		Barom	netric Pressure	
	19 °C			28	%		1	01.8 kPa	
EUT perform	ed within the	requiremen	its of the ap	pplicable	standard [X	[]Yes []N	o Le	s Payne	
Conducted	Band Edge M	Ieasuremen	t Rad	liated Co	rrected Edge N	1easurement			
Limit	Lower (MHz)	Upper (MHz)		E Limit uV/m)	Measured (Peak) (dBuV/m)	Delta (dBuV)	D	Freq Oelta MHz)	Pass/Fail
2483.500		2480.250		64.0	39.2	-14.8	3.	.250	Pass



Frequency Span = 10 MHz

Resolution Bandwidth = 100 kHz = 1% of the Frequency Span



Conducted Spurious

DNB Job Number:	06027		Date:	15 Oct 2009	Conformance		
Customer:	Celio Techr	nology Corporation	Standard				
Model Number:	CRF-C8N2	RF-C8N2/CRF-C8v (Inclusive of CRF-C7B)					
Description:	Smart Phon	e Companion		Clause			
	Test Proced	lure			15.247(d)		
Ambient Temper	ature	Relative Hur	nidity	Baron	netric Pressure		
19 °C	101.8 kPa						
EUT performed within the requirements of the applicable standard [X] Yes [] No Les Payne							

Spurious RF Conducted Emissions

Use the following spectrum analyzer settings:

Span = wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10th harmonic. Typically, several plots are required to cover this entire span.

RBW = 100 kHz

VBW RBW

Sweep = auto

Detector function = peak

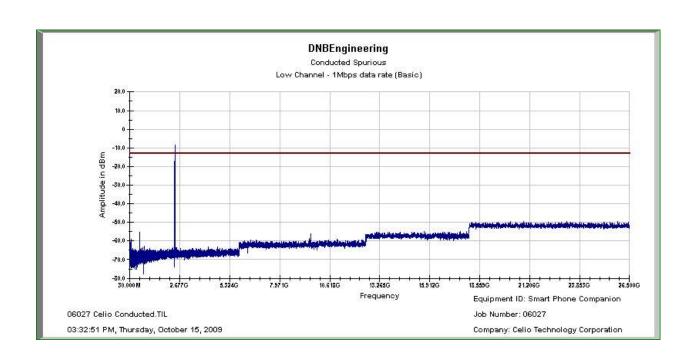
Trace = max hold

Allow the trace to stabilize. Set the marker on the peak of any spurious emission recorded. The level displayed must comply with the limit specified in this Section. Submit these plots.



Conducted Spurious

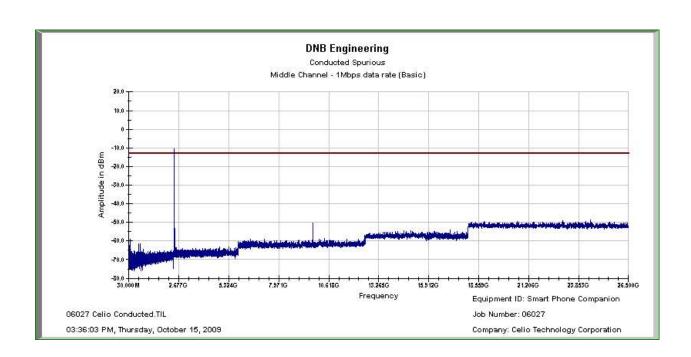
DNB Job Number:	06027	06027 Date: 15 Oct 2009					
Customer:	Celio Techi	nology Corporation	Standard				
Model Number:	CRF-C8N2	/CRF-C8v (Inclusive	FCC Part 15				
Description:	Smart Phon	e Companion				Clause	
	1Mbps data	rate (Basic data rate	15.247(d)				
Ambient Temper	ature	Relative I	Humidity]	Baron	netric Pressure	
19 °C		28	%		1	01.8 kPa	
EUT performed within t	he requireme	nts of the applicable) Le	es Payne			
Peak Output Power	Reading -20			С		Pass/Fall	
-8.5 dBm		-8.1 dBm	-8.1 dBm -28.1 dBm		Pass		





