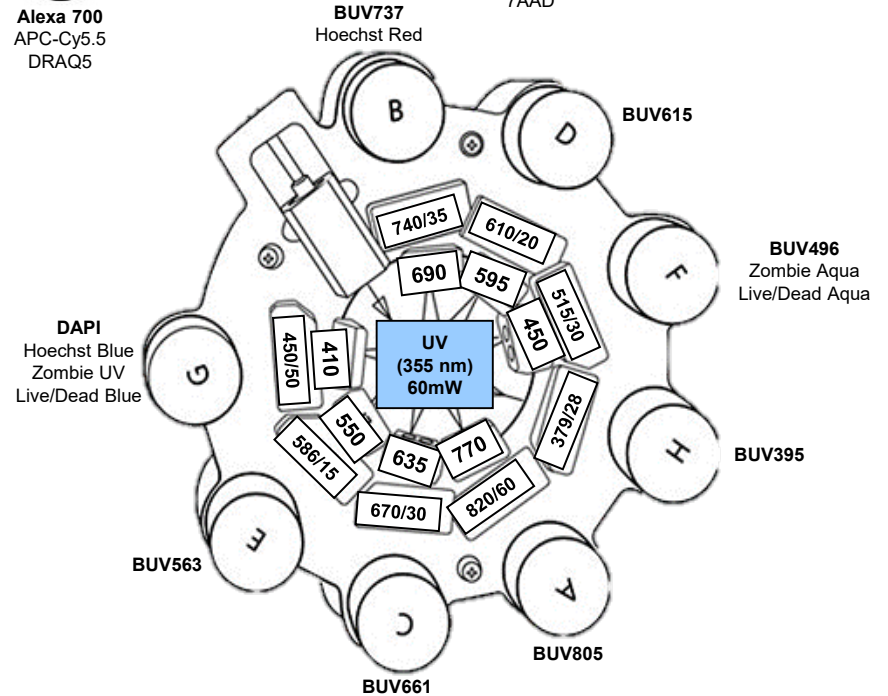
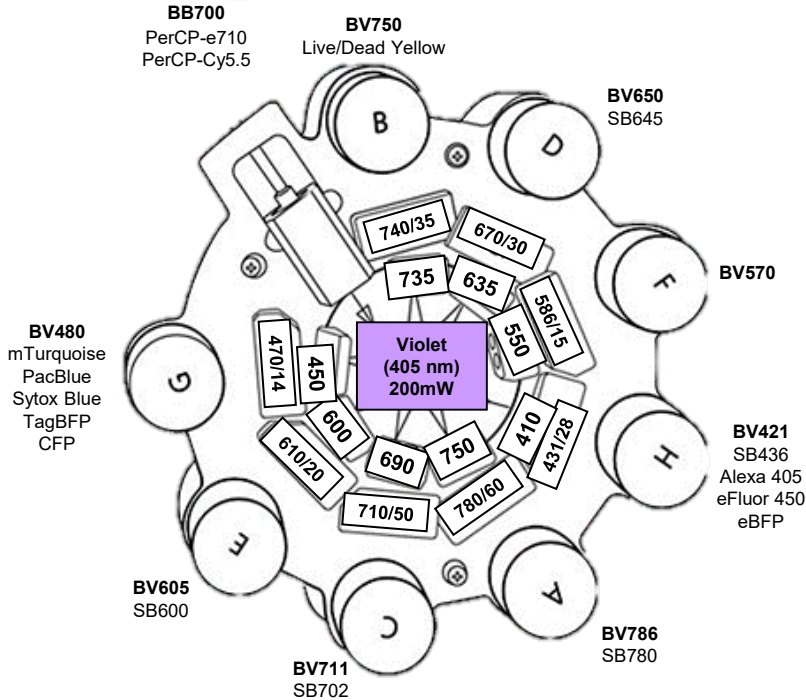
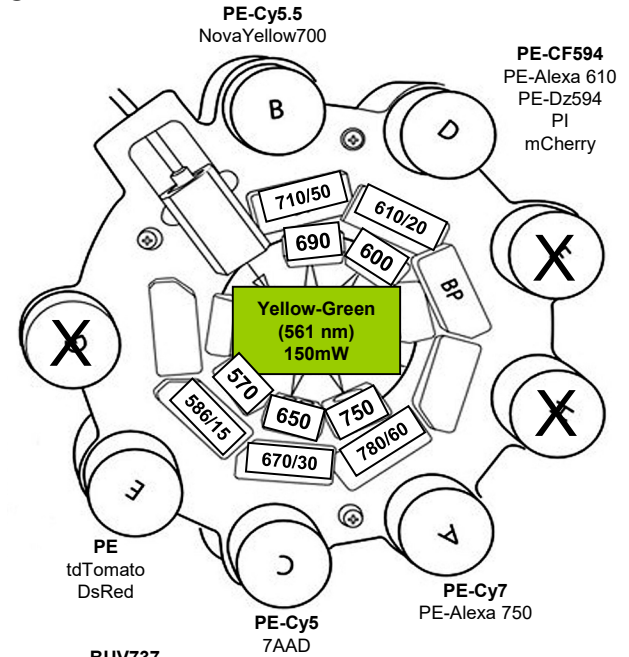
