

TEST RESULT SUMMARY

FCC Part 15 Subpart C Section 15.207

FCC Part 15 Subpart C Section 15.209

IC RSS-210 Issue 8

IC RSS-Gen Issue 3

MANUFACTURER'S NAME	Carestream Health Incorporated 150 Verona Street Rochester NY 14608
PRODUCT NAME	DRYVIEW Chroma Imaging System
MODEL NUMBER(S) TESTED	DRYVIEW Chroma Imaging System
SERIAL NUMBER(S) TESTED	MP2E001273
PRODUCT DESCRIPTION	Imaging system with a 13.56 MHz RFID
TEST REPORT NUMBER	WC1100177.2 Rev A
TEST DATE(S)	28 January – 15 February and 10 March 2011

TÜV SÜD America Inc, as an independent testing laboratory, declares that the equipment tested as specified above conforms to the applicable EMC requirements of FCC Part 15 Subpart C Sections 15.207 "Conducted Limits" and 15.209 "Radiated emission limits; general requirements" and IC RSS-210 "Low-power License-exempt Radiocommunication Devices (All Frequency Bands): Category I Equipment" and IC RSS-Gen "General Requirements and Information for the Certification of Radiocommunication Equipment".

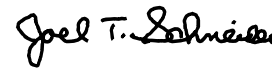
It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical characteristics. Any modifications necessary for compliance made during testing on the above mentioned date(s) must be implemented in all production units for compliance to be maintained.

Date: 30 March 2011

Location: Taylors Falls MN
USA



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Senior EMC Technician



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Not Transferable



America

EMC TEST REPORT

Test Report No. WC1100177.2 Rev A Date of issue: 30 March 2011

Product Name DRYVIEW Chroma Imaging System

Model(s) Tested DRYVIEW Chroma Imaging System

Serial No(s) Tested MP2E001273

Product Description Imaging system with a 13.56 MHz RFID

Manufacturer Carestream Health Incorporated
150 Verona Street
Rochester NY 14608

Test Result **Positive** **Negative**

TÜV SÜD America Inc reports apply only to the specific samples tested under stated test conditions. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. TÜV SÜD America Inc shall have no liability for any deductions, inferences or generalizations drawn by the client or others from TÜV SÜD America Inc issued reports.

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REVISION RECORD

REVISION	TOTAL NUMBER OF PAGES	DATE	DESCRIPTION
	44	10 March 2011	Initial Release
A	44	30 March 2011	Correcting Test Report Number from WC110177.2 to WC1100177.2.





America

DIRECTORY

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EMC TEST REGULATIONS:

The tests were performed according to the following regulations:

FCC Part 15 Subpart C Section 15.207 Paragraph (a)

FCC Part 15 Subpart C Section 15.209 Paragraphs (a), (c), (f)

IC RSS-210 Issue 8 Section 2.5

IC RSS-Gen Issue 3 Sections 4.6.1, 7.2.5

ENVIRONMENTAL CONDITIONS IN THE LAB

	<u>Actual</u>
Temperature:	: 22°C
Atmospheric pressure	: 98kPa
Relative Humidity	: 18%

POWER SUPPLY UTILIZED

Power supply system : 110 V / 60 Hz

TEST EQUIPMENT

All measurement instrumentation is traceable to the National Institute of Standards and Technology and is calibrated according to internal procedure.

MEASUREMENT UNCERTAINTY

The test system for conducted emissions is defined as the LISN, tuned receiver or spectrum analyzer, and coaxial cable. The test system has a measurement uncertainty of ± 1.8 dB. The test system for radiated emissions is defined as the antenna, the pre-amplifier, the spectrum analyzer and the coaxial cable. The test system has a measurement uncertainty of ± 4.8 dB. The equipment comprising the test systems is calibrated on an annual basis

SIGN EXPLANATIONS

- not applicable
- applicable

General field strength limits 0.009 – 30 MHz
FCC 15.209(a), FCC 15.209(c), IC RSS-210 2.5, IC RSS-Gen 7.2.5

Test summary

The requirements are: - MET - NOT MET

Testing was performed in accordance with the test procedure of ANSI C63.4 2003, clause 8.2.2.

Maximum field strength of the fundamental is 5.0 dB μ V/m* or 1.78 μ V/m at 30 meters at 13.56 MHz. Minimum margin of compliance of the fundamental is 24.5 dB. No spurious emissions detected. No unwanted emissions exceed the level of the fundamental.

*Extrapolated levels using a 40 dB/decade falloff as indicated by the measurements.

Test location

- Wild River Lab Large Test Site (Open Area Test Site)

- Wild River Lab Small Test Site (Open Area Test Site)

Test distance

- 0.3 meters

- 1.0 meters

- 3 meters

- 10 meters

Test equipment

TUV ID	Model	Manufacturer	Description	Serial	Cal Due
WRLE02517	HFH2-Z2	Polarad	Loop Antenna	879285/036	29-Jul-11
OWLE02532	ESHS-10	Rohde & Schwarz	EMI Receiver	828178/006	06-Oct-11

Test limit

Frequency (MHz)	Field strength μ V/m	Measurement distance (m)
0.009-0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30	30	30

The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

Test Data, quasi-peak

Frequency (MHz)	Distance 0.3 m dB μ V/m	1.0 m dB μ V/m	3.0 m dB μ V/m	10.0 m dB μ V/m	30 m dB μ V/m	30 m μ V/m	Limit 30 m dB μ V/m	Limit 30 m μ V/m	Delta dB
13.56	81	64	45	24	5.0*	1.78*	29.5	30	-24.5

* Extrapolated value using 40 dB per decade fall off as indicated by measurements

nf = noise floor. No other signals detected up to 30 MHz.

Radiated emissions in the frequency range of 10 kHz to 30 MHz, including the fundamental transmit signal, are measured using a receiver capable of quasi-peak/average/peak measurements and a magnetic loop antenna. The transmitter and loop antenna are rotated through 3 orthogonal axes in order to determine the maximum emission levels. If the signal cannot be measured at the specified limit distance, measurements are recorded at multiple distances nearer to the device and the final level mathematically extrapolated. Measurements between 150 kHz and 30 MHz are made with a 9 kHz resolution bandwidth. Measurements between 9 kHz and 150 kHz are made with a 200 Hz resolution bandwidth.

Radiated Emissions 30 - 8000 MHz

FCC 15.209(c), FCC 15.209(f), IC RSS-210 2.5, RSS-Gen 7.2.5

Test summary

The requirements are: - MET - NOT MET

Testing was performed in accordance with the test procedure of ANSI C63.4 2003, clause 8.3. Maximum spurious emission below 135.6 MHz is 33.06 dB μ V/m (45.0 μ V/m) at 3 meters at 40.68 MHz. Minimum margin of compliance is 6.94 dB. Maximum spurious emission of incorporated digital device above 135.6 MHz and below 1000 MHz is 40.75 dB μ V/m (109 μ V/m) at 3 meters at 216.96 MHz. Minimum margin of compliance is 15.65 dB to extrapolated 3 meter limit. The RFID is always on. No receive mode is available. Maximum spurious emission of incorporated digital device above 1000 MHz is 46.02 dB μ V/m (200 μ V/m) in peak detection mode at 3 meters at 2.8 GHz vs. the average limit. Minimum margin of compliance is 13.98 dB to the extrapolated 3 meter limit.

Test location

Wild River Lab Large Test Site (Open Area Test Site)

Test distance

3 meters

Test Equipment

TUV ID	Model	Manufacturer	Description	Serial	Cal Due
NBLE03196	8566B	Hewlett-Packard	Spectrum Analyzer	2240A01856	19-Oct-11
NBLE03195	85662A	Hewlett-Packard	Analyzer Display	2648A13518	19-Oct-11
OWLE02074	3115	EMCO	Ridge Guide Ant. 1-18 GHz	2504	09-Feb-11
WRLE10527	SL18B4020	Phase One Microwave	Preamplifier 1 – 18 GHz	0001	Code B 05-Oct-11

Cal Code B = Calibration verification performed internally.

Test Limits

Transmitter

Frequency (MHz)	Field strength (μ V/m)	Field strength (dB μ V/m)	Measurement distance (m)
30 - 88	100	40	3
88 – 135.6	150	43.5	3

Incorporated digital device/Receiver – Class A device

Frequency (MHz)	Field strength (μ V/m)	Field strength (dB μ V/m)	Measurement distance (m)	Field strength @ 3 m (μ V/m)
135.6 - 216	150	43.5	10	500
216 - 960	210	46.4	10	700
Above 960	300	49.5	10	1000

The emission limits shown in the above tables are based on measurements employing a CISPR quasi-peak detector except for the frequency bands above 1000 MHz. Radiated emission limits above 1000 MHz are based on measurements employing an average detector. When average radiated emission measurements are specified in this part, there also is a limit on the peak level of the radio frequency emissions. Unless otherwise specified, e.g., see §§ 15.250, 15.252, 15.255, and 15.509–15.519, the limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit applicable to the equipment under test. Radiated emissions from the EUT are measured in the frequency range of 30 to 1000 MHz using a spectrum analyzer and appropriate broadband linearly polarized antennas. Measurements between 30 MHz and 1000 MHz are made with a 120 kHz / 6 dB bandwidth and quasi-peak detection and measurements above 1000 MHz are made with a 1 MHz RBW/VBW / 6 dB bandwidth and peak detection, 1 MHz RBW/ 10 Hz VBW for average detection. Table top equipment is placed on a non-conductive support 80 cm above the ground plane. Interface cables that are closer than 40 centimeters to the ground plane are bundled in the center in a serpentine fashion so they are at least 40 centimeters from the ground plane. Cables to simulators/testers (if used in this test) are routed through the center of the table and to a screen room located outside the test area. The antenna is positioned 3 meters horizontally from the EUT. To locate maximum emissions from the

test sample the antenna is varied in height from 1 to 4 meters, measurement scans are made with both horizontal and vertical antenna polarizations and the EUT is rotated 360 degrees. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB / decade (inverse linear-distance for field strength measurements).

Test data - See following pages

Measurement summary for limit1: FCC 15.209 to 135.6MHz, class A above (3m) (Qp)						
FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 FCC 15.209 to 135.6MHz, class A above (3m)	FINAL (uV / m)
40.68 MHz	43.28 Qp	0.45 / 16.9 / 27.58 / 0.0	33.06	V / 1.00 / 5	-6.94	44.98
108.48 MHz	51.3 Qp	0.93 / 9.07 / 27.43 / 0.0	33.87	H / 1.50 / 180	-9.63	49.37
122.04 MHz	46.2 Qp	0.99 / 8.78 / 27.4 / 0.0	28.56	H / 1.50 / 90	-14.94	26.79
216.96 MHz	56.0 Qp	1.35 / 10.75 / 27.35 / 0.0	40.75	H / 1.00 / 157	-15.65	109.02
54.24 MHz	38.2 Qp	0.53 / 12.97 / 27.55 / 0.0	24.16	V / 1.00 / 270	-15.84	16.14
203.4 MHz	52.73 Qp	1.31 / 10.38 / 27.32 / 0.0	37.1	H / 1.20 / 162	-16.4	71.61
135.6 MHz	44.75 Qp	1.04 / 8.07 / 27.37 / 0.0	26.49	V / 1.00 / 180	-17.01	21.11
94.92 MHz	44.2 Qp	0.86 / 8.04 / 27.46 / 0.0	25.64	V / 1.00 / 90	-17.86	19.14
149.16 MHz	51.35 Qp	1.1 / 9.6 / 27.34 / 0.0	34.71	H / 1.50 / 90	-18.79	54.39
800.007 MHz	38.36 Qp	2.9 / 21.6 / 26.25 / 0.0	36.61	V / 1.00 / 5	-19.79	67.69
275.997 MHz	49.25 Qp	1.53 / 12.58 / 27.31 / 0.0	36.05	H / 1.50 / 180	-20.35	63.46
67.8 MHz	37.0 Qp	0.64 / 9.35 / 27.52 / 0.0	19.47	H / 1.50 / 180	-20.53	9.41
250.0 MHz	49.75 Qp	1.45 / 12.01 / 27.36 / 0.0	35.85	V / 1.00 / 270	-20.55	62.02
352.56 MHz	45.65 Qp	1.76 / 14.83 / 27.18 / 0.0	35.06	H / 1.00 / 0	-21.34	56.62
125.0 MHz	39.35 Qp	1.0 / 8.6 / 27.4 / 0.0	21.55	V / 1.00 / 0	-21.95	11.95
479.169 MHz	41.8 Qp	2.1 / 17.21 / 26.96 / 0.0	34.15	V / 1.00 / 0	-22.25	50.99
431.256 MHz	42.65 Qp	1.98 / 16.34 / 27.05 / 0.0	33.92	V / 1.00 / 0	-22.48	49.66
375.018 MHz	43.5 Qp	1.83 / 15.6 / 27.14 / 0.0	33.78	H / 1.00 / 180	-22.62	48.87
239.991 MHz	48.0 Qp	1.42 / 11.63 / 27.37 / 0.0	33.68	H / 1.00 / 180	-22.72	48.31
189.84 MHz	46.35 Qp	1.26 / 10.44 / 27.37 / 0.0	30.68	H / 1.00 / 90	-22.82	34.20
767.997 MHz	35.55 Qp	2.82 / 21.52 / 26.38 / 0.0	33.52	V / 1.00 / 180	-22.88	47.42
474.6 MHz	40.6 Qp	2.09 / 17.13 / 26.97 / 0.0	32.84	H / 1.50 / 180	-23.56	43.85
910.419 MHz	32.6 Qp	3.09 / 22.44 / 26.2 / 0.0	31.94	V / 1.00 / 0	-24.46	39.54
239.589 MHz	45.35 Qp	1.42 / 11.61 / 27.37 / 0.0	31.01	H / 1.00 / 90	-25.39	35.52
244.08 MHz	44.55 Qp	1.43 / 11.79 / 27.37 / 0.0	30.4	V / 1.00 / 0	-26.0	33.11
527.964 MHz	36.35 Qp	2.22 / 17.98 / 26.88 / 0.0	29.67	V / 1.00 / 0	-26.73	30.44
176.28 MHz	43.35 Qp	1.21 / 9.54 / 27.35 / 0.0	26.74	H / 1.00 / 90	-26.76	21.73
325.44 MHz	40.8 Qp	1.68 / 13.94 / 27.23 / 0.0	29.19	V / 1.00 / 180	-27.21	28.81
230.52 MHz	43.6 Qp	1.39 / 11.27 / 27.39 / 0.0	28.87	H / 1.00 / 180	-27.53	27.77
515.28 MHz	35.3 Qp	2.19 / 17.91 / 26.9 / 0.0	28.49	V / 1.00 / 0	-27.91	26.58
542.4 MHz	34.8 Qp	2.26 / 18.21 / 26.86 / 0.0	28.41	V / 1.00 / 0	-27.99	26.33
528.84 MHz	34.05 Qp	2.22 / 17.95 / 26.88 / 0.0	27.34	V / 1.00 / 270	-29.06	23.28
298.32 MHz	39.55 Qp	1.59 / 13.08 / 27.27 / 0.0	26.95	V / 1.00 / 90	-29.45	22.26
158.774 MHz	41.3 Qp	1.14 / 8.65 / 27.32 / 0.0	23.76	V / 1.00 / 0	-29.74	15.42
420.36 MHz	35.25 Qp	1.95 / 16.14 / 27.06 / 0.0	26.28	V / 1.00 / 270	-30.12	20.61
555.978 MHz	32.4 Qp	2.29 / 18.28 / 26.83 / 0.0	26.14	V / 1.00 / 90	-30.26	20.28
383.979 MHz	35.8 Qp	1.85 / 15.51 / 27.13 / 0.0	26.04	V / 1.00 / 90	-30.36	20.04
287.976 MHz	38.45 Qp	1.56 / 12.75 / 27.29 / 0.0	25.48	H / 1.00 / 0	-30.92	18.79
366.12 MHz	35.4 Qp	1.8 / 15.3 / 27.16 / 0.0	25.34	H / 1.00 / 0	-31.06	18.49
393.258 MHz	33.55 Qp	1.88 / 15.65 / 27.11 / 0.0	23.97	V / 1.00 / 0	-32.43	15.79
339.0 MHz	34.65 Qp	1.72 / 14.37 / 27.2 / 0.0	23.53	V / 1.00 / 0	-32.87	15.01