Conducted Spurious

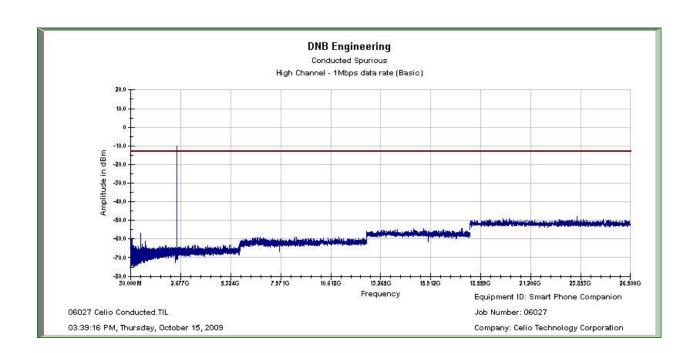
DNB Job Number:	06027		2009	Conformance		
Customer:	Celio Techi	nology Corporation		Standard		
Model Number:	Iodel Number: CRF-C8N2/CRF-C8v (Inclusive of CRF-C7B)					FCC Part 15
Description:	Smart Phon	e Companion		Clause		
	1Mbps data	rate (Basic data rat	15.247(d)			
Ambient Temper	ature	Relative 1	Humidity	Barometric Pressure		
19 °C		28 %			01.8 kPa	
EUT performed within the requirements of the applicable standard [X] Yes [] No Les Payne						
Peak Output Power		Reading -20dBc			Pass/Fall	
-9.3 dBm		-10.5 dBm	-30.5 dBm		Pass	





Conducted Spurious

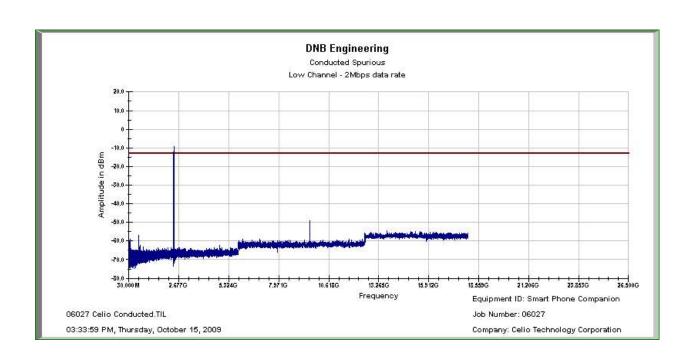
DNB Job Number:	06027		2009	Conformance		
Customer:	Celio Techi	nology Corporation		Standard		
Model Number:	ber: CRF-C8N2/CRF-C8v (Inclusive of CRF-C7B)					FCC Part 15
Description:	Smart Phone Companion					Clause
	1Mbps data rate (Basic data rate) - High Channel					15.247(d)
Ambient Tempera	Relative I	Humidity	Barometric Pressure			
19 °C		28 %		01.8 kPa		
EUT performed within the requirements of the applicable standard [X] Yes [] No Les Payne						
Peak Output Power	Output Power Reading		-20dBc			Pass/Fall
-8.9 dBm		-10.1 dBm	-30.1 dBm			Pass





Conducted Spurious

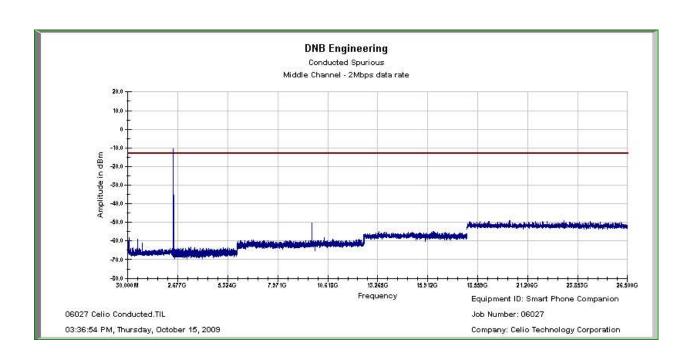
DNB Job Number:	06027		Date:	15 Oct 2	2009	Conformance	
Customer:	Celio Techi	nology Corporation				Standard	
Model Number:	CRF-C8N2/CRF-C8v (Inclusive of CRF-C7B)					FCC Part 15	
Description:	Smart Phon	e Companion		Clause			
	2Mbps data	rate - Low Channe	15.247(d)				
Ambient Temperature Relative Humidity B					Baron	arometric Pressure	
19 °C		28 %		01.8 kPa			
EUT performed within the requirements of the applicable standard [X] Yes [] No Les Payne							
Peak Output Power	k Output Power		Reading -20dBc			Pass/Fall	
-8.5 dBm		-8.95 dBm	-28.9 dBn	1		Pass	





