

Test Report for VESA Display HDR

Company Name : Top Victory Investments Limited

Model Name : AOC PD32M

Display HDR Tier : 1400

Test Start Date : 11/01/2021

Report Date : 11/05/2021

Test Result : Pass

Notice:

Test result is valid only to the original tested device model. Allion reserves the right to prohibit others to distort, isolate, falsify, copied and/or by any process to change the content of this test report unless it is prior approved by Allion.



Company

Company Name: Top Victory Investments Limited

Company Address: 8F.,No.230.LianChen Rd., zhonghe City, Taipei County 23553 Taiwan

Contact

Name: Kanyi Chen

Phone Number: +886-02-8226-1668 ext. 3882

E-Mail: kanyi.chen@tpv-tech.com

Product Information:

Target HDR Tier: 1400

Provided DUT Information Form: Yes No

Display Firmware Version: V003

Panel Driver IC model name: NT60900EH

Panel Driver IC FW: N/A

HDR mode OSD settings: OSD meun -> Image setup -> HDR Mode -> DisplayHDR

DP Certificaion status: Yes

*** This is a required field, the test project will be held until the information provided. ***

Version of Test Specification: Ver 1.1, 29 Aug, 2019

Test interface port: DisplayPort, USB-C, HDMI 1, HDMI 2

All external inputs: DP x1, USB-C x1, HDMI x2

Tester: Karen Chen

Authorized Signature: Lexus Lee

Overall Test Result: Pass

Project ID: MOR-AOC-VSH-173
Document Number : VSH-RPT-002



Certified Product Website Posting Information

If this section is left blank, device(s) will not be posted publicly on the VESA site(s).

At a later date, you may choose to send a copy of your certification and this information to moderator@vesa.org for posting.

If you would like the product listing to hyperlink to an associated product page but do not currently know the URL, you may send the URL at a later date to moderator@vesa.org.

Exact product name(s) to be listed:	AOC PD32M
Date which the certified product listing should appear on the VESA site(s) [DD/MM/YYYY]	20/11/2021
Product URL to be hyperlinked to the certified product listing (if known)	N/A
<i>In order to be listed, the company must be a current member of VESA and have executed a Trademark License Agreement.</i>	



Test Equipment for Display HDR

Model Name	Type	Manufacture	Comment
CS-2000A	Spectroradiometer	Konica Minolta	Last date of calibration: Apr. 19, 2021
K10-A	Light Measurement Device	Klein	
Intel UHD Graphics 630	Graphcis Card	Intel	Driver Ver. 30.0.100.9955
Windows 10x64	System OS	Microsoft	Ver 20H2, Build 19042
DPM Tool	Pattern tool	VESA	Ver 1.11

Summary of Test Result

Test ID	DP	USB-C	HDMI1	HDMI2
5.1.1 Minimum-white Luminance– 10% Center Patch Test	Pass	Pass	Pass	Pass
5.1.2 Minimum-white Luminance– Full-screen Flash Test	Pass	Pass	Pass	Pass
5.1.3 Minimum-white Luminance– Full-screen Long - duration Test	Pass	Pass	Pass	Pass
5.2.1 Dual Corner Box Test– Black-level Test	Pass	Pass	Pass	Pass
5.2.2 Checkerboard tests– Black-level Test	Pass	Pass	Pass	Pass
6.1 Color Gamut Specifications	Pass	Pass	Pass	Pass
7.1 Bit-depth Specification	Pass	Pass	Pass	Pass
8.3 Rise-time	Pass	Pass	Pass	Pass
9.3 Luminance and White Point Accuracy	Pass	Pass	Pass	Pass



