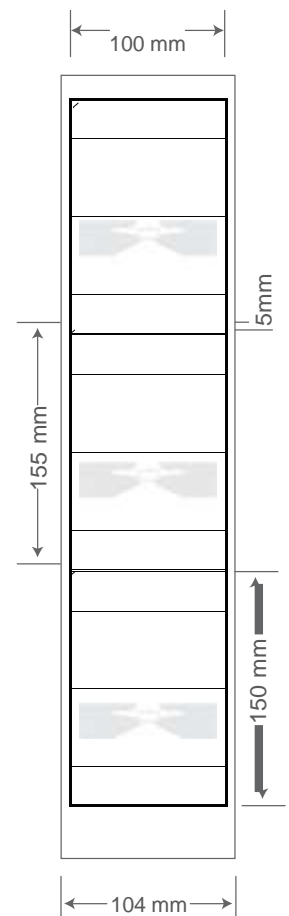
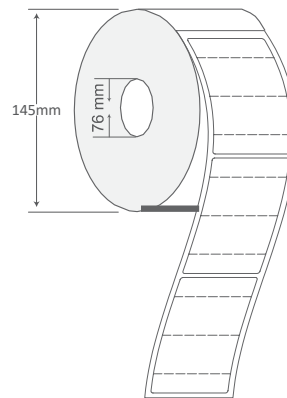


SIVA's Dumbel-T is a high performance UHF RFID tag for both metallic and non-metallic surfaces. The tag extends upright above the surface to prevent any transmission interference caused by the surface underneath and can read up to 13 meters away using UHF reader antennas. It is delivered in a reel format and can be encoded and printed with typical RFID printers that are capable of printing labels.

### TYPICAL APPLICATIONS

For metal surfaces

- Manufacturing and Supply Chain
- Warehouse Operations
- Logistics
- Inventory Management



### PHYSICAL SPECIFICATION

Face Stock	Printable white PET, resin ribbon is recommended
Label Sizes	100 x 150 x 0.2 mm 3.94 x 5.9 x 0.01 in
Adhesive	High performance permanent adhesive with excellent bonding to a variety of substrates
Weight	3.4 gms
Delivery format	On reel
No. of Labels/ Reel	500 pcs
Label Pitch	155 mm / 6.10 in
Core inner diameter	76 mm / 3 in
Roll outer diameter	145 mm / 5.7 in

## RF SPECIFICATION

Mode of Operation	Passive
Device type	Class 1 Gen 2 Passive UHF RFID transponder
Air interface protocol	EPC Global Class 1 Gen 2 ISO 18000-63 Compliant, Gen 2v 2 Compliant
Operational frequency	Global 860-960 MHz
IC type*	IMPINJ MONZA R6 P
Memory configuration	EPC Size of 96 Bits, 96 bits TID with 48 bits Unique serial number
Data Retention	Upto 50 years
Write Cycle Endurance	100,000
Read Range (2W ERP)**	ETSI : upto 12 m / 39.37 ft FCC : 13 m / 42.65 ft
Applicable surface materials	Metallic and Non-metallic surfaces

## ENVIRONMENTAL RESISTANCE

Operating temperature	-40°C to +85°C / -40°F to +185°F
Withstands Exposure to	95% humidity, 60°C × 100 h, 50% humidity, 80°C × 100 h
Peak Temperature	+100°C for 1 hr, +80°C for 100 hrs (Label remains securely attached with object. No physical or performance changes observed.)
Recommended Application Temperature	+10°C to +38°C / 50°F to +100.4°F
Adhesive Service Temperature	-20°C to +85°C / -4°F to +185°F
Water Resistance	IP67
Chemical Resistance	No physical or performance changes in: - 168 h Salt water (salinity 10%) exposure - 168 h Motor oil exposure - 12 h NaOH (10%) exposure - 30 min Acetone exposure
Ideal Storage condition	+23°C / 50% RH
Expected lifetime	Years in normal operating conditions

## PRODUCT INSTALLATION



- Ensure the application surface is not uneven and is clean and dry, to obtain maximum bond strength. If required, use approved cleaning solvents to clean surface.
- The label is affixed to the surface firmly with the tag extending upright above the surface to prevent any transmission interference caused by the surface underneath.
- Avoid touching the exposed adhesive area of the tag while mounting it

## PERSONALIZATION OPTIONS

### Pre-encoding

- Customer specific encoding of EPC

### Customized Printing

- Customer specific layout including logo, text, numbers, barcodes etc.

