



BUYER BEWARE!

All projectors are NOT created equal.

INSIST on High Color Brightness in every projector you buy.

Projector Buyer's Guide to Color Brightness by Model

Projector buyers should proceed with caution.

Derived when presentations consisted of a black font on a white background, the old lumens metric only measures white light. Lumens, or brightness, tells the projector buyer little about the brightness of colors in photos, videos or graphics.

Fortunately, a newer metric gives projector buyers a measurement for the brightness of colors. Color Light Output, or more simply Color Brightness, quantifies the brightness of Red, Green and Blue; the primary colors of light.

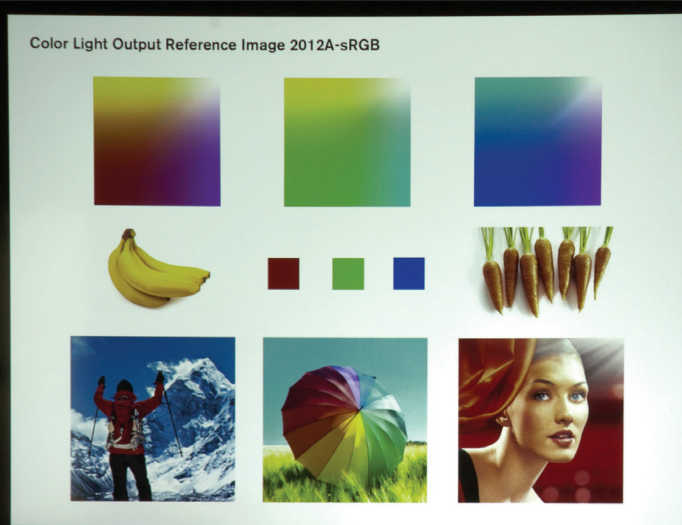
The photograph below shows two projectors setup side-by-side, set in their brightest mode. Both offer similar resolution, price and white brightness levels.

The projector on the left exhibits low Color Brightness; only a fraction of its white brightness. The one on the right shows equal amounts of Color and White Brightness. Colors on the right are much brighter, providing more impact.

This document starts with a listing of projectors where the manufacturer specifies both White and Color Brightness. Second is a table containing projectors measured for their Color Brightness level by a 3rd party laboratory because the manufacturer did not specify the color brightness.

Insist on brighter colors. When selecting a projector, consider both the brightness of White as well as the brightness of Color.

Low Color Brightness¹



High Color Brightness



Actual photograph of side by side projected images from an identical signal source. Both projectors are set to their brightest mode. Testing and photography conducted by Lumita Inc.

Table 1: Models with Manufacturer Specification for Color Brightness

Many manufacturers provide specifications for both White Light Output (White Brightness) and Color Light Output (Color Brightness). Manufacturers publish specifications on product performance and are responsible for their legitimacy and reliability. See manufacturer's websites or contact the manufacturer for details.

