

Thermal Tape, Technical II

Recognition Calculations

Infrared Tools or our distributors can assist with distance calculations for your thermal imager. We can help you know how visible an object will be a certain distances.



How to Work at Night

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How to Work at Night

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Charateristics of SpecterIR

Angular Resolution	1 mR
Spectral Response	7.5 to 12.5 um
Magnification	2X

Scene Characteristics

Distance to object ®	200 m
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Resolving Power Calculation

	Horizontal	Vertical	Units
IFOV (Given by manufacturer) (convert to radians, $2 \cdot \pi$ radians = 180 degrees)	8.6	6.4	Degrees
Pixels (Given by manufacturer) <i>Define L as width or height of the scene viewable in the camera</i> <i>Given that IFOV=L/R</i>	0.150	0.112	radians
L (at "distance to object" from above) <i>Define L/pixel as the width or height in the scene that is represented by a single pixel</i>	160	120	ea
L/pixel <i>Define pixel requirement as the number of pixels an object in the scene must cover in order to be discerned by the viewer</i>	30.020	22.340	m
Pixel req <i>Define resolving power as the size an object in the scene must be in order to be discerned by the viewer</i>	0.188	0.186	m
Resolving Power (convert to feet)	2	2	
	0.375	0.372	m
	1.231	1.222	ft

Yellow cells can be changed by the user