

Annex 1: Measurement diagrams to  
**TEST REPORT**  
No.: 16-1-0181301T13a

According to:

**FCC Regulations**

Part 15.207

Part 15.247







Part 15.407

for

Datalogic S.r.l.

**SKORPIO X4**  
Type:00ANM4HS0GF0A4

FCC ID: U4GSX4WB

Laboratory Accreditation and Listings			
 Deutsche Akkreditierungsstelle D-PL-12047-01-01	 MRA US-EU 0003	 Industry Canada Reg. No.: 3462D-2 Reg. No.: 3462D-3	 Voluntary Controls for Electromagnetic Emissions Reg. No.: R-2666 C-2914, T-1967, G-301
 <b>WiFi</b> ALLIANCE	 <b>Authorized</b> Test Lab Lab Code: 20011130-00		
accredited according to DIN EN ISO/IEC 17025			
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## TABLE OF CONTENTS:

<b>1. AC POWER LINES CONDUCTED EMISSIONS MEASUREMENTS .....</b>	<b>3</b>
1.1. Battery Charging AC/DC Adapter.....	3
1.2. Battery Charging Docking Station + Data Transfer.....	7

# 1. AC Power Lines Conducted Emissions Measurements

## 1.1. Battery Charging AC/DC Adapter

### Diagram No.: 1.01-Mode 1

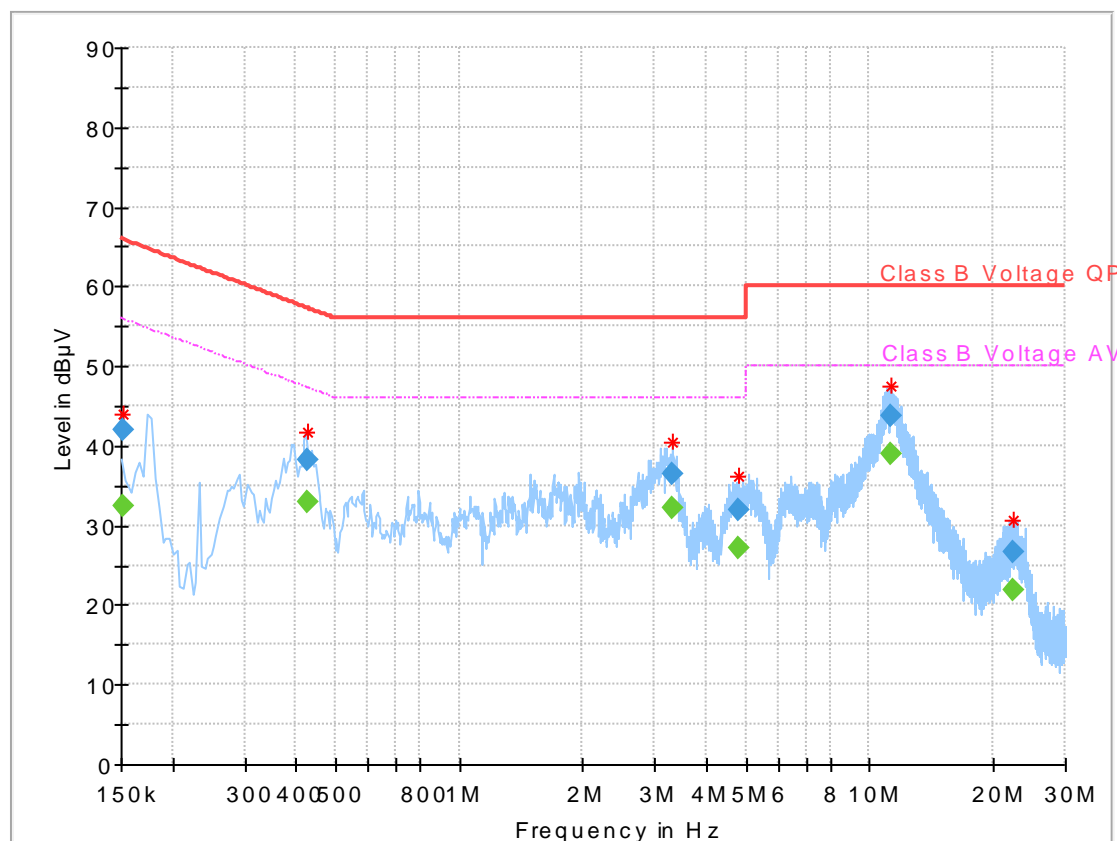
#### Common Information

Test Description:	Conducted Voltage Measurement Class B
Test Site & Location:	Conducted Emission, CETECOM GmbH Essen
Test Software:	R&S EMC32 v9.15
Test Specification:	FCC 15.207
Operating Mode: Mode 1	Battery Charging AC/DC adapter + WLAN 2.4 GHz   b SISO Mode   B.W.20 MHz 11Mbit   Ch11 (2462 MHz) +20 dBm + Bluetooth FHSS  BR Mode   GFSK   1 Mbps   Ch 0 ( 2402 MHz)   +7 dBm
