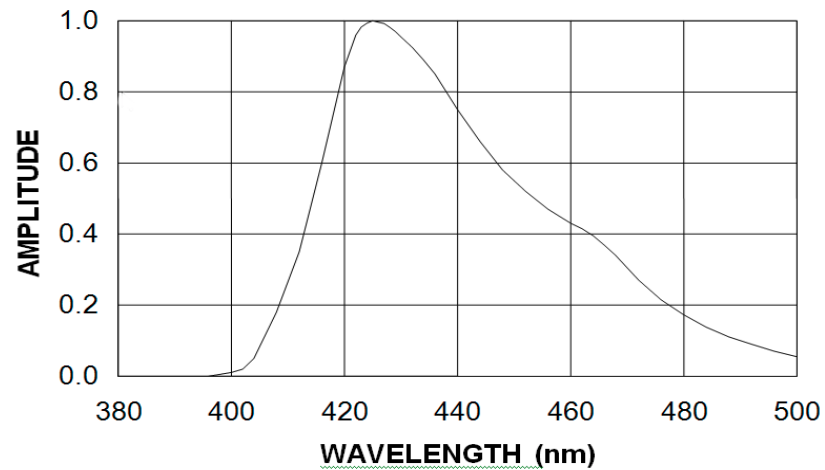


Scintillators:

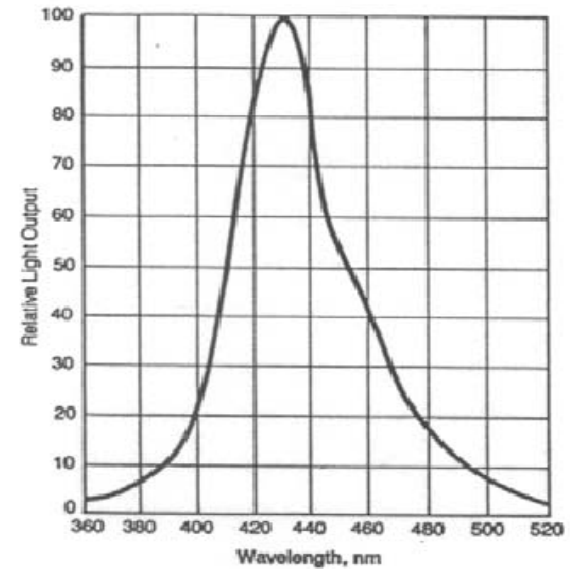
Eljen technologies		Saint Gobain scintillators	
Base	Polyvinyltoluene	Base	Polyvinyltoluene
Density (g/cc)	1.023	Density (g/cc)	1.032
Refractive Index	1.58	Refractive Index	1.58
Vapor Pressure	vacuum	Vapor Pressure	vacuum
Expansion Coefficient (per °C, <67°C)	7.8X10 ⁻⁵	Expansion Coefficient (per °C, <67°C)	7.8X10 ⁻⁵

EJ-200

Light Output, %Anthracene	64
Rise Time, ns	0.9
Decay Time (ns)	2.1
Pulse Width, FWHM, ns	2.5
Wavelength of Max. Emission, nm	425
Light Attenuation Length, cm*	no data
Bulk Light Attenuation Length, cm	no data

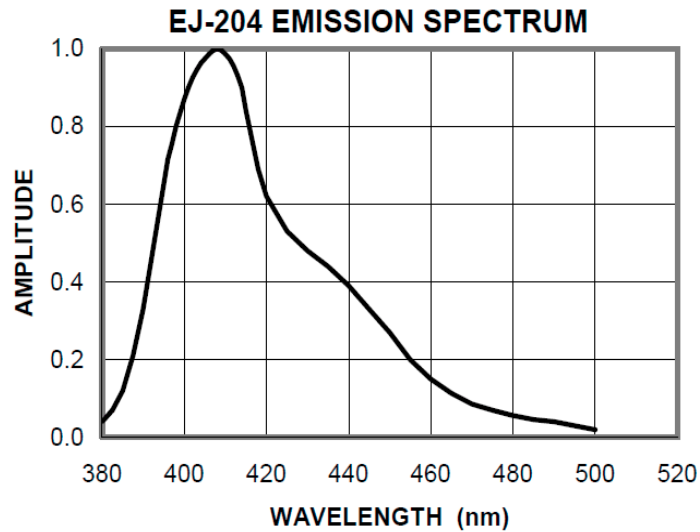
EJ-200 EMISSION SPECTRUM**BC-408**

Light Output, %Anthracene	64
Rise Time, ns	0.9
Decay Time (ns)	2.1
Pulse Width, FWHM, ns	2.5
Wavelength of Max. Emission, nm	425
Light Attenuation Length, cm*	210
Bulk Light Attenuation Length, cm	380

