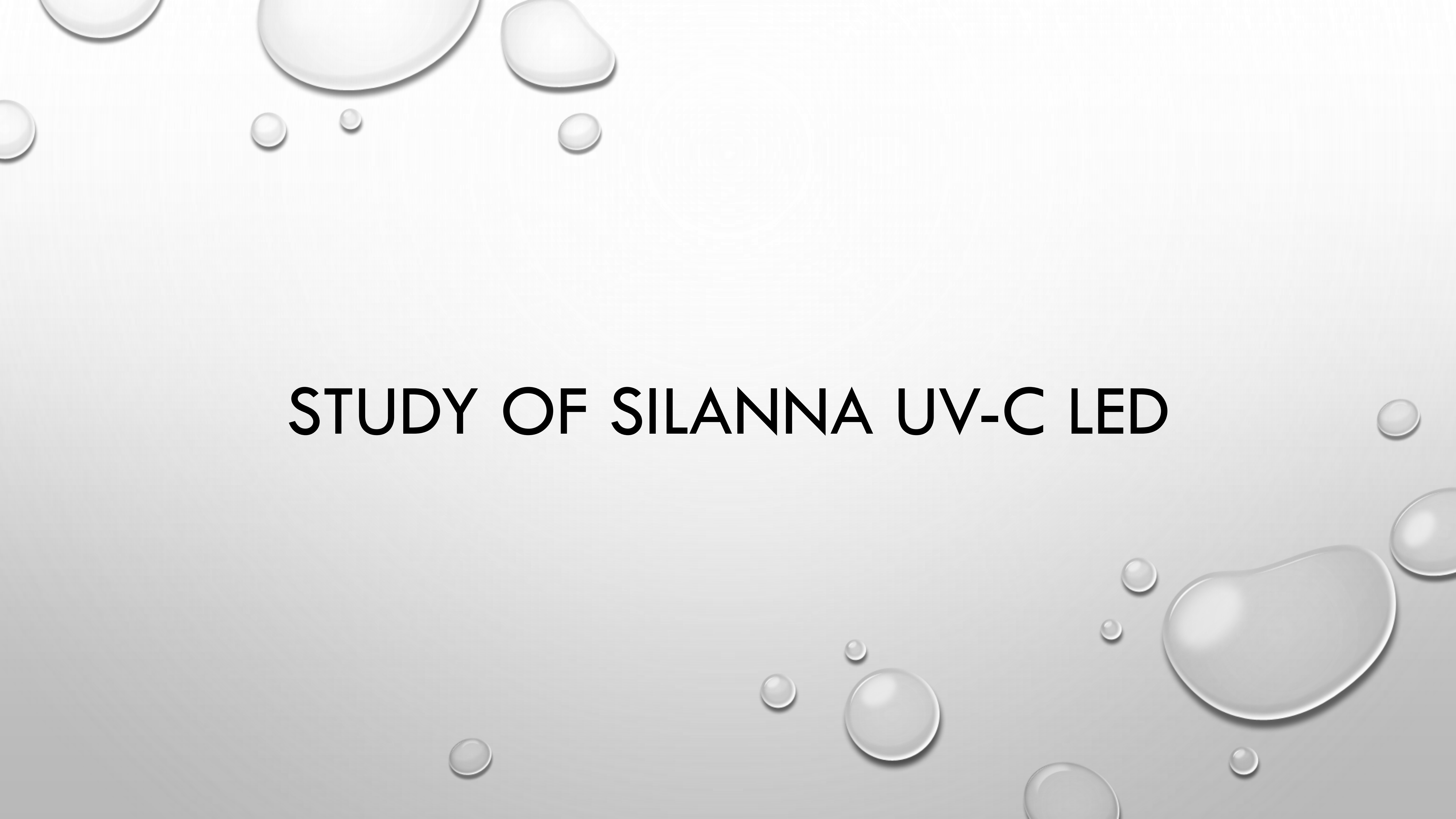
