株式会社 オプトライン

Prizmatix

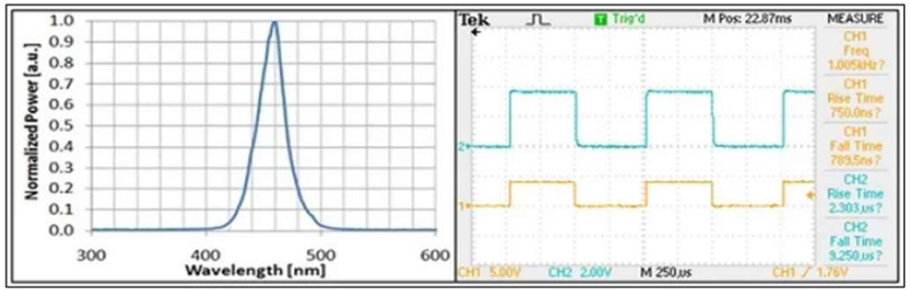
Optogenetics LEDs　（２波長１軸出射タイプは、以下より２波長をお選びください）

型番： STSI-Optogenetics-LED-WL-WL

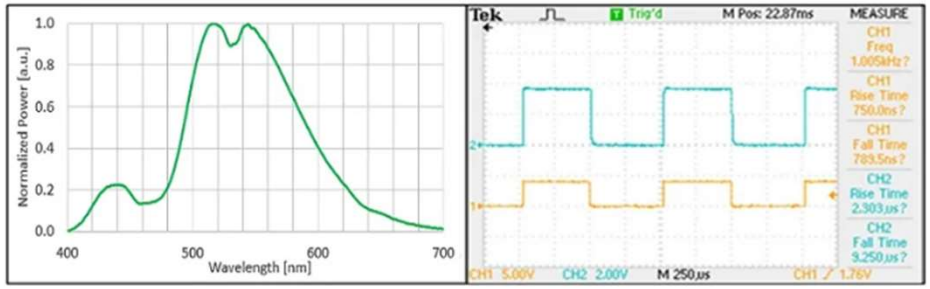
（WL= Violet / Blue / Green / Lime-Green / Yellow / Orang-Red / Red / Deep-Red)

Channel#1： Violet, Blue いずれか Channel#2： Green, Lime-Green, Yellow, Orange-Red, Red, Deep-Red いずれか			Channel#1 Violet	Channel#1 Blue	Channel#2 Lime-Green	Channel#2 Green	Channel#2 Yellow	Channel#2 Orange-Red	Channel#2 Red	Channel#2 Deep-Red
波長		nm	405	460	スペクトルグラフ参照	520	595	625	640	655
ピーク波長レンジ		nm	400-410	450-465	530-550	515-525	585-600	610-630	635-645	650-660
半値幅(nm)		nm	17	23	65	35.9	73	20	22	25
コア径/NA別ファイバ端出	200μm NA0.66 fiber (1m)	mW	13	17	12	7	4.5	12	12.5	12
	250μm NA0.66 fiber (1m)		19	27	18	10	6	19	20	19
	500μm NA0.63 fiber (1m)		60	90	62	37	20	60	66	60
	1000μm NA0.63 fiber (1m)		290	350	240	170	77	182	260	185
カニューラ径別出力（※）	200μm cannula	mW	6.5	10	5.2	4	1.5	4	5.5	4
	250μm cannula		8.6	13	7	6.3	2.2	6	7.4	5.3
	500μm cannula		34	53	28	24	8.9	25	29	21
	Irradiance from 200μm cannula	mW/cm2	210	320	170	130	53	130	177	120
※ LED光源 → ファイバー → ロータリージョイント → ファイバー+カニューラの接続時										
該当Opsin例				ChR1, ChR2	Arch	Arch	NpHR, eNpHR3.0	Jaws, Jaws-ER2		