## ORDER INFORMATION

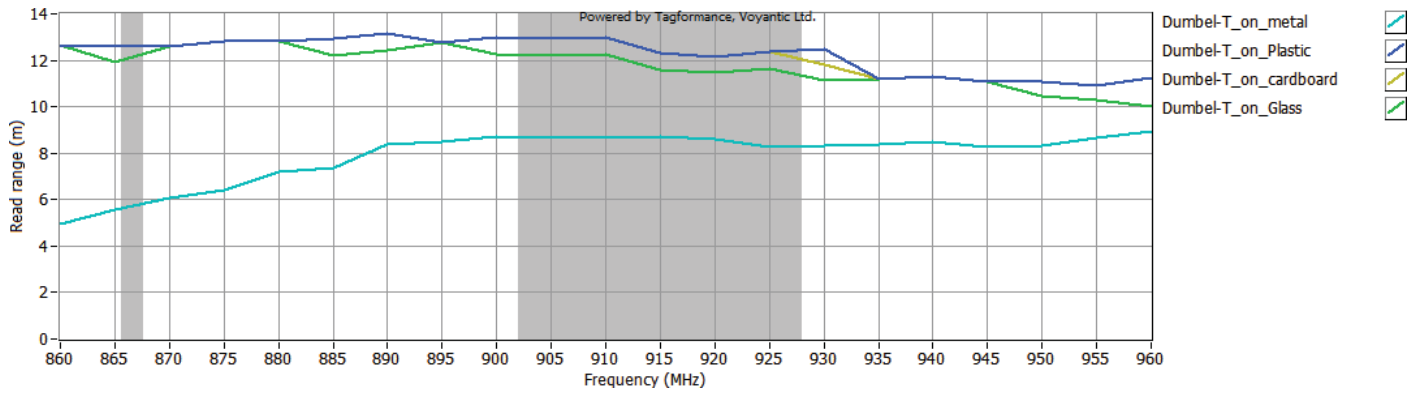
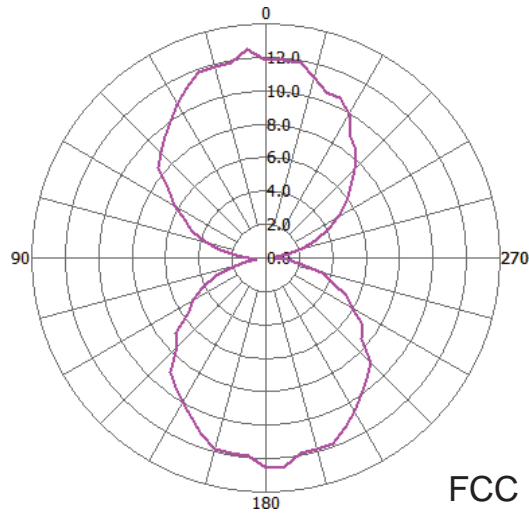
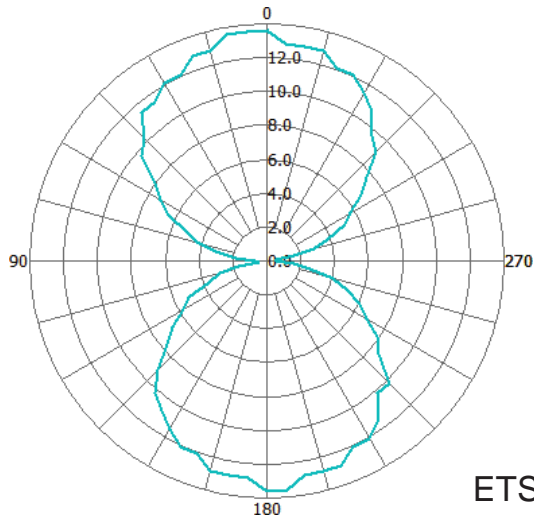
### Part Number

- RF.Li.TT.Dumbel-T

### Roll Sizes

- 500 Labels per Roll / 4 Rolls per Carton

# RADIATION PATTERN & READ RANGE GRAPH (ETSI & FCC)



For more information, visit: [www.rfidcanada.com](http://www.rfidcanada.com)

Email: [info@rfidcanada.com](mailto:info@rfidcanada.com)

+1 905-513-8919

\* Other IC's available on request

\*\* The indicated read range values are measured in our laboratory testing environment, where antennas with optimum directivity are used with maximum allowed operating power. Different surface materials and environments may exhibit different results.



Version : 161219.01