	White Lumens	Color Lumens		White Lumens	Color Lumens		White Lumens	Color Lumens
Dukane			PowerLite 1761W	2600	2600	PowerLite 98H	3000	3000
ImagePro 8104	2500	2500	PowerLite 1770W	3000	3000	PowerLite 99W	3000	3000
ImagePro 8107	2500	2500	PowerLite 1771W	3000	3000	PowerLite 99WH	3000	3000
ImagePro 8112	3000	3000	PowerLite 1776W	3000	3000	PowerLite D6150	3500	3500
ImagePro 8755	2400	2400	PowerLite 1835	3500	3500	PowerLite D6155W	3500	3500
ImagePro 8928	2700	2700	PowerLite 1850W	3700	3700	PowerLite D6250	4000	4000
ImagePro 8930	3200	3200	PowerLite 1880	4000	4000	PL HC2000	1800	1800
ImagePro 8931	3000	3000	PowerLite 1930	4200	4200	PL HC2030	2000	2000
ImagePro 8932	3200	3200	PowerLite 1940W	4200	4200	PL HC3000	2300	2300
ImagePro 8933	3000	3000	PowerLite 1945W	4200	4200	PL HC3020	2300	2300
ImagePro 8957	4000	4000	PowerLite 1955	4500	4500	PL HC3020e	2300	2300
ImagePro 8958	4000	4000	PowerLite 1960	5000	5000	PL HC3500	2500	2500
ImagePro 8959	5000	5000	PowerLite 1965	5000	5000	PL HC500	2600	2600
ImagePro 8970	5000	5000	PowerLite 1975W	5000	5000	PL HC5020UB	2400	2400
ImagePro 8971	6000	6000	PowerLite 1980WU	4400	4400	PL HC5020UBe	2400	2400
ImagePro 8972	4000	4000	PowerLite 1985WU	4800	4800	PL HC5030UB	2400	2400
ImagePro 8973	5500	5500	PowerLite 4100	4500	4500	PL HC5030UBe	2400	2400
ImagePro 8974	4200	4200	PowerLite 420	2500	2500	PL HC707	2700	2700
ImagePro 8975	5000	5000	PowerLite 4200W	4500	4500	PL HC725HD	2800	2800
ImagePro 8977	7000	7000	PowerLite 425W	2500	2500	PL HC730HD	3000	3000
ImagePro 8979	6000	6000	PowerLite 430	3000	3000	PL HC750HD	3000	3000
Epson			PowerLite 4300	5200	5200	PL HC8345	1800	1800
BrightLink 436Wi	3000	3000	PowerLite 435W	3000	3000	PL HC8350	2000	2000
BrightLink 475Wi	2600	2600	PowerLite 4650	5200	5200	PL Presenter	2500	2500
BrightLink 485Wi	3100	3100	PowerLite 470	2600	2600	PL Pro C4030	2000	2000
BrightLink 536Wi	3400	3400	PowerLite 475W	2600	2600	PL Pro C6020UB	2400	2400
BrightLink 575Wi	2700	2700	PowerLite 4750W	4200	4200	PL Pro C6030UB	2400	2400
BrightLink 585Wi	3300	3300	PowerLite 4770W	5000	5000	PL Pro C9350	2000	2000
BrightLink 595Wi	3300	3300	PowerLite 480	3000	3000	PL Pro G5450WU	4000	4000
BrightLink Pro 1410Wi	3100	3100	PowerLite 485W	3100	3100	PL Pro G5550	4500	4500
BrightLink Pro 1420Wi	3300	3300	PowerLite 4855WU	4000	4000	PL Pro G5650W	4500	4500
BrightLink Pro 1430Wi	3300	3300	PowerLite 520	2700	2700	PL Pro G6050W	5500	5500
EX3212	2800	2800	PowerLite 525W	2800	2800	PL Pro G6070W	5500	5500
EX3220	3000	3000	PowerLite 530	3200	3200	PL Pro G6150	6500	6500
EX5210	2800	2800	PowerLite 535W	3400	3400	PL Pro G6170	6500	6500
EX5220	3000	3000	PowerLite 570	2700	2700	PL Pro G6270W	6500	6500
EX5230	3500	3500	PowerLite 575W	2700	2700	PL Pro G6450WU	4500	4500
EX6210	2700	2700	PowerLite 580	3200	3200	PL Pro G6470WU	4500	4500
EX6220	3000	3000	PowerLite 585W	3300	3300	PL Pro G6550WU	5200	5200
EX7210	2800	2800	PowerLite 905	3000	3000	PL Pro G6570WU	5200	5200
EX7220	3000	3000	PowerLite 915W	3200	3200	PL Pro G6750WU	6000	6000
EX7230	3000	3000	PowerLite 93+	2600	2600	PL Pro G6770WU	6000	6000
EX7235	3000	3000	PowerLite 935W	3700	3700	PL Pro G6800	7000	7000
MegaPlex MG-850HD	2800	2800	PowerLite 95	2600	2600	PL Pro G6870	7000	7000
MovieMate 85HD	2500	2500	PowerLite 955WH	3200	3200	PL Pro G6900WU	6000	6000
PowerLite 1221	2800	2800	PowerLite 965	3500	3500	PL Pro G6970WU	6000	6000
PowerLite 1222	3000	3000	PowerLite 965H	3500	3500	PL Pro Z8000WUNL	6000	6000
PowerLite 1261W	2800	2800	PowerLite 96W	2700	2700	PL Pro Z8050WNL	7000	7000
PowerLite 1262W	3000	3000	PowerLite 97	2700	2700	PL Pro Z8150NL	8000	8000
PowerLite 1263W	3000	3000	PowerLite 97H	2700	2700	PL Pro Z8250NL	10000	10000
PowerLite 1751	2600	2600	PowerLite 98	2700	2700	PL Pro Z8255NL	10000	10000