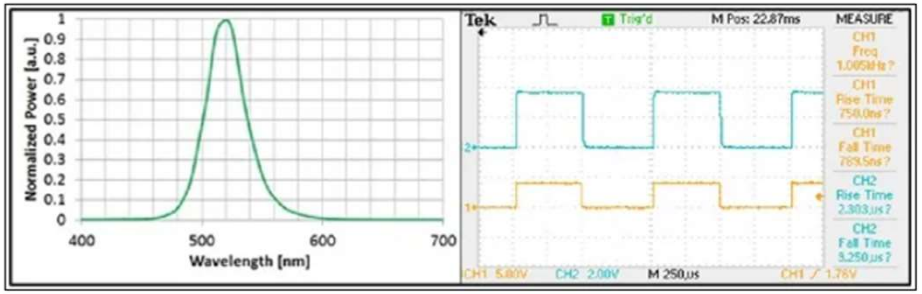
＊値は実測例の参考値です。



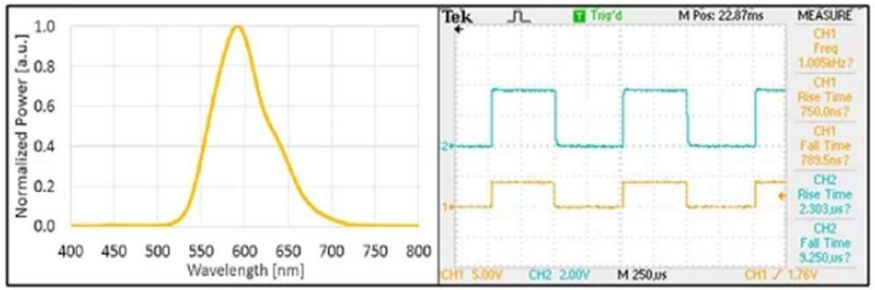
[Left]: Optogenetics-LED-Blue
[Right]: Optogenetics-LED-Blue Rise/Fall Time. Ch1 - TTL input , Ch2 Photodiode measurement



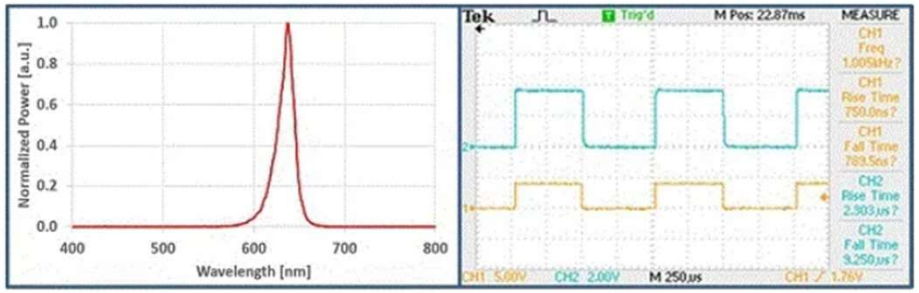
[Left]: ;Optogenetics-LED-Lime-Green spectrum
[Right]: Optogenetics-LED-Lime-Green Rise/Fall Time.. Ch1 - TTL input , Ch2 Photodiode measurement.



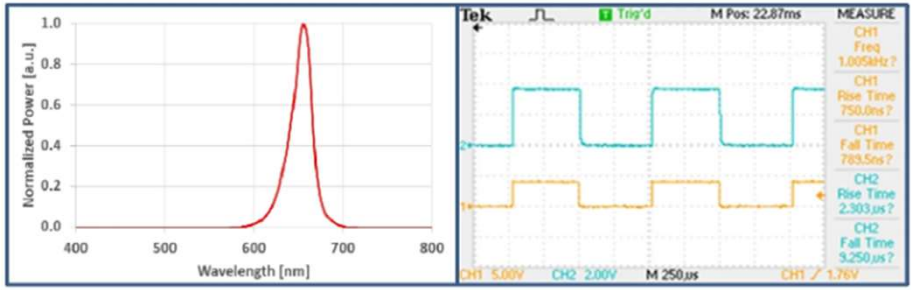
[Left]: Optogenetics-LED-520 spectrum
[Right]: Optogenetics-LED-520 Rise/Fall Time. Ch1 - TTL input , Ch2 Photodiode measurement.



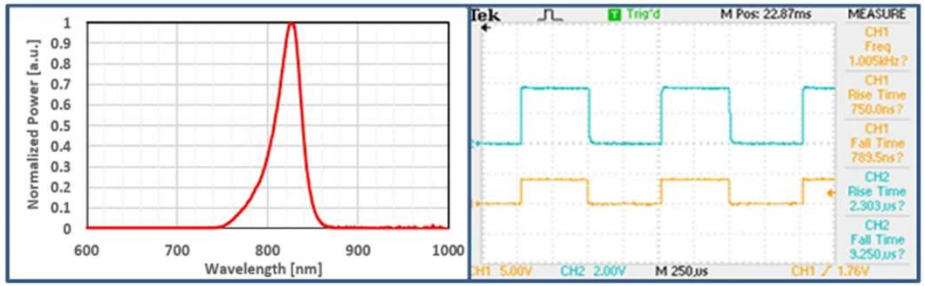
[Left]: Optogenetics-LED-Yellow spectrum
[Right]: Optogenetics-LED-Yellow Rise/Fall Time. Ch1 - TTL input , Ch2 Photodiode measurement.



[Left]: Optogenetics-LED-Orange-Red spectrum
[Right]: Optogenetics-LED-Orange-Red Rise/Fall Time. Ch1 - TTL input , Ch2 Photodiode measurement.



[Left]: Optogenetics-LED-Deep-Red spectrum
[Right]: Optogenetics-LED-Deep-Red Rise/Fall Time. Ch1 - TTL input , Ch2 Photodiode measurement.



[Left]: Optogenetics-LED-IR-820 spectrum
[Right]: Optogenetics-LED-IR-820 Rise/Fall Time. Ch1 - TTL input , Ch2 Photodiode measurement.