

Annex 1: Measurement diagrams to TEST REPORT

No.: 17-1-0180901T18a

According to:

# **FCC Regulations**

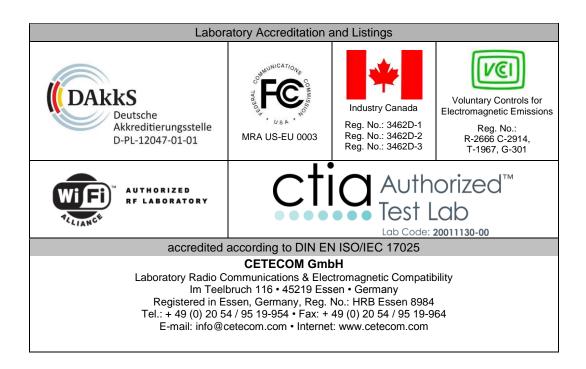
Part 15.207s Part 15.247 Part 15.407

for

Datalogic S.r.l.

# FALCON X4 Type E00ANM4HS0GF0A4

FCC ID: U4GFX4WB





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# 1. AC Power Lines Conducted Emissions Measurements

# 1.1. Battery Charging via Docking Station + WLAN 2.4 GHz Intentional Radiators

# Diagram No.: 1.03- Terminal & Spare Battery Charging + WLAN 2.4 GHz Mode

#### **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 & FCC15.247 Intentional Radiator

WLAN Operating Mode: Continuous TX – WLAN 2.4 GHz g Mode-SISO-B.W. 20 MHz- 12 Mbit –

Ch 6 (2437 MHz)- PWR+20dBm

Measured on line: N/L

Diagram details: Shows the peak values as a sum of measured ports in maxhold mode

Environmental Conditions: Humidity: 42%rH; Temperature: 20°C

Operator: T

Comments: FALCON X4 internal & Spare Battery Charging + WLAN2.4 GHz Operating Mode

#### **EUT Information**

Manufacturer:Datalogic S.r.l.EUT MODEL:FALCON X4EuT Type:E00ANM4HS0GF0A4

 P/N:
 945550001

 S/N:
 Z17P02008

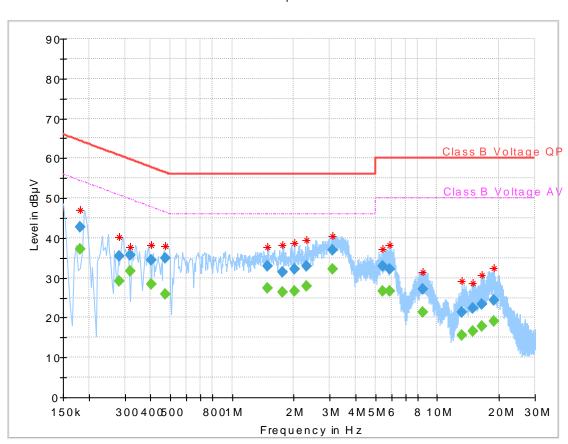
 HW Version:
 BETA

 SW Version:
 Android 4.4.4

 Firmware Version:
 2.01.46.20180109

 Input:
 Internal Battery charging

Battery Type: BT-26 | Li-ion|3.7V DC 5200mAh (2 Cylindrical Cells)





#### Final\_Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBµV)	$\begin{array}{c} Limit\\ (dB\mu V) \end{array}$
0.181563		37.19	54.41
0.181563	42.75		64.41
0.283125		29.18	50.72
0.283125	35.35		60.72
0.318906		31.76	49.74
0.318906	35.64		59.74
0.404688		28.41	47.76
0.404688	34.35		57.76
0.473438		25.93	46.45
0.473438	34.88		56.45
1.489063		27.46	46.00
1.489063	32.88		56.00
1.765313	31.34		56.00
1.765313		26.45	46.00
2.016875	32.20		56.00
2.016875		26.73	46.00
2.314375	32.85		56.00
2.314375		27.83	46.00
3.077656	36.89		56.00
3.077656		32.26	46.00
5.411406		26.70	50.00
5.411406	32.85		60.00
5.884688	32.06		60.00
5.884688		26.53	50.00
8.523594	27.21		60.00
8.523594		21.32	50.00
13.160781		15.48	50.00
13.160781	21.32		60.00
14.891875		16.52	50.00
14.891875	22.30		60.00
16.598438		17.82	50.00
16.598438	23.40		60.00
18.968281		18.99	50.00
18.968281	24.51		60.00



# 1.2. Battery Charging via Docking Station + WLAN 5 GHz Intentional Radiators

# Diagram No.: 1.04- Terminal & Spare Battery Charging + WLAN 5 GHz Mode

#### **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 & FCC15.247 Intentional Radiator

WLAN Operating Mode: Continuous TX -WLAN 5GHz n Mode-SISO-B.W. 20 MHz- MCS0 -

Ch 36 (5180 MHz)- PWR+20dBm

Measured on line: N/L:

Diagram details: Shows the peak values as a sum of measured ports in maxhold mode

Environmental Conditions: Humidity: 42%rH; Temperature: 20°C

Operator: TFr

Comments: FALCON X4 internal & Spare Battery Charging + WLAN 5 GHz Operating Mode