Measurement summary for limit2: FCC A >1GHz 3m av (Av)					
FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA2 FCC A >1GHz 3m av
2.8 GHz	54.8 Pk	5.49 / 29.29 / 43.57 / 0.0	46.02	V / 1.38 / 0	-13.98*
1.5 GHz	57.2 Pk	3.93 / 25.7 / 42.2 / 0.0	44.63	V / 1.55 / 188	-15.37*
1.2 GHz	55.15 Pk	3.5 / 25.8 / 41.47 / 0.0	42.98	V / 1.20 / 40	-17.02*
1.625 GHz	52.7 Pk	4.11 / 26.3 / 42.1 / 0.0	41	V / 1.00 / 0	-19.0*
1.25 GHz	52.95 Pk	3.58 / 25.7 / 41.63 / 0.0	40.6	V / 1.59 / 184	-19.4*
2.199 GHz	52.05 Pk	4.8 / 27.6 / 43.99 / 0.0	40.46	V / 1.50 / 100	-19.54*
1.0 GHz	52.25 Pk	3.22 / 24.7 / 41.2 / 0.0	38.97	V / 1.55 / 25	-21.03*

* Peak measurements against the average limit



Occupied bandwidth

RSS-Gen 4.6.1

Test summary

The requirements are: - MET - NOT MET

Test was performed in accordance with the article "The Measurement of Occupied Bandwidth" by Industry Canada's certification bureau.

Occupied bandwidth = 2.855 kHz

Test location

- Wild River Lab Large Test Site (Open Area Test Site)

- Wild River Lab Small Test Site (Open Area Test Site)

Test equipment

TUV ID	Model Number	Manufacturer	Description	Serial Number	Cal Due
WRLE10515	7405	EMCO/EMC Test	Near field probe	7405-901	Code Y
WRLE03371	E4440A	Agilent	Spectrum Analyzer	MY43362222	09-Aug-11

Cal Code B = Calibration verification performed internally. Cal Code Y = Calibration not required when used with other calibrated equipment.

Test limit

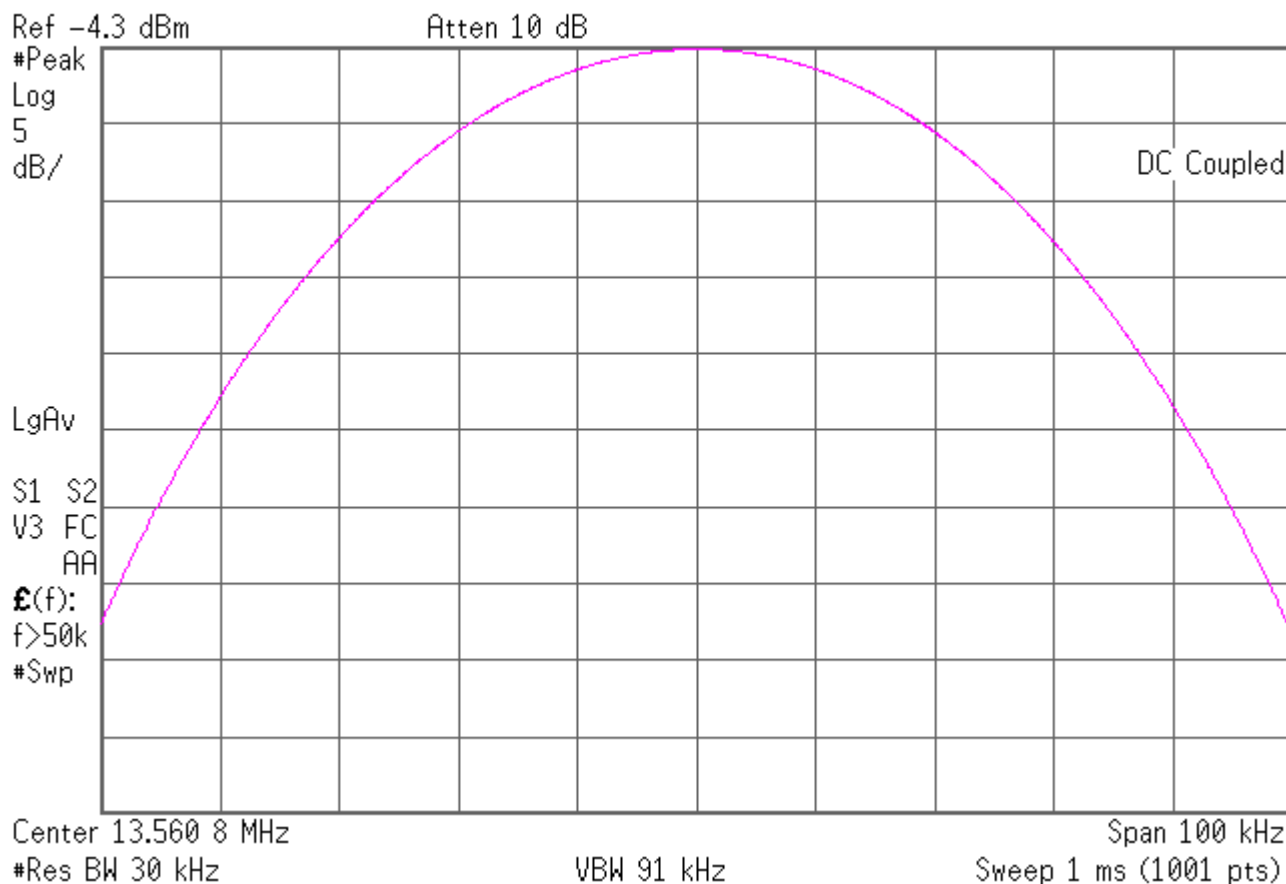
No limit specified

Test data

See following pages

99% Occupied bandwidth
1 of 2, wide RBW, set ref lvl

Agilent 09:36:18 Mar 10, 2011



99% Occupied bandwidth
2 of 2, narrow RBW

Agilent 09:48:16 Mar 10, 2011

▲ Mkr1 2.855 kHz
-0.04 dB

Ref -4.3 dBm

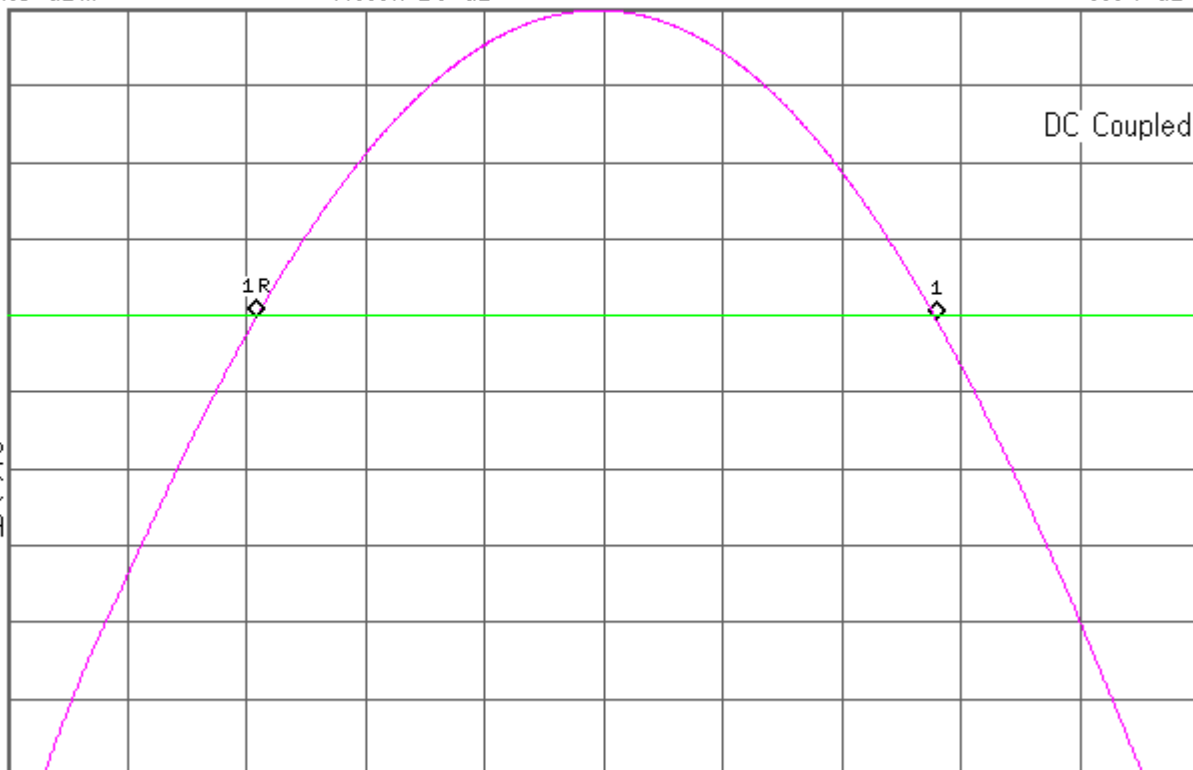
Atten 10 dB

#Peak
Log
5
dB/

DI
-24.3
dBm
LgAv

S1 S2
V3 FC
AA

£(f):
f<50k
#Swp



Center 13.560 305 MHz

#Res BW 1 kHz

#VBW 50 MHz

Span 5 kHz
Sweep 4.6 ms (1001 pts)

Conducted Emissions - AC Power Lines

FCC 15.207(a), IC RSS-Gen 7.2.4

Test summary

The requirements are: - MET - NOT MET

Testing was performed in accordance with the test procedure of ANSI C63.4 2003, clause 7.2

Minimum margin of compliance is 14.28 dB at 13.56 MHz – quasi-peak

Minimum margin of compliance is 4.76 dB at 13.56 MHz – average

Test location

- Wild River Lab Large Test Site (Open Area Test Site)

- Wild River Lab Small Test Site (Open Area Test Site)

Test equipment used:

TUV ID	Model	Manufacturer	Description	Serial	Cal Due
OWLE02078	3825/2	Electro-Mechanics (EMCO)	50 Ω LISN	1326	Code B 30-Jun-11
WRLE02476	11947A	Hewlett Packard	Transient Limiter	3107A00780	Code B 26-Feb-11
OWLE02532	ESHS-10	Rohde & Schwarz	EMI Receiver	828178/006	06-Oct-11

Cal Code B = Calibration verification performed internally. Cal Code Y = Calibration not required when used with other calibrated equipment.

Test limits, dB μ V

Frequency (MHz)	Quasi Peak	Average
0.15 - 0.5	66 - 56*	56 - 46*
0.5 - 5	56	46
5 - 30	60	50

*Decreases with the logarithm of the frequency

Conducted emissions on the 50 Hz and/or 60 Hz power interface of the EUT are measured in the frequency range of 150 kHz to 30 MHz. The measurements are performed using a receiver, which has CISPR characteristic bandwidth (9 kHz resolution bandwidth) and quasi-peak/average detection, and a Line Impedance Stabilization Network (LISN), with 50 Ω /50 μ H (CISPR 16) characteristics. Table top equipment is placed on a non-conducting table 80 centimeters above the floor and is positioned 40 centimeters from the vertical ground plane (wall) of the screen room. In some cases, a pre-scan using a spectrum analyzer is initially performed on the units comprising the system under test to locate the highest emissions.