Test Results-HDR 1400 Port : DP 3840x2160 60 Hz RGB

ID	Pass / Fail	Comment or Value																																																												
5.1.1 Minimum-white Luminance 10% Center Patch Test	Pass	Minimum of all samples: 1448.47 nits Maximum range between high and low <10% : 5.7% Detailed Measured Value <table border="1" data-bbox="794 611 1123 1124"> <tr><td>1</td><td>1531.30</td><td>16</td><td>1448.47</td></tr> <tr><td>2</td><td>1517.22</td><td>17</td><td>1450.84</td></tr> <tr><td>3</td><td>1500.99</td><td>18</td><td>1462.98</td></tr> <tr><td>4</td><td>1489.71</td><td>19</td><td>1452.68</td></tr> <tr><td>5</td><td>1469.74</td><td>20</td><td>1459.07</td></tr> <tr><td>6</td><td>1476.90</td><td>21</td><td>1462.37</td></tr> <tr><td>7</td><td>1462.39</td><td>22</td><td>1457.30</td></tr> <tr><td>8</td><td>1463.64</td><td>23</td><td>1459.15</td></tr> <tr><td>9</td><td>1456.62</td><td>24</td><td>1450.65</td></tr> <tr><td>10</td><td>1453.90</td><td>25</td><td>1466.65</td></tr> <tr><td>11</td><td>1456.11</td><td>26</td><td>1466.98</td></tr> <tr><td>12</td><td>1452.62</td><td>27</td><td>1468.52</td></tr> <tr><td>13</td><td>1464.04</td><td>28</td><td>1462.68</td></tr> <tr><td>14</td><td>1449.94</td><td>29</td><td>1453.29</td></tr> <tr><td>15</td><td>1448.55</td><td>30</td><td>1466.64</td></tr> </table> <p>Criteria: Please refer to P.30 of VESA Display HDR CTS Ver 1.1 for details.</p>	1	1531.30	16	1448.47	2	1517.22	17	1450.84	3	1500.99	18	1462.98	4	1489.71	19	1452.68	5	1469.74	20	1459.07	6	1476.90	21	1462.37	7	1462.39	22	1457.30	8	1463.64	23	1459.15	9	1456.62	24	1450.65	10	1453.90	25	1466.65	11	1456.11	26	1466.98	12	1452.62	27	1468.52	13	1464.04	28	1462.68	14	1449.94	29	1453.29	15	1448.55	30	1466.64
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5.1.2 Minimum-white Luminance Full-screen Flash Test	Pass	Minimum of all samples: 1665.04 nits Detailed Measured Value <table border="1" data-bbox="794 1431 948 1603"> <tr><td>1</td><td>1665.04</td></tr> <tr><td>2</td><td>1686.46</td></tr> <tr><td>3</td><td>1673.67</td></tr> <tr><td>4</td><td>1684.19</td></tr> <tr><td>5</td><td>1682.11</td></tr> </table> <p>Criteria: Please refer to P.31 of VESA Display HDR CTS Ver 1.1 for details.</p>	1	1665.04	2	1686.46	3	1673.67	4	1684.19	5	1682.11																																																		
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5.1.3 Minimum-white Luminance– Full-screen Long-duration Test	Pass	<p>Minimum of all samples: 1429.05 nits</p> <p>Detailed Measured Value</p> <table border="1" data-bbox="794 506 1123 1021"> <tr><td>1</td><td>1693.62</td><td>16</td><td>1555.16</td></tr> <tr><td>2</td><td>1692.30</td><td>17</td><td>1550.52</td></tr> <tr><td>3</td><td>1681.03</td><td>18</td><td>1543.62</td></tr> <tr><td>4</td><td>1673.59</td><td>19</td><td>1522.98</td></tr> <tr><td>5</td><td>1656.28</td><td>20</td><td>1514.09</td></tr> <tr><td>6</td><td>1666.46</td><td>21</td><td>1504.12</td></tr> <tr><td>7</td><td>1638.27</td><td>22</td><td>1492.41</td></tr> <tr><td>8</td><td>1635.02</td><td>23</td><td>1498.65</td></tr> <tr><td>9</td><td>1616.04</td><td>24</td><td>1479.80</td></tr> <tr><td>10</td><td>1627.60</td><td>25</td><td>1466.80</td></tr> <tr><td>11</td><td>1608.75</td><td>26</td><td>1460.17</td></tr> <tr><td>12</td><td>1600.91</td><td>27</td><td>1449.97</td></tr> <tr><td>13</td><td>1586.57</td><td>28</td><td>1441.26</td></tr> <tr><td>14</td><td>1573.93</td><td>29</td><td>1436.94</td></tr> <tr><td>15</td><td>1562.52</td><td>30</td><td>1429.05</td></tr> </table> <p>Criteria: Please refer to P.32 of VESA display HDR CTS Ver 1.1 for details.</p>	1	1693.62	16	1555.16	2	1692.30	17	1550.52	3	1681.03	18	1543.62	4	1673.59	19	1522.98	5	1656.28	20	1514.09	6	1666.46	21	1504.12	7	1638.27	22	1492.41	8	1635.02	23	1498.65	9	1616.04	24	1479.80	10	1627.60	25	1466.80	11	1608.75	26	1460.17	12	1600.91	27	1449.97	13	1586.57	28	1441.26	14	1573.93	29	1436.94	15	1562.52	30	1429.05
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5.2.1 Dual Corner Box Test Black-level Test	Pass	<p>Screen center value: 0.0034 nits White corners value: 1667.77 nits</p> <p>Detailed Measured Value</p> <table border="1" data-bbox="831 1361 1075 1464"> <tr><td>Center</td><td>0.0034</td></tr> <tr><td>Left</td><td>1667.77</td></tr> <tr><td>Right</td><td>1891.92</td></tr> </table> <p>Criteria: Please refer to P.34 of VESA Display HDR CTS Ver 1.1 for details.</p>	Center	0.0034	Left	1667.77	Right	1891.92																																																						
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5.2.2 Checkerboard tests Black-level Test	Pass	<p>Active Dimming Stops Required at 50 cd/m² : 15.54</p> <p>Active Dimming Stops Required at 5 cd/m² : 17.33</p> <p><i>Detailed Measured Value</i></p> <p>Active Dimming at 50 cd/m² :</p> <table border="1" data-bbox="794 640 1075 779"> <tr><td>Top White</td><td>52.28</td></tr> <tr><td>Bottom White</td><td>53.19</td></tr> <tr><td>Top Black</td><td>0.0319</td></tr> <tr><td>Bottom Black</td><td>0.0298</td></tr> </table> <p>Active Dimming at 5 cd/m² :</p> <table border="1" data-bbox="794 846 1075 985"> <tr><td>Top White</td><td>5.38</td></tr> <tr><td>Bottom White</td><td>5.66</td></tr> <tr><td>Top Black</td><td>0.0095</td></tr> <tr><td>Bottom Black</td><td>0.0082</td></tr> </table> <p>Criteria: Please refer to P.39 of VESA Display HDR CTS Ver 1.1 for details.</p>	Top White	52.28	Bottom White	53.19	Top Black	0.0319	Bottom Black	0.0298	Top White	5.38	Bottom White	5.66	Top Black	0.0095	Bottom Black	0.0082												
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6.1 Color Gamut Specifications	Pass	<p>10% Patch Color Luminance Sum: 1509 nits BT.709 Coverage u'v' : 99.77% DCI-P3 Coverage u'v' : 96.11%</p> <table border="1" data-bbox="794 1328 1251 1467"> <thead> <tr><th></th><th>x</th><th>y</th><th>Luminance</th></tr> </thead> <tbody> <tr><td>Red</td><td>0.6894</td><td>0.2994</td><td>317.26</td></tr> <tr><td>Green</td><td>0.2062</td><td>0.6859</td><td>1058.71</td></tr> <tr><td>Blue</td><td>0.1553</td><td>0.0618</td><td>133.03</td></tr> </tbody> </table> <table border="1" data-bbox="794 1467 1123 1606"> <thead> <tr><th></th><th>u'</th><th>v'</th></tr> </thead> <tbody> <tr><td>Red</td><td>0.52888</td><td>0.51680</td></tr> <tr><td>Green</td><td>0.07624</td><td>0.57061</td></tr> <tr><td>Blue</td><td>0.18106</td><td>0.16211</td></tr> </tbody> </table> <p>Full Screen Color Luminance Sum: 1649 nits BT.709 Coverage u'v' : 99.75% DCI-P3 Coverage u'v' : 96.22%</p>		x	y	Luminance	Red	0.6894	0.2994	317.26	Green	0.2062	0.6859	1058.71	Blue	0.1553	0.0618	133.03		u'	v'	Red	0.52888	0.51680	Green	0.07624	0.57061	Blue	0.18106	0.16211
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6.1 Color Gamut Specifications		<p>Full Screen Color detail value</p> <table border="1" data-bbox="794 443 1252 577"> <thead> <tr> <th></th> <th>x</th> <th>y</th> <th>Luminance</th> </tr> </thead> <tbody> <tr> <td>Red</td> <td>0.6901</td> <td>0.2996</td> <td>350.77</td> </tr> <tr> <td>Green</td> <td>0.2080</td> <td>0.6864</td> <td>1155.20</td> </tr> <tr> <td>Blue</td> <td>0.1556</td> <td>0.0636</td> <td>143.10</td> </tr> </tbody> </table> <table border="1" data-bbox="794 584 1123 712"> <thead> <tr> <th></th> <th>u'</th> <th>v'</th> </tr> </thead> <tbody> <tr> <td>Red</td> <td>0.52932</td> <td>0.51705</td> </tr> <tr> <td>Green</td> <td>0.07689</td> <td>0.57090</td> </tr> <tr> <td>Blue</td> <td>0.18030</td> <td>0.16582</td> </tr> </tbody> </table> <p>Please refer to P.9 of report for coverage picture.</p> <p>Criteria: Please refer to P.40 of VESA Display HDR CTS Ver 1.1 for details.</p>		x	y	Luminance	Red	0.6901	0.2996	350.77	Green	0.2080	0.6864	1155.20	Blue	0.1556	0.0636	143.10		u'	v'	Red	0.52932	0.51705	Green	0.07689	0.57090	Blue	0.18030	0.16582
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7.1 Bit-depth Specification	Pass	<p>Driver IC Display Claims (Min) 8+2 bits</p> <p>Criteria: Please refer to P.44 of VESA Display HDR CTS Ver 1.1 for details.</p>																												
8.3 Rise-time Specifications	Pass	<p>Rise Time (Max) at 60 refresh rate(Hz): 21 ms Measuring 5 sequential rises.</p> <table border="1" data-bbox="831 1503 991 1675"> <tbody> <tr><td>1</td><td>21</td></tr> <tr><td>2</td><td>21</td></tr> <tr><td>3</td><td>21</td></tr> <tr><td>4</td><td>21</td></tr> <tr><td>5</td><td>21</td></tr> </tbody> </table> <p>Criteria: Please refer to P.48 of VESA Display HDR CTS Ver 1.1 for details.</p>	1	21	2	21	3	21	4	21	5	21																		
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4	21																													
5	21																													

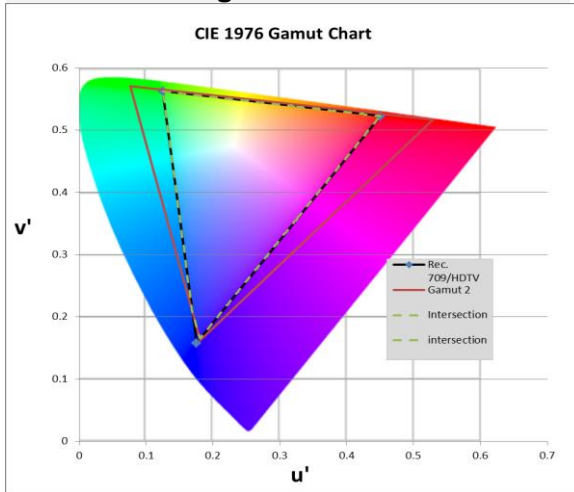


ID	Pass / Fail	Comment or Value																																	
9.3 Luminance and White Point Accuracy	Pass	<p>Delta-ITP Value</p> <table border="1" data-bbox="794 434 1075 676"> <tr><td>5.172 cd/m2</td><td>8.9</td></tr> <tr><td>14.958 cd/m2</td><td>12.2</td></tr> <tr><td>50.825 cd/m2</td><td>12.4</td></tr> <tr><td>100.23 cd/m2</td><td>12.9</td></tr> <tr><td>199.15 cd/m2</td><td>13.4</td></tr> <tr><td>50% of Tier Level Maximum</td><td>12.81</td></tr> </table> <p>Detailed Measured Value</p> <table border="1" data-bbox="794 741 1166 983"> <thead> <tr><th>x</th><th>y</th><th>Y</th></tr> </thead> <tbody> <tr><td>0.2919</td><td>0.3125</td><td>5.42</td></tr> <tr><td>0.2920</td><td>0.3136</td><td>16.77</td></tr> <tr><td>0.2917</td><td>0.3153</td><td>54.37</td></tr> <tr><td>0.2917</td><td>0.3156</td><td>106.51</td></tr> <tr><td>0.2918</td><td>0.3164</td><td>211.88</td></tr> <tr><td>0.2922</td><td>0.3178</td><td>689.07</td></tr> </tbody> </table> <p>Criteria: Please refer to P.52 of VESA Display HDR CTS Ver 1.1 for details.</p>	5.172 cd/m2	8.9	14.958 cd/m2	12.2	50.825 cd/m2	12.4	100.23 cd/m2	12.9	199.15 cd/m2	13.4	50% of Tier Level Maximum	12.81	x	y	Y	0.2919	0.3125	5.42	0.2920	0.3136	16.77	0.2917	0.3153	54.37	0.2917	0.3156	106.51	0.2918	0.3164	211.88	0.2922	0.3178	689.07
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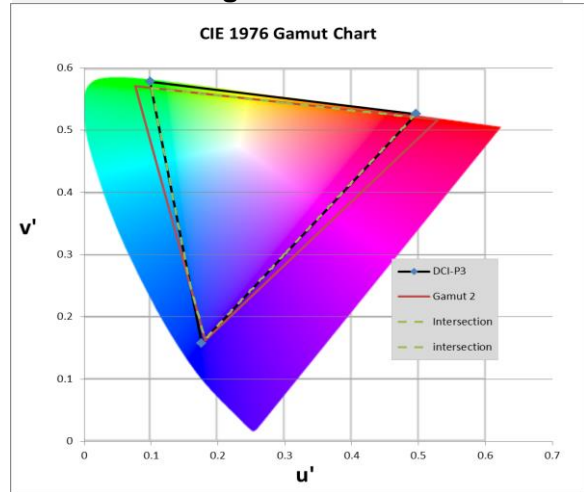