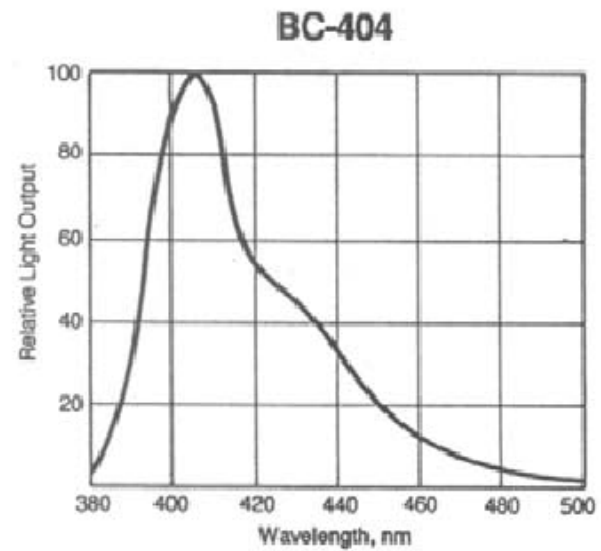
BC-408

EJ-204

Light Output, %Anthracene	68
Rise Time, ns	0.7
Decay Time (ns)	1.8
Pulse Width, FWHM, ns	2.2
Wavelength of Max. Emission, nm	408
Light Attenuation Length, cm*	no data
Bulk Light Attenuation Length, cm	no data

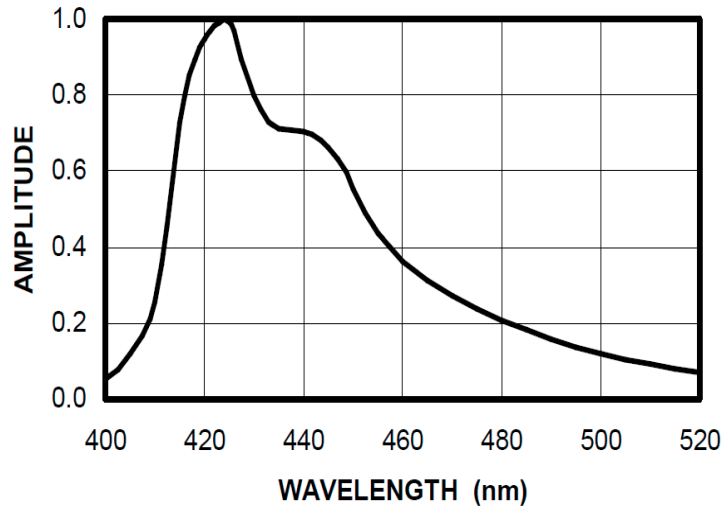
**BC-404**

Light Output, %Anthracene	68
Rise Time, ns	0.7
Decay Time (ns)	1.8
Pulse Width, FWHM, ns	2.2
Wavelength of Max. Emission, nm	408
Light Attenuation Length, cm*	140
Bulk Light Attenuation Length, cm	160