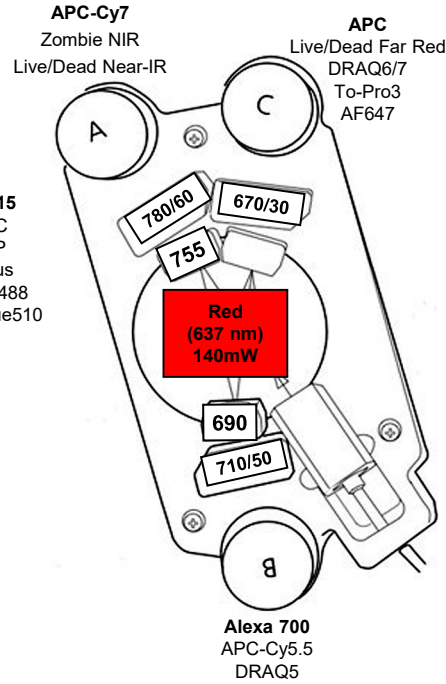
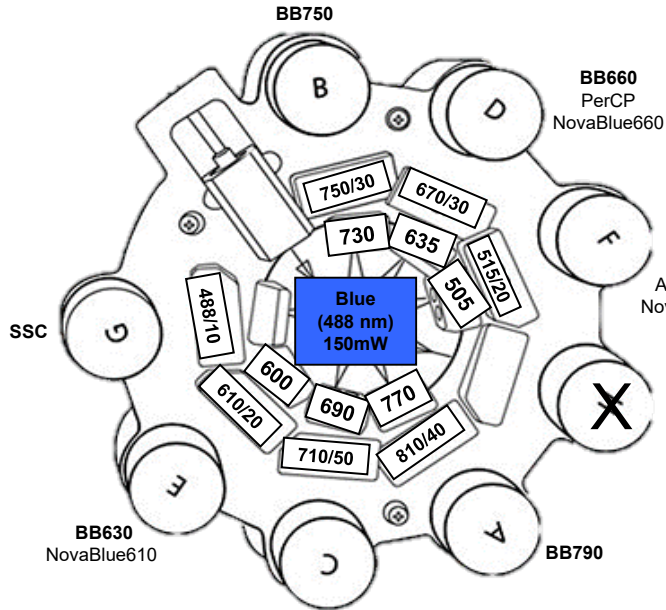