Test data

See following pages

CONDUCTED EMISSIONS



Test Report #: WC1100177 Run 1 Test Area: SR2
 EUT Model #: DRYVIEW CHROMA Imaging Date: 2/10/2011
 EUT Serial #: MP2E001273 (printer) EUT Power: 230/110VAC, 50/60Hz Temperature: 24.0 °C
 Test Method: FCC / EN55022 A Air Pressure: 99.0 kPa
 Customer: Carestream Health, Inc. Rel. Humidity: 21.0 %


EUT Description: DRYVIEW CHROMA Imaging System (with 13.56 MHz RFID)

Notes: Antenna terminated, printing test prints.

Data File Name: 0177-1.dat Page: 1 of 7

List of measurements for run #: 1

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV)	EUT Lead	DELTA1 EN55022 B Qp	DELTA2 EN55022 B Avg
Start of Conducted scan 0.15 - 30 MHz						
Printer Power Cable						
230VAC / 50Hz						
150.0 kHz	30.66 Qp	0.01 / 2.9 / 0.0 / 9.95	43.53	L1	-22.47	n/a
508.87 kHz	24.86 Qp	0.05 / 0.09 / 0.0 / 9.9	34.9	L1	-21.1	n/a
870.0 kHz	17.54 Qp	0.08 / 0.01 / 0.0 / 9.91	27.54	L1	-28.46	n/a
2.834 MHz	27.66 Qp	0.14 / 0.02 / 0.0 / 9.92	37.74	L1	-18.26	n/a
5.402 MHz	15.14 Qp	0.19 / 0.03 / 0.0 / 9.94	25.3	L1	-34.7	n/a
9.367 MHz	13.44 Qp	0.25 / 0.05 / 0.0 / 9.97	23.71	L1	-36.29	n/a
13.56 MHz	34.66 Qp	0.3 / 0.07 / 0.0 / 10.01	45.04	L1	-14.96	n/a
15.43 MHz	13.26 Qp	0.32 / 0.08 / 0.0 / 10.02	23.68	L1	-36.32	n/a
20.51 MHz	13.26 Qp	0.35 / 0.11 / 0.0 / 10.06	23.78	L1	-36.22	n/a
21.61 MHz	8.88 Qp	0.36 / 0.13 / 0.0 / 10.07	19.44	L1	-40.56	n/a
24.195 MHz	10.88 Qp	0.38 / 0.18 / 0.0 / 10.09	21.53	L1	-38.47	n/a
26.45 MHz	10.78 Qp	0.4 / 0.22 / 0.0 / 10.03	21.42	L1	-38.58	n/a
27.04 MHz	10.82 Qp	0.4 / 0.23 / 0.0 / 10.0	21.45	L1	-38.55	n/a
150.0 kHz	26.91 Av	0.01 / 2.9 / 0.0 / 9.95	39.78	L1	n/a	-16.22
508.87 kHz	16.38 Av	0.05 / 0.09 / 0.0 / 9.9	26.42	L1	n/a	-19.58
870.0 kHz	7.54 Av	0.08 / 0.01 / 0.0 / 9.91	17.54	L1	n/a	-28.46
2.834 MHz	19.95 Av	0.14 / 0.02 / 0.0 / 9.92	30.03	L1	n/a	-15.97
5.402 MHz	7.8 Av	0.19 / 0.03 / 0.0 / 9.94	17.96	L1	n/a	-32.04
9.367 MHz	5.65 Av	0.25 / 0.05 / 0.0 / 9.97	15.92	L1	n/a	-34.08
13.56 MHz	34.51 Av	0.3 / 0.07 / 0.0 / 10.01	44.89	L1	n/a	-5.11
15.43 MHz	2.49 Av	0.32 / 0.08 / 0.0 / 10.02	12.91	L1	n/a	-37.09
20.51 MHz	4.27 Av	0.35 / 0.11 / 0.0 / 10.06	14.79	L1	n/a	-35.21
21.61 MHz	3.04 Av	0.36 / 0.13 / 0.0 / 10.07	13.6	L1	n/a	-36.4
24.195 MHz	5.43 Av	0.38 / 0.18 / 0.0 / 10.09	16.08	L1	n/a	-33.92
26.45 MHz	5.65 Av	0.4 / 0.22 / 0.0 / 10.03	16.29	L1	n/a	-33.71

Tested by: Brad Reasoner 
 Printed Signature

Reviewed by: Robert J Behringer 
 Printed Signature

CONDUCTED EMISSIONS



Test Report #: WC1100177 Run 1 Test Area: SR2
 EUT Model #: DRYVIEW CHROMA Imaging Date: 2/10/2011
 EUT Serial #: MP2E001273 (printer) EUT Power: 230/110VAC, 50/60Hz Temperature: 24.0 °C
 Test Method: FCC / EN55022 A Air Pressure: 99.0 kPa
 Customer: Carestream Health, Inc. Rel. Humidity: 21.0 %

EUT Description: DRYVIEW CHROMA Imaging System (with 13.56 MHz RFID)


Notes: Antenna terminated, printing test prints.


Data File Name: 0177-1.dat Page: 2 of 7

List of measurements for run #: 1

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV)	EUT Lead	DELTA1 EN55022 B Qp	DELTA2 EN55022 B Avg
27.04 MHz	5.46 Av	0.4 / 0.23 / 0.0 / 10.0	16.09	L1	n/a	-33.91
150.0 kHz	30.92 Qp	0.01 / 2.9 / 0.0 / 9.95	43.79	N	-22.21	n/a
508.87 kHz	21.5 Qp	0.05 / 0.09 / 0.0 / 9.9	31.54	N	-24.46	n/a
870.0 kHz	17.78 Qp	0.08 / 0.01 / 0.0 / 9.91	27.78	N	-28.22	n/a
2.834 MHz	26.94 Qp	0.14 / 0.02 / 0.0 / 9.92	37.02	N	-18.98	n/a
5.402 MHz	14.48 Qp	0.19 / 0.03 / 0.0 / 9.94	24.64	N	-35.36	n/a
9.367 MHz	12.48 Qp	0.25 / 0.05 / 0.0 / 9.97	22.75	N	-37.25	n/a
13.56 MHz	35.34 Qp	0.3 / 0.07 / 0.0 / 10.01	45.72	N	-14.28	n/a
15.43 MHz	20.36 Qp	0.32 / 0.08 / 0.0 / 10.02	30.78	N	-29.22	n/a
20.51 MHz	12.04 Qp	0.35 / 0.11 / 0.0 / 10.06	22.56	N	-37.44	n/a
21.61 MHz	8.8 Qp	0.36 / 0.13 / 0.0 / 10.07	19.36	N	-40.64	n/a
24.195 MHz	11.94 Qp	0.38 / 0.18 / 0.0 / 10.09	22.59	N	-37.41	n/a
26.45 MHz	11.82 Qp	0.4 / 0.22 / 0.0 / 10.03	22.46	N	-37.54	n/a
27.04 MHz	11.28 Qp	0.4 / 0.23 / 0.0 / 10.0	21.91	N	-38.09	n/a
150.0 kHz	27.04 Av	0.01 / 2.9 / 0.0 / 9.95	39.91	N	n/a	-16.09
508.87 kHz	15.33 Av	0.05 / 0.09 / 0.0 / 9.9	25.37	N	n/a	-20.63
870.0 kHz	7.65 Av	0.08 / 0.01 / 0.0 / 9.91	17.65	N	n/a	-28.35
2.834 MHz	18.34 Av	0.14 / 0.02 / 0.0 / 9.92	28.42	N	n/a	-17.58
5.402 MHz	5.17 Av	0.19 / 0.03 / 0.0 / 9.94	15.33	N	n/a	-34.67
9.367 MHz	5.47 Av	0.25 / 0.05 / 0.0 / 9.97	15.74	N	n/a	-34.26
13.56 MHz	34.86 Av	0.3 / 0.07 / 0.0 / 10.01	45.24	N	n/a	-4.76
15.43 MHz	10.41 Av	0.32 / 0.08 / 0.0 / 10.02	20.83	N	n/a	-29.17
20.51 MHz	3.82 Av	0.35 / 0.11 / 0.0 / 10.06	14.34	N	n/a	-35.66
21.61 MHz	3.02 Av	0.36 / 0.13 / 0.0 / 10.07	13.58	N	n/a	-36.42
24.195 MHz	5.12 Av	0.38 / 0.18 / 0.0 / 10.09	15.77	N	n/a	-34.23
26.45 MHz	5.78 Av	0.4 / 0.22 / 0.0 / 10.03	16.42	N	n/a	-33.58
27.04 MHz	5.66 Av	0.4 / 0.23 / 0.0 / 10.0	16.29	N	n/a	-33.71

110VAC / 60Hz

Tested by: Brad Reasoner 
 Printed Signature

Reviewed by: Robert J Behringer 
 Printed Signature

CONDUCTED EMISSIONS



Test Report #: WC1100177 Run 1 Test Area: SR2
 EUT Model #: DRYVIEW CHROMA Imaging Date: 2/10/2011
 EUT Serial #: MP2E001273 (printer) EUT Power: 230/110VAC, 50/60Hz Temperature: 24.0 °C
 Test Method: FCC / EN55022 A Air Pressure: 99.0 kPa
 Customer: Carestream Health, Inc. Rel. Humidity: 21.0 %


EUT Description: DRYVIEW CHROMA Imaging System (with 13.56 MHz RFID)


Notes: Antenna terminated, printing test prints.

Data File Name: 0177-1.dat Page: 3 of 7

List of measurements for run #: 1

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV)	EUT Lead	DELTA1 EN55022 B Qp	DELTA2 EN55022 B Avg
150.0 kHz	26.04 Qp	0.01 / 2.9 / 0.0 / 9.95	38.91	L1	-27.09	n/a
314.09 kHz	24.28 Qp	0.03 / 1.5 / 0.0 / 9.9	35.71	L1	-24.15	n/a
570.0 kHz	23.72 Qp	0.05 / 0.04 / 0.0 / 9.9	33.72	L1	-22.28	n/a
870.0 kHz	7.62 Qp	0.08 / 0.01 / 0.0 / 9.91	17.62	L1	-38.38	n/a
2.87 MHz	19.76 Qp	0.14 / 0.02 / 0.0 / 9.92	29.84	L1	-26.16	n/a
8.96 MHz	8.94 Qp	0.24 / 0.05 / 0.0 / 9.97	19.2	L1	-40.8	n/a
13.56 MHz	32.5 Qp	0.3 / 0.07 / 0.0 / 10.01	42.88	L1	-17.12	n/a
15.79 MHz	28.66 Qp	0.32 / 0.08 / 0.0 / 10.02	39.09	L1	-20.91	n/a
20.99 MHz	12.08 Qp	0.36 / 0.12 / 0.0 / 10.07	22.62	L1	-37.38	n/a
24.15 MHz	7.54 Qp	0.38 / 0.17 / 0.0 / 10.09	18.19	L1	-41.81	n/a
26.6 MHz	6.1 Qp	0.4 / 0.22 / 0.0 / 10.02	16.74	L1	-43.26	n/a
27.04 MHz	7.0 Qp	0.4 / 0.23 / 0.0 / 10.0	17.63	L1	-42.37	n/a
28.39 MHz	7.02 Qp	0.41 / 0.25 / 0.0 / 10.01	17.69	L1	-42.31	n/a
150.0 kHz	22.26 Av	0.01 / 2.9 / 0.0 / 9.95	35.13	L1	n/a	-20.87
314.09 kHz	17.48 Av	0.03 / 1.5 / 0.0 / 9.9	28.91	L1	n/a	-20.95
570.0 kHz	17.82 Av	0.05 / 0.04 / 0.0 / 9.9	27.82	L1	n/a	-18.18
2.87 MHz	16.62 Av	0.14 / 0.02 / 0.0 / 9.92	26.7	L1	n/a	-19.3
8.96 MHz	4.19 Av	0.24 / 0.05 / 0.0 / 9.97	14.45	L1	n/a	-35.55
13.56 MHz	32.15 Av	0.3 / 0.07 / 0.0 / 10.01	42.53	L1	n/a	-7.47
15.79 MHz	17.68 Av	0.32 / 0.08 / 0.0 / 10.02	28.11	L1	n/a	-21.89
20.99 MHz	4.65 Av	0.36 / 0.12 / 0.0 / 10.07	15.19	L1	n/a	-34.81
24.15 MHz	0.99 Av	0.38 / 0.17 / 0.0 / 10.09	11.64	L1	n/a	-38.36
26.6 MHz	0.15 Av	0.4 / 0.22 / 0.0 / 10.02	10.79	L1	n/a	-39.21
27.04 MHz	0.17 Av	0.4 / 0.23 / 0.0 / 10.0	10.8	L1	n/a	-39.2
28.39 MHz	1.45 Av	0.41 / 0.25 / 0.0 / 10.01	12.12	L1	n/a	-37.88
150.0 kHz	28.04 Qp	0.01 / 2.9 / 0.0 / 9.95	40.91	N	-25.09	n/a
314.09 kHz	22.22 Qp	0.03 / 1.5 / 0.0 / 9.9	33.65	N	-26.21	n/a
570.0 kHz	23.02 Qp	0.05 / 0.04 / 0.0 / 9.9	33.02	N	-22.98	n/a
2.87 MHz	19.42 Qp	0.14 / 0.02 / 0.0 / 9.92	29.5	N	-26.5	n/a

Tested by: Brad Reasoner 
 Printed Signature

Reviewed by: Robert J Behringer 
 Printed Signature

CONDUCTED EMISSIONS



Test Report #: WC1100177 Run 1 Test Area: SR2
 EUT Model #: DRYVIEW CHROMA Imaging Date: 2/10/2011
 EUT Serial #: MP2E001273 (printer) EUT Power: 230/110VAC, 50/60Hz Temperature: 24.0 °C
 Test Method: FCC / EN55022 A Air Pressure: 99.0 kPa
 Customer: Carestream Health, Inc. Rel. Humidity: 21.0 %

EUT Description: DRYVIEW CHROMA Imaging System (with 13.56 MHz RFID)

Notes: Antenna terminated, printing test prints.