Conducted Spurious

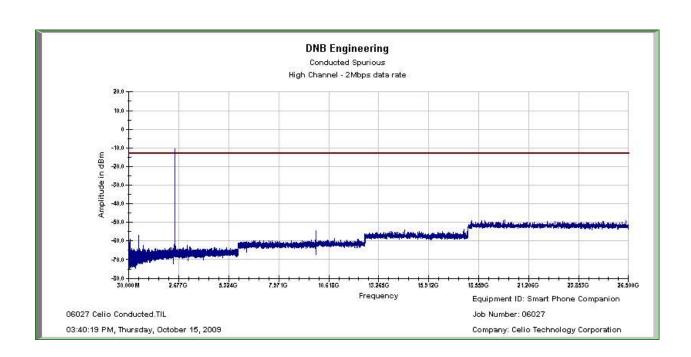
DNB Job Number:	06027		Date:	15 Oct 2	2009	Conformance	
Customer:	Celio Techi	nology Corporation		Standard			
Model Number:	CRF-C8N2	/CRF-C8v (Inclusive		FCC Part 15			
Description:	Smart Phon	e Companion		Clause			
	2Mbps data	rate - Mid Channe	15.247(d)				
Ambient Temperature Relative Humidity B					Baron	arometric Pressure	
19 °C		28 %		1	01.8 kPa		
EUT performed within the requirements of the applicable standard [X] Yes [] No Les Payne							
Peak Output Power	Reading		-20dBc	-20dBc		Pass/Fall	
-9.3 dBm		-10.5 dBm	-30.5 dBn	ı		Pass	





Conducted Spurious

DNB Job Number:	06027		2009	Conformance		
Customer:	Celio Techi	nology Corporation		Standard		
Model Number:	per: CRF-C8N2/CRF-C8v (Inclusive of CRF-C7B)					FCC Part 15
Description:	Smart Phone Companion					Clause
	2Mbps data	rate - High Channe	15.247(d)			
Ambient Temperature Relative Humidity Bard					Baron	netric Pressure
19 °C		28 %		01.8 kPa		
EUT performed within the requirements of the applicable standard [X] Yes [] No Les Payne						
Peak Output Power Readin		Reading	-20dBc			Pass/Fall
-8.9 dBm	-8.9 dBm -		-30.5 dBm		Pass	

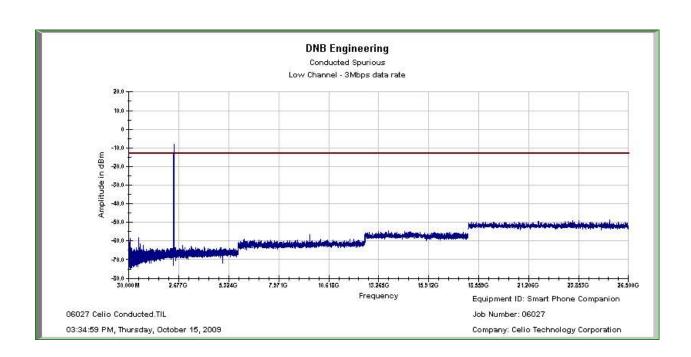




Conducted Spurious

DNB Job Number:	06027	06027 Date: 15 Oct 2009				Conformance
Customer:	Celio Techi	nology Corporation		Standard		
Model Number:	CRF-C8N2/CRF-C8v (Inclusive of CRF-C7B)					FCC Part 15
Description:	Smart Phon	Smart Phone Companion				Clause
	3Mbps data	rate - Low Channe	15.247(d)			
Ambient Temper	ature	Relative Humidity Barom			metric Pressure	
19 °C		28 %		101.8 kPa		
EUT performed within the requirements of the applicable standard [X] Yes [] No Les Payne						
Peak Output Power	Reading		-20dBc			Pass/Fall
-6.5 dBm		-7.7 dBm	-27.7 dBm	1		Pass

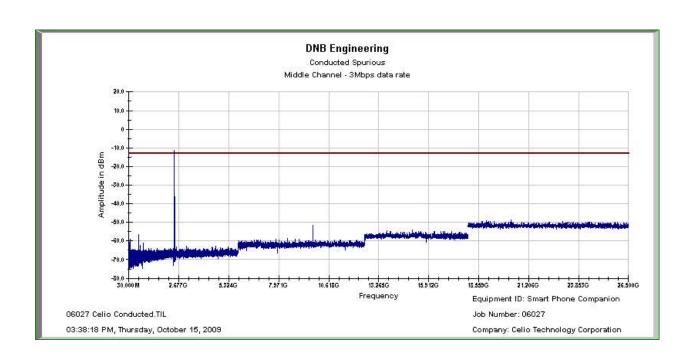
Resolution Bandwidth = 100 kHzVideo Bandwidth = 300 kHz





