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SAR TEST EXCLUSION CALCULATION

FCC ID: VC7120-0129
Model numbers: Aura 42 and Chroma 42

Based on guidance from KDB 447498

Time averaged conducted power		
Nominal power output	-5dBm	Set by Firmware
Production tolerance	+0.5dB	IC tolerance over temperature and supply
max conducted power	-4.5dBm (0.35mW)	“tune up tolerance”
Max theoretical duty cycle in normal operation	0.14%	25ms every 17.6s
Max average conducted power	0.00049 mW	
Rounded up to nearest mW	1 mW	(clause 4.3.1)

Minimum test Separation Distance	
Minimum 5mm is used (clause 4.1.5)	It is conceivable that a user might touch the electronic shelf label display while it is transmitting. Antenna is 4mm from the surface of the display.

Minimum frequency	902.5 MHz
Maximum frequency	927.5 MHz

SAR test exclusion threshold calculation (clause 4.3.1)

*Calculation = Power of channel (mW) / min test separation(mm) * [sqrt freq (GHz)]. result rounded to 1decimal place*

Min channel : 1 / 5 * [sqrt 0.9025] = 0.2
Max channel: 1 / 5 * [sqrt 0.9275] = 0.2

This is below the limits for 1-g SAR (3.0) and 10-g SAR (7.5) and so the product meets the thresholds for SAR test exclusion.

Assessment carried out by:-

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