# FACSymphony S6 Configuration



# Symphony S6

30 colors

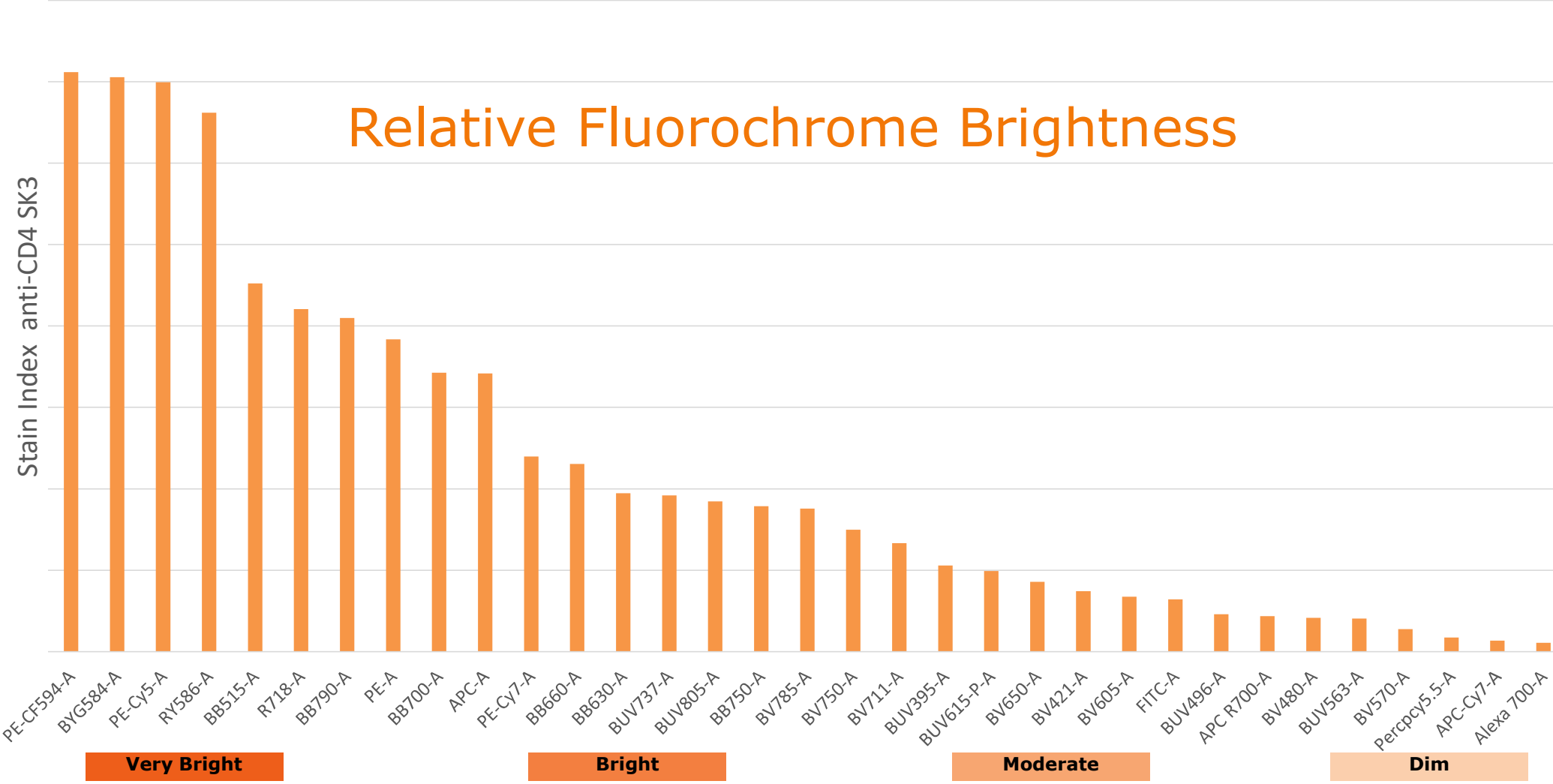


Laser	Detector	PMT	Long Pass	Band Pass	Optimal Fluors
355 nm 60 mW	H		NA	379/28 BP	<b>BUV 395</b>
	G		410 LP	450/50 BP	<b>DAPI</b> , Hoechst blue, Zombie UV, Live/Dead Blue
	F		450 LP	515/30 BP	<b>BUV 496</b> , Live/Dead aqua, Zombie aqua
	E		550 LP	586/15 BP	<b>BUV 563</b>
	D		595 LP	610/20 BP	<b>BUV 615</b>
	C		635 LP	670/30 BP	<b>BUV 661</b>
	B		690 LP	740/35 BP	<b>BUV 737</b>
405 nm 200 mW	A		770 LP	820/60 BP	<b>BUV 805</b>
	H		410 LP	431/28 BP	<b>BV 421</b> , SB 436, eFluor 450, Alexa 405, EBFp
	G		450 LP	470/14 BP	<b>BV 480</b> , pacific blue, TagBFP, mTurquoise, sytox blue, CFP
	F		550 LP	586/15 BP	<b>BV 570</b> , Live/Dead yellow
	E		600 LP	610/20 BP	<b>BV 605</b> , SB 600
	D		635 LP	670/30 BP	<b>BV 650</b> , SB 645
	C		690 LP	710/50 BP	<b>BV 711</b> , SB 702