DP

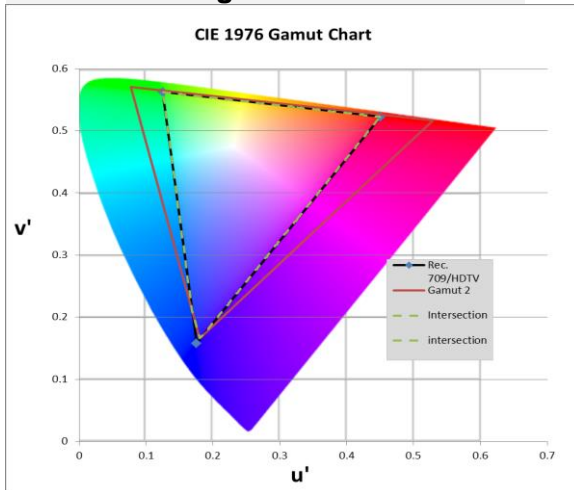
BT.709 Coverage u'v' for the 10% Patch



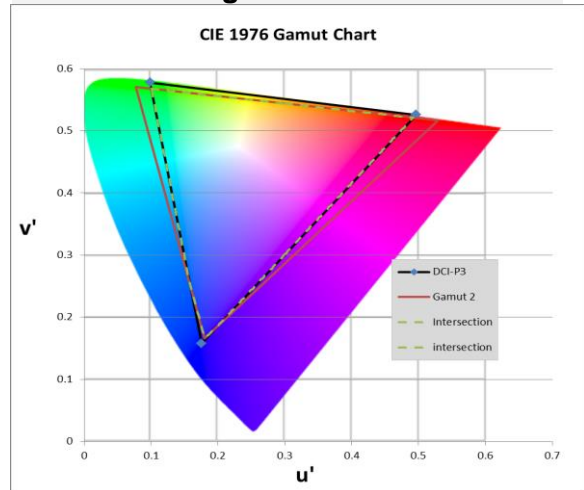
DCI-P3 Coverage u'v' for the 10% Patch



BT.709 Coverage u'v' for Full screen



DCI-P3 Coverage u'v' for Full screen





Test Results-HDR 1400 Port : USB-C 3840x2160 60 Hz RGB

ID	Pass / Fail	Comment or Value																																																												
5.1.1 Minimum-white Luminance– 10% Center Patch Test	Pass	Minimum of all samples: 1486.36 nits Maximum range between high and low <10% : 8.5% Detailed Measured Value <table border="1" data-bbox="794 611 1123 1122"> <tr><td>1</td><td>1613.39</td><td>16</td><td>1502.35</td></tr> <tr><td>2</td><td>1582.00</td><td>17</td><td>1503.44</td></tr> <tr><td>3</td><td>1591.47</td><td>18</td><td>1494.64</td></tr> <tr><td>4</td><td>1559.07</td><td>19</td><td>1493.76</td></tr> <tr><td>5</td><td>1557.40</td><td>20</td><td>1486.36</td></tr> <tr><td>6</td><td>1538.83</td><td>21</td><td>1493.44</td></tr> <tr><td>7</td><td>1537.21</td><td>22</td><td>1496.81</td></tr> <tr><td>8</td><td>1520.23</td><td>23</td><td>1495.91</td></tr> <tr><td>9</td><td>1520.10</td><td>24</td><td>1490.90</td></tr> <tr><td>10</td><td>1519.79</td><td>25</td><td>1492.28</td></tr> <tr><td>11</td><td>1506.90</td><td>26</td><td>1491.53</td></tr> <tr><td>12</td><td>1514.38</td><td>27</td><td>1486.67</td></tr> <tr><td>13</td><td>1499.42</td><td>28</td><td>1488.10</td></tr> <tr><td>14</td><td>1498.90</td><td>29</td><td>1493.07</td></tr> <tr><td>15</td><td>1496.23</td><td>30</td><td>1490.64</td></tr> </table> <p>Criteria: Please refer to P.30 of VESA Display HDR CTS Ver 1.1 for details.</p>	1	1613.39	16	1502.35	2	1582.00	17	1503.44	3	1591.47	18	1494.64	4	1559.07	19	1493.76	5	1557.40	20	1486.36	6	1538.83	21	1493.44	7	1537.21	22	1496.81	8	1520.23	23	1495.91	9	1520.10	24	1490.90	10	1519.79	25	1492.28	11	1506.90	26	1491.53	12	1514.38	27	1486.67	13	1499.42	28	1488.10	14	1498.90	29	1493.07	15	1496.23	30	1490.64
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14	1498.90	29	1493.07																																																											
15	1496.23	30	1490.64																																																											
5.1.2 Minimum-white Luminance– Full-screen Flash Test	Pass	Minimum of all samples: 1715.72 nits Detailed Measured Value <table border="1" data-bbox="794 1429 948 1603"> <tr><td>1</td><td>1715.72</td></tr> <tr><td>2</td><td>1721.06</td></tr> <tr><td>3</td><td>1719.99</td></tr> <tr><td>4</td><td>1724.06</td></tr> <tr><td>5</td><td>1723.18</td></tr> </table> <p>Criteria: Please refer to P.31 of VESA Display HDR CTS Ver 1.1 for details.</p>	1	1715.72	2	1721.06	3	1719.99	4	1724.06	5	1723.18																																																		
1	1715.72																																																													
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4	1724.06																																																													
5	1723.18																																																													



ID	Pass / Fail	Comment or Value																																																												
5.1.3 Minimum-white Luminance– Full-screen Long-duration Test	Pass	Minimum of all samples: 1471.59 nits Detailed Measured Value <table border="1" data-bbox="794 510 1123 1021"> <tr><td>1</td><td>1735.72</td><td>16</td><td>1598.90</td></tr> <tr><td>2</td><td>1726.00</td><td>17</td><td>1592.13</td></tr> <tr><td>3</td><td>1717.34</td><td>18</td><td>1580.44</td></tr> <tr><td>4</td><td>1709.87</td><td>19</td><td>1575.62</td></tr> <tr><td>5</td><td>1695.77</td><td>20</td><td>1571.59</td></tr> <tr><td>6</td><td>1696.82</td><td>21</td><td>1558.28</td></tr> <tr><td>7</td><td>1678.59</td><td>22</td><td>1551.35</td></tr> <tr><td>8</td><td>1678.67</td><td>23</td><td>1537.86</td></tr> <tr><td>9</td><td>1670.85</td><td>24</td><td>1519.38</td></tr> <tr><td>10</td><td>1659.85</td><td>25</td><td>1528.50</td></tr> <tr><td>11</td><td>1638.06</td><td>26</td><td>1512.48</td></tr> <tr><td>12</td><td>1637.23</td><td>27</td><td>1501.67</td></tr> <tr><td>13</td><td>1640.85</td><td>28</td><td>1504.54</td></tr> <tr><td>14</td><td>1620.95</td><td>29</td><td>1484.16</td></tr> <tr><td>15</td><td>1615.18</td><td>30</td><td>1471.59</td></tr> </table> <p>Criteria: Please refer to P.32 of VESA DisplayHDR CTS Ver 1.1 for details.</p>	1	1735.72	16	1598.90	2	1726.00	17	1592.13	3	1717.34	18	1580.44	4	1709.87	19	1575.62	5	1695.77	20	1571.59	6	1696.82	21	1558.28	7	1678.59	22	1551.35	8	1678.67	23	1537.86	9	1670.85	24	1519.38	10	1659.85	25	1528.50	11	1638.06	26	1512.48	12	1637.23	27	1501.67	13	1640.85	28	1504.54	14	1620.95	29	1484.16	15	1615.18	30	1471.59
1	1735.72	16	1598.90																																																											
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15	1615.18	30	1471.59																																																											
5.2.1 Dual Corner Box Test Black-level Test	Pass	Screen center value: 0.0032 nits White corners value: 1670.55 nits Detailed Measured Value <table border="1" data-bbox="831 1361 1075 1464"> <tr><td>Center</td><td>0.0032</td></tr> <tr><td>Left</td><td>1670.55</td></tr> <tr><td>Right</td><td>1909.10</td></tr> </table> <p>Criteria: Please refer to P.34 of VESA Display HDR CTS Ver 1.1 for details.</p>	Center	0.0032	Left	1670.55	Right	1909.10																																																						
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Right	1909.10																																																													



