

Colorimetric Report

Page (1/4)



CCalc 2.4
Copyright © 2018, Denis Freund
All Rights Reserved
lic. for PRAD ProAdviser

Date	Monday, September 30, 2019
Tester	Denis Freund
Display	BenQ PD3220U
Sensor	X-Rite i1 Pro
Testchart	In accordance with ISO 12646:2007 (1)
Target	sRGB
Display Profile	Not considered
Rendering Intent	-

(1) Five equally spaced code values for each channel

White Point (CCT)	6546 Kelvin
White Point XYZ (normalized)	95.24 100.00 109.91
DeltaE to D50/ D65	20.15/ 0.71
Assumed Target Whitepoint (2)	6500 Kelvin
DeltaE to Assumed Target Whitepoint	0.80
Brightness (3)	193.90 cd/m ²
Black Point (3)	0.25 cd/m ²
Contrast (x:1)	776:1
Gradation (Average)	2.21

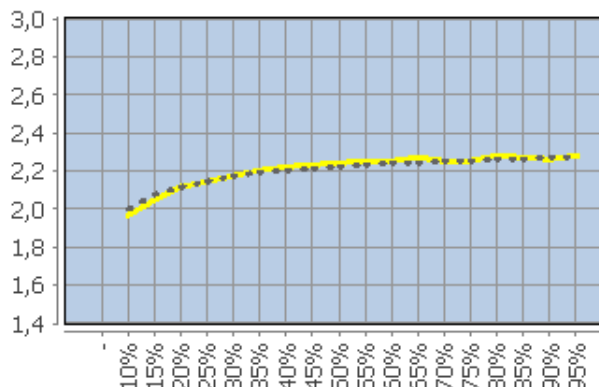
(2) Daylight (3) Measured separately

	Percent	Kelvin	Delta C	Delta E	Gamma
	5	-	-	-	-
	10	7224	1.94	2.05	1.97
	15	7046	1.44	1.50	2.05
	20	6895	1.14	1.15	2.11
	25	6777	0.80	0.83	2.14
	30	6742	0.73	0.73	2.17
	35	6709	0.85	0.89	2.20
	40	6651	0.65	0.75	2.22
	45	6602	0.48	0.59	2.23
	50	6585	0.33	0.41	2.24
	55	6610	0.37	0.44	2.25
	60	6603	0.34	0.36	2.25
	65	6618	0.46	0.55	2.27
	70	6541	0.27	0.27	2.25
	75	6605	0.40	0.40	2.25
	80	6606	0.40	0.42	2.28
	85	6565	0.17	0.17	2.27
	90	6562	0.24	0.24	2.26
	95	6579	0.33	0.33	2.28
	100 (4)	6546	-	-	-
	Average (5)	-	0.63	0.67	2.21
	Maximum (5)	-	1.94	2.05	-
	Range (5)	-	2.01	-	-

(4) Visual adaptation to display whitepoint is assumed

(5) Only luminance > 1% considered

Corresponding Gamma



Colorimetric Report

Page (2/4)



CCalc 2.4
Copyright © 2018, Denis Freund
All Rights Reserved
lic. for PRAD ProAdviser

Date	Monday, September 30, 2019
Tester	Denis Freund
Display	BenQ PD3220U
Sensor	X-Rite i1 Pro
Testchart	In accordance with ISO 12646:2007 (1)
Target	sRGB
Display Profile	Not considered
Rendering Intent	-