Data File Name: 0177-1.dat

Page: 4 of 7

List of measurements for run #: 1

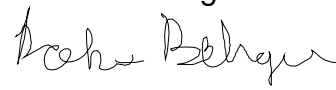
FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV)	EUT Lead	DELTA1 EN55022 B Qp	DELTA2 EN55022 B Avg
8.96 MHz	10.64 Qp	0.24 / 0.05 / 0.0 / 9.97	20.9	N	-39.1	n/a
13.56 MHz	32.82 Qp	0.3 / 0.07 / 0.0 / 10.01	43.2	N	-16.8	n/a
15.79 MHz	27.26 Qp	0.32 / 0.08 / 0.0 / 10.02	37.69	N	-22.31	n/a
20.99 MHz	13.9 Qp	0.36 / 0.12 / 0.0 / 10.07	24.44	N	-35.56	n/a
24.15 MHz	11.3 Qp	0.38 / 0.17 / 0.0 / 10.09	21.95	N	-38.05	n/a
26.6 MHz	8.22 Qp	0.4 / 0.22 / 0.0 / 10.02	18.86	N	-41.14	n/a
27.04 MHz	7.5 Qp	0.4 / 0.23 / 0.0 / 10.0	18.13	N	-41.87	n/a
28.39 MHz	7.9 Qp	0.41 / 0.25 / 0.0 / 10.01	18.57	N	-41.43	n/a
150.0 kHz	24.38 Av	0.01 / 2.9 / 0.0 / 9.95	37.25	N	n/a	-18.75
314.09 kHz	17.24 Av	0.03 / 1.5 / 0.0 / 9.9	28.67	N	n/a	-21.19
570.0 kHz	18.06 Av	0.05 / 0.04 / 0.0 / 9.9	28.06	N	n/a	-17.94
2.87 MHz	14.15 Av	0.14 / 0.02 / 0.0 / 9.92	24.23	N	n/a	-21.77
8.96 MHz	3.55 Av	0.24 / 0.05 / 0.0 / 9.97	13.81	N	n/a	-36.19
13.56 MHz	32.08 Av	0.3 / 0.07 / 0.0 / 10.01	42.46	N	n/a	-7.54
15.79 MHz	20.11 Av	0.32 / 0.08 / 0.0 / 10.02	30.54	N	n/a	-19.46
20.99 MHz	8.19 Av	0.36 / 0.12 / 0.0 / 10.07	18.73	N	n/a	-31.27
24.15 MHz	5.16 Av	0.38 / 0.17 / 0.0 / 10.09	15.81	N	n/a	-34.19
26.6 MHz	2.05 Av	0.4 / 0.22 / 0.0 / 10.02	12.69	N	n/a	-37.31
27.04 MHz	1.46 Av	0.4 / 0.23 / 0.0 / 10.0	12.09	N	n/a	-37.91
28.39 MHz	2.51 Av	0.41 / 0.25 / 0.0 / 10.01	13.18	N	n/a	-36.82

End of Conducted scan

Tested by: Brad Reasoner
Printed


Signature

Reviewed by: Robert J Behringer
Printed


Signature

CONDUCTED EMISSIONS



Test Report #: WC1100177 Run 1 Test Area: SR2
 EUT Model #: DRYVIEW CHROMA Imaging Date: 2/10/2011
 EUT Serial #: MP2E001273 (printer) EUT Power: 230/110VAC, 50/60Hz Temperature: 24.0 °C
 Test Method: FCC / EN55022 A Air Pressure: 99.0 kPa
 Customer: Carestream Health, Inc. Rel. Humidity: 21.0 %



EUT Description: DRYVIEW CHROMA Imaging System (with 13.56 MHz RFID)

Notes: Antenna terminated, printing test prints.

Data File Name: 0177-1.dat Page: 5 of 7

Measurement summary for limit1: EN55022 B Qp (Qp)

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV)	EUT Lead	DELTA1 EN55022 B Qp
13.56 MHz	35.34 Qp	0.3 / 0.07 / 0.0 / 10.01	45.72	N	-14.28
2.834 MHz	27.66 Qp	0.14 / 0.02 / 0.0 / 9.92	37.74	L1	-18.26
15.79 MHz	28.66 Qp	0.32 / 0.08 / 0.0 / 10.02	39.09	L1	-20.91
508.87 kHz	24.86 Qp	0.05 / 0.09 / 0.0 / 9.9	34.9	L1	-21.1
150.0 kHz	30.92 Qp	0.01 / 2.9 / 0.0 / 9.95	43.79	N	-22.21
570.0 kHz	23.72 Qp	0.05 / 0.04 / 0.0 / 9.9	33.72	L1	-22.28
314.09 kHz	24.28 Qp	0.03 / 1.5 / 0.0 / 9.9	35.71	L1	-24.15
2.87 MHz	19.76 Qp	0.14 / 0.02 / 0.0 / 9.92	29.84	L1	-26.16
870.0 kHz	17.78 Qp	0.08 / 0.01 / 0.0 / 9.91	27.78	N	-28.22
15.43 MHz	20.36 Qp	0.32 / 0.08 / 0.0 / 10.02	30.78	N	-29.22
5.402 MHz	15.14 Qp	0.19 / 0.03 / 0.0 / 9.94	25.3	L1	-34.7
20.99 MHz	13.9 Qp	0.36 / 0.12 / 0.0 / 10.07	24.44	N	-35.56
20.51 MHz	13.26 Qp	0.35 / 0.11 / 0.0 / 10.06	23.78	L1	-36.22
9.367 MHz	13.44 Qp	0.25 / 0.05 / 0.0 / 9.97	23.71	L1	-36.29
24.195 MHz	11.94 Qp	0.38 / 0.18 / 0.0 / 10.09	22.59	N	-37.41
26.45 MHz	11.82 Qp	0.4 / 0.22 / 0.0 / 10.03	22.46	N	-37.54
24.15 MHz	11.3 Qp	0.38 / 0.17 / 0.0 / 10.09	21.95	N	-38.05
27.04 MHz	11.28 Qp	0.4 / 0.23 / 0.0 / 10.0	21.91	N	-38.09
8.96 MHz	10.64 Qp	0.24 / 0.05 / 0.0 / 9.97	20.9	N	-39.1
21.61 MHz	8.88 Qp	0.36 / 0.13 / 0.0 / 10.07	19.44	L1	-40.56
26.6 MHz	8.22 Qp	0.4 / 0.22 / 0.0 / 10.02	18.86	N	-41.14
28.39 MHz	7.9 Qp	0.41 / 0.25 / 0.0 / 10.01	18.57	N	-41.43

Tested by: Brad Reasoner 
 Printed Signature
 Reviewed by: Robert J Behringer 
 Printed Signature

CONDUCTED EMISSIONS



Test Report #: WC1100177 Run 1 Test Area: SR2
 EUT Model #: DRYVIEW CHROMA Imaging Date: 2/10/2011
 EUT Serial #: MP2E001273 (printer) EUT Power: 230/110VAC, 50/60Hz Temperature: 24.0 °C
 Test Method: FCC / EN55022 A Air Pressure: 99.0 kPa
 Customer: Carestream Health, Inc. Rel. Humidity: 21.0 %



EUT Description: DRYVIEW CHROMA Imaging System (with 13.56 MHz RFID)

Notes: Antenna terminated, printing test prints.

Data File Name: 0177-1.dat Page: 6 of 7

Measurement summary for limit2: EN55022 B Avg (Av)

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV)	EUT Lead	DELTA2 EN55022 B Avg
13.56 MHz	34.86 Av	0.3 / 0.07 / 0.0 / 10.01	45.24	N	-4.76
2.834 MHz	19.95 Av	0.14 / 0.02 / 0.0 / 9.92	30.03	L1	-15.97
150.0 kHz	27.04 Av	0.01 / 2.9 / 0.0 / 9.95	39.91	N	-16.09
570.0 kHz	18.06 Av	0.05 / 0.04 / 0.0 / 9.9	28.06	N	-17.94
2.87 MHz	16.62 Av	0.14 / 0.02 / 0.0 / 9.92	26.7	L1	-19.3
15.79 MHz	20.11 Av	0.32 / 0.08 / 0.0 / 10.02	30.54	N	-19.46
508.87 kHz	16.38 Av	0.05 / 0.09 / 0.0 / 9.9	26.42	L1	-19.58
314.09 kHz	17.48 Av	0.03 / 1.5 / 0.0 / 9.9	28.91	L1	-20.95
870.0 kHz	7.65 Av	0.08 / 0.01 / 0.0 / 9.91	17.65	N	-28.35
15.43 MHz	10.41 Av	0.32 / 0.08 / 0.0 / 10.02	20.83	N	-29.17
20.99 MHz	8.19 Av	0.36 / 0.12 / 0.0 / 10.07	18.73	N	-31.27
5.402 MHz	7.8 Av	0.19 / 0.03 / 0.0 / 9.94	17.96	L1	-32.04
26.45 MHz	5.78 Av	0.4 / 0.22 / 0.0 / 10.03	16.42	N	-33.58
27.04 MHz	5.66 Av	0.4 / 0.23 / 0.0 / 10.0	16.29	N	-33.71
24.195 MHz	5.43 Av	0.38 / 0.18 / 0.0 / 10.09	16.08	L1	-33.92
9.367 MHz	5.65 Av	0.25 / 0.05 / 0.0 / 9.97	15.92	L1	-34.08
24.15 MHz	5.16 Av	0.38 / 0.17 / 0.0 / 10.09	15.81	N	-34.19
20.51 MHz	4.27 Av	0.35 / 0.11 / 0.0 / 10.06	14.79	L1	-35.21
8.96 MHz	4.19 Av	0.24 / 0.05 / 0.0 / 9.97	14.45	L1	-35.55
21.61 MHz	3.04 Av	0.36 / 0.13 / 0.0 / 10.07	13.6	L1	-36.4
28.39 MHz	2.51 Av	0.41 / 0.25 / 0.0 / 10.01	13.18	N	-36.82
26.6 MHz	2.05 Av	0.4 / 0.22 / 0.0 / 10.02	12.69	N	-37.31

Tested by: Brad Reasoner 
 Printed Signature
 Reviewed by: Robert J Behringer 
 Printed Signature

CONDUCTED EMISSIONS



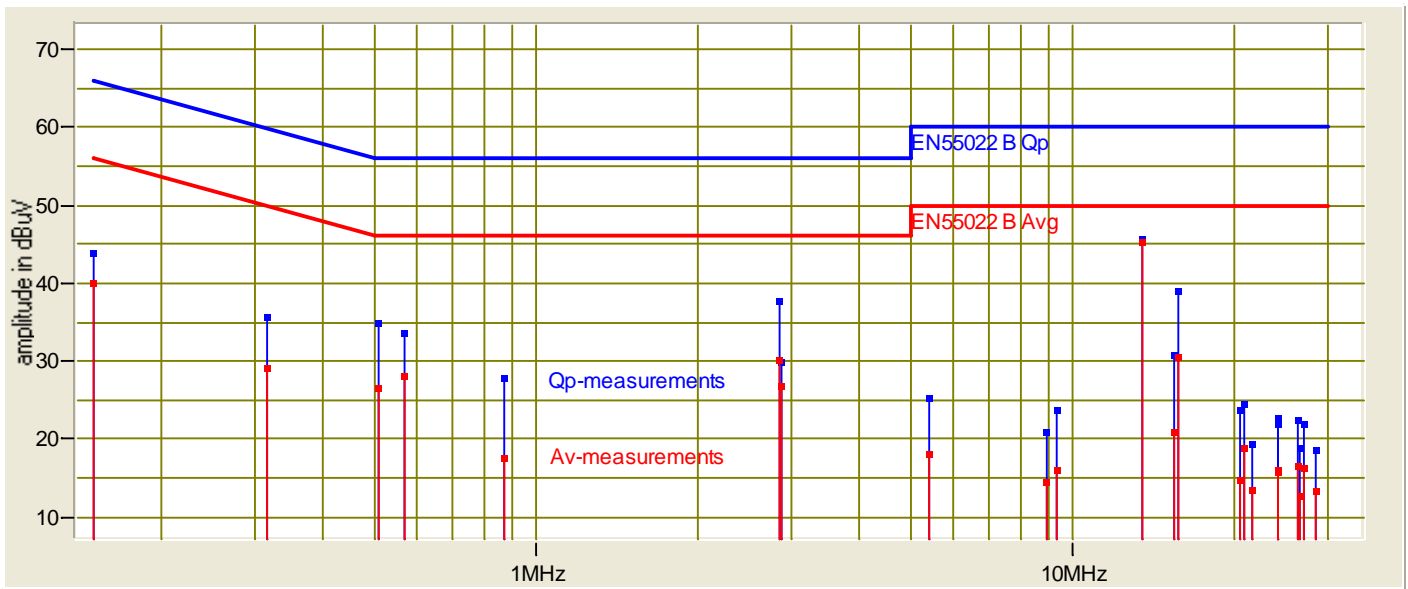
Test Report #: WC1100177 Run 1 Test Area: SR2
 EUT Model #: DRYVIEW CHROMA Imaging Date: 2/10/2011
 EUT Serial #: MP2E001273 (printer) EUT Power: 230/110VAC, 50/60Hz Temperature: 24.0 °C
 Test Method: FCC / EN55022 A Air Pressure: 99.0 kPa
 Customer: Carestream Health, Inc. Rel. Humidity: 21.0 %

EUT Description: DRYVIEW CHROMA Imaging System (with 13.56 MHz RFID)

Notes: Antenna terminated, printing test prints.