ID	Pass / Fail	Comment or Value																												
5.2.2 Checkerboard tests Black-level Test	Pass	<p>Active Dimming Stops Required at 50 cd/m² : 15.55</p> <p>Active Dimming Stops Required at 5 cd/m² : 17.38</p> <p><i>Detailed Measured Value</i> Active Dimming at 50 cd/m² :</p> <table border="1" data-bbox="794 640 1075 779"> <tr><td>Top White</td><td>49.46</td></tr> <tr><td>Bottom White</td><td>52.31</td></tr> <tr><td>Top Black</td><td>0.0333</td></tr> <tr><td>Bottom Black</td><td>0.0298</td></tr> </table> <p>Active Dimming at 5 cd/m² :</p> <table border="1" data-bbox="794 846 1075 985"> <tr><td>Top White</td><td>5.40</td></tr> <tr><td>Bottom White</td><td>5.49</td></tr> <tr><td>Top Black</td><td>0.0091</td></tr> <tr><td>Bottom Black</td><td>0.0085</td></tr> </table> <p>Criteria: Please refer to P.39 of VESA Display HDR CTS Ver 1.1 for details.</p>	Top White	49.46	Bottom White	52.31	Top Black	0.0333	Bottom Black	0.0298	Top White	5.40	Bottom White	5.49	Top Black	0.0091	Bottom Black	0.0085												
Top White	49.46																													
Bottom White	52.31																													
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Bottom Black	0.0298																													
Top White	5.40																													
Bottom White	5.49																													
Top Black	0.0091																													
Bottom Black	0.0085																													
6.1 Color Gamut Specifications	Pass	<p>10% Patch Color Luminance Sum: 1539 nits BT.709 Coverage u'v' : 99.77% DCI-P3 Coverage u'v' : 96.21%</p> <table border="1" data-bbox="794 1323 1252 1462"> <thead> <tr><th></th><th>x</th><th>y</th><th>Luminance</th></tr> </thead> <tbody> <tr><td>Red</td><td>0.6896</td><td>0.2996</td><td>333.21</td></tr> <tr><td>Green</td><td>0.2055</td><td>0.6879</td><td>1072.42</td></tr> <tr><td>Blue</td><td>0.1553</td><td>0.0618</td><td>133.69</td></tr> </tbody> </table> <table border="1" data-bbox="794 1462 1123 1601"> <thead> <tr><th></th><th>u'</th><th>v'</th></tr> </thead> <tbody> <tr><td>Red</td><td>0.52883</td><td>0.51695</td></tr> <tr><td>Green</td><td>0.07580</td><td>0.57093</td></tr> <tr><td>Blue</td><td>0.18106</td><td>0.16211</td></tr> </tbody> </table> <p>Full Screen Color Luminance Sum: 1672 nits BT.709 Coverage u'v' : 99.75% DCI-P3 Coverage u'v' : 96.27%</p>		x	y	Luminance	Red	0.6896	0.2996	333.21	Green	0.2055	0.6879	1072.42	Blue	0.1553	0.0618	133.69		u'	v'	Red	0.52883	0.51695	Green	0.07580	0.57093	Blue	0.18106	0.16211
	x	y	Luminance																											
Red	0.6896	0.2996	333.21																											
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6.1 Color Gamut Specifications		<p>Full Screen Color detail value</p> <table border="1" data-bbox="794 443 1252 577"> <thead> <tr> <th></th> <th>x</th> <th>y</th> <th>Luminance</th> </tr> </thead> <tbody> <tr> <td>Red</td> <td>0.6899</td> <td>0.2997</td> <td>365.46</td> </tr> <tr> <td>Green</td> <td>0.2072</td> <td>0.6882</td> <td>1163.50</td> </tr> <tr> <td>Blue</td> <td>0.1556</td> <td>0.0637</td> <td>143.07</td> </tr> </tbody> </table> <table border="1" data-bbox="794 584 1123 712"> <thead> <tr> <th></th> <th>u'</th> <th>v'</th> </tr> </thead> <tbody> <tr> <td>Red</td> <td>0.52900</td> <td>0.51706</td> </tr> <tr> <td>Green</td> <td>0.07643</td> <td>0.57117</td> </tr> <tr> <td>Blue</td> <td>0.18024</td> <td>0.16602</td> </tr> </tbody> </table> <p>Please refer to P.15 of report for coverage picture.</p> <p>Criteria: Please refer to P.40 of VESA Display HDR CTS Ver 1.1 for details.</p>		x	y	Luminance	Red	0.6899	0.2997	365.46	Green	0.2072	0.6882	1163.50	Blue	0.1556	0.0637	143.07		u'	v'	Red	0.52900	0.51706	Green	0.07643	0.57117	Blue	0.18024	0.16602
	x	y	Luminance																											
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Green	0.07643	0.57117																												
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7.1 Bit-depth Specification	Pass	<p>Driver IC Display Claims (Min) 8+2 bits</p> <p>Criteria: Please refer to P.44 of VESA Display HDR CTS Ver 1.1 for details.</p>																												
8.3 Rise-time Specifications	Pass	<p>Rise Time (Max) at 60 refresh rate(Hz): 21 ms Measuring 5 sequential rises.</p> <table border="1" data-bbox="831 1503 991 1675"> <tbody> <tr><td>1</td><td>21</td></tr> <tr><td>2</td><td>21</td></tr> <tr><td>3</td><td>21</td></tr> <tr><td>4</td><td>21</td></tr> <tr><td>5</td><td>21</td></tr> </tbody> </table> <p>Criteria: Please refer to P.48 of VESA Display HDR CTS Ver 1.1 for details.</p>	1	21	2	21	3	21	4	21	5	21																		
1	21																													
2	21																													
3	21																													
4	21																													
5	21																													

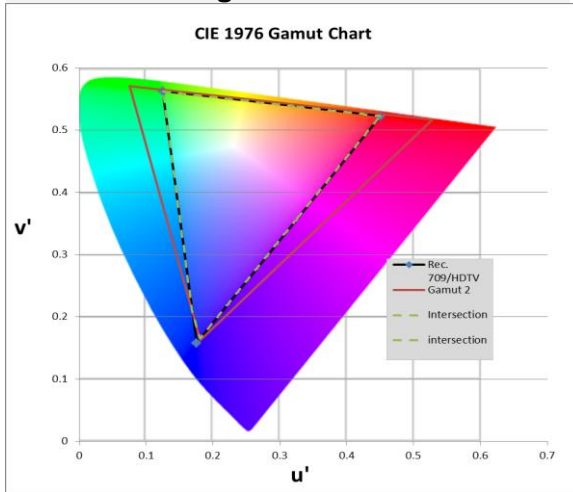


ID	Pass / Fail	Comment or Value																																	
9.3 Luminance and White Point Accuracy	Pass	<p>Delta-ITP Value</p> <table border="1"> <tr><td>5.172 cd/m2</td><td>7.7</td></tr> <tr><td>14.958 cd/m2</td><td>11.0</td></tr> <tr><td>50.825 cd/m2</td><td>10.6</td></tr> <tr><td>100.23 cd/m2</td><td>11.1</td></tr> <tr><td>199.15 cd/m2</td><td>11.8</td></tr> <tr><td>50% of Tier Level Maximum</td><td>11.44</td></tr> </table> <p>Detailed Measured Value</p> <table border="1"> <thead> <tr><th>x</th><th>y</th><th>Y</th></tr> </thead> <tbody> <tr><td>0.2940</td><td>0.3140</td><td>5.31</td></tr> <tr><td>0.2938</td><td>0.3144</td><td>16.54</td></tr> <tr><td>0.2942</td><td>0.3170</td><td>53.41</td></tr> <tr><td>0.2942</td><td>0.3171</td><td>104.92</td></tr> <tr><td>0.2942</td><td>0.3178</td><td>210.06</td></tr> <tr><td>0.2943</td><td>0.3185</td><td>692.46</td></tr> </tbody> </table> <p>Criteria: Please refer to P.52 of VESA Display HDR CTS Ver 1.1 for details.</p>	5.172 cd/m2	7.7	14.958 cd/m2	11.0	50.825 cd/m2	10.6	100.23 cd/m2	11.1	199.15 cd/m2	11.8	50% of Tier Level Maximum	11.44	x	y	Y	0.2940	0.3140	5.31	0.2938	0.3144	16.54	0.2942	0.3170	53.41	0.2942	0.3171	104.92	0.2942	0.3178	210.06	0.2943	0.3185	692.46
5.172 cd/m2	7.7																																		
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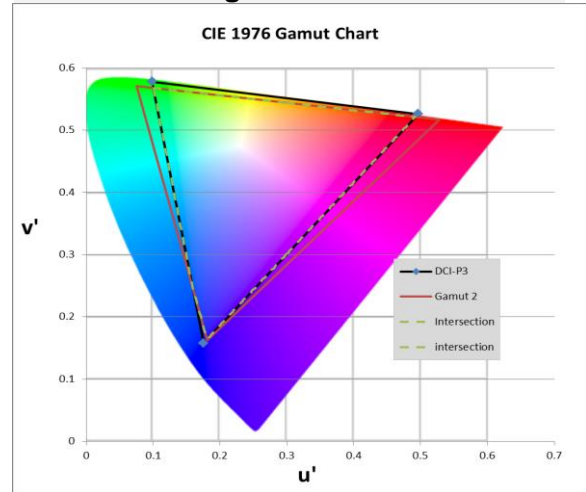