Conducted Spurious

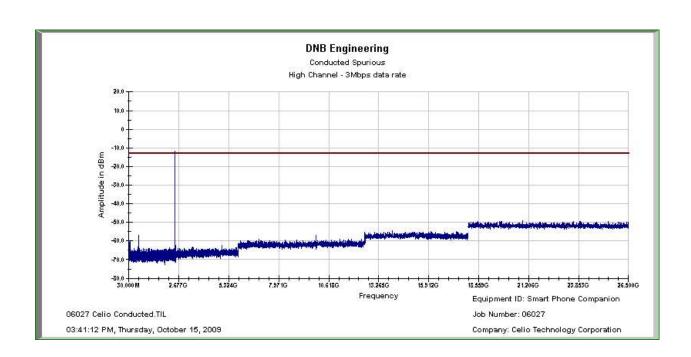
DNB Job Number:	06027		2009	Conformance		
Customer:	Celio Techi	nology Corporation		Standard		
Model Number:	CRF-C8N2/CRF-C8v (Inclusive of CRF-C7B)					FCC Part 15
Description:	Smart Phone Companion					Clause
	3Mbps data		15.247(d)			
Ambient Tempera	Relative H	Humidity	Barometric Pressure			
19 °C		28 %		01.8 kPa		
EUT performed within the requirements of the applicable standard [X] Yes [] No Les Payne						
Peak Output Power	Power Reading		-20dBc			Pass/Fall
-9.3 dBm	-9.3 dBm -:		-31.3 dBm			Pass





Conducted Spurious

DNB Job Number:	06027	06027 Date: 15 Oct 2009				Conformance
Customer:	Celio Technology Corporation					Standard
Model Number:	Model Number: CRF-C8N2/CRF-C8v (Inclusive of CRF-C7B)					FCC Part 15
Description:	Smart Phon	Smart Phone Companion				Clause
	3Mbps data	rate - High Channo	15.247(d)			
Ambient Temper	ature	Relative Humidity Barom			metric Pressure	
19 °C		28 %		01.8 kPa		
EUT performed within the requirements of the applicable standard [X] Yes [] No Les Payne						
Peak Output Power	ak Output Power Reading		-20dBc			Pass/Fall
-8.9 dBm		-11.7 dBm	-31.7 dBm		Pass	



15.247(d): Power spectral density(PSD).

The same method of determining the conducted output power shall be used to determine the power spectral density.

If a peak output power is measured, then a peak power spectral density measurement is required. If an average output power is measured, then an average power spectral density measurement should be used.

Locate and zoom in on emission peak(s) within the passband.

Set RBW = 3 kHz,

VBW > RBW,

Sweep= (SPAN/3 kHz) e.g., for a span of 1.5 MHz,

the sweep should be $1.5 \times 10_6 \times 3 \times 10_3 = 500$ seconds.

The peak level measured must be no greater than + 8 dBm. If external attenuation is used, don't forget to add this value to the reading. Use the following guidelines for modifying the power spectral density measurement procedure when necessary.

For devices with spectrum line spacing greater than 3 kHz no change is required.

For devices with spectrum line spacing equal to or less than 3 kHz, the resolution bandwidth must be reduced below 3kHz until the individual lines in the spectrum are resolved. The measurement data must then be normalized to 3 kHz by summing the power of all the individual spectral lines within a 3kHz band (in linear power units) to determine compliance.

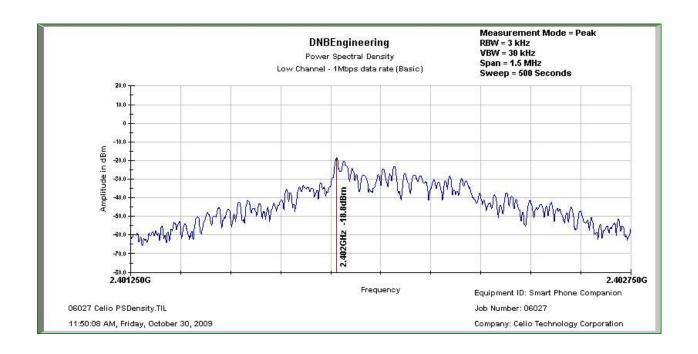
If the spectrum line spacing cannot be resolved on the available spectrum analyzer, the noise density function on most modern conventional spectrum analyzers will directly measure the noise power density normalized to a 1 Hz noise power bandwidth. Add 35dB for correction to 3 kHz.