Data File Name: 0177-1.dat Page: 7 of 7

Graph:



Tested by: Brad Reasoner *Brad Reasoner*
 Printed Signature
 Reviewed by: Robert J Behringer *Robert J Behringer*
 Printed Signature

CONDUCTED EMISSIONS



Test Report #: WC1100177 Run 2 Test Area: SR2
 EUT Model #: DRYVIEW CHROMA Imaging Date: 2/10/2011
 EUT Serial #: MP2E001273 (printer) EUT Power: 230/110VAC, 50/60Hz Temperature: 24.0 °C
 Test Method: FCC / EN55022 A Air Pressure: 99.0 kPa
 Customer: Carestream Health, Inc. Rel. Humidity: 21.0 %


EUT Description: DRYVIEW CHROMA Imaging System (with 13.56 MHz RFID)

Notes: Antenna terminated, printing test prints.

Data File Name: 0177-1.dat Page: 1 of 7

List of measurements for run #: 2

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV)	EUT Lead	DELTA1 EN55011 B Grp1 Qp	DELTA2 EN55022 B Avg
Start of Conducted scan 0.15 - 30 MHz						
DRE						
230VAC / 50Hz						
150.0 kHz	35.76 Qp	0.01 / 0.2 / 0.0 / 9.95	45.93	L1	-20.07	n/a
291.38 kHz	32.34 Qp	0.03 / 0.1 / 0.0 / 9.9	42.37	L1	-18.12	n/a
480.0 kHz	12.28 Qp	0.04 / 0.1 / 0.0 / 9.9	22.33	L1	-34.01	n/a
720.0 kHz	7.58 Qp	0.06 / 0.1 / 0.0 / 9.9	17.65	L1	-38.35	n/a
989.95 kHz	5.94 Qp	0.09 / 0.1 / 0.0 / 9.91	16.04	L1	-39.96	n/a
4.39 MHz	-2.26 Qp	0.17 / 0.08 / 0.0 / 9.93	7.92	L1	-48.08	n/a
6.72 MHz	-1.34 Qp	0.21 / 0.04 / 0.0 / 9.95	8.86	L1	-51.14	n/a
11.43 MHz	2.46 Qp	0.27 / 0.1 / 0.0 / 9.99	12.82	L1	-47.18	n/a
13.56 MHz	32.24 Qp	0.3 / 0.26 / 0.0 / 10.01	42.8	L1	-17.2	n/a
19.315 MHz	25.84 Qp	0.34 / 0.62 / 0.0 / 10.05	36.86	L1	-23.14	n/a
24.09 MHz	15.14 Qp	0.38 / 0.79 / 0.0 / 10.09	26.4	L1	-33.6	n/a
26.48 MHz	12.04 Qp	0.4 / 0.63 / 0.0 / 10.03	23.1	L1	-36.9	n/a
27.28 MHz	14.88 Qp	0.4 / 0.58 / 0.0 / 10.0	25.86	L1	-34.14	n/a
28.36 MHz	11.26 Qp	0.41 / 0.51 / 0.0 / 10.01	22.18	L1	-37.82	n/a
150.0 kHz	6.3 Av	0.01 / 0.2 / 0.0 / 9.95	16.47	L1	n/a	-39.53
291.38 kHz	26.39 Av	0.03 / 0.1 / 0.0 / 9.9	36.42	L1	n/a	-14.07
480.0 kHz	-5.77 Av	0.04 / 0.1 / 0.0 / 9.9	4.28	L1	n/a	-42.06
720.0 kHz	-6.98 Av	0.06 / 0.1 / 0.0 / 9.9	3.09	L1	n/a	-42.91
989.95 kHz	-0.04 Av	0.09 / 0.1 / 0.0 / 9.91	10.06	L1	n/a	-35.94
4.39 MHz	-7.47 Av	0.17 / 0.08 / 0.0 / 9.93	2.71	L1	n/a	-43.29
6.72 MHz	-7.02 Av	0.21 / 0.04 / 0.0 / 9.95	3.18	L1	n/a	-46.82
11.43 MHz	-3.8 Av	0.27 / 0.1 / 0.0 / 9.99	6.56	L1	n/a	-43.44
13.56 MHz	32.38 Av	0.3 / 0.26 / 0.0 / 10.01	42.94	L1	n/a	-7.06
19.315 MHz	19.75 Av	0.34 / 0.62 / 0.0 / 10.05	30.77	L1	n/a	-19.23
24.09 MHz	9.28 Av	0.38 / 0.79 / 0.0 / 10.09	20.54	L1	n/a	-29.46

Tested by: Brad Reasoner 
 Printed Signature

Reviewed by: Robert J Behringer 
 Printed Signature

CONDUCTED EMISSIONS



Test Report #: WC1100177 Run 2 Test Area: SR2
 EUT Model #: DRYVIEW CHROMA Imaging Date: 2/10/2011
 EUT Serial #: MP2E001273 (printer) EUT Power: 230/110VAC, 50/60Hz Temperature: 24.0 °C
 Test Method: FCC / EN55022 A Air Pressure: 99.0 kPa
 Customer: Carestream Health, Inc. Rel. Humidity: 21.0 %


EUT Description: DRYVIEW CHROMA Imaging System (with 13.56 MHz RFID)

Notes: Antenna terminated, printing test prints.

Data File Name: 0177-1.dat Page: 2 of 7

List of measurements for run #: 2

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV)	EUT Lead	DELTA1 EN55011 B Grp1 Qp	DELTA2 EN55022 B Avg
26.48 MHz	5.81 Av	0.4 / 0.63 / 0.0 / 10.03	16.87	L1	n/a	-33.13
27.28 MHz	8.57 Av	0.4 / 0.58 / 0.0 / 10.0	19.55	L1	n/a	-30.45
28.36 MHz	4.89 Av	0.41 / 0.51 / 0.0 / 10.01	15.81	L1	n/a	-34.19
150.0 kHz	35.8 Qp	0.01 / 0.2 / 0.0 / 9.95	45.97	N	-20.03	n/a
291.38 kHz	32.68 Qp	0.03 / 0.1 / 0.0 / 9.9	42.71	N	-17.78	n/a
480.0 kHz	13.46 Qp	0.04 / 0.1 / 0.0 / 9.9	23.51	N	-32.83	n/a
720.0 kHz	8.1 Qp	0.06 / 0.1 / 0.0 / 9.9	18.17	N	-37.83	n/a
989.95 kHz	6.92 Qp	0.09 / 0.1 / 0.0 / 9.91	17.02	N	-38.98	n/a
4.39 MHz	-2.56 Qp	0.17 / 0.08 / 0.0 / 9.93	7.62	N	-48.38	n/a
6.72 MHz	-2.54 Qp	0.21 / 0.04 / 0.0 / 9.95	7.66	N	-52.34	n/a
11.43 MHz	3.12 Qp	0.27 / 0.1 / 0.0 / 9.99	13.48	N	-46.52	n/a
13.56 MHz	32.64 Qp	0.3 / 0.26 / 0.0 / 10.01	43.2	N	-16.8	n/a
19.315 MHz	23.54 Qp	0.34 / 0.62 / 0.0 / 10.05	34.56	N	-25.44	n/a
24.09 MHz	11.62 Qp	0.38 / 0.79 / 0.0 / 10.09	22.88	N	-37.12	n/a
26.48 MHz	12.32 Qp	0.4 / 0.63 / 0.0 / 10.03	23.38	N	-36.62	n/a
27.28 MHz	11.12 Qp	0.4 / 0.58 / 0.0 / 10.0	22.1	N	-37.9	n/a
28.36 MHz	11.18 Qp	0.41 / 0.51 / 0.0 / 10.01	22.1	N	-37.9	n/a
150.0 kHz	5.9 Av	0.01 / 0.2 / 0.0 / 9.95	16.07	N	n/a	-39.93
291.38 kHz	25.84 Av	0.03 / 0.1 / 0.0 / 9.9	35.87	N	n/a	-14.62
480.0 kHz	-5.94 Av	0.04 / 0.1 / 0.0 / 9.9	4.11	N	n/a	-42.23
720.0 kHz	-6.95 Av	0.06 / 0.1 / 0.0 / 9.9	3.12	N	n/a	-42.88
989.95 kHz	4.81 Av	0.09 / 0.1 / 0.0 / 9.91	14.91	N	n/a	-31.09
4.39 MHz	-7.29 Av	0.17 / 0.08 / 0.0 / 9.93	2.89	N	n/a	-43.11
6.72 MHz	-7.67 Av	0.21 / 0.04 / 0.0 / 9.95	2.53	N	n/a	-47.47
11.43 MHz	-3.75 Av	0.27 / 0.1 / 0.0 / 9.99	6.61	N	n/a	-43.39
13.56 MHz	31.77 Av	0.3 / 0.26 / 0.0 / 10.01	42.33	N	n/a	-7.67
19.315 MHz	18.26 Av	0.34 / 0.62 / 0.0 / 10.05	29.28	N	n/a	-20.72
24.09 MHz	5.38 Av	0.38 / 0.79 / 0.0 / 10.09	16.64	N	n/a	-33.36
26.48 MHz	5.99 Av	0.4 / 0.63 / 0.0 / 10.03	17.05	N	n/a	-32.95

Tested by: Brad Reasoner 
 Printed Signature

Reviewed by: Robert J Behringer 
 Printed Signature

CONDUCTED EMISSIONS



Test Report #: WC1100177 Run 2 Test Area: SR2
 EUT Model #: DRYVIEW CHROMA Imaging Date: 2/10/2011
 EUT Serial #: MP2E001273 (printer) EUT Power: 230/110VAC, 50/60Hz Temperature: 24.0 °C
 Test Method: FCC / EN55022 A Air Pressure: 99.0 kPa
 Customer: Carestream Health, Inc. Rel. Humidity: 21.0 %


EUT Description: DRYVIEW CHROMA Imaging System (with 13.56 MHz RFID)

Notes: Antenna terminated, printing test prints.

Data File Name: 0177-1.dat Page: 3 of 7

List of measurements for run #: 2

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV)	EUT Lead	DELTA1 EN55011 B Grp1 Qp	DELTA2 EN55022 B Avg
27.28 MHz	5.81 Av	0.4 / 0.58 / 0.0 / 10.0	16.79	N	n/a	-33.21
28.36 MHz	5.96 Av	0.41 / 0.51 / 0.0 / 10.01	16.88	N	n/a	-33.12
110VAC / 60Hz						
150.0 kHz	32.86 Qp	0.01 / 0.2 / 0.0 / 9.95	43.03	L1	-22.97	n/a
270.0 kHz	19.36 Qp	0.02 / 0.1 / 0.0 / 9.9	29.39	L1	-31.73	n/a
600.0 kHz	6.44 Qp	0.05 / 0.1 / 0.0 / 9.9	16.5	L1	-39.5	n/a
960.0 kHz	0.88 Qp	0.09 / 0.1 / 0.0 / 9.91	10.97	L1	-45.03	n/a
1.76 MHz	-3.3 Qp	0.11 / 0.0 / 0.0 / 9.91	6.73	L1	-49.27	n/a
8.84 MHz	5.06 Qp	0.24 / 0.1 / 0.0 / 9.97	15.37	L1	-44.63	n/a
6.24 MHz	-1.78 Qp	0.2 / 0.01 / 0.0 / 9.95	8.39	L1	-51.61	n/a
13.56 MHz	33.86 Qp	0.3 / 0.26 / 0.0 / 10.01	44.42	L1	-15.58	n/a
14.03 MHz	20.56 Qp	0.3 / 0.3 / 0.0 / 10.01	31.18	L1	-28.82	n/a
19.85 MHz	15.76 Qp	0.35 / 0.64 / 0.0 / 10.06	26.81	L1	-33.19	n/a
24.66 MHz	14.24 Qp	0.38 / 0.76 / 0.0 / 10.1	25.48	L1	-34.52	n/a
27.31 MHz	11.46 Qp	0.4 / 0.58 / 0.0 / 10.0	22.44	L1	-37.56	n/a
150.0 kHz	4.49 Av	0.01 / 0.2 / 0.0 / 9.95	14.66	L1	n/a	-41.34
270.0 kHz	-3.1 Av	0.02 / 0.1 / 0.0 / 9.9	6.93	L1	n/a	-44.19
600.0 kHz	-7.07 Av	0.05 / 0.1 / 0.0 / 9.9	2.99	L1	n/a	-43.01
960.0 kHz	-7.43 Av	0.09 / 0.1 / 0.0 / 9.91	2.66	L1	n/a	-43.34
1.76 MHz	-7.74 Av	0.11 / 0.0 / 0.0 / 9.91	2.29	L1	n/a	-43.71
6.24 MHz	-6.94 Av	0.2 / 0.01 / 0.0 / 9.95	3.23	L1	n/a	-46.77
8.84 MHz	1.13 Av	0.24 / 0.1 / 0.0 / 9.97	11.44	L1	n/a	-38.56
14.03 MHz	15.18 Av	0.3 / 0.3 / 0.0 / 10.01	25.8	L1	n/a	-24.2
19.85 MHz	9.52 Av	0.35 / 0.64 / 0.0 / 10.06	20.57	L1	n/a	-29.43
24.66 MHz	8.22 Av	0.38 / 0.76 / 0.0 / 10.1	19.46	L1	n/a	-30.54
27.31 MHz	5.86 Av	0.4 / 0.58 / 0.0 / 10.0	16.84	L1	n/a	-33.16
150.0 kHz	31.84 Qp	0.01 / 0.2 / 0.0 / 9.95	42.01	N	-23.99	n/a
270.0 kHz	20.7 Qp	0.02 / 0.1 / 0.0 / 9.9	30.73	N	-30.39	n/a

Tested by: Brad Reasoner 
 Printed Signature

Reviewed by: Robert J Behringer 
 Printed Signature

CONDUCTED EMISSIONS



Test Report #: WC1100177 Run 2 Test Area: SR2
 EUT Model #: DRYVIEW CHROMA Imaging Date: 2/10/2011
 EUT Serial #: MP2E001273 (printer) EUT Power: 230/110VAC, 50/60Hz Temperature: 24.0 °C
 Test Method: FCC / EN55022 A Air Pressure: 99.0 kPa
 Customer: Carestream Health, Inc. Rel. Humidity: 21.0 %

EUT Description: DRYVIEW CHROMA Imaging System (with 13.56 MHz RFID)



Notes: Antenna terminated, printing test prints.

