EXHIBIT C - RF EXPOSURE EVALUATION

Applicable Standard

According to subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm^2)	Averaging Time (minutes)
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f²)	30
30–300	27.5	0.073	0.2	30
300–1500	/	/	f/1500	30
1500–100,000	/	/	1.0	30

f = frequency in MHz; * = Plane-wave equivalent power density;

According to §1.1310 and §2.1091 RF exposure is calculated.

Calculation formula:

Prediction of power density at the distance of the applicable MPE limit
S = PG/4πR² = power density (in appropriate units, e.g. mW/cm^2);
P = power input to the antenna (in appropriate units, e.g., mW);
G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

Calculated Data:

Operation Modes	Frequency (MHz)	Antenna Gain		Conducted output power including Tune-up Tolerance▲		Evaluation Distance (cm)	Power Density (mW/cm^2)	MPE Limit (mW/cm^2)
		(dBi)	(numeric)	(dBm)	(mW)			
BLE	2402-2480	1.8	1.51	1	1.26	20.00	0.0004	1.0
NFC	13.56	0	1.0	-29.02	0.001	20.00	<<0.001	0.98

Note:
1. The Conducted output power including Tune-up Tolerance provided by manufacturer
2. EIRP(dBm)=E(dBuV/m)-95.2 for 3 meters distance
   NFC E Field =66.18dBuV/m@3m
   ==> EIRP= -29.02dBm

Simultaneous transmission:

BLE and NFC can transmit simultaneously:

$$\sum_{i} \frac{S_i}{S_{Limit,i}} \leq 1$$

$S_{BLE} / S_{limit\text{-}BLE} + S_{NFC} / S_{limit\text{-}NFC}$

=0.0004/1.0+0.001/0.98

<<0.01

Result: Compliant. The device compliant RF Exposure at 20cm distances.

***** END OF REPORT *****