Should all the above fail or any controversy develop regarding accuracy of measurement, the Laboratory will use the HP 89440A Vector Signal Analyzer for final measurement unless a clear showing can be made for a further alternate.



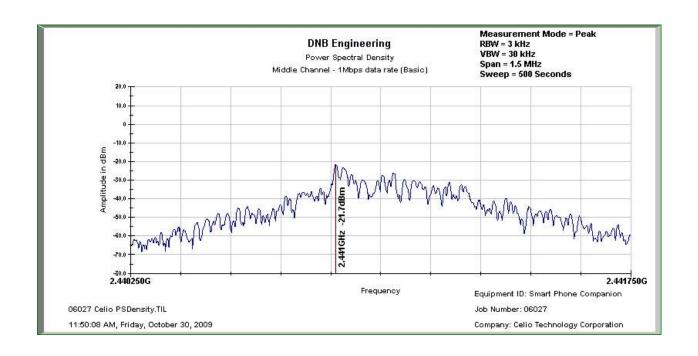
Power Spectral Density

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DNB Job Number	:: 06027		Date:	30 Oct 2009	Conformance Standard		
Customer:	mer: Celio Technology Corporation						
Model Number:	Model Number: CRF-C8N2/CRF-C8v (Inclusive of CRF-C7B)						
Description:	Description: Smart Phone Companion						
	1Mbps data	1Mbps data rate (Basic data rate)					
		Environment	al Conditions				
Ambient T	emperature	Relative l	Humidity	Barometric Pressure			
21	°C	25	%	101.	101.2 kPa		
EUT performed w	ithin the requireme	nts of the applicable	standard [X] Ye	es [] No Les P	ayne		
Channel	Freq MHz	Meas PSD (dBm)	Limit (dBm)	Delta (dBm)	Pass/Fail		
Low	2401.867	-18.8	8.0	-26.8	Pass		



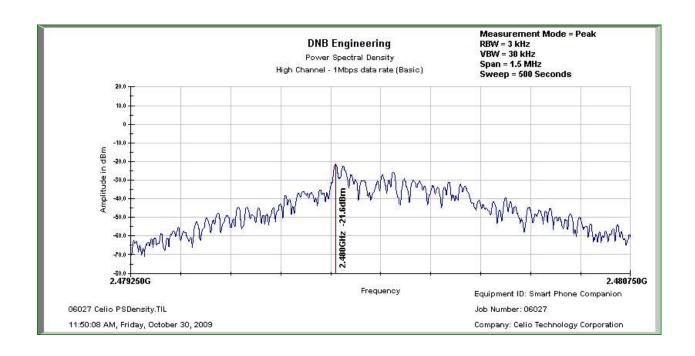


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DNB Job Number	:: 06027		Date:	30 Oct 2009	Conformance	
Customer:	Celio Techi	nology Corporation			Standard	
Model Number:	CRF-C8N2	/CRF-C8v (Inclusiv	e of CRF-C7B)		FCC Part 15	
Description:	Smart Phon	e Companion			Clause 15.247(e)	
	1Mbps data	1Mbps data rate (Basic data rate)				
		Environmenta	al Conditions			
Ambient T	emperature	Relative Humidity Barom			ic Pressure	
21 °C		25 %		101.	101.2 kPa	
EUT performed within the requirements of the applicable standard [X] Yes [] No Les Payne						
Channel	Freq MHz	Meas PSD (dBm)	Limit (dBm)	Delta (dBm)	Pass/Fail	
Middle	2440.864	-21.7	8.0	-29.7	Pass	