(1) Five equally spaced code values for each channel

	RGB	Delta C	Delta H	Delta L	Delta E94
	0 0 0	1.47	0.00	1.24	1.93
	0 0 63	0.23	1.33	1.05	1.33
	0 0 127	3.38	0.43	1.74	1.90
	0 0 191	2.06	1.16	1.46	1.57
	0 0 255	2.02	1.55	1.69	1.79
	0 63 0	3.67	0.82	0.28	1.37
	0 63 63	1.51	1.06	0.32	1.21
	0 63 127	0.78	1.59	0.66	1.21
	0 63 191	0.82	1.97	1.21	1.52
	0 63 255	0.88	2.13	1.34	1.57
	0 127 0	2.68	0.15	0.23	0.68
	0 127 63	2.40	0.02	0.16	0.73
	0 127 127	2.25	0.70	0.01	1.07
	0 127 191	0.46	3.18	0.37	2.00
	0 127 255	0.14	3.13	0.70	1.64
	0 191 0	1.28	0.69	0.20	0.42
	0 191 63	1.45	0.78	0.26	0.53
	0 191 127	1.42	1.00	0.27	0.71
	0 191 191	2.50	0.50	0.46	1.05
	0 191 255	1.75	2.38	0.70	1.67
	0 255 0	1.60	0.84	0.09	0.40
	0 255 63	1.16	1.19	0.10	0.50
	0 255 127	1.32	1.08	0.07	0.53
	0 255 191	2.68	0.58	0.29	0.79
	0 255 255	3.02	0.52	0.42	1.06
	63 0 0	3.12	1.61	0.41	1.70
	63 0 63	1.11	1.02	0.43	0.85
	63 0 127	1.44	0.13	0.63	0.72
	63 0 191	1.11	0.82	0.98	1.05
	63 0 255	1.46	1.30	1.42	1.50
	63 63 0	3.20	1.01	0.07	1.41
	63 63 63	0.83	0.12	0.09	0.84
	63 63 127	0.43	0.59	0.35	0.53
	63 63 191	0.40	1.35	0.88	1.08
	63 63 255	0.64	1.77	1.17	1.35
	63 127 0	2.05	0.30	0.30	0.62
	63 127 63	1.64	0.12	0.25	0.61
	63 127 127	1.51	0.57	0.06	0.89
	63 127 191	0.13	2.62	0.25	1.66
	63 127 255	0.30	2.73	0.65	1.46
	63 191 0	0.72	0.22	0.13	0.21
	63 191 63	0.83	0.34	0.18	0.30
	63 191 127	0.90	0.77	0.25	0.55
	63 191 191	1.97	0.42	0.44	0.92
	63 191 255	1.33	2.12	0.66	1.50
	63 255 0	1.00	0.69	0.03	0.30
	63 255 63	0.98	1.04	0.08	0.44

Colorimetric Report

Page (3/4)



CCalc 2.4
Copyright © 2018, Denis Freund
All Rights Reserved
lic. for PRAD ProAdviser

Date	Monday, September 30, 2019
Tester	Denis Freund
Display	BenQ PD3220U
Sensor	X-Rite i1 Pro
Testchart	In accordance with ISO 12646:2007 (1)
Target	sRGB
Display Profile	Not considered
Rendering Intent	-

(1) Five equally spaced code values for each channel

	RGB	Delta C	Delta H	Delta L	Delta E94
	63 255 127	1.44	1.03	0.15	0.55
	63 255 191	2.27	0.46	0.20	0.67
	63 255 255	2.79	0.51	0.40	1.03
	127 0 0	3.54	1.61	0.56	1.39
	127 0 63	1.70	1.44	0.32	1.02
	127 0 127	0.78	0.74	0.20	0.46
	127 0 191	0.94	0.11	0.60	0.62
	127 0 255	0.63	0.60	0.80	0.83
	127 63 0	3.02	0.38	0.43	1.04
	127 63 63	1.83	0.53	0.30	0.91
	127 63 127	0.73	0.55	0.06	0.41
	127 63 191	0.13	0.08	0.33	0.33
	127 63 255	0.25	0.85	0.72	0.79
	127 127 0	1.58	0.77	0.43	0.74
	127 127 63	1.05	0.56	0.40	0.67
	127 127 127	0.36	0.08	0.25	0.44
	127 127 191	0.88	0.83	0.05	0.63
	127 127 255	0.58	1.53	0.41	0.85
	127 191 0	0.01	0.51	0.01	0.23
	127 191 63	0.11	0.35	0.06	0.18
	127 191 127	0.10	0.18	0.09	0.15
	127 191 191	0.83	0.29	0.26	0.54
	127 191 255	0.52	1.57	0.52	1.15
	127 255 0	0.24	0.25	0.07	0.13
	127 255 63	0.11	0.47	0.10	0.21
	127 255 127	0.67	0.60	0.04	0.32
	127 255 191	1.55	0.30	0.10	0.49
	127 255 255	2.09	0.46	0.32	0.90
	191 0 0	2.07	0.09	0.84	0.95
	191 0 63	1.79	0.73	0.75	0.94
	191 0 127	1.16	0.73	0.46	0.64
	191 0 191	0.15	0.78	0.18	0.37
	191 0 255	0.31	0.08	0.34	0.34
	191 63 0	1.37	0.92	0.78	0.94
	191 63 63	1.76	0.26	0.68	0.85
	191 63 127	1.12	0.57	0.54	0.70
	191 63 191	0.05	0.70	0.19	0.38
	191 63 255	0.14	0.10	0.23	0.24
	191 127 0	0.80	0.97	0.75	0.92
	191 127 63	1.22	0.58	0.65	0.83
	191 127 127	0.83	0.13	0.46	0.60
	191 127 191	0.46	0.55	0.25	0.45
	191 127 255	0.51	0.36	0.17	0.27
	191 191 0	0.32	1.42	0.19	0.69
	191 191 63	0.23	1.40	0.18	0.74
	191 191 127	0.36	0.97	0.08	0.66
	191 191 191	0.31	0.13	0.12	0.36