Table 1: Continued

	White Lumens	Color Lumens		White Lumens	Color Lumens		White Lumens	Color Lumens
Epson (Continued)			EB-4750W	4200	4200	EB-W03	2700	2700
PL Pro Z8350WNL	8500	8500	EB-4950WU	4500	4500	EB-W8D	2500	2500
PL Pro Z8450WUNL	7000	7000	EB-520	2700	2700	EB-W16	3000	3000
PL Pro Z8455WUNL	7000	7000	EB-525W	2800	2800	EB-W16SK	6000	6000
PL Pro Z9750UNL	7500	7500	EB-530	3200	3200	EB-W22	3000	3000
PL Pro Z9800WNL	8300	8300	EB-535W	3400	3400	EB-W28	3000	3000
PL Pro Z9870NL	8700	8700	EB-536Wi	3400	3400	EB-W29	3000	3000
PL Pro Z9870UNL	8700	8700	EB-536WT	3400	3400	EB-X03	2700	2700
PL Pro Z9900WNL	9200	9200	EB-570	2700	2700	EB-X18	3000	3000
PL Pro Z10000UNL	10000	10000	EB-575Wi	2700	2700	EB-X20	2700	2700
PL Pro Z10005UNL	10000	10000	EB-580	3200	3200	EB-X24	3200	3200
PL Pro Z11000WNL	11000	11000	EB-585W	3300	3300	EB-X25	3500	3500
PL Pro Z11005NL	11000	11000	EB-585Wi	3300	3300	EB-X27	2700	2700
PowerLite S11	2600	2600	EB-590WT	3300	3300	EB-X29	3000	3000
PowerLite S17	2700	2700	EB-595Wi	3300	3300	EB-X30	3500	3500
PowerLite S27	2700	2700	EB-935W	3700	3700	EB-Z9750WU	7500	7500
PowerLite W16	3000	3000	EB-940H	3000	3000	EB-Z9800W	8300	8300
PowerLite W16SK	6000	6000	EB-945	3000	3000	EB-Z9870U	8700	8700
PowerLite W17	2800	2800	EB-945H	3000	3000	EB-Z9875U	8700	8700
PowerLite W29	3000	3000	EB-950WH	3000	3000	EB-Z9900W	9200	9200
PowerLite X12	2800	2800	EB-950WHV	3000	3000	EB-Z10000U	10000	10000
PowerLite X15	3000	3000	EB-955W	3000	3000	EB-Z10005U	10000	10000
PowerLite X17	2700	2700	EB-955WH	3200	3200	EB-Z11000	11000	11000
PowerLite X27	2700	2700	EB-965	3500	3500	EB-Z11000W	11000	11000
VS210	2600	2600	EB-965H	3500	3500	EH-TW490	3000	3000
VS220	2700	2700	EB-97H	2700	2700	EH-TW5100	1800	1800
VS230	2800	2800	EB-98	3000	3000	EH-TW5200	2000	2000
VS315W	2600	2600	EB-98H	3000	3000	EH-TW570	3000	3000
VS320	2700	2700	EB-99WH	3000	3000	EH-TW6100	2300	2300
VS330	2700	2700	EB-G6050W	5500	5500	EH-TW6600	2500	2500
VS335W	2700	2700	EB-G6070W	5500	5500	EH-TW6600W	2500	2500
VS350W	3700	3700	EB-G6150	6500	6500	EH-TW7200	2000	2000
VS410	4000	4000	EB-G6170	6500	6500	EH-TW8200	2400	2400
EB-1420Wi	3300	3300	EB-G6250W	6500	6500	EH-TW8200W	2400	2400
EB-1430Wi	3300	3300	EB-G6270W	6500	6500	EH-TW9200	2400	2400
EB-1751	2600	2600	EB-G6350	7000	7000	EH-TW9200W	2400	2400
EB-1761W	2600	2600	EB-G6370	7000	7000			
EB-1771W	3000	3000	EB-G6450WU	4500	4500	Hitachi		
EB-1776W	3000	3000	EB-G6470WU	4500	4500	CP-A222WN	2200	2200
EB-1930	4200	4200	EB-G6550WU	5200	5200	CP-A352WN	3500	3500
EB-1935	4200	4200	EB-G6570WU	5200	5200	CP-AW2519N	2500	2500
EB-1940W	4200	4200	EB-G6650WU	6000	6000	CP-AW2519NM	2500	2500
EB-1945W	4200	4200	EB-G6750WU	6000	6000	CP-AW252WN	2500	2500
EB-1950	4500	4500	EB-G6770WU	6000	6000	CP-AW312WN	3000	3000
EB-1955	4500	4500	EB-G6800	7000	7000	CP-D31N	3000	3000
EB-1960	5000	5000	EB-G6870	7000	7000	CP-D32WN	3200	3200
EB-1965	5000	5000	EB-G6900WU	6000	6000	CP-EW300	3000	3000
EB-1970W	5000	5000	EB-G6970WU	6000	6000	CP-SX8350	5000	5000
EB-1975W	5000	5000	EB-S03	2700	2700	CP-WU8440	4200	4200
EB-1980WU	4400	4400	EB-S17	2700	2700	CP-WU8450	5000	5000
EB-1985WU	4800	4800	EB-S18	2900	2900	CP-WU8460	6000	6000
EB-4550	4500	4500	EB-S27	2700	2700	CP-WUX8441	5000	5000
EB-4650	5200	5200	EB-S29	3000	3000	CP-WUX8460	6000	6000