488 nm 150 mW	B		735 LP	740/35 BP	<b>BV 750</b>
	A		750 LP	780/60 BP	<b>BV 786</b> , SB 780
	G		NA	488/10 BP	SSC
	F		505 LP	515/20 BP	<b>BB 515</b> , FITC, Alexa 488, NovaBlue 510, GFP
	E		600 LP	610/20 BP	<b>BB 630</b> , NovaBlue 610
	D		635 LP	670/30 BP	<b>BB 660</b> , PerCP, NovaBlue 660
	C		690 LP	710/50 BP	<b>BB 700</b> , PerCP-e710, PerCP-Cy5.5
561 nm 150 mW	B		730 LP	750/30 BP	<b>BB 750</b>
	A		770 LP	810/40 BP	<b>BB 790</b>
	E		570 LP	586/15 BP	<b>PE</b> , tdTomato, DsRed
	D		600 LP	610/20 BP	<b>PE-CF594</b> , PE-Dazzle594, PE-e610, mCherry, PI
	C		650 LP	670/30 BP	<b>PE-Cy5</b> , 7-AAD
637 nm 140 mW	B		690 LP	710/50 BP	<b>PE-Cy5.5</b> , NovaYellow 700
	A		750 LP	780/60 BP	<b>PE-Cy7</b>
	C		650 LP	670/30 BP	<b>APC</b> , af647, DRAQ7, TO-PRO-3, Live/Dead far-red
637 nm 140 mW	B		690 LP	710/50 BP	<b>Alexa 700</b> , DRAQ5
	A		750 LP	780/60 BP	<b>APC-Cy7</b> , Zombie NIR, Live/Dead near-IR