Data File Name: 0177-1.dat Page: 4 of 7

List of measurements for run #: 2

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV)	EUT Lead	DELTA1 EN55011 B Grp1 Qp	DELTA2 EN55022 B Avg
600.0 kHz	7.26 Qp	0.05 / 0.1 / 0.0 / 9.9	17.32	N	-38.68	n/a
960.0 kHz	1.42 Qp	0.09 / 0.1 / 0.0 / 9.91	11.51	N	-44.49	n/a
1.76 MHz	-2.54 Qp	0.11 / 0.0 / 0.0 / 9.91	7.49	N	-48.51	n/a
6.24 MHz	7.22 Qp	0.2 / 0.01 / 0.0 / 9.95	17.39	N	-42.61	n/a
8.84 MHz	10.58 Qp	0.24 / 0.1 / 0.0 / 9.97	20.89	N	-39.11	n/a
14.03 MHz	17.46 Qp	0.3 / 0.3 / 0.0 / 10.01	28.08	N	-31.92	n/a
19.85 MHz	13.66 Qp	0.35 / 0.64 / 0.0 / 10.06	24.71	N	-35.29	n/a
24.66 MHz	10.58 Qp	0.38 / 0.76 / 0.0 / 10.1	21.82	N	-38.18	n/a
27.31 MHz	10.94 Qp	0.4 / 0.58 / 0.0 / 10.0	21.92	N	-38.08	n/a
150.0 kHz	3.66 Av	0.01 / 0.2 / 0.0 / 9.95	13.83	N	n/a	-42.17
270.0 kHz	-2.93 Av	0.02 / 0.1 / 0.0 / 9.9	7.1	N	n/a	-44.02
600.0 kHz	-7.1 Av	0.05 / 0.1 / 0.0 / 9.9	2.96	N	n/a	-43.04
960.0 kHz	-7.65 Av	0.09 / 0.1 / 0.0 / 9.91	2.44	N	n/a	-43.56
1.76 MHz	-7.35 Av	0.11 / 0.0 / 0.0 / 9.91	2.68	N	n/a	-43.32
6.24 MHz	-1.43 Av	0.2 / 0.01 / 0.0 / 9.95	8.74	N	n/a	-41.26
8.84 MHz	5.38 Av	0.24 / 0.1 / 0.0 / 9.97	15.69	N	n/a	-34.31
14.03 MHz	11.96 Av	0.3 / 0.3 / 0.0 / 10.01	22.58	N	n/a	-27.42
19.85 MHz	7.49 Av	0.35 / 0.64 / 0.0 / 10.06	18.54	N	n/a	-31.46
24.66 MHz	5.08 Av	0.38 / 0.76 / 0.0 / 10.1	16.32	N	n/a	-33.68
27.31 MHz	5.23 Av	0.4 / 0.58 / 0.0 / 10.0	16.21	N	n/a	-33.79

End of Conducted scan

Tested by: Brad Reasoner 
 Printed Signature
 Reviewed by: Robert J Behringer 
 Printed Signature

CONDUCTED EMISSIONS



Test Report #: WC1100177 Run 2 Test Area: SR2
 EUT Model #: DRYVIEW CHROMA Imaging Date: 2/10/2011
 EUT Serial #: MP2E001273 (printer) EUT Power: 230/110VAC, 50/60Hz Temperature: 24.0 °C
 Test Method: FCC / EN55022 A Air Pressure: 99.0 kPa
 Customer: Carestream Health, Inc. Rel. Humidity: 21.0 %


EUT Description: DRYVIEW CHROMA Imaging System (with 13.56 MHz RFID)

Notes: Antenna terminated, printing test prints.

Data File Name: 0177-1.dat Page: 5 of 7

Measurement summary for limit1: EN55011 B Grp1 Qp (Qp)

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV)	EUT Lead	DELTA1 EN55011 B Grp1 Qp
13.56 MHz	33.86 Qp	0.3 / 0.26 / 0.0 / 10.01	44.42	L1	-15.58
291.38 kHz	32.68 Qp	0.03 / 0.1 / 0.0 / 9.9	42.71	N	-17.78
150.0 kHz	35.8 Qp	0.01 / 0.2 / 0.0 / 9.95	45.97	N	-20.03
19.315 MHz	25.84 Qp	0.34 / 0.62 / 0.0 / 10.05	36.86	L1	-23.14
14.03 MHz	20.56 Qp	0.3 / 0.3 / 0.0 / 10.01	31.18	L1	-28.82
270.0 kHz	20.7 Qp	0.02 / 0.1 / 0.0 / 9.9	30.73	N	-30.39
480.0 kHz	13.46 Qp	0.04 / 0.1 / 0.0 / 9.9	23.51	N	-32.83
19.85 MHz	15.76 Qp	0.35 / 0.64 / 0.0 / 10.06	26.81	L1	-33.19
24.09 MHz	15.14 Qp	0.38 / 0.79 / 0.0 / 10.09	26.4	L1	-33.6
27.28 MHz	14.88 Qp	0.4 / 0.58 / 0.0 / 10.0	25.86	L1	-34.14
24.66 MHz	14.24 Qp	0.38 / 0.76 / 0.0 / 10.1	25.48	L1	-34.52
26.48 MHz	12.32 Qp	0.4 / 0.63 / 0.0 / 10.03	23.38	N	-36.62
27.31 MHz	11.46 Qp	0.4 / 0.58 / 0.0 / 10.0	22.44	L1	-37.56
28.36 MHz	11.26 Qp	0.41 / 0.51 / 0.0 / 10.01	22.18	L1	-37.82
720.0 kHz	8.1 Qp	0.06 / 0.1 / 0.0 / 9.9	18.17	N	-37.83
600.0 kHz	7.26 Qp	0.05 / 0.1 / 0.0 / 9.9	17.32	N	-38.68
989.95 kHz	6.92 Qp	0.09 / 0.1 / 0.0 / 9.91	17.02	N	-38.98
8.84 MHz	10.58 Qp	0.24 / 0.1 / 0.0 / 9.97	20.89	N	-39.11
6.24 MHz	7.22 Qp	0.2 / 0.01 / 0.0 / 9.95	17.39	N	-42.61
960.0 kHz	1.42 Qp	0.09 / 0.1 / 0.0 / 9.91	11.51	N	-44.49
11.43 MHz	3.12 Qp	0.27 / 0.1 / 0.0 / 9.99	13.48	N	-46.52
4.39 MHz	-2.26 Qp	0.17 / 0.08 / 0.0 / 9.93	7.92	L1	-48.08
1.76 MHz	-2.54 Qp	0.11 / 0.0 / 0.0 / 9.91	7.49	N	-48.51
6.72 MHz	-1.34 Qp	0.21 / 0.04 / 0.0 / 9.95	8.86	L1	-51.14

Tested by: Brad Reasoner 
 Printed Signature

Reviewed by: Robert J Behringer 
 Printed Signature

CONDUCTED EMISSIONS



Test Report #: WC1100177 Run 2 Test Area: SR2
 EUT Model #: DRYVIEW CHROMA Imaging Date: 2/10/2011
 EUT Serial #: MP2E001273 (printer) EUT Power: 230/110VAC, 50/60Hz Temperature: 24.0 °C
 Test Method: FCC / EN55022 A Air Pressure: 99.0 kPa
 Customer: Carestream Health, Inc. Rel. Humidity: 21.0 %


EUT Description: DRYVIEW CHROMA Imaging System (with 13.56 MHz RFID)

Notes: Antenna terminated, printing test prints.

Data File Name: 0177-1.dat Page: 6 of 7

Measurement summary for limit2: EN55022 B Avg (Av)

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV)	EUT Lead	DELTA2 EN55022 B Avg
13.56 MHz	32.38 Av	0.3 / 0.26 / 0.0 / 10.01	42.94	L1	-7.06
291.38 kHz	26.39 Av	0.03 / 0.1 / 0.0 / 9.9	36.42	L1	-14.07
19.315 MHz	19.75 Av	0.34 / 0.62 / 0.0 / 10.05	30.77	L1	-19.23
14.03 MHz	15.18 Av	0.3 / 0.3 / 0.0 / 10.01	25.8	L1	-24.2
19.85 MHz	9.52 Av	0.35 / 0.64 / 0.0 / 10.06	20.57	L1	-29.43
24.09 MHz	9.28 Av	0.38 / 0.79 / 0.0 / 10.09	20.54	L1	-29.46
27.28 MHz	8.57 Av	0.4 / 0.58 / 0.0 / 10.0	19.55	L1	-30.45
24.66 MHz	8.22 Av	0.38 / 0.76 / 0.0 / 10.1	19.46	L1	-30.54
989.95 kHz	4.81 Av	0.09 / 0.1 / 0.0 / 9.91	14.91	N	-31.09
26.48 MHz	5.99 Av	0.4 / 0.63 / 0.0 / 10.03	17.05	N	-32.95
28.36 MHz	5.96 Av	0.41 / 0.51 / 0.0 / 10.01	16.88	N	-33.12
27.31 MHz	5.86 Av	0.4 / 0.58 / 0.0 / 10.0	16.84	L1	-33.16
8.84 MHz	5.38 Av	0.24 / 0.1 / 0.0 / 9.97	15.69	N	-34.31
150.0 kHz	6.3 Av	0.01 / 0.2 / 0.0 / 9.95	16.47	L1	-39.53
6.24 MHz	-1.43 Av	0.2 / 0.01 / 0.0 / 9.95	8.74	N	-41.26
480.0 kHz	-5.77 Av	0.04 / 0.1 / 0.0 / 9.9	4.28	L1	-42.06
720.0 kHz	-6.95 Av	0.06 / 0.1 / 0.0 / 9.9	3.12	N	-42.88
600.0 kHz	-7.07 Av	0.05 / 0.1 / 0.0 / 9.9	2.99	L1	-43.01
4.39 MHz	-7.29 Av	0.17 / 0.08 / 0.0 / 9.93	2.89	N	-43.11
1.76 MHz	-7.35 Av	0.11 / 0.0 / 0.0 / 9.91	2.68	N	-43.32
960.0 kHz	-7.43 Av	0.09 / 0.1 / 0.0 / 9.91	2.66	L1	-43.34
11.43 MHz	-3.75 Av	0.27 / 0.1 / 0.0 / 9.99	6.61	N	-43.39
270.0 kHz	-2.93 Av	0.02 / 0.1 / 0.0 / 9.9	7.1	N	-44.02
6.72 MHz	-7.02 Av	0.21 / 0.04 / 0.0 / 9.95	3.18	L1	-46.82

Tested by: Brad Reasoner 
 Printed Signature

Reviewed by: Robert J Behringer 
 Printed Signature

CONDUCTED EMISSIONS



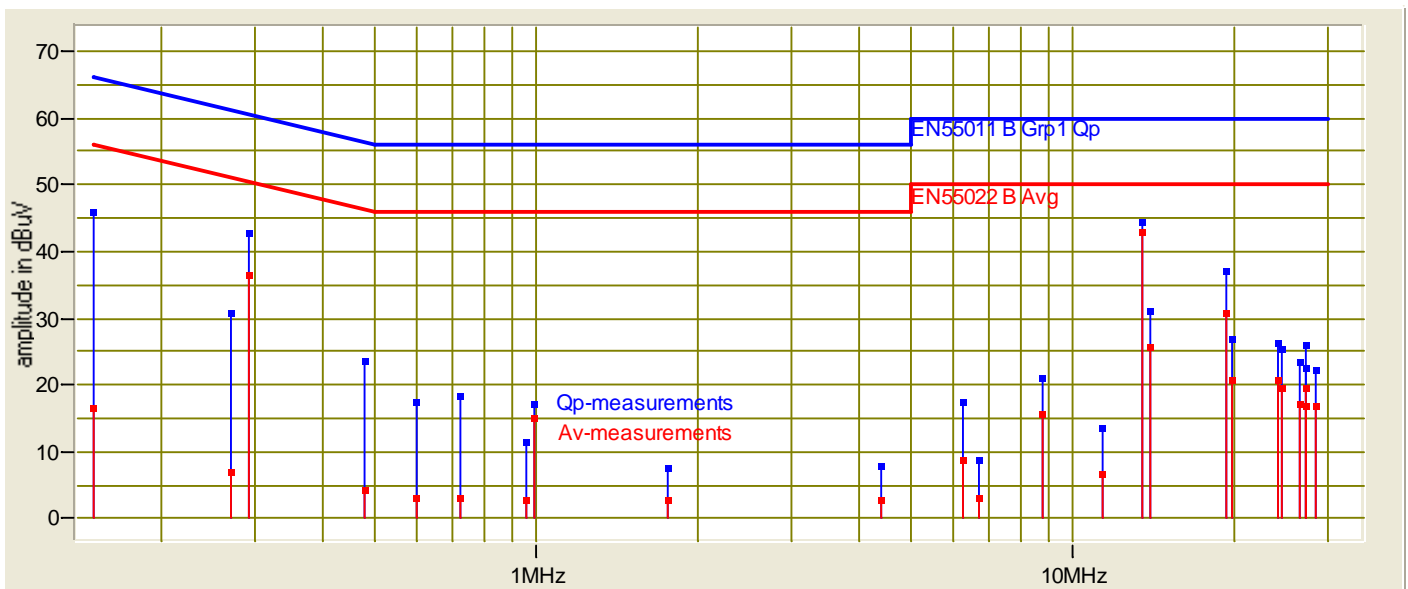
Test Report #: WC1100177 Run 2 Test Area: SR2
 EUT Model #: DRYVIEW CHROMA Imaging Date: 2/10/2011
 EUT Serial #: MP2E001273 (printer) EUT Power: 230/110VAC, 50/60Hz Temperature: 24.0 °C
 Test Method: FCC / EN55022 A Air Pressure: 99.0 kPa
 Customer: Carestream Health, Inc. Rel. Humidity: 21.0 %

EUT Description: DRYVIEW CHROMA Imaging System (with 13.56 MHz RFID)

Notes: Antenna terminated, printing test prints.