Table 1: Continued

	White Lumens	Color Lumens
Hitachi (Continued)		
CP-WX2515WN	2700	2700
CP-WX3015WN	3000	3000
CP-WX3030WN	3000	3000
CP-WX4022WN	4000	4000
CP-WX8240	4000	4000
CP-WX8240A	4000	4000
CP-WX8255A	5500	5500
CP-X2521WN	2700	2700
CP-X2530WN	2700	2700
CP-X3021WN	3200	3200
CP-X3030WN	3200	3200
CP-X4015WN	4000	4000
CP-X4022WN	4000	4000
CP-X5022WN	5000	5000
CP-X8150	5000	5000
CP-X8160	6000	6000
CP-X8170	7000	7000
Sony		
VPL-CW275	5100	5100
VPL-CX275	5200	5200
VPL-DW120	2600	2600
VPL-DW126	2600	2600
VPL-DX120	2600	2600
VPL-DX140	3200	3200
VPL-DX146	3200	3200
VPL-EW225	2600	2600
VPL-EW246	3100	3100
VPL-EW276	3700	3700
VPL-EX225	2700	2700
VPL-EX246	3200	3200
VPL-EX276	3700	3700
VPL-FH30	4300	4300
VPL-FH31B	4300	4300
VPL-FH31W	4300	4300
VPL-FH36B	5200	5200
VPL-FH36W	5200	5200
VPL-FH500L	7000	7000
VPL-FX30	4200	4200
VPL-FX35	5000	5000
VPL-FX37	6000	6000
VPL-FX500L	7000	7000