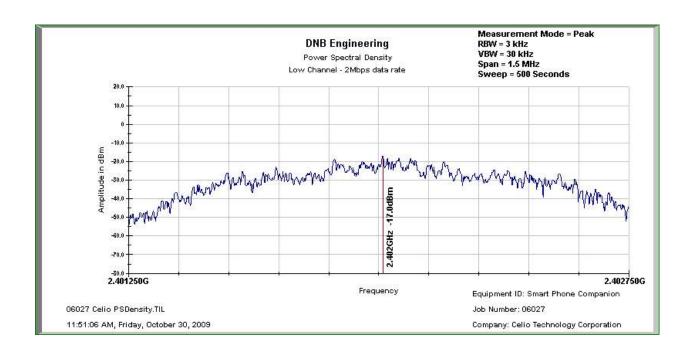


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DNB Job Number	:: 06027		Date:	30 Oct 2009	Conformance		
Customer:	Celio Techi	Celio Technology Corporation Star					
Model Number:	CRF-C8N2	/CRF-C8v (Inclusiv	e of CRF-C7B)		FCC Part 15		
Description:	Smart Phon	Smart Phone Companion					
	1Mbps data	rate (Basic data rat	e)		15.247(e)		
		Environment	al Conditions				
Ambient T	emperature	Relative Humidity Barom			ic Pressure		
21 °C		25 %		101.	101.2 kPa		
EUT performed w	ithin the requireme	nts of the applicable	standard [X] Ye	es [] No Les P	ayne		
Channel	Freq MHz	Meas PSD (dBm)	Limit (dBm)	Delta (dBm)	Pass/Fail		
High	2479.864	-21.6	8.0	-29.6	Pass		



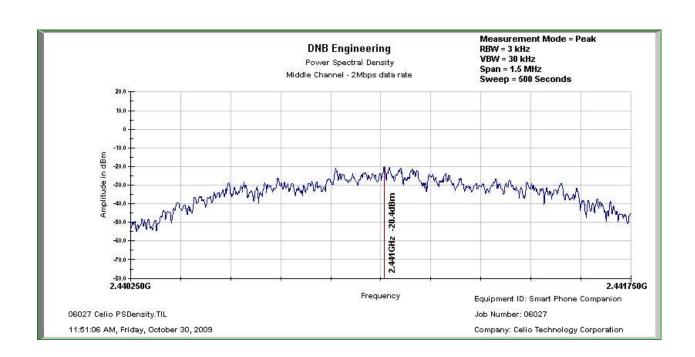


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DNB Job Number	:: 06027		Date:	30 Oct 2009	Conformance Standard		
Customer:	Celio Tech	Celio Technology Corporation					
Model Number:	CRF-C8N2	/CRF-C8v (Inclusive	e of CRF-C7B)		FCC Part 15		
Description:	Smart Phor	e Companion			Clause		
	2Mbps data	rate			15.247(e)		
		Environmenta	al Conditions				
Ambient Temperature		Relative Humidity Baron		Baromet	ric Pressure		
21 °C		25 %		101	01.2 kPa		
EUT performed w	ithin the requireme	nts of the applicable	standard [X] Ye	es [] No Les	Payne		
Channel	Freq MHz	Meas PSD (dBm)	Limit (dBm)	Delta (dBm)	Pass/Fail		
Low	2402.012	-17.0	8.0	-25.0	Pass		



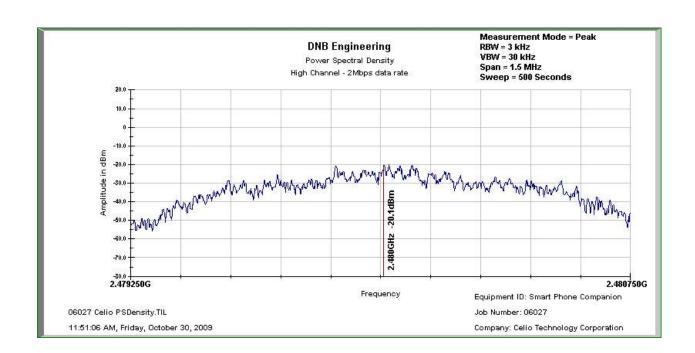


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DNB Job Number	:: 06027		Date:	30 Oct 2009	Conformance		
Customer:	Celio Techi	Celio Technology Corporation Sta					
Model Number:	CRF-C8N2	/CRF-C8v (Inclusiv	e of CRF-C7B)		FCC Part 15		
Description:	Smart Phon	Smart Phone Companion					
	2Mbps data	rate			15.247(e)		
		Environment	al Conditions				
Ambient T	emperature	Relative Humidity Barom			ic Pressure		
21 °C		25 %		101.	101.2 kPa		
EUT performed w	ithin the requireme	nts of the applicable	standard [X] Ye	es [] No Les P	ayne		
Channel	Freq MHz	Meas PSD (dBm)	Limit (dBm)	Delta (dBm)	Pass/Fail		
Middle	2441.011	-20.4	8.0	-28.4	Pass		