USB-C

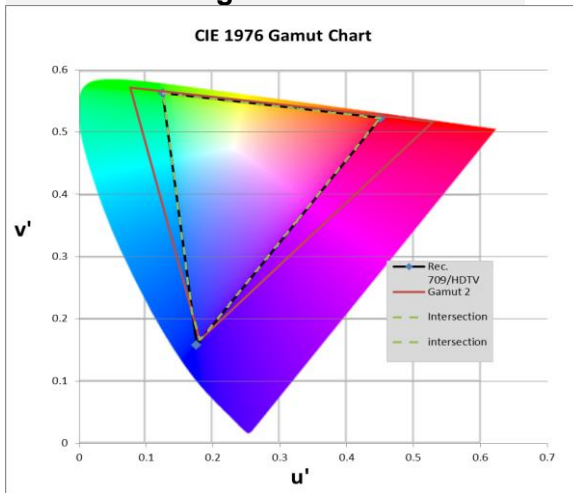
BT.709 Coverage u'v' for the 10% Patch



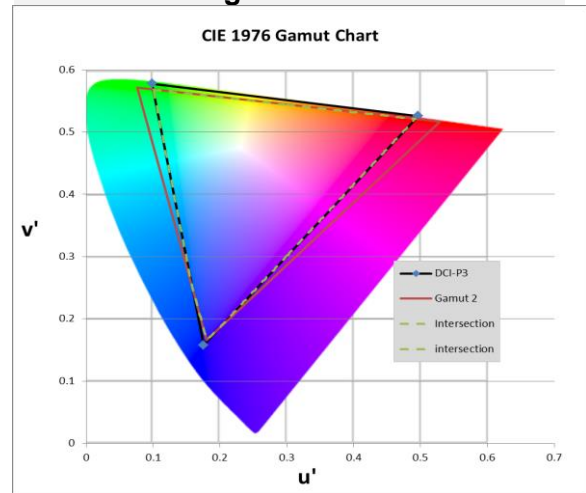
DCI-P3 Coverage u'v' for the 10% Patch



BT.709 Coverage u'v' for Full screen



DCI-P3 Coverage u'v' for Full screen





Test Results-HDR 1400 Port : HDMI1 1920x1080 60 Hz RGB

ID	Pass / Fail	Comment or Value																																																												
5.1.1 Minimum-white Luminance– 10% Center Patch Test	Pass	Minimum of all samples: 1432.66 nits Maximum range between high and low <10% : 9.6% Detailed Measured Value <table border="1" data-bbox="794 611 1123 1126"> <tr><td>1</td><td>1569.66</td><td>16</td><td>1441.61</td></tr> <tr><td>2</td><td>1551.16</td><td>17</td><td>1440.30</td></tr> <tr><td>3</td><td>1550.72</td><td>18</td><td>1444.29</td></tr> <tr><td>4</td><td>1513.06</td><td>19</td><td>1441.32</td></tr> <tr><td>5</td><td>1507.85</td><td>20</td><td>1442.40</td></tr> <tr><td>6</td><td>1488.96</td><td>21</td><td>1434.77</td></tr> <tr><td>7</td><td>1479.56</td><td>22</td><td>1438.92</td></tr> <tr><td>8</td><td>1466.44</td><td>23</td><td>1440.06</td></tr> <tr><td>9</td><td>1465.34</td><td>24</td><td>1436.27</td></tr> <tr><td>10</td><td>1459.53</td><td>25</td><td>1436.57</td></tr> <tr><td>11</td><td>1454.89</td><td>26</td><td>1432.66</td></tr> <tr><td>12</td><td>1449.12</td><td>27</td><td>1441.40</td></tr> <tr><td>13</td><td>1449.94</td><td>28</td><td>1439.56</td></tr> <tr><td>14</td><td>1446.73</td><td>29</td><td>1435.33</td></tr> <tr><td>15</td><td>1448.54</td><td>30</td><td>1441.45</td></tr> </table> <p>Criteria: Please refer to P.30 of VESA Display HDR CTS Ver 1.1 for details.</p>	1	1569.66	16	1441.61	2	1551.16	17	1440.30	3	1550.72	18	1444.29	4	1513.06	19	1441.32	5	1507.85	20	1442.40	6	1488.96	21	1434.77	7	1479.56	22	1438.92	8	1466.44	23	1440.06	9	1465.34	24	1436.27	10	1459.53	25	1436.57	11	1454.89	26	1432.66	12	1449.12	27	1441.40	13	1449.94	28	1439.56	14	1446.73	29	1435.33	15	1448.54	30	1441.45
1	1569.66	16	1441.61																																																											
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5.1.2 Minimum-white Luminance– Full-screen Flash Test	Pass	Minimum of all samples: 1649.77 nits Detailed Measured Value <table border="1" data-bbox="794 1431 948 1603"> <tr><td>1</td><td>1649.77</td></tr> <tr><td>2</td><td>1661.87</td></tr> <tr><td>3</td><td>1651.01</td></tr> <tr><td>4</td><td>1661.41</td></tr> <tr><td>5</td><td>1656.04</td></tr> </table> <p>Criteria: Please refer to P.31 of VESA Display HDR CTS Ver 1.1 for details.</p>	1	1649.77	2	1661.87	3	1651.01	4	1661.41	5	1656.04																																																		
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5	1656.04																																																													



ID	Pass / Fail	Comment or Value																																																												
5.1.3 Minimum-white Luminance– Full-screen Long-duration Test	Pass	Minimum of all samples: 1404.68 nits Detailed Measured Value <table border="1" data-bbox="794 510 1123 1021"> <tr><td>1</td><td>1682.21</td><td>16</td><td>1543.90</td></tr> <tr><td>2</td><td>1665.37</td><td>17</td><td>1527.50</td></tr> <tr><td>3</td><td>1662.79</td><td>18</td><td>1527.18</td></tr> <tr><td>4</td><td>1647.09</td><td>19</td><td>1501.31</td></tr> <tr><td>5</td><td>1658.44</td><td>20</td><td>1496.33</td></tr> <tr><td>6</td><td>1631.66</td><td>21</td><td>1494.81</td></tr> <tr><td>7</td><td>1629.31</td><td>22</td><td>1475.38</td></tr> <tr><td>8</td><td>1617.06</td><td>23</td><td>1473.13</td></tr> <tr><td>9</td><td>1616.98</td><td>24</td><td>1454.17</td></tr> <tr><td>10</td><td>1600.21</td><td>25</td><td>1452.03</td></tr> <tr><td>11</td><td>1589.26</td><td>26</td><td>1441.32</td></tr> <tr><td>12</td><td>1578.96</td><td>27</td><td>1430.60</td></tr> <tr><td>13</td><td>1574.24</td><td>28</td><td>1422.17</td></tr> <tr><td>14</td><td>1565.94</td><td>29</td><td>1411.00</td></tr> <tr><td>15</td><td>1548.19</td><td>30</td><td>1404.68</td></tr> </table> <p>Criteria: Please refer to P.32 of VESA DisplayHDR CTS Ver 1.1 for details.</p>	1	1682.21	16	1543.90	2	1665.37	17	1527.50	3	1662.79	18	1527.18	4	1647.09	19	1501.31	5	1658.44	20	1496.33	6	1631.66	21	1494.81	7	1629.31	22	1475.38	8	1617.06	23	1473.13	9	1616.98	24	1454.17	10	1600.21	25	1452.03	11	1589.26	26	1441.32	12	1578.96	27	1430.60	13	1574.24	28	1422.17	14	1565.94	29	1411.00	15	1548.19	30	1404.68
1	1682.21	16	1543.90																																																											
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14	1565.94	29	1411.00																																																											
15	1548.19	30	1404.68																																																											
5.2.1 Dual Corner Box Test Black-level Test	Pass	Screen center value: 0.0031 nits White corners value: 1658.83 nits Detailed Measured Value <table border="1" data-bbox="831 1361 1075 1464"> <tr><td>Center</td><td>0.0031</td></tr> <tr><td>Left</td><td>1658.83</td></tr> <tr><td>Right</td><td>1836.23</td></tr> </table> <p>Criteria: Please refer to P.34 of VESA Display HDR CTS Ver 1.1 for details.</p>	Center	0.0031	Left	1658.83	Right	1836.23																																																						
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Right	1836.23																																																													