Table 2: Models Tested by 3rd Party Laboratory for Color Brightness

The manufacturers in table two have not provided Color Light Output (Color Brightness) specifications. These models were tested by third party laboratories (Intertek & Lumita) in accordance with IDMS 15.4 in order to provide critical information to buyers.

	Lumens Spec.	Tested Color Brightness		Lumens Spec.	Tested Color Brightness		Lumens Spec.	Tested Color Brightness
3M			MS502	2700	760	W1500	2200	1440
MP225A	32	30	MS504	3000	700	W7000	2000	1500
AAXA			MS510	2700	730	W770ST	2500	680
MP-300-03	550	150	MS513	2700	700	Canon		
P2 Jr.	55	30	MS517	2800	700	LV-S300	3000	620
P3	50	20	MS521	3000	460	LV-WX300	3000	700
P300	300	140	MS524	3200	670	LV-X300	3000	630
P4-X	95	40	MS612ST	2500	710	Casio		
P450	450	190	MS614	2700	710	XJ-A130	2000	540
Acer			MW516	2800	670	XJ-A141	2500	1200
C120	100	90	MW519	2800	700	XJ-A246	2500	1340
H5360	2500	600	MW523	3000	430	XJ-A252	3000	1170
H5370BD	2500	570	MW526	3200	620	XJ-A256	3000	1370
H5380BD	3000	660	MW621ST	3000	530	XJ-H1700	4000	770
H6500	2100	720	MW665	3200	650	XJ-M140	2500	1440
H6510BD	3000	580	MW721	3500	810	XJ-M151	3000	1640
K132	500	130	MW727	4200	830	XJ-M240	2500	1280
P1173	3000	590	MW769	4200	950	XJ-M245	2500	1160
P1273	3000	710	MW814ST	2500	770	XJ-M251	3000	1650
P1283	3000	650	MW824ST	3200	590	XJ-ST145	2500	510
P1383W	3100	660	MW843UST	3000	560	XJ-UT310WN	3100	1890
P1500	3000	530	MW851UST	2500	460	Christie		
P5271	3100	700	MW853UST	3200	860	DHD800	8000	2000
P7505	5000	980	MW860USTi	3000	480	Dell		
X110P	2700	700	MW870UST	3000	530	1409X	2500	820
X1161P	2700	720	MX503	2700	830	1610HD	3500	910
X1163	3000	720	MX505	3000	640	2400MP	3000	710
X1211K	2500	670	MX511	2700	700	4320	4300	1080
X1240	2700	650	MX518	2800	720	M110	300	80
X1261P	2700	640	MX520	3000	610	M115HD	450	120
X1373WH	3000	560	MX522	3000	430	M900HD	900	180
Acto			MX525	3200	430	S300wi	2200	480
DX221ST	3200	470	MX570	3200	380	S500wi	3200	840
ASUS			MX613ST	2500	660	Hitachi		
S1	200	120	MX620ST	3000	630	CP-DX250	2500	480
BenQ			MX660P	3000	790	CP-DX300	3000	650
HC1200	2800	1740	MX661	3000	680	InFocus		
HT1075	2200	1390	MX711	3200	770	IN102	2500	740
HT1085ST	2200	1390	MX723	3700	660	IN1110	2100	530
Joybee GP2	200	30	MX726	4000	870	IN1110A	2100	550
LW61ST	2000	550	MX763	3700	830	IN1112	2200	590
MH630	3000	770	MX764	4200	980	IN1112A	2200	530
MH680	3000	700	MX810ST	2500	490	IN112	2700	640
MH740	4000	730	MX815ST	2700	720	IN112A	3000	700
MP512	2200	610	MX816ST	3000	640	IN114	2700	660
MP515	2500	750	MX850UST	2500	400	IN114A	3000	670
MP522	2000	540	SH915	4000	780	IN114ST	2700	560
MP522ST	2000	590	SH940	4000	1160	IN116	2700	630
MP525P	2500	840	SP840	4000	480	IN116A	3000	660
MP622	2700	1090	SU917	5000	900	IN122	3200	760
MP622C	2200	1010	TH681	3000	840	IN124	3200	840
MP780ST	2500	600	W1070	2000	1570	IN124ST	3000	690
			W1080ST	2000	1470			

