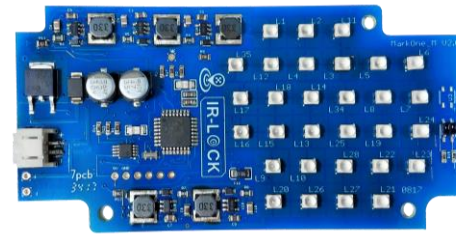


## Detection Characteristics and Specifications

MarkOne Beacon V2.0

IR-LOCK Sensor

The **MarkOne Beacon System** is comprised of the **IR-LOCK Sensor** and **MarkOne Beacon V2.0**. The system provides reliable target detection and tracking in any lighting condition, including bright sunlight and complete darkness. The IR-LOCK Sensor interfaces with robotics hardware via I2C, SPI, UART, USB, or Analog. MarkOne Beacon V2.0 is compatible with SF20 and LW20 rangefinders.



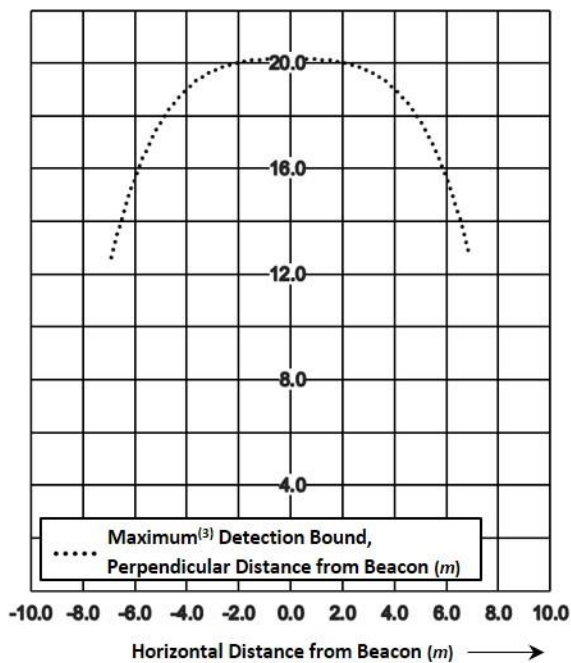
**Detection Half Angle:**  $\varphi=35^\circ$

**Maximum Detection Range at  $\varphi=0^\circ$ :** 20m

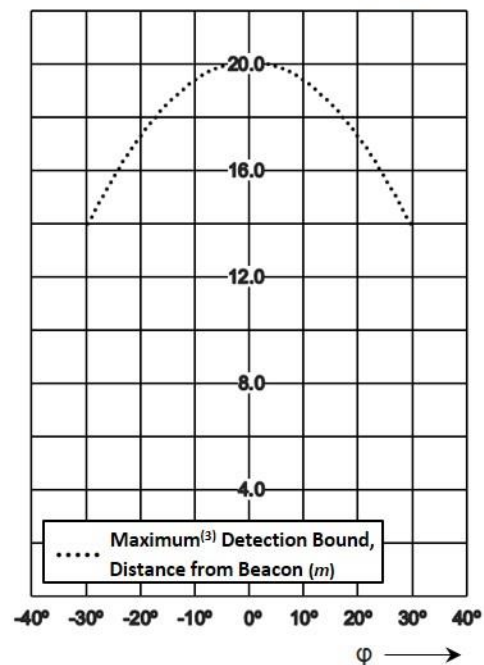
**Lens focal length:** 3.6mm

**Compatible Rangefinders<sup>(1)</sup>:** SF20, LW20

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



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



(1) SF20 and LW20 rangefinders are compatible with MarkOne Beacon V2.0. The SF10/A is also a reliable option, depending on the sensor configurations.

(2) Test Conditions:

- Outdoors in sunlight
- Sensor Firmware: MarkOneBeta\_1.0.1.hex

(3) Detection range extends further than indicated in graph, but with reduced detection rate.

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

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