ID	Pass / Fail	Comment or Value																												
5.2.2 Checkerboard tests Black-level Test	Pass	<p>Active Dimming Stops Required at 50 cd/m² : 15.18</p> <p>Active Dimming Stops Required at 5 cd/m² : 17.17</p> <p><i>Detailed Measured Value</i> Active Dimming at 50 cd/m² :</p> <table border="1" data-bbox="794 640 1075 779"> <tr><td>Top White</td><td>50.57</td></tr> <tr><td>Bottom White</td><td>51.40</td></tr> <tr><td>Top Black</td><td>0.0403</td></tr> <tr><td>Bottom Black</td><td>0.0386</td></tr> </table> <p>Active Dimming at 5 cd/m² :</p> <table border="1" data-bbox="794 846 1075 985"> <tr><td>Top White</td><td>5.16</td></tr> <tr><td>Bottom White</td><td>5.02</td></tr> <tr><td>Top Black</td><td>0.0102</td></tr> <tr><td>Bottom Black</td><td>0.0095</td></tr> </table> <p>Criteria: Please refer to P.39 of VESA Display HDR CTS Ver 1.1 for details.</p>	Top White	50.57	Bottom White	51.40	Top Black	0.0403	Bottom Black	0.0386	Top White	5.16	Bottom White	5.02	Top Black	0.0102	Bottom Black	0.0095												
Top White	50.57																													
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Top White	5.16																													
Bottom White	5.02																													
Top Black	0.0102																													
Bottom Black	0.0095																													
6.1 Color Gamut Specifications	Pass	<p>10% Patch Color Luminance Sum: 1494 nits BT.709 Coverage u'v' : 99.79% DCI-P3 Coverage u'v' : 96.05%</p> <table border="1" data-bbox="794 1328 1251 1467"> <thead> <tr><th></th><th>x</th><th>y</th><th>Luminance</th></tr> </thead> <tbody> <tr><td>Red</td><td>0.6894</td><td>0.2994</td><td>312.10</td></tr> <tr><td>Green</td><td>0.2061</td><td>0.6842</td><td>1050.34</td></tr> <tr><td>Blue</td><td>0.1551</td><td>0.0622</td><td>131.76</td></tr> </tbody> </table> <table border="1" data-bbox="794 1467 1123 1606"> <thead> <tr><th></th><th>u'</th><th>v'</th></tr> </thead> <tbody> <tr><td>Red</td><td>0.52888</td><td>0.51680</td></tr> <tr><td>Green</td><td>0.07635</td><td>0.57026</td></tr> <tr><td>Blue</td><td>0.18055</td><td>0.16291</td></tr> </tbody> </table> <p>Full Screen Color Luminance Sum: 1613 nits BT.709 Coverage u'v' : 99.78% DCI-P3 Coverage u'v' : 96.15%</p>		x	y	Luminance	Red	0.6894	0.2994	312.10	Green	0.2061	0.6842	1050.34	Blue	0.1551	0.0622	131.76		u'	v'	Red	0.52888	0.51680	Green	0.07635	0.57026	Blue	0.18055	0.16291
	x	y	Luminance																											
Red	0.6894	0.2994	312.10																											
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ID	Pass / Fail	Comment or Value																												
6.1 Color Gamut Specifications		<p>Full Screen Color detail value</p> <table border="1" data-bbox="794 443 1252 577"> <thead> <tr> <th></th> <th>x</th> <th>y</th> <th>Luminance</th> </tr> </thead> <tbody> <tr> <td>Red</td> <td>0.6900</td> <td>0.2995</td> <td>343.08</td> </tr> <tr> <td>Green</td> <td>0.2077</td> <td>0.6847</td> <td>1129.67</td> </tr> <tr> <td>Blue</td> <td>0.1553</td> <td>0.0636</td> <td>140.45</td> </tr> </tbody> </table> <table border="1" data-bbox="794 584 1123 712"> <thead> <tr> <th></th> <th>u'</th> <th>v'</th> </tr> </thead> <tbody> <tr> <td>Red</td> <td>0.52934</td> <td>0.51697</td> </tr> <tr> <td>Green</td> <td>0.07692</td> <td>0.57053</td> </tr> <tr> <td>Blue</td> <td>0.17992</td> <td>0.16579</td> </tr> </tbody> </table> <p>Please refer to P.21 of report for coverage picture.</p> <p>Criteria: Please refer to P.40 of VESA Display HDR CTS Ver 1.1 for details.</p>		x	y	Luminance	Red	0.6900	0.2995	343.08	Green	0.2077	0.6847	1129.67	Blue	0.1553	0.0636	140.45		u'	v'	Red	0.52934	0.51697	Green	0.07692	0.57053	Blue	0.17992	0.16579
	x	y	Luminance																											
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Green	0.07692	0.57053																												
Blue	0.17992	0.16579																												
7.1 Bit-depth Specification	Pass	<p>Driver IC Display Claims (Min) 8+2 bits</p> <p>Criteria: Please refer to P.44 of VESA Display HDR CTS Ver 1.1 for details.</p>																												
8.3 Rise-time Specifications	Pass	<p>Rise Time (Max) at 60 refresh rate(Hz): 18 ms Measuring 5 sequential rises.</p> <table border="1" data-bbox="831 1496 991 1671"> <tbody> <tr><td>1</td><td>16</td></tr> <tr><td>2</td><td>16</td></tr> <tr><td>3</td><td>18</td></tr> <tr><td>4</td><td>16</td></tr> <tr><td>5</td><td>18</td></tr> </tbody> </table> <p>Criteria: Please refer to P.48 of VESA Display HDR CTS Ver 1.1 for details.</p>	1	16	2	16	3	18	4	16	5	18																		
1	16																													
2	16																													
3	18																													
4	16																													
5	18																													

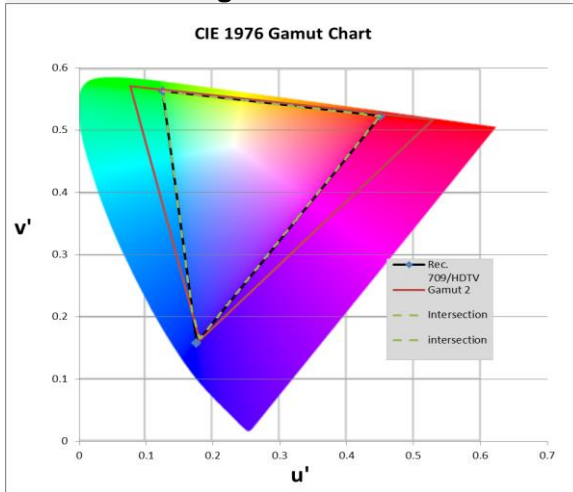


ID	Pass / Fail	Comment or Value																																	
9.3 Luminance and White Point Accuracy	Pass	<p>Delta-ITP Value</p> <table border="1" data-bbox="794 434 1075 676"> <tr><td>5.172 cd/m2</td><td>8.4</td></tr> <tr><td>14.958 cd/m2</td><td>11.1</td></tr> <tr><td>50.825 cd/m2</td><td>11.2</td></tr> <tr><td>100.23 cd/m2</td><td>12.1</td></tr> <tr><td>199.15 cd/m2</td><td>12.4</td></tr> <tr><td>50% of Tier Level Maximum</td><td>12.58</td></tr> </table> <p>Detailed Measured Value</p> <table border="1" data-bbox="794 741 1165 983"> <thead> <tr><th>x</th><th>y</th><th>Y</th></tr> </thead> <tbody> <tr><td>0.2921</td><td>0.3133</td><td>5.23</td></tr> <tr><td>0.2920</td><td>0.3139</td><td>16.21</td></tr> <tr><td>0.2923</td><td>0.3158</td><td>52.06</td></tr> <tr><td>0.2921</td><td>0.3162</td><td>103.70</td></tr> <tr><td>0.2924</td><td>0.3171</td><td>205.83</td></tr> <tr><td>0.2927</td><td>0.3182</td><td>678.02</td></tr> </tbody> </table> <p>Criteria: Please refer to P.52 of VESA Display HDR CTS Ver 1.1 for details.</p>	5.172 cd/m2	8.4	14.958 cd/m2	11.1	50.825 cd/m2	11.2	100.23 cd/m2	12.1	199.15 cd/m2	12.4	50% of Tier Level Maximum	12.58	x	y	Y	0.2921	0.3133	5.23	0.2920	0.3139	16.21	0.2923	0.3158	52.06	0.2921	0.3162	103.70	0.2924	0.3171	205.83	0.2927	0.3182	678.02
5.172 cd/m2	8.4																																		
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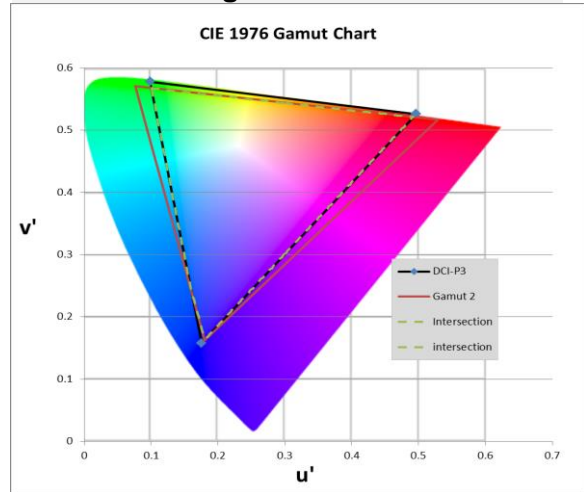