**Bold = intended fluors for the default filter configuration**

# Relative Fluorochrome Brightness

Stain Index anti-CD4 SK3





# TSM (Total Spread Matrix)

Total Spread Matrix	APC-A	APC-Cy7-A	Alexa Fluor 700-A	BB515-A	BB630-A	BB660-A	BB700-A	BB750-A	BB790-A	BUV396-A	BUV496-A	BUV563-A	BUV615-A	BUV661-A	BUV737-A	BUV805-A	BV421-A	BV480-A	BV570-A	BV605-A	BV650-A	BV711-A	BV750-A	BV786-A	PE-A	PE-CF594-A	PE-Cy5-A	PE-Cy7-A	
APC-A		118.103	252.273	8.42539	0	63.0032	31.5904	59.2091	51.023	0	0	0	0	52.497	66.6587	25.6758	0	0	0	0	66.477	58.8165	81.8483	45.2561	0	0	92.0513	61.7214	
APC-Cy7-A	1398.4		124.89	0	0	38.3732	17.7958	52.958	189.13	0	0	0	11.4711	43.7295	66.6371	24.4797	0	0	0	18.4753	0	55.5582	111.644	0.247184	0	0	28.1209	210	
Alexa Fluor 700-A	33.6616	259.266		22.1498	9.67076	29.8545	48.1264	54.2403	0	0	100.76	56.0282	10.0513	0	63.9369	28.8189	0	0	28.144	12.8391	20.5169	51.2861	75.1029	73.3023	12.8479	44.9094	0	68.2574	
APC R700-A	140.006	436.796		19.6852	0	35.5055	56.2848	77.0001	98.5398	8.02771	91.9491	29.771	25.5611	22.7858	84.458	33.3592	0	0	25.0003	18.5164	29.0996	88.9408	100.364	99.1685	0	21.4566	35.5123	136.823	
R718-A	46.0741	270.014		0.413105	0	6.91447	27.509	33.9896	51.7304	0	0	0	0	0	82.6776	43.4186	37.623	0	0	0	15.5669	18.3898	59.481	72.5673	0	21.5304	6.91266	92.1898	
BB515-A	0.57993	0	15.2009		75.0886	34.0641	33.2922	37.753	10.3588	0	0	0	14.2825	8.02218	0	10.2693	0	0	38.3675	39.5059	32.7305	15.2328	15.2196	24.7817	0	30.7892	0	8.22008	
BB630-A	152.063	45.3564	92.983		0	124.966	145.45	212.027	116.609	0	0	95.3089	48.1641	49.635	12.7716	12.0118	8.24514	91.3576	214.112	74.85	66.7887	98.8758	83.9606	66.3944	269.66	69.6555	38.4366		
BB660-A	333.932	123.557	236.636		42.3006		197.011	243.029	186.111	0	0	0	63.5122	73.6813	27.2596	0	11.8088	40.8481	36.1523	91.7344	105.753	189.508	119.478	0	27.9487	85.4276	46.0201		
BB700-A	239.27	254.376	383.204		62.9864	155.798		493.689	248.943	0	0	0	59.392	134.93	39.1861	20.986	0	28.3573	47.3387	57.9175	220.487	241.291	188.41	0	35.9451	70.9733	67.3395		
PerPCy5_5-A	83.8561	74.8268	116.673		15.69	45.363		146.906	131.715	0	60.2518	35.5789	17.6472	20.8576	63.3645	30.3532	0	0	9.00398	30.3679	96.1475	68.272	73.9956	0	12.1009	38.5136	48.1399		
BB750-A	41.2337	134.264	87.3616		29.8807	31.1246	73.255		326.942	0	0	0	20.5281	0	65.2535	51.7538	44.3079	14.6511	21.4438	37.8181	20.9342	55.4847	246.26	177.185	0	16.4888	36.9445		
BB790-A	43.1771	150.285	61.9018		81.1477	52.1929	85.4783	784.706		0	0	0	0.173335	69.479	74.6494	21.2375	0	70.9063	48.87	25.2199	35.9227	204	263.792	0	54.7266	12.3779	71.4201		
BUV396-A	11.1267	0	15.2323		0	12.3783	0	0	14.7718		0	0	0	0	0	0	16.9032	0	0	0	0	0	0	0	0	0	6.91266	0	
BUV496-A	37.2091	0	29.4111		19.1103	18.334	24.259	0	14.7718	34.6949	0	45.1957	48.2204	26.4073	19.6739	10.2721	0	40.8797	37.8173	9.02892	0	41.7707	29.0476	29.0618	91.1112	0	19.2594		
BUV563-A	77.8357	14.5218	21.7902		75.3893	18.3348	22.241	48.1159	18.2076	11.4826	0	0	108.144	39.2521	35.964	0.165159	24.3669	0	40.8023	45.8007	0	0	24.5698	19.9014	96.7307	169.123	28.1274	14.5968	
BUV615-A	156.199	45.3504	65.0032		182.803	57.5934	29.8385	65.254	60.6257	16.654	0	29.5574		113.27	95.2819	44.818	50.1024	14.6511	45.1528	127.341	37.9223	29.3946	48.9279	41.9597	89.9672	522.279	72.5093	60.2965	
BUV661-A	481.155	172.956	285.407		0	93.3095	44.4556	127.309	74.2014	0	0	0	23.1627	0	263.814	92.181	0	28.1806	8.97518	98.648	69.5984	122.78	83.9686	0	46.956	121.274	111.451		