Data File Name: 0177-1.dat Page: 7 of 7

Graph:



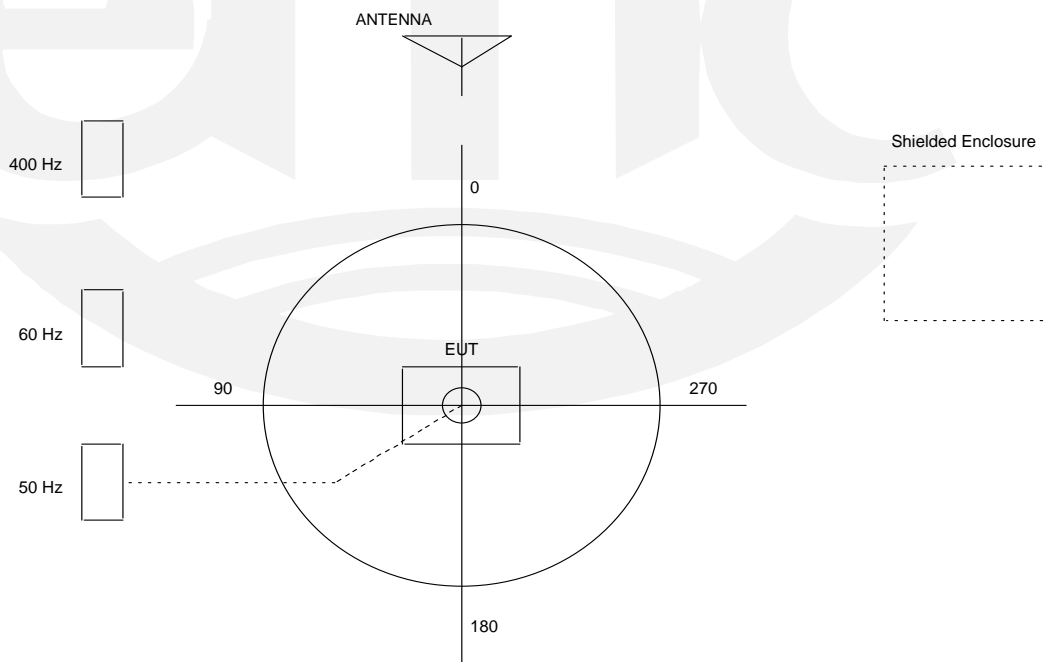
Tested by: Brad Reasoner *Brad Reasoner*
 Printed Signature
 Reviewed by: Robert J Behringer *Robert J Behringer*
 Printed Signature

TEST SETUP FOR EMISSIONS TESTING

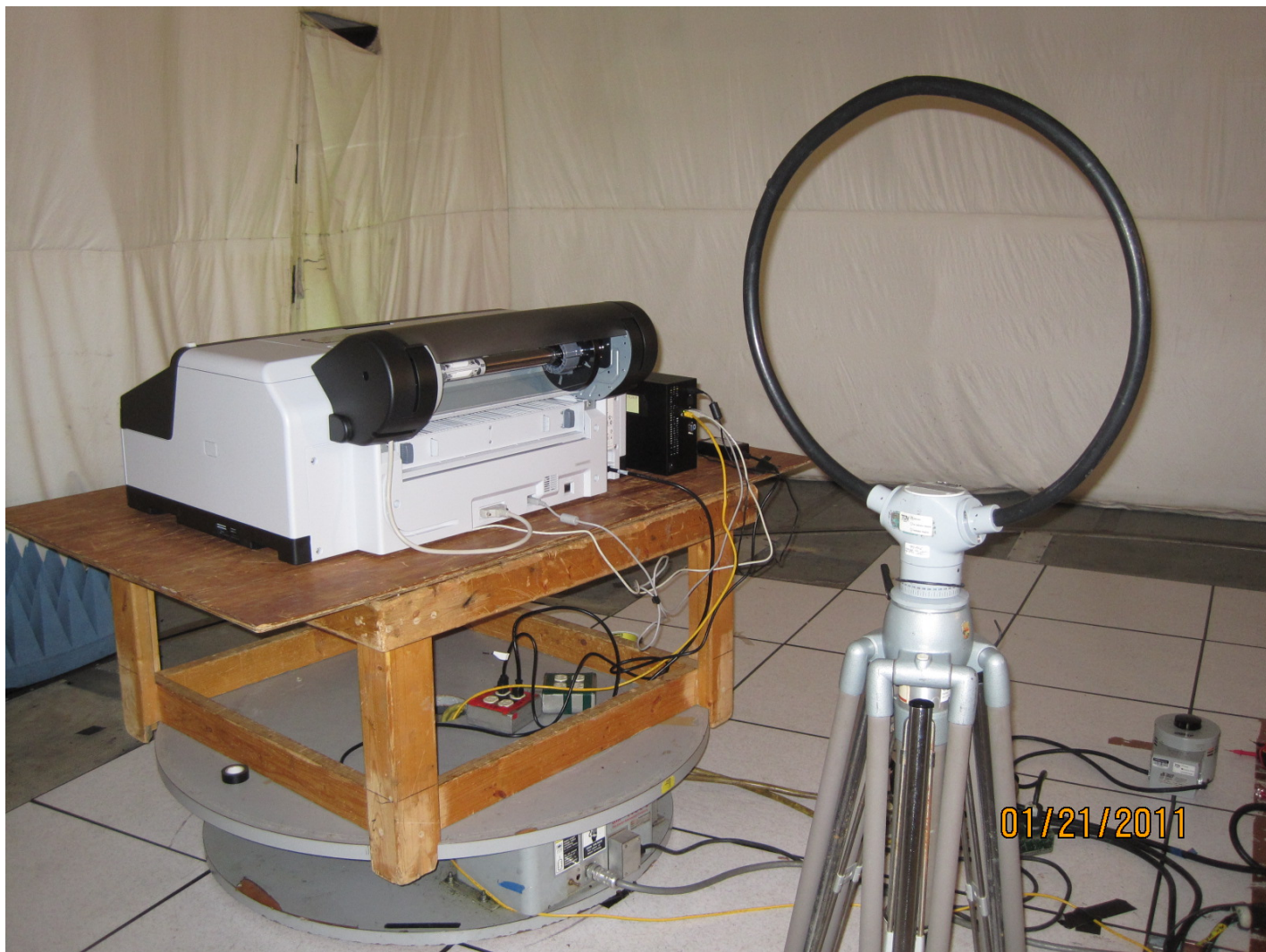
WILD RIVER LAB Large Test Site

Notes:

1. Items shown in dotted lines are located on the floor below the test area. It is 5 meters vertically from the ground floor to the test area.
2. 50 Hz, 60 Hz, and 400 Hz are power panels for alternating current.
3. The antenna may be positioned horizontally 3, 10 or 30 meters from the center of the turntable.
4. The circle is a 6.7 meter diameter turntable.
5. A ground plane is in the plane of this sheet.
6. The test sample is shown in the azimuthal position representing zero degrees.



Test-setup photo(s):
General Field Strength Limits 0.009 – 30 MHz



Test-setup photo(s):
Radiated Emissions 30 - 8000 MHz



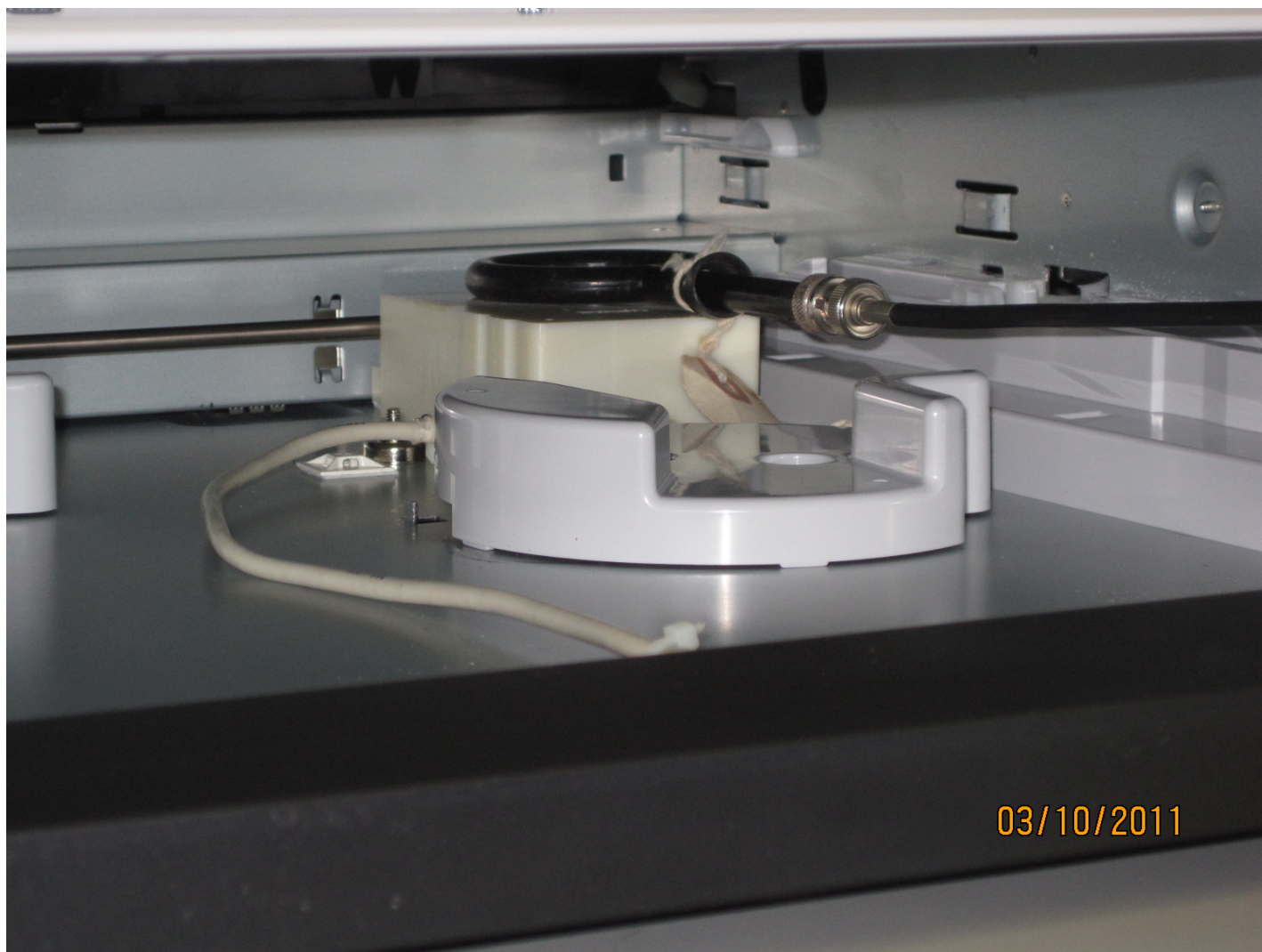
Test-setup photo(s):
Radiated Emissions 30 - 8000 MHz



Test-setup photo(s):
Conducted Emissions, AC lines, 150 kHz - 30 MHz



Test-setup photo(s):
99% Occupied bandwidth



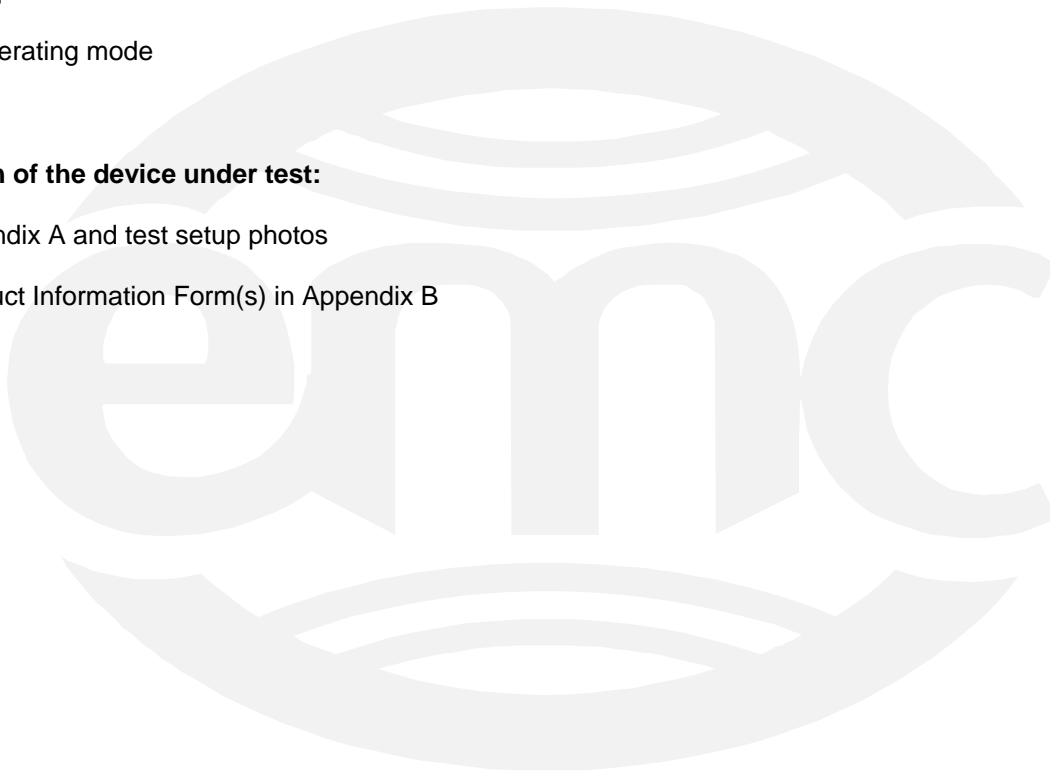
Equipment Under Test (EUT) Test Operation Mode:

The device under test was operated under the following conditions during immunity testing :

- Standby
- Test program (H - Pattern)
- Test program (color bar)
- Test program (customer specific)
- Practice operation
- Normal operating mode

Configuration of the device under test:

- See Appendix A and test setup photos
- See Product Information Form(s) in Appendix B



DEVIATIONS FROM STANDARD:

None.