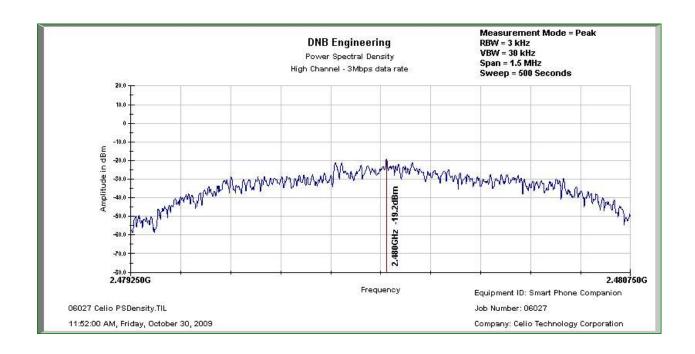


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DNB Job Number	:: 06027	06027		30 Oct 2009	Conformance	
Customer:	Celio Techi	nology Corporation			Standard	
Model Number:	CRF-C8N2	/CRF-C8v (Inclusiv	e of CRF-C7B)		FCC Part 15	
Description:	Smart Phon	e Companion			Clause 15.247(e)	
	2Mbps data	2Mbps data rate				
		Environment	al Conditions			
Ambient T	emperature	Relative Humidity Barome			ic Pressure	
21	°C	25 %			2 kPa	
EUT performed within the requirements of the applicable standard [X] Yes [] No Les Payne						
Channel	Freq MHz	Meas PSD (dBm)	Limit (dBm)	Delta (dBm)	Pass/Fail	
High	2480.009	-20.1	8.0	-28.1	Pass	



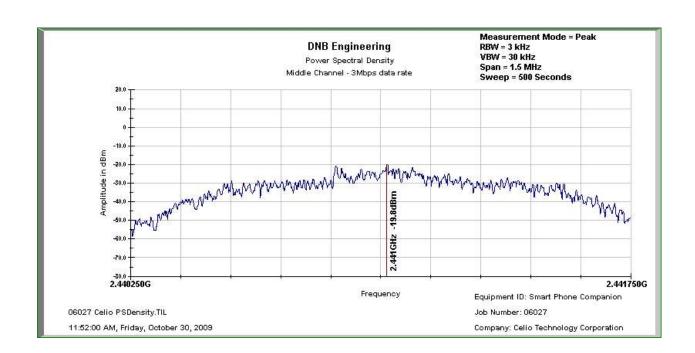


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DNB Job Number	:: 06027	06027		30 Oct 2009	Conformance	
Customer:	Celio Tech	nology Corporation			Standard	
Model Number:	CRF-C8N2	/CRF-C8v (Inclusiv	e of CRF-C7B)		FCC Part 15	
Description:	Smart Phor	ne Companion			Clause 15.247(e)	
	3Mbps data	3Mbps data rate				
		Environment	al Conditions			
Ambient T	emperature	Relative Humidity Barom		Barometr	etric Pressure	
21	°C	25 % 101			2 kPa	
EUT performed within the requirements of the applicable standard [X] Yes [] No Les Payne						
Channel	Freq MHz	Meas PSD (dBm)	Limit (dBm)	Delta (dBm)	Pass/Fail	
Low	2402.018	-16.8	8.0	-24.8	Pass	



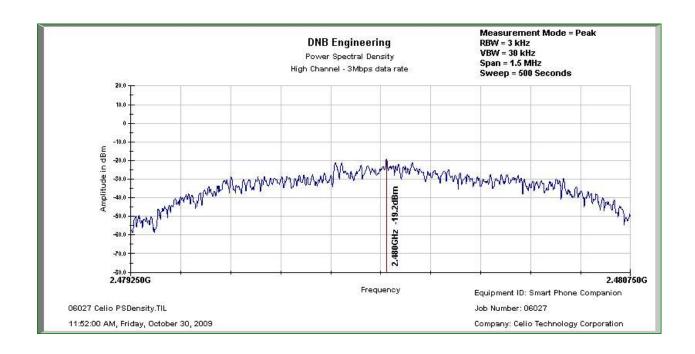


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DNB Job Number	:: 06027		Date:	30 Oct 2009	Conformance		
Customer:	Celio Techi	Celio Technology Corporation Sta					
Model Number:	CRF-C8N2	/CRF-C8v (Inclusiv	e of CRF-C7B)		FCC Part 15		
Description:	Smart Phon	Smart Phone Companion					
	3Mbps data	rate			15.247(e)		
		Environment	al Conditions				
Ambient T	emperature	Relative Humidity Barom			ic Pressure		
21 °C		25 %		101.	01.2 kPa		
EUT performed w	ithin the requireme	nts of the applicable	standard [X] Ye	es [] No Les P	ayne		
Channel	Freq MHz	Meas PSD (dBm)	Limit (dBm)	Delta (dBm)	Pass/Fail		
Middle	2441.018	-19.8	8.0	-27.8	Pass		



