

Colorimetric Report

Page (1/5)



CCalc 2.5
Copyright © 2020, Denis Freund
All Rights Reserved
lic. for PRAD ProAdviser

Date	Thursday, December 9, 2021
Tester	Oliver Jachmann
Display	MSI Optix MPG321QRFDE-QD
Sensor	X-Rite i1 Display Pro (Corr.: WLED, XR)
Testchart	In accordance with ISO 12646:2007 (1)
Target	DCI-P3 RGB
Display Profile	Considered
Rendering Intent	Relative colorimetric

(1) Five equally spaced code values for each channel

White Point (CCT)	6241 Kelvin
White Point XYZ (normalized)	95.58 100.00 105.65
DeltaE to D50/ D65	17.23/ 2.21
Assumed Target Whitepoint (2)	6200 Kelvin
DeltaE to Assumed Target Whitepoint	1.28
Brightness	152.19 cd/m ²
Black Point	0.21 cd/m ²
Contrast (x:1)	725:1
Gradation (Average)	2.57

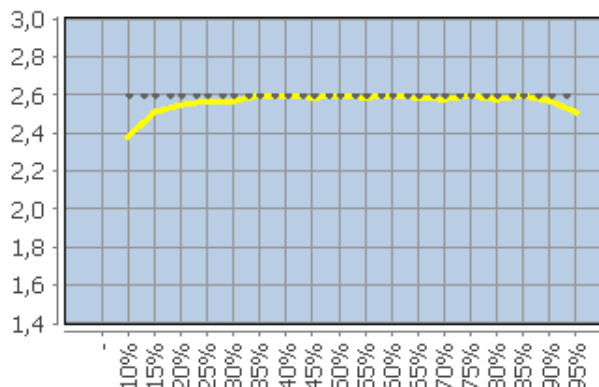
(2) Daylight

	Percent	Kelvin	Delta C	Delta E	Gamma
	5	-	-	-	-
	10	7792	1.28	2.00	2.38
	15	6666	0.79	1.43	2.51
	20	6327	0.80	1.16	2.55
	25	6085	0.82	0.95	2.57
	30	6085	0.68	0.82	2.57
	35	6235	0.11	0.12	2.60
	40	6309	0.49	0.49	2.60
	45	6258	0.26	0.34	2.59
	50	6218	0.32	0.32	2.60
	55	6244	0.66	0.68	2.59
	60	6221	0.12	0.12	2.60
	65	6240	0.81	0.83	2.59
	70	6237	0.22	0.28	2.58
	75	6198	0.39	0.39	2.60
	80	6274	0.54	0.56	2.58
	85	6221	0.22	0.22	2.60
	90	6241	0.01	0.11	2.57
	95	6249	0.68	0.70	2.51
	100 (3)	6241	-	-	-
	Average (4)	-	0.45	0.5	2.57
	Maximum (4)	-	0.82	1.16	-
	Range (4)	-	1.61	-	-

(3) Visual adaptation to display whitepoint is assumed

(4) Only luminance > 1% considered

Corresponding Gamma



Colorimetric Report

Page (2/5)



CCalc 2.5
Copyright © 2020, Denis Freund
All Rights Reserved
lic. for PRAD ProAdviser

Date	Thursday, December 9, 2021
Tester	Oliver Jachmann
Display	MSI Optix MPG321QRFDE-QD
Sensor	X-Rite i1 Display Pro (Corr.: WLED, XR)
Testchart	In accordance with ISO 12646:2007 (1)
Target	DCI-P3 RGB
Display Profile	Considered
Rendering Intent	Relative colorimetric