Measured on line:	N/L1
Diagram details:	Shows the peak values as a sum of measured ports in maxhold mode
Environmental Conditions:	Humidity: 50%rH; Temperature: 22°C
Operator:	HLA
Comments:	

#### EUT Information

Manufacturer:	Datalogic S.r.l.
EUT MODEL:	SKORPIO X4
EuT Type:	00ANM4HS0GF0A4
P/N:	942600012
S/N:	Z16P01723
HW Version:	BETA
SW Version:	Android 4.4.4
Firmware Version:	2.00.29
Input:	Internal Battery charging
Battery Type:	BT-0016   Li-ion 3.7V DC 5200mAh (2 Cylindrical Cells)

Full Spectrum



### Final Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	PE	Corr. (dB)
0.150938	42.05	---	65.95	23.90	1000.0	9.000	N	GND	0.1
0.150938	---	32.52	55.95	23.43	1000.0	9.000	N	GND	0.1
0.425938	38.09	---	57.33	19.24	1000.0	9.000	L1	GND	0.1
0.425938	---	32.98	47.33	14.35	1000.0	9.000	L1	GND	0.1
3.298750	36.50	---	56.00	19.50	1000.0	9.000	L1	GND	0.4
3.298750	---	32.06	46.00	13.94	1000.0	9.000	L1	GND	0.4
4.785938	31.91	---	56.00	24.09	1000.0	9.000	L1	GND	0.4
4.785938	---	27.09	46.00	18.91	1000.0	9.000	L1	GND	0.4
11.298125	43.62	---	60.00	16.38	1000.0	9.000	L1	GND	0.5
11.298125	---	38.95	50.00	11.05	1000.0	9.000	L1	GND	0.5
22.498594	26.61	---	60.00	33.39	1000.0	9.000	L1	GND	0.7
22.498594	---	21.77	50.00	28.23	1000.0	9.000	L1	GND	0.7