HDMI1

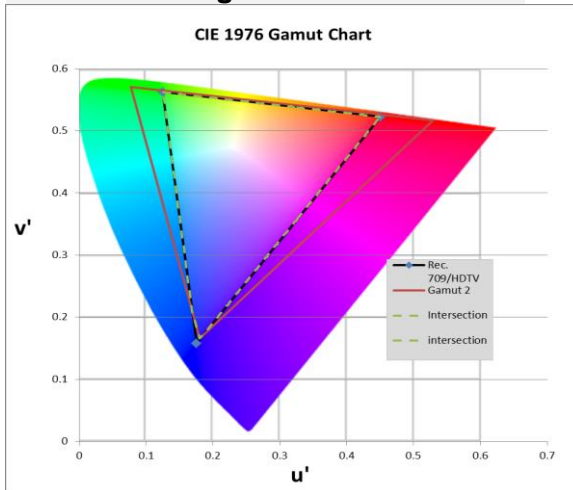
BT.709 Coverage u'v' for the 10% Patch



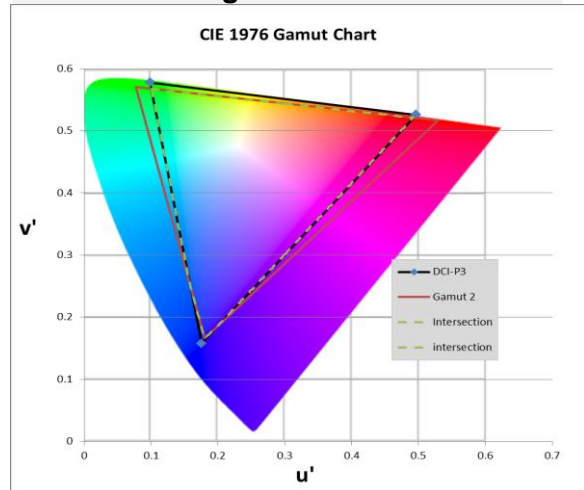
DCI-P3 Coverage u'v' for the 10% Patch



BT.709 Coverage u'v' for Full screen



DCI-P3 Coverage u'v' for Full screen





Test Results-HDR 1400 Port : HDMI2 1920x1080 60 Hz RGB

ID	Pass / Fail	Comment or Value																																																												
5.1.1 Minimum-white Luminance– 10% Center Patch Test	Pass	Minimum of all samples: 1473.50 nits Maximum range between high and low <10% : 6.8% Detailed Measured Value <table border="1" data-bbox="794 613 1123 1128"> <tr><td>1</td><td>1573.56</td><td>16</td><td>1480.93</td></tr> <tr><td>2</td><td>1562.06</td><td>17</td><td>1479.24</td></tr> <tr><td>3</td><td>1559.64</td><td>18</td><td>1481.48</td></tr> <tr><td>4</td><td>1528.71</td><td>19</td><td>1474.36</td></tr> <tr><td>5</td><td>1518.04</td><td>20</td><td>1474.01</td></tr> <tr><td>6</td><td>1501.37</td><td>21</td><td>1479.63</td></tr> <tr><td>7</td><td>1495.52</td><td>22</td><td>1476.30</td></tr> <tr><td>8</td><td>1490.55</td><td>23</td><td>1480.80</td></tr> <tr><td>9</td><td>1485.18</td><td>24</td><td>1473.50</td></tr> <tr><td>10</td><td>1480.33</td><td>25</td><td>1477.70</td></tr> <tr><td>11</td><td>1481.26</td><td>26</td><td>1479.95</td></tr> <tr><td>12</td><td>1484.33</td><td>27</td><td>1478.24</td></tr> <tr><td>13</td><td>1483.97</td><td>28</td><td>1483.58</td></tr> <tr><td>14</td><td>1478.41</td><td>29</td><td>1476.47</td></tr> <tr><td>15</td><td>1476.56</td><td>30</td><td>1479.73</td></tr> </table> Criteria: Please refer to P.30 of VESA Display HDR CTS Ver 1.1 for details.	1	1573.56	16	1480.93	2	1562.06	17	1479.24	3	1559.64	18	1481.48	4	1528.71	19	1474.36	5	1518.04	20	1474.01	6	1501.37	21	1479.63	7	1495.52	22	1476.30	8	1490.55	23	1480.80	9	1485.18	24	1473.50	10	1480.33	25	1477.70	11	1481.26	26	1479.95	12	1484.33	27	1478.24	13	1483.97	28	1483.58	14	1478.41	29	1476.47	15	1476.56	30	1479.73
1	1573.56	16	1480.93																																																											
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15	1476.56	30	1479.73																																																											
5.1.2 Minimum-white Luminance– Full-screen Flash Test	Pass	Minimum of all samples: 1711.37 nits Detailed Measured Value <table border="1" data-bbox="794 1435 948 1608"> <tr><td>1</td><td>1711.37</td></tr> <tr><td>2</td><td>1718.64</td></tr> <tr><td>3</td><td>1714.52</td></tr> <tr><td>4</td><td>1717.65</td></tr> <tr><td>5</td><td>1718.70</td></tr> </table> Criteria: Please refer to P.31 of VESA Display HDR CTS Ver 1.1 for details.	1	1711.37	2	1718.64	3	1714.52	4	1717.65	5	1718.70																																																		
1	1711.37																																																													
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ID	Pass / Fail	Comment or Value																																																												
5.1.3 Minimum-white Luminance– Full-screen Long-duration Test	Pass	Minimum of all samples: 1448.81 nits Detailed Measured Value <table border="1" data-bbox="794 510 1123 1021"> <tr><td>1</td><td>1735.44</td><td>16</td><td>1589.33</td></tr> <tr><td>2</td><td>1727.33</td><td>17</td><td>1581.31</td></tr> <tr><td>3</td><td>1713.78</td><td>18</td><td>1574.58</td></tr> <tr><td>4</td><td>1707.66</td><td>19</td><td>1555.92</td></tr> <tr><td>5</td><td>1704.63</td><td>20</td><td>1548.85</td></tr> <tr><td>6</td><td>1690.80</td><td>21</td><td>1541.21</td></tr> <tr><td>7</td><td>1679.80</td><td>22</td><td>1522.75</td></tr> <tr><td>8</td><td>1669.06</td><td>23</td><td>1523.37</td></tr> <tr><td>9</td><td>1669.65</td><td>24</td><td>1501.81</td></tr> <tr><td>10</td><td>1651.12</td><td>25</td><td>1491.56</td></tr> <tr><td>11</td><td>1640.21</td><td>26</td><td>1492.90</td></tr> <tr><td>12</td><td>1631.02</td><td>27</td><td>1477.12</td></tr> <tr><td>13</td><td>1620.52</td><td>28</td><td>1467.20</td></tr> <tr><td>14</td><td>1612.53</td><td>29</td><td>1461.52</td></tr> <tr><td>15</td><td>1601.47</td><td>30</td><td>1448.81</td></tr> </table> <p>Criteria: Please refer to P.32 of VESA DisplayHDR CTS Ver 1.1 for details.</p>	1	1735.44	16	1589.33	2	1727.33	17	1581.31	3	1713.78	18	1574.58	4	1707.66	19	1555.92	5	1704.63	20	1548.85	6	1690.80	21	1541.21	7	1679.80	22	1522.75	8	1669.06	23	1523.37	9	1669.65	24	1501.81	10	1651.12	25	1491.56	11	1640.21	26	1492.90	12	1631.02	27	1477.12	13	1620.52	28	1467.20	14	1612.53	29	1461.52	15	1601.47	30	1448.81
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12	1631.02	27	1477.12																																																											
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14	1612.53	29	1461.52																																																											
15	1601.47	30	1448.81																																																											
5.2.1 Dual Corner Box Test Black-level Test	Pass	Screen center value: 0.0033 nits White corners value: 1667.68 nits Detailed Measured Value <table border="1" data-bbox="831 1361 1075 1464"> <tr><td>Center</td><td>0.0033</td></tr> <tr><td>Left</td><td>1667.68</td></tr> <tr><td>Right</td><td>1882.47</td></tr> </table> <p>Criteria: Please refer to P.34 of VESA Display HDR CTS Ver 1.1 for details.</p>	Center	0.0033	Left	1667.68	Right	1882.47																																																						
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Right	1882.47																																																													