(1) Five equally spaced code values for each channel

	RGB	Delta C	Delta H	Delta L	Delta E94
	0 0 0	1.24	0.00	1.25	1.75
	0 0 63	1.68	0.17	1.35	1.53
	0 0 127	4.84	2.31	1.43	2.11
	0 0 191	4.97	2.72	1.27	1.85
	0 0 255	6.76	2.76	0.84	1.55
	0 63 0	4.60	0.89	0.61	1.81
	0 63 63	0.75	0.04	0.38	0.55
	0 63 127	0.99	0.64	0.41	0.64
	0 63 191	0.75	0.18	0.17	0.24
	0 63 255	1.85	0.03	0.52	0.59
	0 127 0	8.41	4.60	0.15	2.65
	0 127 63	0.95	0.08	0.05	0.25
	0 127 127	0.20	0.21	0.15	0.22
	0 127 191	0.24	0.19	0.01	0.13
	0 127 255	2.61	1.57	0.11	0.87
	0 191 0	8.60	6.71	0.02	2.70
	0 191 63	0.80	0.01	0.16	0.21
	0 191 127	0.27	0.08	0.04	0.08
	0 191 191	0.90	0.70	0.21	0.52
	0 191 255	0.67	2.68	0.10	1.49
	0 255 0	10.50	7.77	0.02	2.65
	0 255 63	1.46	0.17	0.08	0.21
	0 255 127	0.51	0.14	0.09	0.13
	0 255 191	0.24	0.42	0.10	0.21
	0 255 255	0.81	0.92	0.07	0.51
	63 0 0	1.80	0.35	1.62	1.82
	63 0 63	2.84	0.29	1.39	1.75
	63 0 127	2.70	0.82	0.93	1.20
	63 0 191	3.85	1.80	1.12	1.48
	63 0 255	6.20	2.34	0.71	1.36
	63 63 0	4.39	1.94	0.40	2.35
	63 63 63	0.86	0.12	0.45	0.98
	63 63 127	0.57	0.36	0.55	0.62
	63 63 191	0.65	0.32	0.21	0.28
	63 63 255	2.04	0.04	0.40	0.50
	63 127 0	8.30	4.82	0.27	2.87
	63 127 63	0.43	0.62	0.17	0.39
	63 127 127	0.66	0.68	0.09	0.56
	63 127 191	0.46	0.64	0.13	0.43
	63 127 255	2.44	1.25	0.09	0.74
	63 191 0	8.50	6.91	0.05	2.82
	63 191 63	0.03	0.46	0.03	0.18
	63 191 127	0.17	0.26	0.03	0.13
	63 191 191	1.17	0.60	0.19	0.54
	63 191 255	0.93	2.24	0.13	1.28
	63 255 0	10.18	8.21	0.04	2.78
	63 255 63	1.04	0.72	0.14	0.30

Colorimetric Report

Page (3/5)



CCalc 2.5
Copyright © 2020, Denis Freund
All Rights Reserved
lic. for PRAD ProAdviser

Date	Thursday, December 9, 2021
Tester	Oliver Jachmann
Display	MSI Optix MPG321QRFDE-QD
Sensor	X-Rite i1 Display Pro (Corr.: WLED, XR)
Testchart	In accordance with ISO 12646:2007 (1)
Target	DCI-P3 RGB
Display Profile	Considered
Rendering Intent	Relative colorimetric

(1) Five equally spaced code values for each channel

	RGB	Delta C	Delta H	Delta L	Delta E94
	63 255 127	0.53	0.17	0.09	0.14
	63 255 191	1.17	0.62	0.22	0.42
	63 255 255	0.80	0.76	0.07	0.44
	127 0 0	3.25	2.99	0.49	1.80
	127 0 63	1.00	0.43	0.36	0.52
	127 0 127	1.18	0.34	0.34	0.48
	127 0 191	0.27	0.51	0.03	0.21
	127 0 255	3.65	0.65	0.12	0.58
	127 63 0	4.18	3.95	0.23	2.42
	127 63 63	0.38	0.10	0.25	0.29
	127 63 127	0.02	0.38	0.12	0.25
	127 63 191	0.14	0.20	0.07	0.12
	127 63 255	1.44	0.31	0.46	0.53
	127 127 0	10.09	1.67	0.03	2.58
	127 127 63	1.42	0.08	0.29	0.56
	127 127 127	0.19	0.11	0.09	0.24
	127 127 191	0.20	0.37	0.02	0.24
	127 127 255	2.14	0.69	0.23	0.58
	127 191 0	10.99	4.44	0.23	2.58
	127 191 63	0.90	0.57	0.16	0.34
	127 191 127	0.17	0.07	0.02	0.06
	127 191 191	0.43	0.57	0.01	0.43
	127 191 255	1.34	2.31	0.21	1.45
	127 255 0	10.84	7.70	0.09	2.82
	127 255 63	1.75	0.60	0.26	0.41
	127 255 127	0.28	0.26	0.01	0.11
	127 255 191	0.74	0.15	0.06	0.19
	127 255 255	0.14	0.31	0.01	0.18
	191 0 0	5.30	6.19	0.23	2.67
	191 0 63	0.38	0.03	0.20	0.22
	191 0 127	0.31	0.30	0.10	0.18
	191 0 191	0.46	0.23	0.01	0.13
	191 0 255	1.24	0.57	0.46	0.54
	191 63 0	6.38	6.75	0.13	3.03
	191 63 63	0.28	0.28	0.12	0.19
	191 63 127	0.48	0.05	0.04	0.13
	191 63 191	0.32	0.16	0.08	0.13
	191 63 255	1.33	0.58	0.28	0.41
	191 127 0	11.38	5.44	0.01	3.30
	191 127 63	0.08	0.40	0.04	0.21
	191 127 127	0.18	0.41	0.31	0.41
	191 127 191	0.95	0.14	0.22	0.37
	191 127 255	1.44	0.23	0.24	0.39
	191 191 0	12.88	0.84	0.10	2.38
	191 191 63	0.07	0.42	0.07	0.20
	191 191 127	0.23	0.45	0.09	0.30
	191 191 191	0.33	0.03	0.10	0.35