## Diagram No.: 1.02-Mode 2

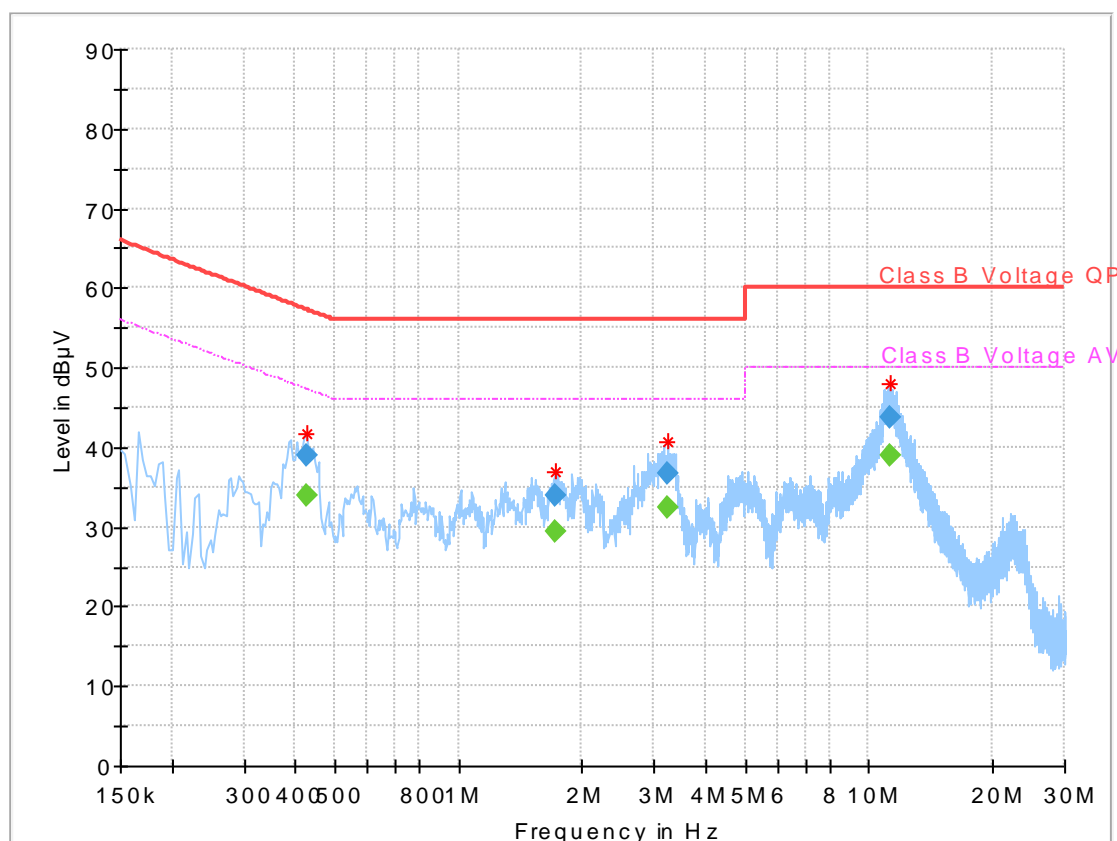
### Common Information

Test Description:	Conducted Voltage Measurement Class B
Test Site & Location:	Conducted Emission, CETECOM GmbH Essen
Test Software:	R&S EMC32 v9.15
Test Specification:	FCC 15.207
Operating Mode: Mode 2	Battery Charging AC/DC adapter + WLAN 5 GHz a SISO Mode   B.W. 20 MHz   24 Mbit   Ch 36 (5180 MHz) +20 dBm + Bluetooth Low Energy  GFSK  1 Mbps  Pattern Length:37   PRBS9  Ch 0 (2402 MHz) +7 dBm
Measured on line:	N/L1
Diagram details:	Shows the peak values as a sum of measured ports in maxhold mode
Environmental Conditions:	Humidity: 50% rH; Temperature: 22°C
Operator:	HLA
Comments:	

### EUT Information

Manufacturer:	Datalogic S.r.l.
EUT MODEL:	SKORPIO X4
EuT Type:	00ANM4HS0GF0A4
P/N:	942600012
S/N:	Z16P01723
HW Version:	BETA
SW Version:	Android 4.4.4
Firmware Version:	2.00.29
Input:	Internal Battery charging
Battery Type:	BT-0016   Li-ion 3.7V DC 5200mAh (2 Cylindrical Cells)

Full Spectrum



**Final\_Result**

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	PE	Corr. (dB)
0.425938	---	33.99	47.33	13.34	1000.0	9.000	L1	GND	0.1
0.425938	39.01	---	57.33	18.32	1000.0	9.000	L1	GND	0.1
1.727344	---	29.47	46.00	16.53	1000.0	9.000	L1	GND	0.3
1.727344	34.04	---	56.00	21.96	1000.0	9.000	L1	GND	0.3
3.240625	---	32.46	46.00	13.54	1000.0	9.000	L1	GND	0.4
3.240625	36.63	---	56.00	19.37	1000.0	9.000	L1	GND	0.4
11.277031	---	39.01	50.00	10.99	1000.0	9.000	L1	GND	0.5
11.277031	43.72	---	60.00	16.28	1000.0	9.000	L1	GND	0.5

