**GENERAL**

1. The Infra-Red illuminator shall be a solid state LED device utilizing PLATINUM Elite SMT (Surface Mount Technology) LEDs, light intensifying optics and light shaping holographic diffuser with current controlled LEDs providing at least 10 years illumination life (44,000hrs night time use).
2. The illuminator shall be low voltage operation and requires an input of 12-24V AC/ DC.
3. The illuminator shall include an adjustable photocell for automatic on/off operation.
4. The illuminator shall have a telemetry control input for remote operation. The telemetry control shall work with a volt-free or a TTL input.
5. The illuminator shall provide a volt-free photocell-following output.
6. Infra-Red models shall be available in 850nm or 940nm versions. Other wavelengths available.
7. The LED illuminator shall be vandal resistant and manufactured using high impact polycarbonate lensing and shall incorporate an aluminum extruded heat sink to aid LED life expectancy.
8. The illuminator shall have an IP66 rating as a minimum.
9. The illuminator shall have an operational temperature range between -50 to 50˚C (-58 to 122°F).
10. The illuminator shall be CE and FCC approved.
11. The illuminator shall incorporate hot-spot reduction (HRT) technology.
12. The illuminator shall incorporate status LEDs indicating correct input voltage and receipt of valid commands.

1. The illuminator shall make use of interchangeable diffuser-lenses permitting optional angles of 10°, 35°, 60°, 80°, 120° and custom diffuser-lenses as an option.
2. The illuminator shall make use of an Adaptive Illumination system which permits the manual adjustment of the LED panels to provide beam angles up to 180, to alter the horizontal beam angle between a narrow and wide spread.
3. The illuminator shall be controllable using a hand-held remote control permitting remote adjustment of the following parameters:
   1. Power Select – 20%, 40%, 60%, 80% and 100% of power
   2. Photocell Adjust – 3 sensitivity levels
   3. Photocell Disable
   4. Timer Setting – telemetry-triggered, pre-determined on period for selectable periods of 1, 3, 10 and 30 minutes and timer disable.
   5. Remote Control Set-up Disable
   6. Restore Factory Defaults (excluding PIN)
   7. Remote Dimming
   8. LED Status Indicators on/off
   9. Assign a security PIN

1. The illuminator shall be controllable via manual input buttons on the illuminator of the following functions:
   1. Power Select – 20%, 40%, 60%, 80% and 100% of power
   2. Photocell Adjust – 3 sensitivity levels
   3. Photocell Disable
   4. LED Status Indicators on/off
   5. Restore Factory Defaults (excluding PIN reset)
   6. Remote Control Set-up Disable
   7. Manual Button Disable
   8. Restore Factory Defaults (including PIN reset)
2. Programming inputs on both the remote control and on the illuminator can be disabled if required.
3. The illuminator can be assigned a PIN code using the remote control to lock in settings and limit access.
4. The illuminator shall comply with the POWERS lighting standard and the manufacturer shall guarantee that the Infra-Red illuminator will provide a minimum of 0.35uW/cm2 power on scene at the maximum quoted distance.
5. The illuminator shall be covered by a manufacturer’s warranty of 5 years

**TECHNICAL SPECIFICATIONS**

1. The illuminator shall meet or exceed the following specifications:
   1. Max. lighting distance: 500m (1640ft)
   2. Angle of Illumination: 10, 35, 60, 80, 120, 180 degrees, adjustable from a

single unit

* 1. Optics: PLATINUM Elite SMT LEDs
  2. Wavelength: 850nm (940nm as an option)
  3. Power on Scene

at max distance: At least 0.35uW/cm2

* 1. Consumption: 92 watts
  2. Input: 12 to 24V AC/DC
  3. Weight: 4.5kg (9.9lbs)
  4. Ingress Protection Rating: IP66
  5. Operating Temperature: -50°C to + 50⁰C (-58 to 122°F)  
     1. Colour: Black (RAL 9005) as standard. Other colours available
  6. Dimensions: 279mm x 223mm x 68mm (11” x 9” x 3”)

* 1. Cable: 2.5m (x 8.2ft), 6 core, black
  2. Control: Manual buttons or remote control

1. The illuminator shall be covered by a manufacturer’s warranty of 5 years.
2. The illuminator shall be available with full specification data based on the POWERS lighting standard for video surveillance.
3. The illuminator shall be available with additional VARIO Universal Bracketry (VUB), to accommodate for the mounting of multiple LED panels at various horizontal and vertical tilts.
4. The Infra-Red illuminator shall be the VAR2-i8-2 (for 850nm models) or VAR2-i8-2-C (for 940nm models) manufactured by Raytec or an approved equivalent.