Colorimetric Report

Page (4/4)



CCalc 2.4
Copyright © 2018, Denis Freund
All Rights Reserved
lic. for PRAD ProAdviser

Date	Monday, September 30, 2019
Tester	Denis Freund
Display	BenQ PD3220U
Sensor	X-Rite i1 Pro
Testchart	In accordance with ISO 12646:2007 (1)
Target	sRGB
Display Profile	Not considered
Rendering Intent	-

(1) Five equally spaced code values for each channel

	RGB	Delta C	Delta H	Delta L	Delta E94
	191 191 255	0.10	0.46	0.29	0.42
	191 255 0	0.03	0.55	0.21	0.30
	191 255 63	0.77	0.36	0.25	0.33
	191 255 127	0.02	0.14	0.10	0.12
	191 255 191	0.87	0.05	0.08	0.32
	191 255 255	1.07	0.39	0.17	0.65
	255 0 0	1.32	1.24	1.13	1.25
	255 0 63	1.91	0.07	1.18	1.24
	255 0 127	1.66	0.81	0.91	1.04
	255 0 191	0.68	1.47	0.68	0.92
	255 0 255	0.28	1.00	0.21	0.43
	255 63 0	1.35	1.53	1.06	1.25
	255 63 63	2.22	0.12	0.95	1.06
	255 63 127	1.63	0.62	1.06	1.16
	255 63 191	0.60	1.48	0.63	0.91
	255 63 255	0.10	0.94	0.30	0.47
	255 127 0	1.12	1.54	1.04	1.26
	255 127 63	1.93	0.82	0.83	1.03
	255 127 127	1.81	0.10	0.71	0.89
	255 127 191	0.78	1.29	0.56	0.92
	255 127 255	0.03	0.83	0.22	0.44
	255 191 0	0.03	2.45	0.43	1.17
	255 191 63	0.42	2.28	0.41	1.18
	255 191 127	0.85	1.84	0.33	1.19
	255 191 191	1.48	0.15	0.19	0.73
	255 191 255	0.37	0.65	0.03	0.43
	255 255 0	0.47	1.17	0.30	0.57
	255 255 63	0.68	1.08	0.28	0.56
	255 255 127	0.15	0.90	0.23	0.52
	255 255 191	0.48	0.47	0.13	0.40
	255 255 255 (1)	-	-	-	-
	Average (2)	1.14	0.86	0.45	0.82
	Maximum (2)	3.67	3.18	1.74	2.00

(1) Visual adaptation to display whitepoint is assumed; CIELAB reference values are adapted (Bradford transformation) to display whitepoint
(2) Without Black

Color Space	Gamut Volume CIELAB D50
sRGB	94%