## 1.2. Battery Charging Docking Station + Data Transfer

### Diagram No.: 1.03-Mode 3

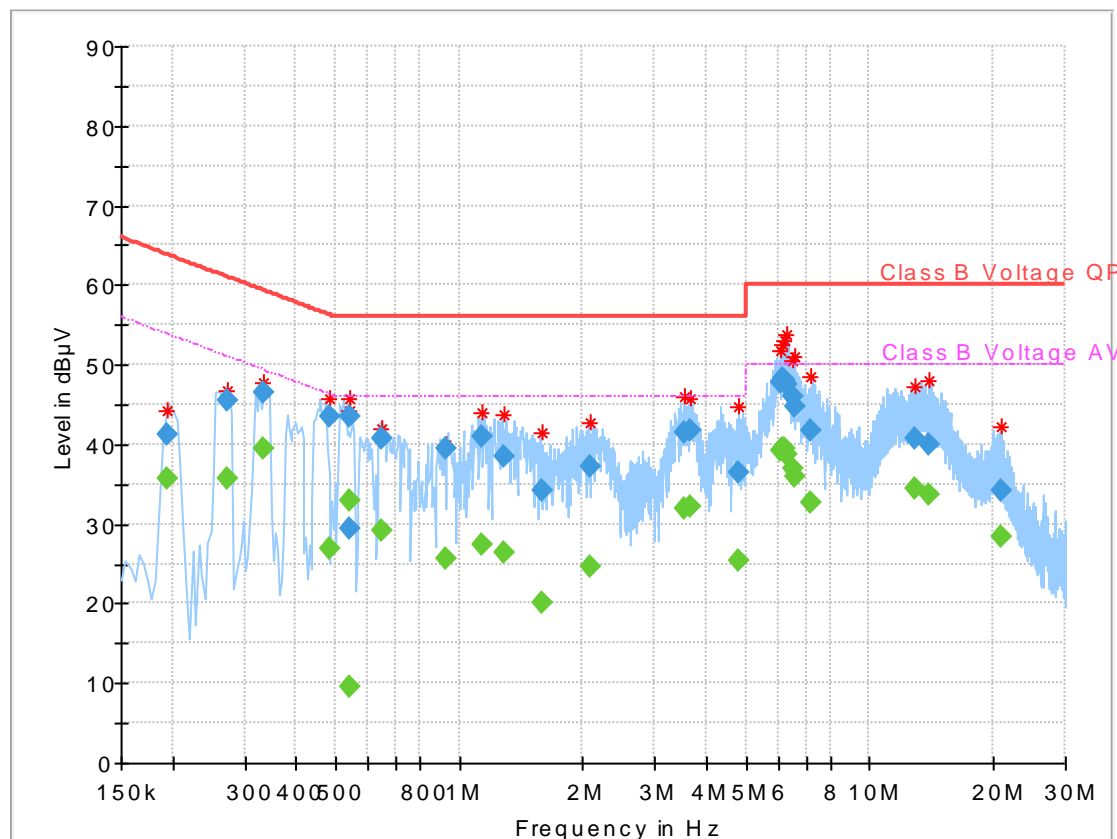
#### Common Information

Test Description:	Conducted Voltage Measurement Class B
Test Site & Location:	Conducted Emission, CETECOM GmbH Essen
Test Software:	R&S EMC32 v9.15
Test Specification:	FCC 15.207
Operating Mode: Mode 3	Battery Charging Docking Station + Data Transfer + WLAN 2.4 GHz   b SISO Mode   B.W.20 MHz 11Mbit   Ch11 (2462 MHz) +20 dBm + Bluetooth FHSS  BR Mode   GFSK   1 Mbps   Ch 0 ( 2402 MHz)   +7 dBm
Measured on line:	N/L1
Diagram details:	Shows the peak values as a sum of measured ports in maxhold mode
Environmental Conditions:	Humidity: 50%rH; Temperature: 22°C
Operator:	HLA
Comments:	