Table 2: Continued

	Lumens Spec.	Tested Color Brightness		Lumens Spec.	Tested Color Brightness		Lumens Spec.	Tested Color Brightness
InFocus (Continued)								
IN126	3200	810	XD490U	3000	780	EP771	3000	930
IN126ST	3000	630	XD500U	2200	640	ES522	2800	660
IN126STA	3300	700	XD700U	5000	850	EW1691e	3000	770
IN1338HD	4000	690	NEC			EW536	2800	700
IN118HDa	3000	400	NP110	2200	640	EW695UT	3500	780
IN2102	2500	760	NP200	2100	480	EX525ST	2500	570
IN2104	2500	650	NP40	2200	830	EX530	2600	650
IN2112	3000	750	NP4001	4500	1640	EX532	2800	650
IN2114	3000	760	NP4100	6200	1950	EX551	2800	640
IN2116	3000	730	NP50	2600	740	EX685UT	3000	620
IN2124	3200	800	NP60	3000	790	EX765	4000	810
IN2126	3200	840	NP61	3000	700	EX784	5000	1060
IN2128HDa	3500	740	NP-M282X	2800	810	EX785	5000	1300
IN3102	3000	840	NP-M322W	3200	810	GT750e	3000	950
IN3104	3500	1010	NP-M322X	3200	870	GT760	3400	600
IN3114	3500	910	NP-M352WS	3500	1020	GT1080	2800	500
IN3116	3500	930	NP-M402H	4000	1060	H180X	3000	660
IN3124	4800	1050	NP-M402X	4000	1030	H181X	3200	580
IN3126	4000	760	NP-PE401H	4000	1020	HD131Xe	2500	480
IN3128HD	4000	590	NP-PX750U	7500	1250	HD131Xw	2500	650
IN3138HD	4000	720	NP-PX750U+	7500	660	HD141X	3000	630
IN35	2500	840	NP-PX800X	8000	1890	HD20	1700	1020
IN37	3000	970	NP-U260W	2600	540	HD23	2500	680
IN3914	2700	730	NP-U300X	3000	770	HD25E	2800	420
IN5312	4500	1190	NP-U310W	3100	690	HD25-LV	3500	670
Work Big IN24+	2400	720	NP-V260	2600	620	HD26	3200	670
Work Big IN26+	2400	640	NP-V260W	2600	620	HD33	1800	940
Work Big IN32	2000	940	NP-V260X	2600	640	HD65	1600	650
Work Big IN34	2500	670	NP-V300W	3000	740	HD66	2500	710
Work Big IN36	3000	870	NP-V300X	3000	740	ML300	300	130
LG			NP-VE281	2800	590	ML500	500	140
BS-275	2700	700	NP-VE281X	2800	700	ML550	500	150
PA75U	700	230	V311W	3100	690	ML750	700	110
PA77U	700	300	V311X	3100	720	ML1000P	1000	170
PB63U	500	220	Optoma			PK320	100	60
PH300W	300	200	DH1009	3200	590	PRO150S	2800	810
PW800	800	340	DH1011	3000	640	PRO160S	3000	810
Mimio			DS331	3200	500	PRO250X	2800	740
mimioProjector	2800	550	DS339	2600	760	PRO260X	3000	770
Mitsubishi			DS550	2600	650	PRO360W	3000	820
EX240U	2500	510	DW326e	3000	710	PT100	50	10
HC1500	1600	720	DX326	2800	710	PT110	100	20
HC4000	1300	400	DX346	3000	690	S303	3000	670
HC7800D	1500	1090	DX550	2600	640	S316	3200	710
HD4000U	2000	690	EH200ST	3000	500	TS526	2800	700
WD380U-EST	2800	660	EH415	4200	800	TS551	2800	640
XD211U	2200	660	EH500	4700	1000	TW766W	4000	800
XD221U	2300	810	EH501	5000	430	TX536	2800	670
XD221U-ST	2000	650	EH503	5000	1190	TX542	2800	680
XD250U	2700	1050	EP1691	2500	820	TX631-3D	3500	850
XD3500U	5000	940	EP716	1800	510	W303	3200	500
XD360U-EST	2500	350	EP719	2000	600	W304M	3100	780
XD460U	2600	850	EP721	2200	550	W305ST	3200	490
			EP727	2200	590	W306ST	3500	730
			EP728	2700	810	W307UST	3500	660