Colorimetric Report

Page (4/5)



CCalc 2.5
Copyright © 2020, Denis Freund
All Rights Reserved
lic. for PRAD ProAdviser

Date	Thursday, December 9, 2021
Tester	Oliver Jachmann
Display	MSI Optix MPG321QRFDE-QD
Sensor	X-Rite i1 Display Pro (Corr.: WLED, XR)
Testchart	In accordance with ISO 12646:2007 (1)
Target	DCI-P3 RGB
Display Profile	Considered
Rendering Intent	Relative colorimetric

(1) Five equally spaced code values for each channel

	RGB	Delta C	Delta H	Delta L	Delta E94
	191 191 255	1.46	0.37	0.12	0.57
	191 255 0	13.59	4.93	0.19	2.57
	191 255 63	2.85	0.17	0.29	0.53
	191 255 127	0.29	0.02	0.12	0.13
	191 255 191	0.58	0.48	0.05	0.32
	191 255 255	0.20	0.06	0.03	0.10
	255 0 0	9.48	10.68	0.05	3.80
	255 0 63	0.05	0.06	0.06	0.07
	255 0 127	0.32	0.24	0.09	0.15
	255 0 191	0.03	0.07	0.04	0.05
	255 0 255	0.61	1.12	0.21	0.45
	255 63 0	10.44	10.72	0.12	3.93
	255 63 63	0.03	0.35	0.08	0.15
	255 63 127	0.34	0.14	0.06	0.11
	255 63 191	0.18	0.22	0.16	0.19
	255 63 255	1.02	0.77	0.23	0.39
	255 127 0	13.06	9.62	0.01	4.02
	255 127 63	0.01	0.15	0.01	0.06
	255 127 127	0.09	0.57	0.04	0.27
	255 127 191	0.87	0.39	0.08	0.29
	255 127 255	1.44	0.35	0.07	0.32
	255 191 0	14.51	4.52	0.23	2.93
	255 191 63	0.05	0.43	0.24	0.30
	255 191 127	0.50	0.07	0.09	0.17
	255 191 191	0.44	0.60	0.12	0.45
	255 191 255	1.03	0.27	0.09	0.35
	255 255 0	15.95	0.47	0.29	2.39
	255 255 63	4.30	1.03	0.38	0.87
	255 255 127	0.41	0.81	0.27	0.47
	255 255 191	0.31	0.00	0.19	0.22
	255 255 255 (1)	-	-	-	-
	Average (2)	2.61	1.42	0.24	0.91
	Maximum (2)	15.95	10.72	1.62	4.02

(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
DCI-P3 RGB	91%

Colorimetric Report

Page (5/5)



CCalc 2.5
Copyright © 2020, Denis Freund
All Rights Reserved
lic. for PRAD ProAdviser

Date	Thursday, December 9, 2021
Tester	Oliver Jachmann
Display	MSI Optix MPG321QRFDE-QD
Sensor	X-Rite i1 Display Pro (Corr.: WLED, XR)
Testchart	In accordance with ISO 12646:2007 (1)
Target	DCI-P3 RGB
Display Profile	Considered
Rendering Intent	Relative colorimetric

(1) Five equally spaced code values for each channel

Property	Device adjustments
Backlight brightness	
Brightness	37
Contrast	70
RGB Gain	50 50 49
Gradation	-
Other	