#### EUT Information

Manufacturer:	Datalogic S.r.l.
EUT MODEL:	SKORPIO X4
EuT Type:	00ANM4HS0GF0A4
P/N:	942600012
S/N:	Z16P01742
HW Version:	BETA
SW Version:	Android 4.4.4
Firmware Version:	2.00.29
Input:	Internal Battery charging
Battery Type:	BT-0016   Li-ion 3.7V DC 5200mAh (2 Cylindrical Cells)

Full Spectrum



## Final Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	PE	Corr. (dB)
0.193281	---	35.74	53.89	18.15	1000.0	9.000	L1	GND	0.1
0.193281	41.32	---	63.89	22.57	1000.0	9.000	L1	GND	0.1
0.273594	45.58	---	61.01	15.43	1000.0	9.000	N	GND	0.1
0.273594	---	35.74	51.01	15.27	1000.0	9.000	N	GND	0.1
0.333281	46.51	---	59.37	12.86	1000.0	9.000	N	GND	0.1
0.333281	---	39.46	49.37	9.91	1000.0	9.000	N	GND	0.1
0.482813	---	26.82	46.29	19.47	1000.0	9.000	N	GND	0.1
0.482813	43.51	---	56.29	12.78	1000.0	9.000	N	GND	0.1
0.538594	---	9.54	46.00	36.46	1000.0	9.000	N	GND	0.1
0.538594	29.49	---	56.00	26.51	1000.0	9.000	N	GND	0.1
0.540938	---	32.88	46.00	13.12	1000.0	9.000	N	GND	0.1
0.540938	43.43	---	56.00	12.57	1000.0	9.000	N	GND	0.1
0.646406	40.71	---	56.00	15.29	1000.0	9.000	N	GND	0.2
0.646406	---	29.15	46.00	16.85	1000.0	9.000	N	GND	0.2
0.926406	39.43	---	56.00	16.57	1000.0	9.000	N	GND	0.2
0.926406	---	25.52	46.00	20.48	1000.0	9.000	N	GND	0.2
1.132500	41.09	---	56.00	14.91	1000.0	9.000	N	GND	0.3
1.132500	---	27.47	46.00	18.53	1000.0	9.000	N	GND	0.3
1.288594	---	26.42	46.00	19.58	1000.0	9.000	N	GND	0.3
1.288594	38.46	---	56.00	17.54	1000.0	9.000	N	GND	0.3
1.589375	34.12	---	56.00	21.88	1000.0	9.000	N	GND	0.3
1.589375	---	20.02	46.00	25.98	1000.0	9.000	N	GND	0.3
2.074375	37.16	---	56.00	18.84	1000.0	9.000	N	GND	0.3
2.074375	---	24.56	46.00	21.44	1000.0	9.000	N	GND	0.3
3.533594	41.50	---	56.00	14.50	1000.0	9.000	L1	GND	0.3
3.533594	---	32.03	46.00	13.97	1000.0	9.000	L1	GND	0.3
3.661406	---	32.21	46.00	13.79	1000.0	9.000	L1	GND	0.3
3.661406	41.63	---	56.00	14.37	1000.0	9.000	L1	GND	0.3
4.800313	---	25.36	46.00	20.64	1000.0	9.000	N	GND	0.4
4.800313	36.49	---	56.00	19.51	1000.0	9.000	N	GND	0.4
6.048125	---	39.11	50.00	10.89	1000.0	9.000	N	GND	0.4
6.048125	47.71	---	60.00	12.29	1000.0	9.000	N	GND	0.4
6.147500	---	39.47	50.00	10.53	1000.0	9.000	N	GND	0.4
6.147500	48.18	---	60.00	11.82	1000.0	9.000	N	GND	0.4
6.179844	---	39.47	50.00	10.53	1000.0	9.000	N	GND	0.4
6.179844	48.06	---	60.00	11.94	1000.0	9.000	N	GND	0.4
6.313281	---	38.70	50.00	11.30	1000.0	9.000	N	GND	0.4
6.313281	47.57	---	60.00	12.43	1000.0	9.000	N	GND	0.4
6.464531	---	37.06	50.00	12.94	1000.0	9.000	N	GND	0.4
6.464531	45.91	---	60.00	14.09	1000.0	9.000	N	GND	0.4
6.539844	---	35.95	50.00	14.05	1000.0	9.000	N	GND	0.4
6.539844	44.73	---	60.00	15.27	1000.0	9.000	N	GND	0.4
7.224531	---	32.66	50.00	17.34	1000.0	9.000	N	GND	0.4
7.224531	41.61	---	60.00	18.39	1000.0	9.000	N	GND	0.4
12.860000	---	34.45	50.00	15.55	1000.0	9.000	N	GND	0.6
12.860000	40.72	---	60.00	19.28	1000.0	9.000	N	GND	0.6
13.885781	---	33.79	50.00	16.21	1000.0	9.000	N	GND	0.6
13.885781	39.94	---	60.00	20.06	1000.0	9.000	N	GND	0.6
20.909844	---	28.53	50.00	21.47	1000.0	9.000	N	GND	0.8
20.909844	34.14	---	60.00	25.86	1000.0	9.000	N	GND	0.8



