Certification Exhibit

FCC ID: 2ADIR-KO310

FCC Rule Part: 47 CFR Part 2.1091

Project Number: 721003386

Manufacturer: The Coca-Cola Company
Model Name / Number: UHF RFID Reader Module / KO310

RF Exposure

General Information:

Applicant: The Coca-Cola Company
Device Category: Mobile
Environment: General Population/Uncontrolled Exposure

Technical Information

Antenna	Antenna Type	Antenna Gain (dBi)
1	Trace	-33.02
2	Trace	-33.02
3	Trace	-31.16
4	Trace	0.41
5	Trace	-36.98
6	Trace	-36.53

Note: From the above table, worst-case antenna gain was used to show the MPE calculation.

Technical Information (RFID– FCC 15.247) – Antenna 4:

Frequency Range (MHz): 902.75 – 927.25
Antenna Type: Trace Antenna
Antenna Gain: 0.41 dBi
*Maximum Transmitter Conducted Power: 26.82dBm, 480.84mW
Maximum System EIRP: 27.23dBm, 528.45mW
Exposure Conditions: 20 centimeters
*Worst Case from all antenna ports

RF Exposure Calculation

Table 1: Device Characteristics

Technical Parameters	Antenna 4
Frequency Range (MHz)	902.75 – 927.25
Separation Distance (cm)	20.00
Separation Distance (m)	0.2000
Antenna Gain (dBi)	0.41
ERP Easily Determined	YES
Conducted Power (dBm)	26.82
Conducted Power (mW)	480.84
Duty Factor (Source-Based) %	100
Maximum (Source-Based) Time-Averaged Conducted Power (mW)	480.84
Maximum (Source-Based) Time-Averaged ERP (mW)	322.22
Maximum (Source-Based) Time-Averaged EIRP (mW)	528.45
Maximum Output (mW)	480.84

Test Exemption Criteria

Test exemption is determined by 47 CFR 1.1307(b)(3)(i)(B) where single RF source is exempt if:
Table 1 and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in Table 1 to apply, R must be at least $\lambda/2\pi$, where λ is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of $\lambda/4$ or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

TABLE 1 TO § 1.1307(b)(3)(i)(C)—SINGLE RF SOURCES SUBJECT TO ROUTINE ENVIRONMENTAL EVALUATION

RF Source frequency (MHz)	Threshold ERP (watts)
0.3-1.34	1,920 R^2.
1.34-30	3,450 R^2/f^2.
30-300	3.83 R^2.
300-1,500	0.0128 R^2 f.
1,500-100,000	19.2R^2.

Table 2: 47 CFR 1.1307(b)(3)(i)(C) MPE – Based Exemption ERP (W)

Technical Parameters	Antenna 4
λ / 2π (m)	0.053
R≥ λ / 2π	YES
Maximum (Source-Based) Time-Averaged ERP (W)	0.3222
ERP Threshold (W)	0.4622
Exemption	YES