Table 2: Continued

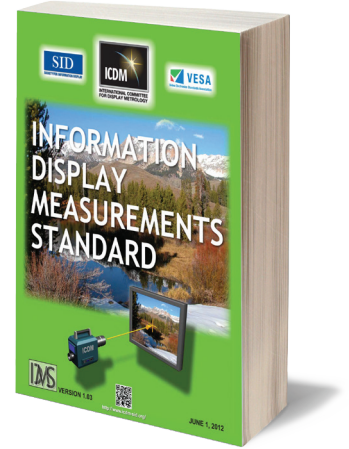
	Lumens Spec.	Tested Color Brightness		Lumens Spec.	Tested Color Brightness		Lumens Spec.	Tested Color Brightness
Optoma (Continued)			UX60	2000	730	D940VX	4300	930
W311	3200	490	Toshiba			D966HD	4500	910
W316	3400	660	TDP-T45U	2500	670	DH758USTiR	3500	700
W316ST	3400	640	ViewSonic			DW868	4500	760
W351	3800	810	PJ506D	2000	630	H1180HD	2000	880
W415	4500	800	PJD5123	2700	730	H1186	2000	1490
X303	3000	410	PJD5132	2800	730	Qumi Q2	300	50
X304M	3000	620	PJD5133	2700	700	Qumi Q5	500	80
X305ST	3000	540	PJD5134	3000	670	Qumi Q7	800	130
X306ST	3200	680	PJD5153	3200	770			
X312	3200	610	PJD5155	3200	900			
X313	3000	710	PJD5223	2700	680			
X316	3200	590	PJD5232	2800	580			
X351	3600	700	PJD5233	2700	640			
X600	6000	1070	PJD5234	2800	640			
ZW210ST	2000	410	PJD5234L	3000	690			
ZW212ST	2500	390	PJD5255	3200	940			
ZX210ST	2000	360	PJD5523w	2700	620			
ZX212ST	2500	280	PJD5533w	2800	740			
Panasonic			PJD5555w	3200	860			
PT-CW230EA	2500	550	PJD6220	2300	640			
PT-D5700U	6000	3050	PJD6350	3300	730			
PT-DW830UW	8500	3400	PJD6383s	3000	720			
PT-DZ570U	4000	2240	PJD6531w	3000	940			
PT-DZ6710	6000	2990	PJD6544w	3500	750			
PT-DZ770UK	7000	2340	PJD6553w	3500	870			
PT-DZ870UK	8500	3700	PJD6683ws	3000	830			
PT-LS26U	2600	670	PJD7533w	4000	710			
PT-RW430UK	3500	800	PJD7583w	3000	730			
PT-RZ370U	3500	840	PJD7820HD	3000	830			
PT-RZ470UW	3500	830	PJD7822HDL	3200	750			
PT-RZ670U	6500	3460	PLED-W500	500	120			
PT-SD2600C	2600	670	Pro8200	2000	780			
Philips			Pro8300	3000	720			
PicoPix PPX2340	40	30	Pro8400	4000	1030			
Promethean			Pro8450w	4500	980			
PRM-35	2500	600	Pro8500	5000	1300			
Ricoh			Pro8520HD	5000	780			
PJ S2240	3000	710	Vivitek					
PJ WX2240	3100	700	D512-3D	2600	560			
PJ WX4240N	3000	540	D5280	4500	900			
PJ X2240	3000	690	D530	3200	790			
Sharp			D535	3200	620			
PG-F212X	2300	860	D536-3D	3200	610			
PG-LW2000	2800	770	D537W	3200	720			
PG-LW3000	3000	870	D538W-3D	3200	680			
PG-LX2000	2800	790	D554	3000	650			
XR-30X	2300	740	D555	3000	670			
XR-32X	2500	750	D557WH	3000	640			
XR-41X	2600	660	D791ST	3000	340			
Smart			D795WT	3000	320			
LightRaise 40Wi	2500	750	D803W-3D	3600	680			
LightRaise 60Wi	2500	620	D832MX	3200	780			
SLR60Wi2	3000	670	D865W	4000	670			
			D910HD	3000	710			