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5.2.2 Checkerboard tests Black-level Test	Pass	<p>Active Dimming Stops Required at 50 cd/m² : 15.21</p> <p>Active Dimming Stops Required at 5 cd/m² : 17.25</p> <p><i>Detailed Measured Value</i> Active Dimming at 50 cd/m² :</p> <table border="1" data-bbox="794 640 1075 779"> <tr><td>Top White</td><td>51.76</td></tr> <tr><td>Bottom White</td><td>50.53</td></tr> <tr><td>Top Black</td><td>0.0413</td></tr> <tr><td>Bottom Black</td><td>0.0372</td></tr> </table> <p>Active Dimming at 5 cd/m² :</p> <table border="1" data-bbox="794 846 1075 985"> <tr><td>Top White</td><td>5.04</td></tr> <tr><td>Bottom White</td><td>5.07</td></tr> <tr><td>Top Black</td><td>0.0098</td></tr> <tr><td>Bottom Black</td><td>0.0093</td></tr> </table> <p>Criteria: Please refer to P.39 of VESA Display HDR CTS Ver 1.1 for details.</p>	Top White	51.76	Bottom White	50.53	Top Black	0.0413	Bottom Black	0.0372	Top White	5.04	Bottom White	5.07	Top Black	0.0098	Bottom Black	0.0093												
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6.1 Color Gamut Specifications	Pass	<p>10% Patch Color Luminance Sum: 1535 nits BT.709 Coverage u'v' : 99.8% DCI-P3 Coverage u'v' : 96.0%</p> <table border="1" data-bbox="794 1323 1251 1462"> <thead> <tr><th></th><th>x</th><th>y</th><th>Luminance</th></tr> </thead> <tbody> <tr><td>Red</td><td>0.6896</td><td>0.2995</td><td>320.33</td></tr> <tr><td>Green</td><td>0.2060</td><td>0.6835</td><td>1079.49</td></tr> <tr><td>Blue</td><td>0.1551</td><td>0.0622</td><td>135.36</td></tr> </tbody> </table> <table border="1" data-bbox="794 1462 1123 1601"> <thead> <tr><th></th><th>u'</th><th>v'</th></tr> </thead> <tbody> <tr><td>Red</td><td>0.52896</td><td>0.51689</td></tr> <tr><td>Green</td><td>0.07637</td><td>0.57011</td></tr> <tr><td>Blue</td><td>0.18055</td><td>0.16291</td></tr> </tbody> </table> <p>Full Screen Color Luminance Sum: 1660 nits BT.709 Coverage u'v' : 99.8% DCI-P3 Coverage u'v' : 96.1%</p>		x	y	Luminance	Red	0.6896	0.2995	320.33	Green	0.2060	0.6835	1079.49	Blue	0.1551	0.0622	135.36		u'	v'	Red	0.52896	0.51689	Green	0.07637	0.57011	Blue	0.18055	0.16291
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7.1 Bit-depth Specification	Pass	<p>Driver IC Display Claims (Min) 8+2 bits</p> <p>Criteria: Please refer to P.44 of VESA Display HDR CTS Ver 1.1 for details.</p>																												
8.3 Rise-time Specifications	Pass	<p>Rise Time (Max) at 60 refresh rate(Hz): 18 ms Measuring 5 sequential rises.</p> <table border="1" data-bbox="831 1496 991 1671"> <tbody> <tr><td>1</td><td>18</td></tr> <tr><td>2</td><td>16</td></tr> <tr><td>3</td><td>16</td></tr> <tr><td>4</td><td>16</td></tr> <tr><td>5</td><td>16</td></tr> </tbody> </table> <p>Criteria: Please refer to P.48 of VESA Display HDR CTS Ver 1.1 for details.</p>	1	18	2	16	3	16	4	16	5	16																		
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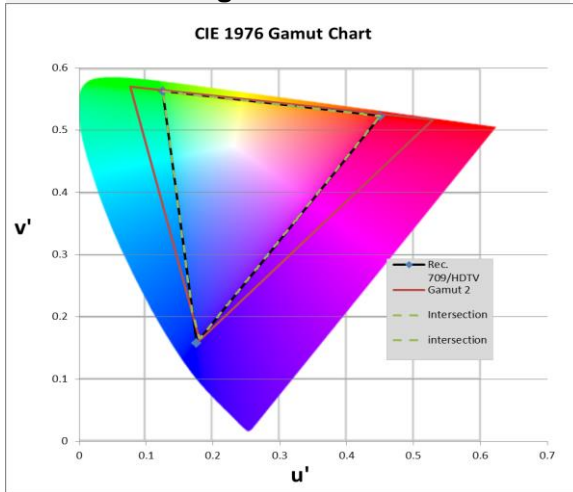


ID	Pass / Fail	Comment or Value																																	
9.3 Luminance and White Point Accuracy	Pass	<p>Delta-ITP Value</p> <table border="1"> <tr><td>5.172 cd/m2</td><td>8.9</td></tr> <tr><td>14.958 cd/m2</td><td>12.4</td></tr> <tr><td>50.825 cd/m2</td><td>12.0</td></tr> <tr><td>100.23 cd/m2</td><td>12.9</td></tr> <tr><td>199.15 cd/m2</td><td>13.3</td></tr> <tr><td>50% of Tier Level Maximum</td><td>12.59</td></tr> </table> <p>Detailed Measured Value</p> <table border="1"> <thead> <tr><th>x</th><th>y</th><th>Y</th></tr> </thead> <tbody> <tr><td>0.2922</td><td>0.3131</td><td>5.46</td></tr> <tr><td>0.2922</td><td>0.3139</td><td>16.92</td></tr> <tr><td>0.2924</td><td>0.3159</td><td>54.24</td></tr> <tr><td>0.2922</td><td>0.3162</td><td>107.72</td></tr> <tr><td>0.2923</td><td>0.3170</td><td>213.51</td></tr> <tr><td>0.2926</td><td>0.3182</td><td>697.69</td></tr> </tbody> </table> <p>Criteria: Please refer to P.52 of VESA Display HDR CTS Ver 1.1 for details.</p>	5.172 cd/m2	8.9	14.958 cd/m2	12.4	50.825 cd/m2	12.0	100.23 cd/m2	12.9	199.15 cd/m2	13.3	50% of Tier Level Maximum	12.59	x	y	Y	0.2922	0.3131	5.46	0.2922	0.3139	16.92	0.2924	0.3159	54.24	0.2922	0.3162	107.72	0.2923	0.3170	213.51	0.2926	0.3182	697.69
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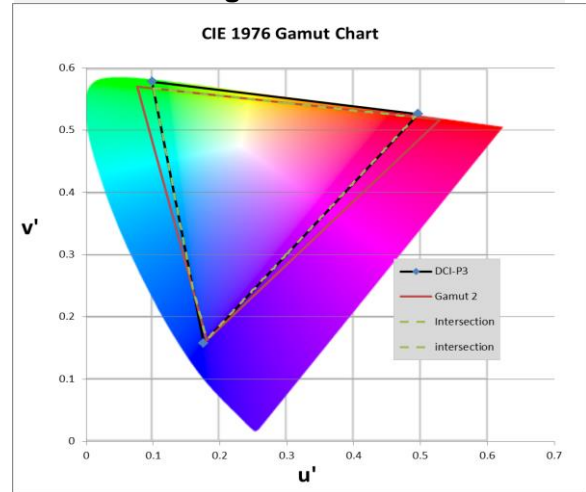


HDMI2

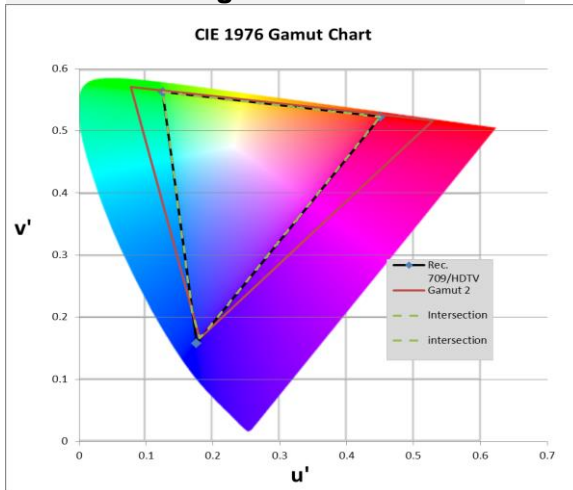
BT.709 Coverage u'v' for the 10% Patch



DCI-P3 Coverage u'v' for the 10% Patch



BT.709 Coverage u'v' for Full screen



DCI-P3 Coverage u'v' for Full screen