GENERAL REMARKS:

None

Modifications required to pass:

- None
- As indicated on the data sheet(s)

Test Specification Deviations: Additions to or Exclusions from:

- None
- As indicated in the Test Plan

SUMMARY:

The requirements according to the technical regulations are

- met and the device under test does fulfill the general approval requirements.
- **not** met and the device under test does **not** fulfill the general approval requirements..

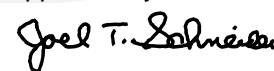
EUT Received Date: 28 January 2011Condition of EUT: NormalTesting Start Date: 28 January 2011Testing End Date: 10 March 2011**TÜV SÜD AMERICA INC**

Tested by:



Greg S Jakubowski
Senior EMC Technician

Approved by:



Joel T Schneider
Senior EMC Engineer

Appendix A

Carestream Health Incorporated EMC Test Plan
Document Part Number #8J5350





EMC Test Plan

DRYVIEW Chroma Imaging System

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Affected Departments: Design, Agency,

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1. Purpose

This document will detail the EMC Test requirements for the DRYVIEW Chroma Imaging System. The product will be tested for Worldwide EMC compliance.

This document will define the following:

- Define who is responsible for what under this plan.
- List the configurations which are required to be tested.
- Summarize the tests that will be executed.
- List the support equipment required to execute the testing.
- List test programs and software needed to execute the tests.

2. Scope

This document is limited to providing the framework for testing DRYVIEW Chroma to meet WW EMC Compliance. DRYVIEW Chroma Imaging System has two major components: Epson Stylus Pro 4900, known as DRYVIEW Chroma Printer, or Printer, and a CARESTREAM DRYVIEW Chroma DICOM Raster Engine known as the DRE. Both the Printer and DRE may be plugged into any 120V AC to 240V AC outlet.

3. References

8F6845 Product Requirement Spec (PRS) – DRYVIEW Chroma

4. Acronyms

EMC	Electro Magnetic Compatibility
Ethernet	A standard communications link defined in IEE 802
TUV-AM	Technischer Uberwachungs Verein - America or Technical Surveillance Organization – America

5. Responsibilities

HES Oakdale is responsible for the EMC Testing.

The DRYVIEW Chroma - Hardware and Software Design Teams are responsible to support the EMC testing.

The testing will be executed by a 3rd party test house, TUV Wild River Lab (WRL), and TUV New Brighton Lab (NBL), which are qualified to certify the equipment as compliant. The order of testing will be which ever order is most advantageous to TUV with the following exception; ESD testing will be performed last.

6. Theory of Operation DRYVIEW Chroma RF Tag Subsystem

The RF Tag works at a frequency of 13.56 MHz. It comprises a reader, antenna and transponder (for example: smart label) and is used for wireless identification.

The system works according the “reader talks first” principle, which means that the transponder keeps quiet until reader sends a request to it. The reader can rapidly and simultaneously identify numerous transponders in the antenna’s field. It can write data to and read from the transponders: either in addressed mode by using the factory programmed read only number, or in general mode to all transponders in its field. The read/write capability of the transponder allows users to update the data stored in the transponders memory anywhere along its movement.

The RF Tag provides the receive/transmit functions required to communicate with variety of transponders that operate in the 13.56 MHz ISM band. A transmit encoder converts the transmitted data stream into the selected protocol; Protocol section is done in the header of the transmitted data string.

7. System Components

<u>Catalog Number</u>	<u>Part Number</u>
Epson 4900 Printer	XXXXX
DICOM Raster Engine	XXXXX

8. Cables

The DRYVIEW Chroma is configured with the following cables.

Cable: Catalog Number	Description	Usage
N/A	Cat 6 Ethernet Cable	Communication with the Ethernet system.
N/A	USB Cable	Communication DRE To Printer
N/A	USB Cable	Communications DRE to RF-Tag

9. Test Space and Power Requirements

Space and Power for EUT

The DRYVIEW Chroma Printer requires 8 square feet of area. (2 feet X 4 feet).

The Chroma DRE requires 1 square foot of area.

Both the Printer and DRE may be plugged into the same Duplex outlet.

System Voltage and Frequency are:

Circuit amperage capacity for 100 V /120 V must be \geq 4 Amps, 50Hz to 60Hz.
Circuit amperage capacity for 230 V / 240V must be \geq 2 Amps, 50 Hz to 60 Hz.

Space and Power for Test Support Equipment

The test support equipment, used for operating the EUT, requires space and power dedicated outside the test chamber.

The test support equipment and operator requires a minimum of 8 square feet of area. (2 feet X 4 feet). This includes a platform, table or shelf, for the equipment and a chair for the operator.

The test support equipment requires a standard 120 Volt 15 Amp outlet. This must be within 6 feet of the test support equipment.

10. Test Set Up and Change-Over Times

Initial Equipment Set Up Time

The equipment can be set up for testing in approximately 1 hour. This time includes unpacking the equipment, setting up the EUT, setting up and connecting the support equipment.

Another 25 minutes should be allowed for testing the EUT for proper operation before any EMC testing commences.

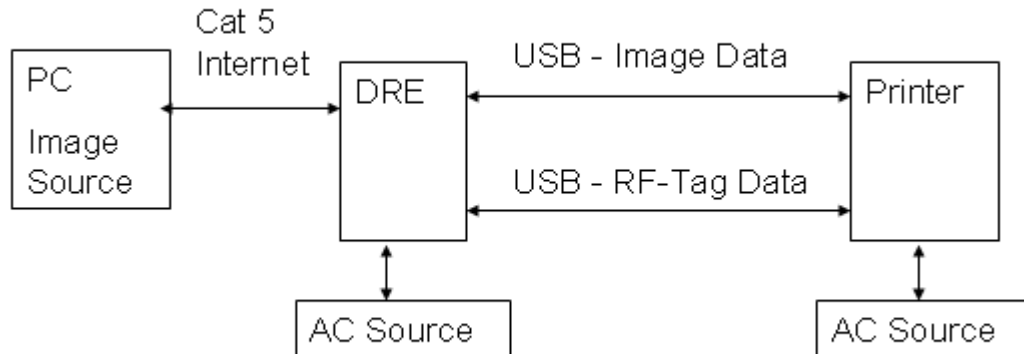
Configuration Change-Over Time

The amount of time for changing the configurations of the EUT and the support equipment should be approximately 0 minutes. The power modules for all are 120-240V.

11. Test Support Equipment

<u>Description</u>	<u>Manufacturer</u>	<u>Model / Serial #</u>	<u>FCC ID #</u>
Lap Top Computer	Dell		
Cat 6 Ethernet Cable - 30 Ft			

12. Test Set-up Showing EUT, Test Support Equipment and Cabling



13. Clock, Oscillator and Data Rate frequencies

Description	Assembly	Part Number	Crystal or Oscillator	Frequency
RF Antenna Board	9G3972	None	Crystal	13.560 MHz
DICOM Raster Engine	xxxxx	The highest frequency referenced for FCC testing is 1.6 GHz .	Oscillator Oscillator Oscillator Oscillator Oscillator Oscillator Oscillator Oscillator Oscillator Oscillator Oscillator Oscillator	14.31818 MHz – Super I/O 32.768 KHz - RTC 25 MHz – LAN (RTL8111C) 100 MHz – 945 GSE Chipset 96 MHz – 945 GSE Chipset 33 MHz – 945 GSE Chipset 48 MHz - USB I/F 1.6 GHz - CPU core 533 MHz – DDR2 Memory I/F 400 MHz – DDR2 Memory I/F 166 MHz – Core Render Clk 200 MHz – Core Display Clk 533 MHz - FSB

14. EMC Requirements Table

	USA	EU	Canada	AS/NZS	ROW
EMISSIONS		EN 60601-1-2: 2007 [Med. Dev. Dir.]	CAN/CSA – C22.2 NO. 60601-1-2-08		IEC 60601-1-2: 2007 (Modified)
Radiated Electric Field Emissions	47 CFR [FCC] Part 15 Subpart B Class A	EN 55011:2007 +A2:2007 Group 1 Class A [EMC Dir.]	ICES-003, Issue 4: 2004	AS/NZS CISPR 11:2003 +A1:2004, +A2:2006	CISPR 11:2003 / A2:2006
Harmonic Current	*	EN 61000-3-2:2006 [EMC Dir.]		AS/NZS 61000.3.2:2007 (Modified)	IEC 61000-3-2:2005
Voltage Flicker	*	EN 61000-3-3 :1995+A1:2001+ A2:2005 [EMC Dir.]			IEC 61000-3- 3:1994/A2:2005
IMMUNITY		EN 60601-1-2: 2007 [Med. Dev, Dir.]			IEC 60601-1-2: 2007 (Modified)
Electro-Static Discharge Immunity	#	EN 61000-4-2:		#	IEC 61000-4-2
Radiated RF, RF Electromagnetic Field Imm.	#	EN 61000-4-3:		#	IEC 61000-4-3
Electrical Fast Transients Immunity	#	EN 61000-4-4:		#	IEC 61000-4-4
Surge Immunity	#	EN 61000-4-5:		#	IEC 61000-4-5
Conducted RF Immunity	#	EN 61000-4-6:		#	IEC 61000-4-6
Power Frequency Magnetic Field Imm.	#	EN 61000-4-8:		#	IEC 61000-4-8
Voltage Dips, Interrupts and Var. Immunity	#	EN 61000-4-11:		#	IEC 61000-4-11
Telecomm- unications Standard	FCC Part 15 Subpart C Sections 15.207 & 15.209	EN 300 330-2 V1.3.1(2006-04) [RTTE Dir.]	IC RSS-210 Issue 7 IC RSS-Gen Issue 2		

- The United States currently does not have any Immunity requirements; there are discussions relating to Harmonization underway and acceptance of (i.e. they may be required to use) IEC 50081-1, IEC 50082-1 and the Basic EMC Standards that support them.

Immunity testing is not required but may be needed to support a product's Risk Analysis.

15. Summary Test Table with Power - Voltages and Frequencies

Test Type	Requirement	Mains Voltage
Radiated Emissions	47 CFR [FCC] Part 15 Subpart B Class A ICES-003 Issue 4 EN/IEC 60601-1-2 [CAN/CSA –C22.2 NO. 60601-1-2-08] EN 55011 Class A	230 V 50 Hz Possible 100 V 50 Hz
Conducted Emissions	47 CFR Part 15 Subpart B ICES-0003 Issue 4 EN/IEC 60601-1-2 [CAN/CSA –C22.2 NO. 60601-1-2-08] EN 55011 Class A	120 V 60 Hz 230 V 50 Hz 100 V 50 Hz (Japan)
RFTag Emissions	EN 300 330 47 CFR Part 15 Subpart C IC-RSS-210 Issue 7 IC-RSS-Gen Issue 2	230 V 50 Hz 120 V 60 Hz
Harmonic Current	EN/IEC 61000-3-2	230 V, 50 Hz
Voltage Flicker	EN/IEC 61000-3-3	230 V, 50 Hz
Immunity	EN/IEC 60601-1-2	See Tests Below
Electro Static Discharge	EN/IEC 61000-4-2	230 V, 50 Hz
Radiated RF Immunity	EN/IEC 61000-4-3	230 V, 50 Hz
Electrical Fast Transients	EN/IEC 61000-4-4	100V, 50 Hz 240 V, 50Hz
Surge	EN/IEC 61000-4-5	100 V, 50 Hz 240 V, 50Hz
Conducted Immunity Tests	EN/IEC 61000-4-6	230 V, 50 Hz
Power Frequency Magnetic Tests	EN/IEC 61000-4-8	230 V at BOTH 50Hz & 60 Hz
Voltage Dip Tests	IEC 61000-4-11	100 V, 50 Hz 240 V, 50Hz

16. Pass/Fail Criteria

- DRYVIEW Chroma shall pass the Radiated Emissions tests if all emissions are below the standard's limit line. Attempts will be made to achieve 4 dB **below** the limit line [−4dB guard band].
- DRYVIEW Chroma shall pass the radiated and conducted immunity tests provided the images produced during these tests are diagnostically acceptable. This judgment will be made by Carestream Health employees who are familiar with potential imaging artifacts caused by a variety of other sources, not only those potentially induced by the impinging radiated field.
- During radiated and conducted immunity tests if the system becomes inoperable, that will be considered a failure.

17. Supplies

Standard copying Paper for Emissions Testing, DRYVIEW Chroma Imaging Film for Immunity testing.

18. Addendum

Reports	One complete set of EMC Reports will be produced for DRYVIEW Chroma.
Registration	DRYVIEW Chroma Imaging System will be FCC and IC registered as an Intentional Radiator.