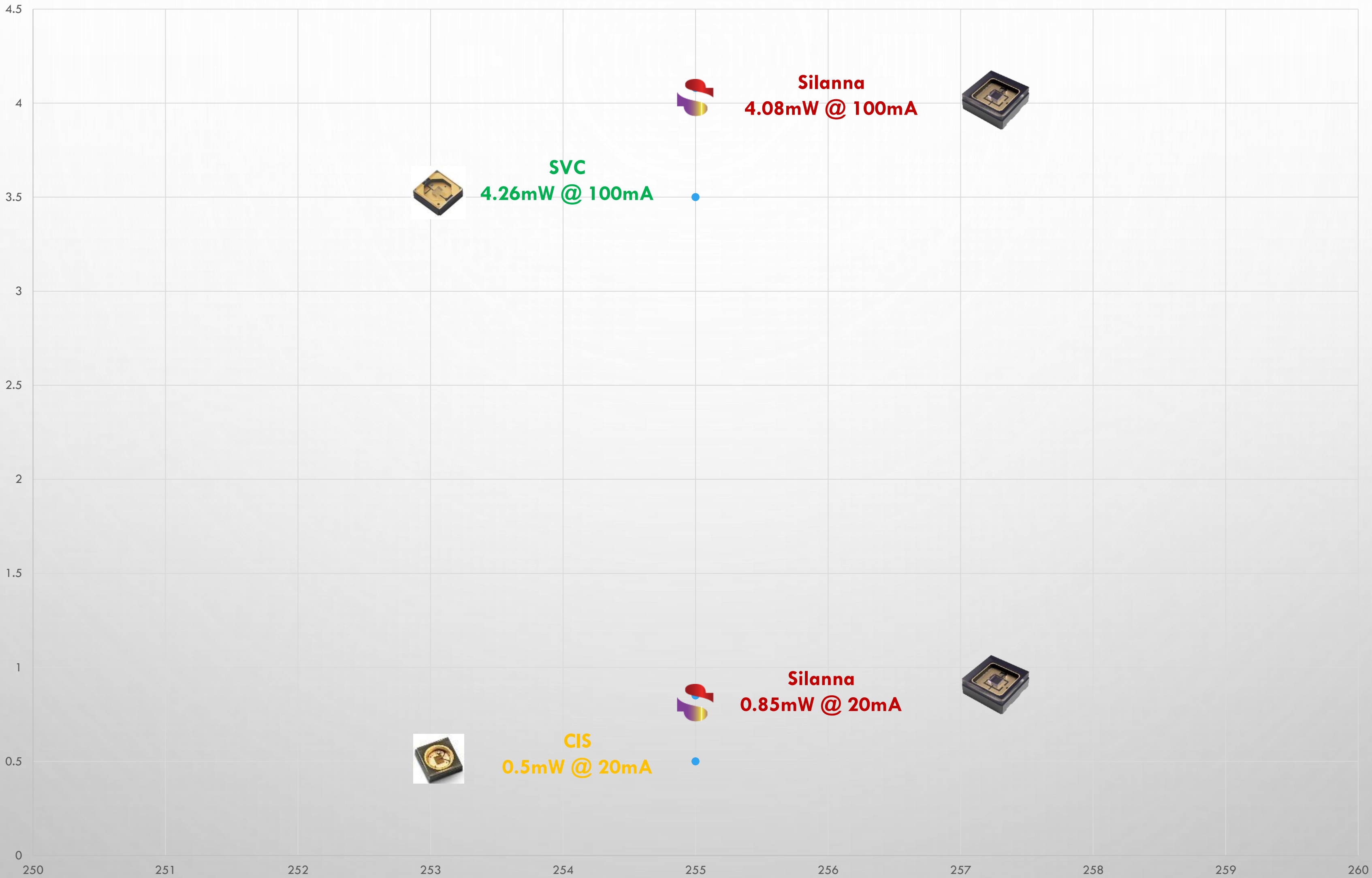