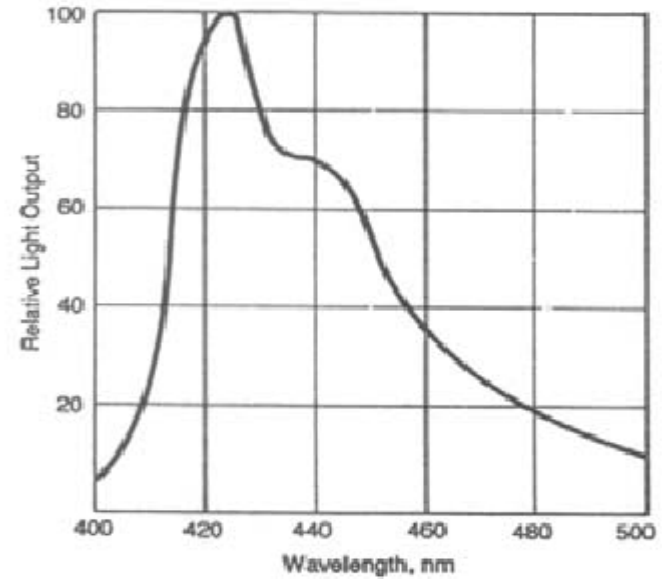


EJ-212

Light Output, %Anthracene	65
Rise Time, ns	0.9
Decay Time (ns)	2.4
Pulse Width, FWHM, ns	2.7
Wavelength of Max. Emission, nm	423
Light Attenuation Length, cm*	no data
Bulk Light Attenuation Length, cm	no data

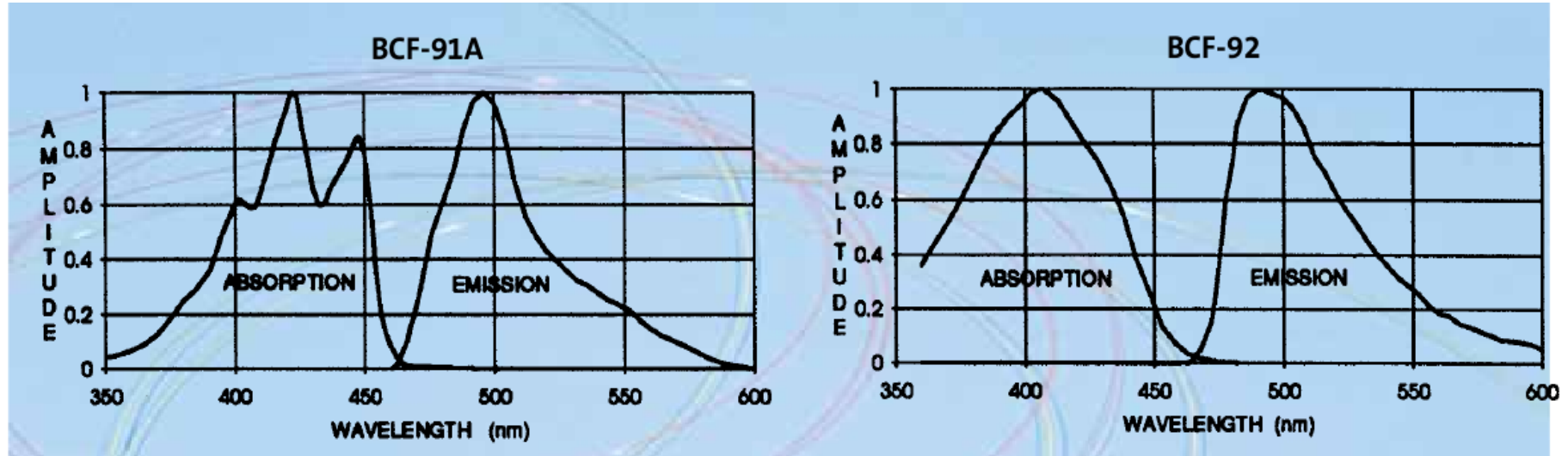
EJ-212 EMISSION SPECTRUM**BC-400**

Light Output, %Anthracene	65
Rise Time, ns	0.9
Decay Time (ns)	2.4
Pulse Width, FWHM, ns	2.7
Wavelength of Max. Emission, nm	423
Light Attenuation Length, cm*	160
Bulk Light Attenuation Length, cm	250

BC-400

WLS Fibers

Saint Gobain WLS



Fiber	Emission color	Emission Peak, nm	Decay time, nm	1/e Length, m	Characterization
BCF-91A	green	494	12	>3.5	Shifts blue to green
BCF-92	green	492	2.7	>3.5	Fast blue to green shifter

Core material..... Polystyrene
 Core refractive index..... 1.60
 Density..... 1.05
 Cladding material..... Acrylic
 Cladding refractive index..... 1.49
 Second cladding material..... Fluor-acrylic
 Refractive index..... 1.42

Kuraray WLS

Fiber	Emission color	Emission Peak, nm	1/e Length, m
Y-7	green	490	3.0
Y-8	green	511	2.8
Y-11	green	476	3.5