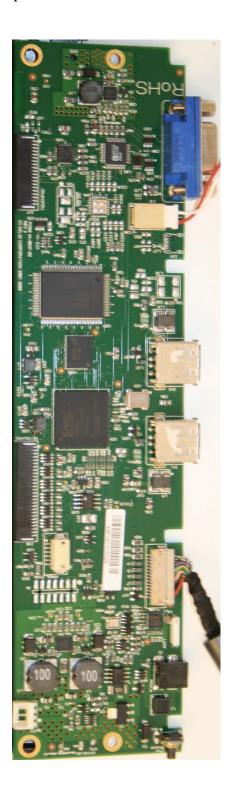


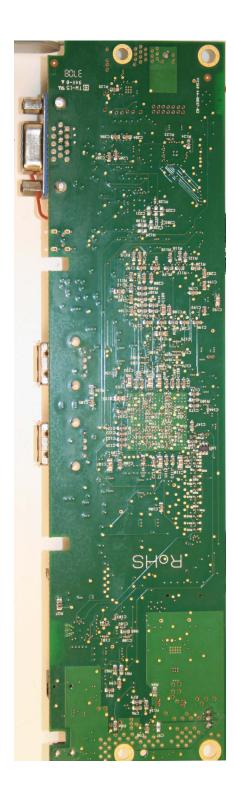
				I o wer spectrum z constru			
DNB Job Number	:: 06027	06027		30 Oct 2009	Conformance		
Customer:	Celio Techi	nology Corporation			Standard		
Model Number:	CRF-C8N2	/CRF-C8v (Inclusiv	e of CRF-C7B)		FCC Part 15		
Description:	Smart Phon	e Companion			Clause 15.247(e)		
	3Mbps data	3Mbps data rate					
		Environment	al Conditions				
Ambient T	emperature	Relative Humidity Barom			ic Pressure		
21	°C	25 %			2 kPa		
EUT performed within the requirements of the applicable standard [X] Yes [] No Les Payne							
Channel	Freq MHz	Meas PSD (dBm)	Limit (dBm)	Delta (dBm)	Pass/Fail		
High	2480.017	-19.2	8.0	-27.2	Pass		



2.1033 (b) (7) Equipment Photographs

Photo 1	Internal	Top of PCB
Photo 2	Internal	Bottom of PCB
Photo 3	Internal	Close up of Bluetooth Radio Section
Photo 4	External	Front of Unit - Closed
Photo 5	External	Front of Unit - Opened
Photo 6	External	Back of Unit - Opened
Photo 7	External	Bottom of Unit - Label Location

















RF Exposure Requirements

15.247 (b)(5)

RF Safety Calculations for Mobile Device:

EIRP = 0.447mW (Using a 3dB Gain Antenna)

Conducted Output Power = 0.224mW

Maximum allowed = $60/f_{GHZ} = 60/2.441.75 = 24.57W$

Per evaluation above this device is considered as having no quantitative effect on RF Exposure.

RF Exposure – MPE Calculations (2400-2483.5 MHz Band) (Portable Device Information Only)

Transmitter Power: 0.224 mW

Antenna Gain: 3 dB Cable loss: 0 dB

Frequency range: 2400 - 2483.5 MHz

Assumptions

- 1. A single ¼ wavelength radiating antenna is assumed.
- 2. Closest exposure distance is assumed to be 20 cm

Calculations

The following results shall be assumed to be accurate for the far-field only. These predictions will over-estimate power density in the near-field. Based on the use of a ¼ wavelength radiator, a distance of 20 cm is considered to be in the far-field for all cases.

 $S = PG/4*PI*R^2$

P is 0.224 mW

G is 3 dB (Antenna gain – loss) or $10^{(3/10)}$ or 1.995

R is 20 cm

 $S = 0.000089 \text{ mW/cm}^2$

For Occupational/Controlled Exposure

From 1,500 to 100,000 MHz, power density limit is 5 mW/cm² for 6 minutes

For General Population/Uncontrolled Exposure

From 1,500 to 100,000 MHz, power density limit is 1 mW/cm² for 30 minutes

Conclusion: Meets MPE limits

End of Report