

# INTEMATIX LED PHOSPHORS

## Green, Yellow and Orange Silicate Product Family



Intematix offers the widest range of silicates, from blue-green to orange and everything in between. Intematix Silicates are known for their high efficiency, making them the ideal phosphor for lighting applications where dazzling brightness is required. Our silicates also have a narrow emission peak, meaning more of the light emission passes through the color filter in LCD displays. Both standard and enhanced brightness silicates are available to meet the unique needs of your application.

### Features

- High efficiency, > 96%
- Wide choice of colors: green, yellow, orange; 507-610nm
- Narrow emission peak, 70-82nm FWHM
- Broad excitation range, UV-Violet-Blue

### Benefits

- Highest lumens/watt for lighting
- Ideal for displays; high light throughput
- Offers complete spectrum solution
- Enables alternative approach to high CRI cool white

### Applications

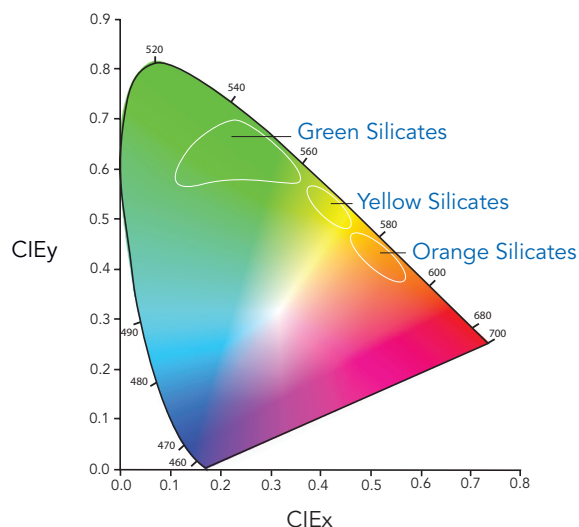
- Mobile Display –high brightness
  - Smart phone
  - Tablet
  - Laptop
  - GPS
- Portable Lighting
  - Flashlight
  - Task Lamp
  - Lantern
- Automotive lighting

## Intematix Silicate Phosphor Product Line

### Orange- Standard

Product	Peak Wavelength	Color Point		Particle Size
	$\lambda_p$ (nm)	CIE <sub>x</sub>	CIE <sub>y</sub>	D50V ( $\mu\text{m}$ )
O5446	586	0.544	0.449	16.5
O5544	590	0.553	0.440	15
O5544 (11)	590	0.551	0.440	11
O5742	600	0.576	0.417	16.5
O5742 (11)	600	0.572	0.420	11
O6040	610	0.599	0.396	15

## Wide Choice of Color Points



### Green- Standard

Product	Peak Wavelength	Color Point		Particle Size
	$\lambda_p$ (nm)	CIE <sub>x</sub>	CIE <sub>y</sub>	D50V ( $\mu\text{m}$ )
G1758	507	0.175	0.574	15.5
G2762 (11)	525	0.280	0.622	11
G3161	530	0.307	0.617	15
G3261	529	0.319	0.615	15
G3161 (11)	530	0.307	0.612	11

### Green- Enhanced Brightness

EG2762	525	0.286	0.627	15.5
EG3261	529	0.319	0.615	15.5
EG3560	535	0.345	0.602	15.5
EG3759	539	0.369	0.587	15.5

### Yellow- Standard

Product	Peak Wavelength	Color Point		Particle Size
	$\lambda_p$ (nm)	CIE <sub>x</sub>	CIE <sub>y</sub>	D50V ( $\mu\text{m}$ )
Y3957	547	0.390	0.568	15.5
Y4156	550	0.402	0.563	15
Y4254	558	0.424	0.547	15
Y4453	565	0.442	0.533	15
Y4651	570	0.459	0.519	15
Y4750	575	0.470	0.503	15

### Yellow- Enhanced Brightness

EY4156	550	0.402	0.563	15.5
EY4254	558	0.423	0.550	15.5
EY4453	565	0.442	0.534	15.5
EY4651	569	0.459	0.519	15.5
EY4750	574	0.470	0.510	15.5

For more information or full product details please contact [phosphor@Intematix.com](mailto:phosphor@Intematix.com) or your sales representative.

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