What's behind this new Color Brightness standard?

Color Light Output, or simply Color Brightness, measures the illuminance of the color primaries Red, Green and Blue. The technical details of this measurement methodology are defined in the newly available Information Display Measurements Standard published by the Society for Information Displays.

The authors of this important standards document were volunteers from all corners of the display industry. These experts carefully examined each of the nearly 200 display metrics in the document to make sure each was relevant, scientifically valid, and worth including in the document.

The Society for Information Displays (SID) is a globally recognized organization working to help educate technical members of the display industry. SID was founded as a Professional Society back in 1962. SID is made up today of about 5,000 display professionals.



More information about this document can be found at: <http://www.icdm-sid.org/>

Why does the standard only measure Red, Green and Blue? What about all the other colors?

Computers and media players define colors as relative levels of Red, Green and Blue. For example, yellow is stored inside the computer as bright red, bright green and no blue.

Regardless of how the projector may create its image, the standard input signal is based on Red, Green and Blue and therefore it's important to measure these standard color primaries.

What does the Brightness metric we've used for years represent?

Brightness, or technically Light Output, is only a measurement of white light. To measure brightness, projector makers will take nine brightness readings across the entire image. The average of the nine measurements is multiplied by the screen area in square meters to determine the projector's lumen output.

How is Color Brightness measured?

Color Light Output is measured almost exactly the same way as "Brightness" or white light output...but instead of measuring white light, the primary colors are measured.

Instead of just nine measurements, there are total of 27 measurements taken, with the three sample images below.

The brightness of Red, Green and Blue are averaged, summed and multiplied by the screen area to determine the total amount of Color Brightness.



¹ Actual photographs of images produced by two competing projectors set to the brightest mode. Price and resolution are the same for both projectors. Projector on the left is a 1-Chip DLP rated by the manufacturer at 2700 lumens of White Brightness; it measured 700 lumens of Color Brightness. The projector on the right is a 3LCD projector rated at 2600 lumens (Color Brightness) and 2600 lumens (White Brightness).

² The data in Table 1 was obtained from Projector Central based on information available from these manufacturers.

³ The White Brightness data in Table 2 was obtained through Projector Central, as specified by the manufacturers. These manufacturers do not provide Color Brightness (Color Light Output) data. Color Brightness was determined in compliance with IDMS 15.4 by 3rd party laboratory testing of a single unit of each model. Serial numbers available upon request.