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## Maximum Permissible Exposure Evaluation

## FCC ID: 2AYMH-P230

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) Radiation as specified in §1.1307(b)

## **EUT Specification**

Product Name:	electronic shelf label
Trade Mark:	Hanshow
Model/Type reference:	Polaris Pro-230Q-N
Listed Model(s):	Polaris Pro-230QP-N, Polaris-230R-N, Polaris Pro-230SQ-N
Frequency band (Operating)	2.4G: 2402MHz ~ 2480MHz
Device category	<ul> <li>Portable (&lt;5mm separation)</li> <li>Mobile (&gt;20cm separation)</li> <li>Fixed (&gt;20cm separation)</li> <li>Others</li> </ul>
Antenna Diversity	Single antenna Multiple antennas Tx diversity Rx diversity Tx/Rx diversity
Antenna Gain (Max)	-1.4dBi

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eirp = pt x gt =  $(E \times d)^2/30$ where: pt = transmitter output power in watts, gt = numeric gain of the transmitting antenna (unitless), E = electric field strength in V/m, ---  $10^{((dBuV/m)/20)}/10^6$ d = measurement distance in meters (m), --- 3m So pt =  $(E \times d)^2/(30 \times gt)$ 

2480MHz Field strength = 83.21 dBuV/m @3m Ant gain = -1.4dBi, Ant numeric gain = 0.72

So pt = { $[10^{(83.21/20)}/10^6 \times 3]^2/(30 \times 0.72)$ } × 1000 mW = 0.09 mW

Per § 1.1307(b)(3)(i)(A), a single RF source is exempt RF device if the available maximum time-averaged power is no more than 1 mW, regardless of separation distance.