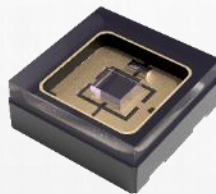
The background of the slide features a light gray gradient. It is decorated with several realistic water droplets of various sizes, some with highlights and shadows, scattered across the top and bottom edges. In the center, there is a faint, circular, textured pattern that resembles a lens flare or a subtle watermark.

STUDY OF SILANNA UV-C LED

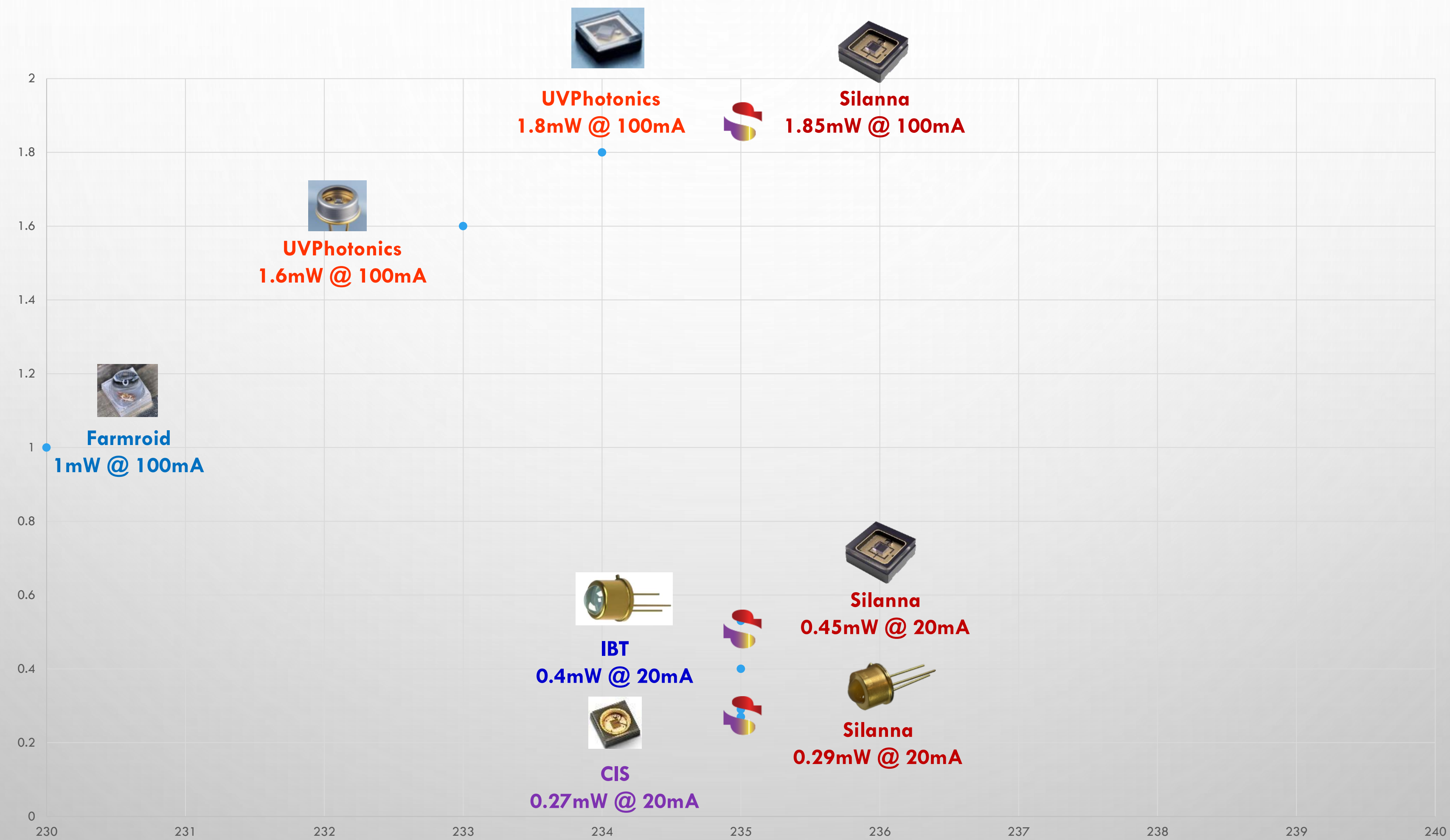
255nm SMD type UV-C LED



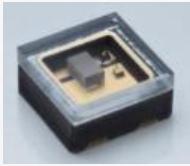
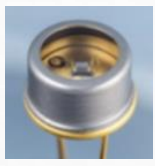
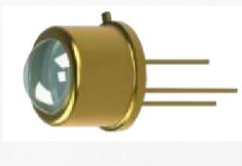
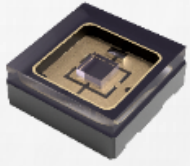
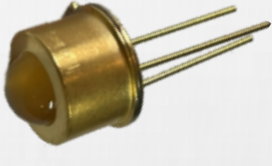
Performance Benchmark of 255nm SMD Type

Company	Product Name	Wavelength (nm)	Top View	Package Size (mm)	chip size-L (mm)	chip size-W (mm)	Viewing Angle	Typ. Driving Current(mA)	Max Driving Current(mA)	Typ. Radiant Flux @typ. If (mW)	Typ. Radiant Flux @max. If (mW)	Vf @typ. If	Vf @max. If	Rth	Tj max	Lifetime
Silanna	SN3-5C3FWL1-TR	255		3.45*3.45*1.3	1	1	120	20	100	0.85	4.08	5.80	8	n/a	n/a	20mA L50 >10,000hr
Crystal IS	Optan 3535	255		3.5*3.5*1.28	0.8	0.8	120	20	100	0.5 min	4~8	6.24	8	10	115	-/-
Seoul Viosys/SETI	CUD5GF1B	255		3.5*3.5*1.2	0.95	0.60	125	100	200	3.5 (4.26*)	7	7.50 (7.17*)	8	31	n/a	L70 >3,000hr

