

## Detection Characteristics

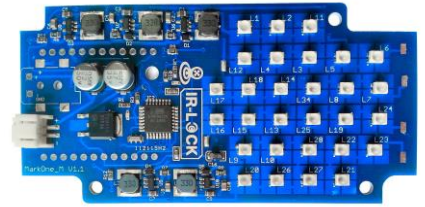
### MarkOne Beacon V1.1 with Case<sup>(1)</sup>

#### IR-LOCK Sensor

The **MarkOne** beacon system enables reliable target detection and tracking in any lighting condition, including bright sunlight and complete darkness. The **IR-LOCK Sensor** can interface with virtually any electronics hardware via I2C, SPI, UART, USB, or Analog.



IR-LOCK Sensor



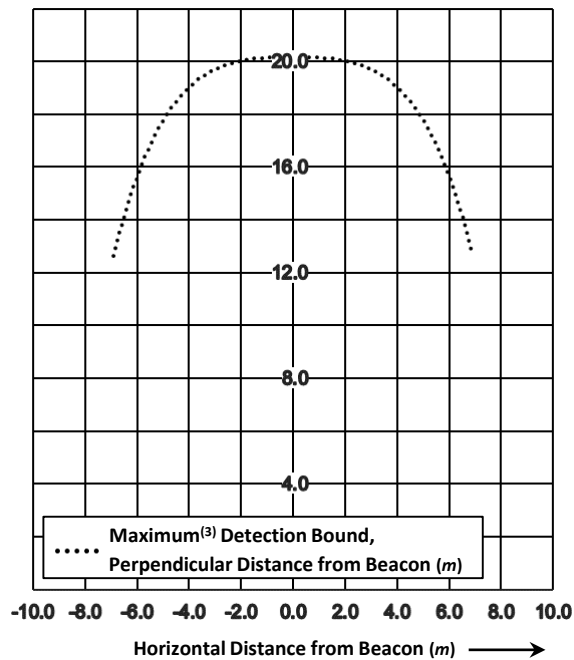
MarkOne Beacon V1.1

**Detection half angle,  $\phi$ :  $>30^\circ$**

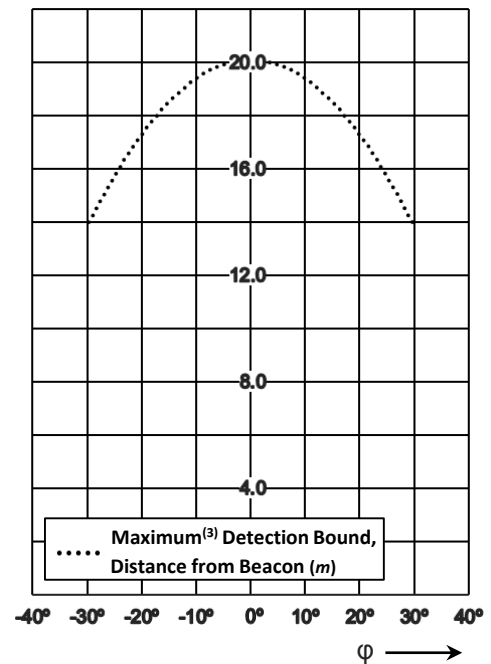
**Maximum detection range at  $\phi=0^\circ$ : 20.1m**

**Lens focal length: 3.6mm**

#### Detection Characteristics<sup>(2)</sup>, Cartesian



#### Detection Characteristics<sup>(2)</sup>, Angular



(1) The IR-LOCK Case is recommended for optimal outdoor performance.

(2) **Test Conditions:**

- Outdoors in moderate sunlight
- Sensor Firmware: *MarkOneBeta\_1.0.1.hex*
- Max detection range decreases slightly in bright sunlight conditions. Use case for optimal performance.

(3) Detection range may extend further than maximum detection bound, but with reduced detection rate.

Website: [www.irlock.com](http://www.irlock.com)

Product Information: <http://bit.ly/MarkOneV11>

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