SECTION 28 23 00
VIDEO SURVEILLANCE

PART 2 – PRODUCTS

2.01 Megapixel Lens

A. The lens shall provide a focal length 1.67mm
B. The lens shall utilize a rectilinear optical design that provides low barrel distortion with ultra wide angle fields of view.
C. The lens shall provide a maximum horizontal barrel distortion of less than one percent (1%) when used with a 1/3-inch format camera sensor.
D. The lens shall provide an ultra wide horizontal field of view up to 120 degrees.
E. The lens shall provide the following fields of view based on the camera’s sensor size.

<table>
<thead>
<tr>
<th>Sensor Size</th>
<th>1/4 inch</th>
<th>1/3 inch</th>
<th>1/2.5 inch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horizontal Field of View</td>
<td>94°</td>
<td>110°</td>
<td>120°</td>
</tr>
<tr>
<td>Vertical Field of View</td>
<td>78°</td>
<td>94°</td>
<td>104°</td>
</tr>
<tr>
<td>Diagonal Field of View</td>
<td>107°</td>
<td>122°</td>
<td>130°</td>
</tr>
</tbody>
</table>
F. The lens shall be corrected to focus in the near infrared (IR) light spectrum as well as in visible light to allow use with Day/Night cameras.
G. The lens shall be usable with up to 5 megapixel resolution cameras.
H. The lens shall have a modulation transfer function (MTF) of 140 lp/mm@>20%.
I. The lens shall keep near and far objects continuously in focus without lens adjustment.
J. The lens shall provide a pan-focus distance of ten centimeters (10cm) to infinity.
K. The lens shall provide an aperture range of F/1.8 to closed.
L. The lens shall be available with either an auto-iris or manual iris version.
M. The auto iris version of the lens shall incorporate an internal neutral density filter to improve image clarity in bright light.
N. The lens shall attach to the camera using a CS-mount.

2.02 Products Meeting the Requirements

A. Manual Iris Lens – Theia model SY110M
B. Auto Iris Lens – Theia model SY110A

2.03 Manufacturer(s)

Theia Technologies
Wilsonville, Oregon
503-570-3296
www.TheiaTech.com

Provided by Fred Zagurski Consultants