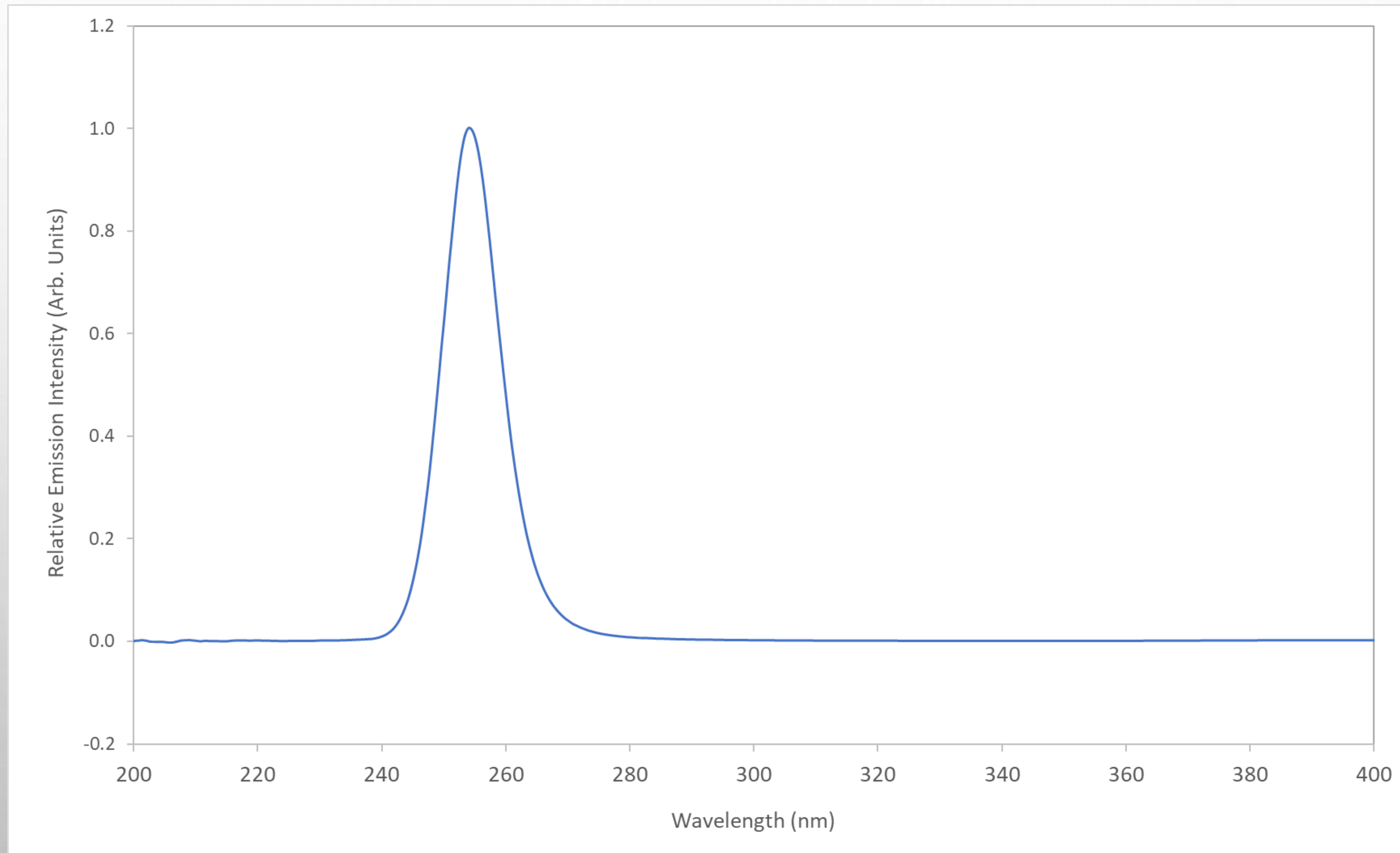
235nm SMD type UV-C LED



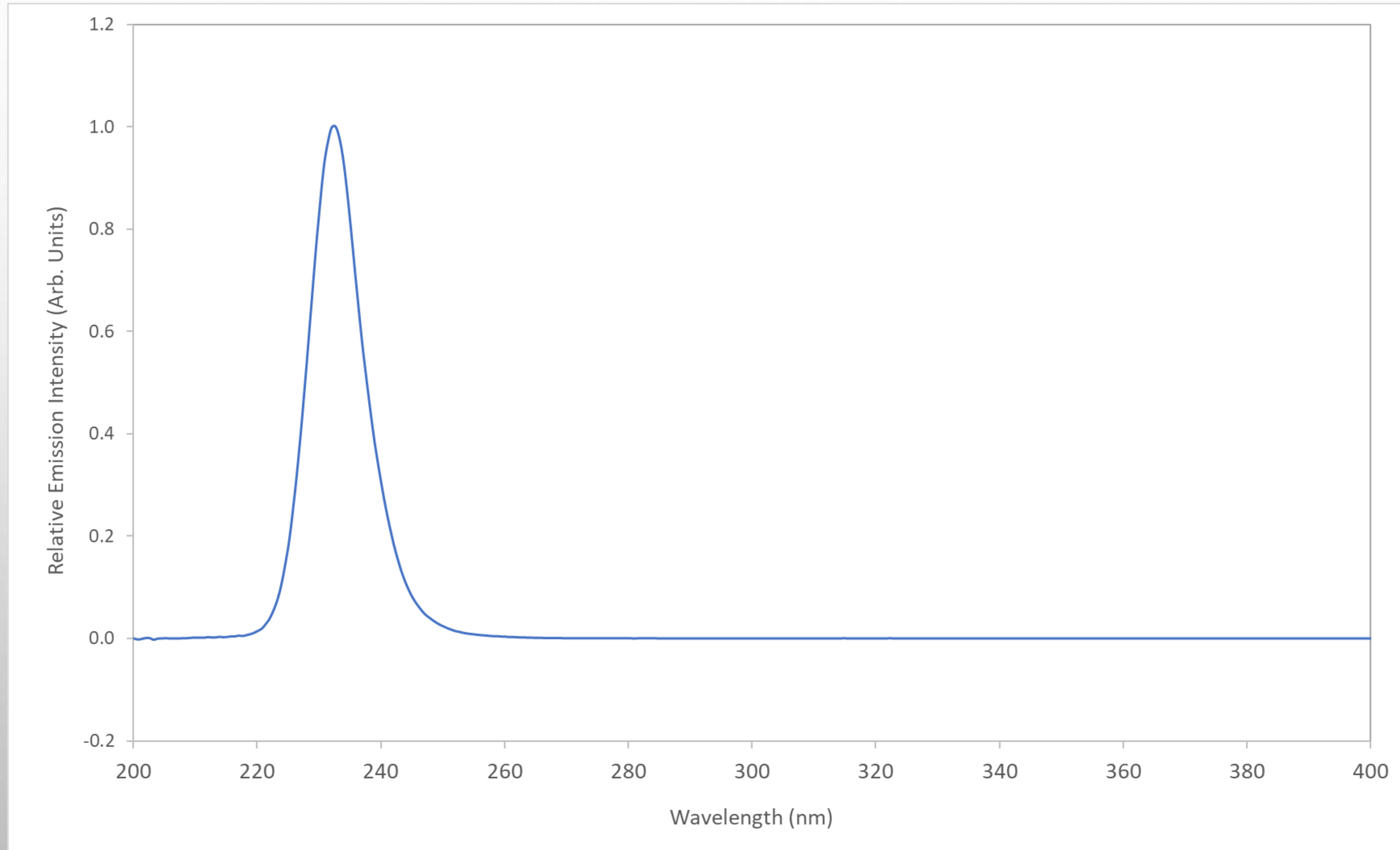
PERFORMANCE BENCHMARK OF 235NM

	227-230	233nm	233nm	235nm	235nm	235nm	235nm
Name	Farmroid (Japan)	Uvphotronics (German)	Uvphotronics (German)	Crystal IS Optan (Japan/US)	IBT	Silanna	Silanna
Photo							
Specification	>1mW @100mA	1.8mW @ 100mA	1.6mW @ 100mA	0.27mW @ 20mA L70 >500hrs Guaranteed	40uW @ 20mA	0.45mW @ 20mA 1.85mW @ 100mA	0.29mW @ 20mA
Voltage	n/a	12.5V	n/a	6.03V	12.5V	6.2V	6.2V
Chip Size	n/a	1mm ²	n/a	0.75mm ²	n/a	1mm ²	1mm ²
Lifetime	n/a	100mA(j = 67 A/cm ²) Without burn-in: L50 ~10hr Burn-in: L50 ~1,750hr 20mA (j = 13 A/cm ²) Without burn-in: L50 ~70hr Burn-in: L50 ~1,500hr	n/a	20mA L70 >500hr	n/a	20mA L50 >2000hr	20mA L50 >2000hr
Type	LED	LED (3.5x3.5mm Ceramic)	LED (TO can)	LED (3.5x3.5mm Ceramic)	LED (TO-39)	LED (3.5x3.5mm Ceramic)	LED (TO-39)

Silanna SN3 255nm Typical Spectral Flux



Silanna SN3 235nm Typical Spectral Flux



SUMMARY

- IN SHORT SUMMARY, SILANNA HAS BETTER OUTPUT RADIANT POWER PERFORMANCE IN DUVC & FUVC FIELDS.
- SILANNA DUVC & FUVC PRODUCTS HAVE BETTER LIFETIME PERFORMANCE.
- SILANNA UNIQUE EPITAXY PROCESS ENABLES TO TWEAK THE WAVELENGTH TO A SHORTER WAVELENGTH LIKE 235NM OR EVEN SHORTER TO 228NM.
- SILANNA UVC LED ALSO HAVE A CLEAR NARROW WAVEFORM WHICH BENEFITS FOR THE APPLICATION.



THANK YOU