## Diagram No.: 1.04-Mode 4

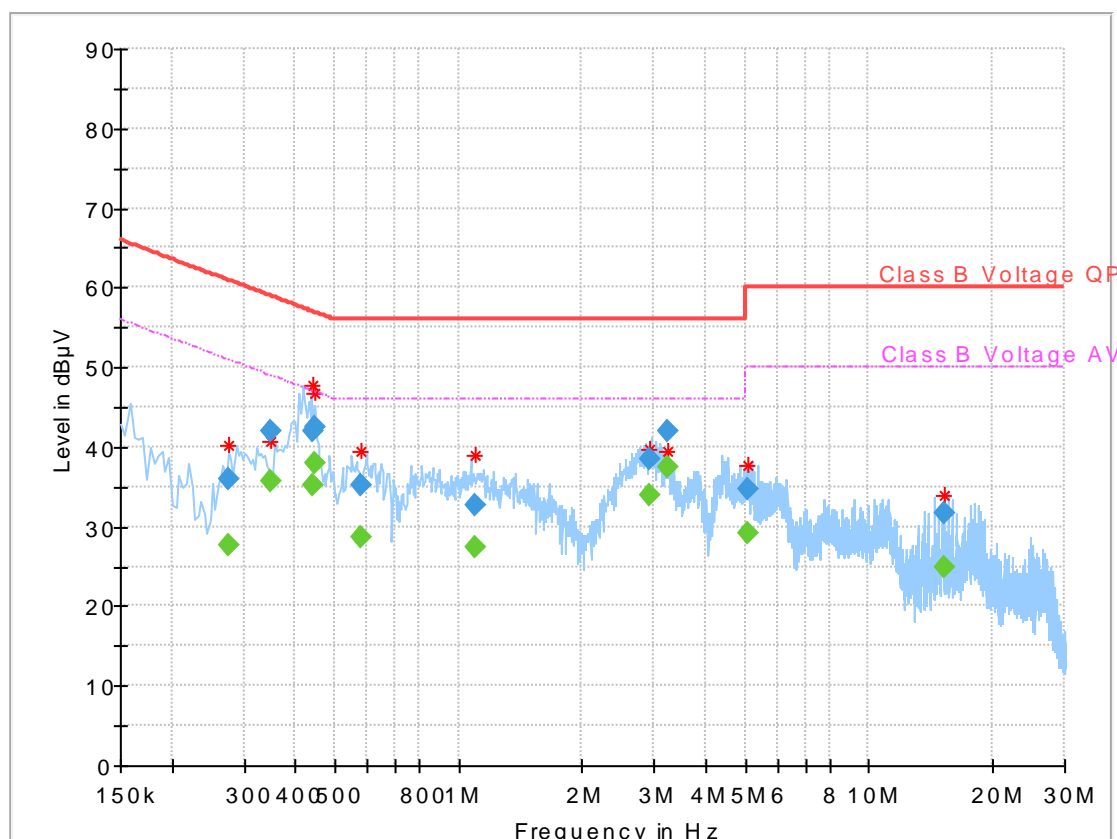
### Common Information

Test Description:	Conducted Voltage Measurement Class B
Test Site & Location:	Conducted Emission, CETECOM GmbH Essen
Test Software:	R&S EMC32 v9.15
Test Specification:	FCC 15.207
Operating Mode: Mode 4	Battery Charging Docking Station + Data Transfer + WLAN 5 GHz a SISO Mode   B.W. 20 MHz   24 Mbit   Ch 36 (5180 MHz) +20 dBm + Bluetooth Low Energy  GFSK  1 Mbps  Pattern Length:37   PRBS9  Ch 0 (2402 MHz) +7 dBm
Measured on line:	N/L1
Diagram details:	Shows the peak values as a sum of measured ports in maxhold mode
Environmental Conditions:	Humidity: 50%rH; Temperature: 22°C
Operator:	HLA
Comments:	

### EUT Information

Manufacturer:	Datalogic S.r.l.
EUT MODEL:	SKORPIO X4
EuT Type:	00ANM4HS0GF0A4
P/N:	942600012
S/N:	Z16P01742
HW Version:	BETA
SW Version:	Android 4.4.4
Firmware Version:	2.00.29
Input:	Internal Battery charging
Battery Type:	BT-0016   Li-ion 3.7V DC 5200mAh (2 Cylindrical Cells)

Full Spectrum



## Final\_Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	PE	Corr. (dB)
0.274219	---	27.77	50.99	23.22	1000.0	9.000	L1	GND	0.1
