

## CCT correlated color temperatures

White light from 1'500K to 20'000K made by RGBACL mix engine (Hyperion 6C)

**Fixture settings:** linear dimming curve + 8 bit mode + LED boost off

The following DMX values are made by photometric data measurements and test comparison with COM 12 PC and CP 90 halogen lamp.

		LINEAR CURVE						QUADRATIC CURVE					
		RED	GREEN	BLUE	AMBER	CYAN	LIME	RED	GREEN	BLUE	AMBER	CYAN	LIME
1	1500 K	255	0	0	255	0	115	255	0	0	255	0	171
2	1600 K	255	1	0	255	1	122	255	16	0	255	16	176
3	1700 K	255	1	0	255	1	146	255	16	0	255	16	193
4	1800 K	255	1	0	255	1	169	255	16	0	255	16	208
5	1900 K	255	0	0	255	1	198	255	0	0	255	16	225
6	2000 K	255	0	4	255	8	212	255	0	32	255	45	233
7	2100 K	255	4	7	255	12	230	255	32	42	255	55	242
8	2200 K	255	4	8	255	30	240	255	32	45	255	87	247
9	2300 K	240	4	12	255	30	255	247	32	55	255	87	255
10	2400 K	228	23	12	255	30	255	241	77	55	255	87	255
11	2500 K	208	23	15	255	40	255	230	77	62	255	101	255
12	2600 K	192	24	17	255	53	255	221	78	66	255	116	255
13	2700 K	178	24	18	255	67	255	213	78	68	255	131	255
14	2800 K	168	25	20	255	79	255	207	80	71	255	142	255
15	2900 K	156	26	23	255	86	255	199	81	77	255	148	255
16	3000 K	145	26	27	255	94	255	192	81	83	255	155	255
17	3100 K	142	34	30	255	97	255	190	93	87	255	157	255
18	3200 K	135	36	30	255	111	255	186	96	87	255	168	255
19	3300 K	128	37	32	255	122	255	181	97	90	255	176	255
20	3400 K	126	39	36	255	131	255	179	100	96	255	183	255
21	3500 K	120	40	40	255	136	255	175	101	101	255	186	255
22	4000 K	102	71	56	255	145	255	161	135	119	255	192	255
23	5000 K	80	130	86	255	160	255	143	182	148	255	202	255
24	5600 K	55	130	98	255	179	255	118	182	158	255	214	255
25	6000 K	55	135	108	255	203	255	118	186	166	255	228	255
26	6500 K	49	140	118	255	230	255	112	189	173	255	242	255
27	8000 K	30	150	148	255	238	255	87	196	194	255	246	255
28	10000 K	4	160	172	255	255	255	32	202	209	255	255	255
29	12000 K	4	192	198	255	255	255	32	221	225	255	255	255
30	14000 K	4	192	213	255	255	255	32	221	233	255	255	255
31	15000 K	4	192	219	255	255	255	32	221	236	255	255	255
32	16000 K	8	193	226	255	255	255	45	222	240	255	255	255
33	17000 K	10	210	233	255	255	255	50	231	244	255	255	255
34	18000 K	10	218	239	255	255	255	50	236	247	255	255	255
35	19000 K	12	230	246	255	255	255	55	242	250	255	255	255
36	20000 K	18	255	255	255	255	255	68	255	255	255	255	255

## Ambershift - Redshift simulation values

White light from 3'200K to 1'500K made by RGBACL mix engine (Hyperion 6C)

**Fixture settings:** linear dimming curve + 8 bit mode + LED boost off

The following DMX values are made by photometric data measurements and test comparison with COM 12 PC and CP 90 halogen lamp.

(following the Planck Line)

LINEAR CURVE					
RED	GREEN	BLUE	AMBER	CYAN	LIME
135	36	30	255	111	255
142	34	30	255	97	255
145	26	27	255	94	255
156	26	23	255	86	255
168	25	20	255	79	255
178	24	18	255	67	255
192	24	17	255	53	255
208	23	15	255	40	255
228	23	12	255	30	255
240	4	12	255	30	255
255	4	8	255	30	240
255	4	7	255	12	230
255	0	4	255	8	212
255	0	0	255	1	198
255	1	0	255	1	169
255	1	0	255	1	146
255	1	0	255	1	122
255	0	0	255	0	115

(following the Plackonian Line)

QUADRATIC CURVE					
RED	GREEN	BLUE	AMBER	CYAN	LIME
186	96	87	255	168	255
190	93	87	255	157	255
192	81	83	255	155	255
199	81	77	255	148	255
207	80	71	255	142	255
213	78	68	255	131	255
221	78	66	255	116	255
230	77	62	255	101	255
241	77	55	255	87	255
247	32	55	255	87	255
255	32	45	255	87	247
255	32	42	255	55	242
255	0	32	255	45	233
255	0	0	255	16	225
255	16	0	255	16	208
255	16	0	255	16	193
255	16	0	255	16	176
255	0	0	255	0	171

100 %	3200 K
95 %	3100 K
90 %	3000 K
85 %	2900 K
80 %	2800 K
75 %	2700 K
70 %	2600 K
60 %	2500 K
50 %	2400 K
45 %	2300 K
40 %	2200 K
35 %	2100 K
30 %	2000 K
25 %	1900 K
20 %	1800 K
15 %	1700 K
10 %	1600 K
5 %	1500 K

### The best way to work with the above DMX values

Set the dimmer curve to LINEAR and 8 bit mode

Choose your desired colors and memorize them into the 10 free memories of the preset virtual color wheel

Change the dimming curve to HALO + 16 Bit modes (the processor will calculate automatically the values for this 10 memories)

ATTENTION: The conversion filter DMX values are similar to the relavite filter in front of a CP 90 - 3200K halogen lamp. In the most of cases the LED lightoutput is much more powerful in relation to the CP 90 filtered halogen lightoutput. In this case you have to dimm down the LED output to match the filtered halogen light. All this values are not just theoretical calculations, but made by accurate photometric and visual tests. For this reason they could be improved in relation to your visual perception and experience with your lights on stage. For more info or reccomandation, feel free to send us an email to [nellt@spotlight.it](mailto:nellt@spotlight.it)