BUV737-A	32.8859	235.561	168.071		0	25.0417	108.102	269.134	231.168	11.5091	0	0	0	8.01778		127.071	52.0473	17.106	0	8.99529	0	41.725	177.762	135.36	0	0	54.5937		
BUV805-A	25.5066	151.631	31.6871		0	6.91164	20.0931	32.0075	68.1869	18.8491	0	0	0	0	32.6873	0	0	57.5391	0.549016	0	25.1907	0	39.8817	0	54.7891	0	9.9432	40.0075	
BV421-A	0	25.9268	0	0.601436		6.91164	8.61387	14.2957	0	0	0	0	0	8.01992	0	0	0	27.0728	0	12.8491	0.320412	0	15.2196	0	0	0	6.91171	0	
BV480-A	0	0	18.7094	37.5716		16.4878	12.3191	17.648	0	0	0	0	0	35.8997	11.4852	12.0504	7.14703	44.0401	0	97.4849	72.055	20.9223	15.1583	0.820726	13.8592	23.0935	40.5713	6.91171	0
BV570-A	30.5677	0	43.4924		0	27.4655	14.5206	28.0533	23.1411	18.2554	0	0	29.9283	33.0601	12.0504	12.7724	44.2773	0	88.6177	20.9114	21.8166	48.8952	29.0409	50.4301	97.2517	20.0975	25.1566		
BV605-A	101.222	20.863	108.464		81.3402	39.7785	38.2306	52.968	52.6809	0	0	0	78.3315	59.5498	73.5772	30.3512	35.2456	0	86.6036		67.9728	69.6435	140.459	92.4747	80.3053	172.009	64.327	38.4669	
BV650-A	202.732	73.417	202.573		18.9117	46.7445	31.5684	48.1532	40.6445	0	0	0	27.7755	77.108	99.2489	31.8626	32.659	0	31.0112	74.8306		133.386	134.483	134.27	20.9087	58.4116	48.1037	36.9105	
BV711-A	74.8196	249.731	407.545		0	46.7313	135.244	164.043	193.16	0	0	0	0	24.6263	172.199	74.7534	27.6457	0	45.1237	12.8447	23.1428		278.901	242.251	8.98556	0	26.5889	91.6971	
BV750-A	25.5168	164.322	118.166		0	12.3762	29.8537	183.357	138.272	0	0	0	0	16.6416	118.189	73.3072	0	0	18.5125	0	95.8791		313.953	0	0	0	44.4999		
BV786-A	22.6718	164.832	55.5088		24.9734	9.9416	8.62038	57.669	126.264	0	89.87	49.8117	23.1544	0	86.1505	91.8339	0	30.895	0	23.1389	18.7383	237.235		15.8735	0	0	88.9071		
PE-A	85.2422	14.5231	41.6417		170.006	77.6843	71.7278	89.7241	65.244	0	0	55.8639	63.9004	31.451	27.5139	0	12.2076	8.24514	125.188	107.753	39.4891	24.5625	18.826	9.72938		310.127	77.6548	48.8896	
BVG584-A	67.7216	14.5212	53.2231		189.31	105.164	54.0131	65.254	87.3756	8.02771	0	0	49.9576	26.3999	19.6922	10.2684	0	0	125.911	111.592	39.5155	37.8946	47.1725	26.9826		709.508	147.632	107.445	
RY596-A	49.2556	28.2133	54.8954	12.0569		172.609	110.643	43.7261	51.4069	99.7865	0	0	53.3508	63.7574	37.7411	19.701	10.2677	0	8.26511	88.6575	93.1873	27.1656	27.133	21.8108	19.9439		487.317	119.368	105.116
PE-CF594-A	149.648	28.2133	81.4732		320.662	146.633	169.722	165.48	163.671	0	0	0	75.619	22.7886	39.1184	18.8676	0	0	53.2176	140.738	55.0304	75.6984	72.8813	43.5864	111.458		168.486	141.619	
PE-Cy5-A	581.802	186.165	351.304		32.1203	422.18	350.998	481.323	416.677	0	0	0	10.0283	99.8572	128.448	40.6094	17.1926	0	28.0074	45.8659	124.775	171.858	218.981	142.415	41.0745	50.9613		254.936	
PE-Cy7-A	19.5003	285.351	27.0732		0	16.4891	44.4589	355.473	999.065	0	0	0	0	0	29.3062	69.3117	24.4418	0	0	0.534227	0	0	142.332	288.851	56.3168	24.8378	14.5226		

\*\*The TSM provides the measurement of total spread and is dependent on MFI (fluorochrome brightness and / or antigen density). TSM was developed specifically to measure total spread and aid panel design (TSM=SSM\*√ Δ MFI). This TSM table was generated using CD4 stained single color. The TSM value will increase or decrease for antigens expressed at higher or lower levels than CD4. The same value across different rows will translate into the same amount of spread.