0.274219	36.03	---	60.99	24.96	1000.0	9.000	L1	GND	0.1
0.349531	---	35.78	48.97	13.19	1000.0	9.000	L1	GND	0.1
0.349531	42.05	---	58.97	16.92	1000.0	9.000	L1	GND	0.1
0.442031	---	35.10	47.02	11.92	1000.0	9.000	L1	GND	0.1
0.442031	41.95	---	57.02	15.07	1000.0	9.000	L1	GND	0.1
0.446563	---	37.93	46.94	9.01	1000.0	9.000	N	GND	0.1
0.446563	42.52	---	56.94	14.42	1000.0	9.000	N	GND	0.1
0.577813	---	28.67	46.00	17.33	1000.0	9.000	N	GND	0.1
0.577813	35.30	---	56.00	20.70	1000.0	9.000	N	GND	0.1
1.098281	32.61	---	56.00	23.39	1000.0	9.000	N	GND	0.3
1.098281	---	27.49	46.00	18.51	1000.0	9.000	N	GND	0.3
2.913594	38.40	---	56.00	17.60	1000.0	9.000	N	GND	0.3
2.913594	---	33.85	46.00	12.15	1000.0	9.000	N	GND	0.3
3.226719	42.09	---	56.00	13.91	1000.0	9.000	L1	GND	0.4
3.226719	---	37.35	46.00	8.65	1000.0	9.000	L1	GND	0.4
5.090625	---	29.21	50.00	20.79	1000.0	9.000	N	GND	0.4
5.090625	34.58	---	60.00	25.42	1000.0	9.000	N	GND	0.4
15.198281	31.59	---	60.00	28.41	1000.0	9.000	L1	GND	0.7
15.198281	---	24.80	50.00	25.20	1000.0	9.000	L1	GND	0.7