#### **EUT Information**

Manufacturer:Datalogic S.r.l.EUT MODEL:FALCON X4EuT Type:E00ANM4HS0GF0A4

 P/N:
 945550001

 S/N:
 Z17P02008

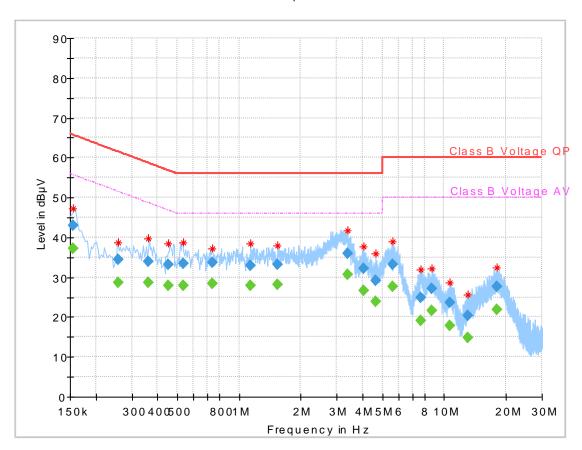
 HW Version:
 BETA

 SW Version:
 Android 4.4.4

 Firmware Version:
 2.01.46.20180109

 Input:
 Internal Battery charging

Battery Type: BT-26 | Li-ion|3.7V DC 5200mAh (2 Cylindrical Cells)





#### Final\_Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBµV)
0.155000		37.22	55.73
0.155000	43.11		65.73
0.257969	34.40		61.50
0.257969		28.71	51.50
0.362344		28.69	48.67
0.362344	34.06		58.67
0.451094	33.20		56.85
0.451094		27.80	46.85
0.536406	33.35		56.00
0.536406		27.98	46.00
0.738438		28.45	46.00
0.738438	33.61		56.00
1.140781		27.89	46.00
1.140781	32.97		56.00
1.535938		28.15	46.00
1.535938	33.20		56.00
3.376875		30.70	46.00
3.376875	36.06		56.00
4.050469	32.24		56.00
4.050469		26.77	46.00
4.640313	29.11		56.00
4.640313		23.97	46.00
5.594375	33.29		60.00
5.594375		27.67	50.00
7.680469	24.94		60.00
7.680469		19.21	50.00
8.673125		21.73	50.00
8.673125	27.14		60.00
10.693906		17.93	50.00
10.693906	23.68		60.00
13.020781	20.35		60.00
13.020781		14.88	50.00
18.122344		21.96	50.00
18.122344	27.68		60.00



# 1.3. Battery Charging via Docking Station + BT-LE Intentional Radiators

# Diagram No.: 1.05- Terminal & Spare Battery Charging + BT-LE Mode

#### **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 & FCC15.247 Intentional Radiator

BT-LE Operating Mode: Continuous TX – BT-LE Mode-SISO-B.W. 1 MHz- GFSK-1Mbps –

Ch 19 (2440 MHz)- PWR+7dBm

Measured on line: N/L1

Diagram details: Shows the peak values as a sum of measured ports in maxhold mode

Environmental Conditions: Humidity: 42%rH; Temperature: 20°C

Operator: TFr

Comments: FALCON X4 internal & Spare Battery Charging + BT-LE Operating Mode

#### **EUT Information**

Manufacturer:Datalogic S.r.l.EUT MODEL:FALCON X4EuT Type:E00ANM4HS0GF0A4

 P/N:
 945550001

 S/N:
 Z17P02008

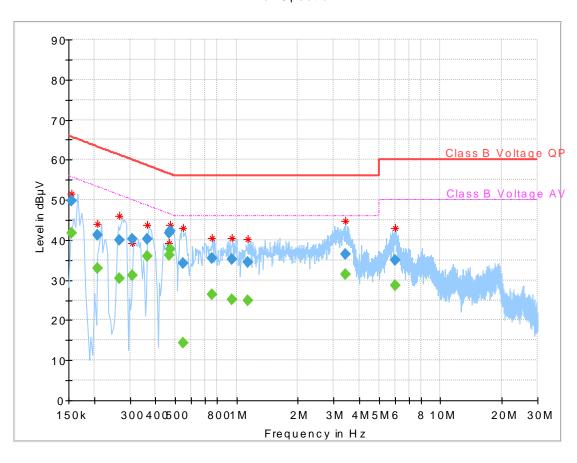
 HW Version:
 BETA

 SW Version:
 Android 4.4.4

 Firmware Version:
 2.01.46.20180109

 Input:
 Internal Battery charging

Battery Type: BT-26 | Li-ion|3.7V DC 5200mAh (2 Cylindrical Cells)





# $\underline{Final}\underline{Result}$

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)
0.155000		41.76	55.73
0.155000	49.78		65.73
0.208906		32.95	53.25
0.208906	41.24		63.25
0.267500		30.31	51.20
0.267500	40.01		61.20
0.307656		31.29	50.03
0.307656	40.17		60.03
0.365156	40.34		58.61
0.365156		35.99	48.61
0.469375		36.19	46.52
0.469375	41.74		56.52
0.474531	42.23		56.43
0.474531		37.61	46.43
0.544219	34.22		56.00
0.544219		14.45	46.00
0.761406	35.45		56.00
0.761406		26.37	46.00
0.952188		25.11	46.00
0.952188	35.15		56.00
1.130781		24.78	46.00
1.130781	34.52		56.00
3.407031	36.54		56.00
3.407031		31.43	46.00
6.034219	34.97		60.00
6.034219		28.63	50.00



# 1.4. Battery Charging via Docking Station + BT-BR-EDR Intentional Radiators

# Diagram No.: 1.06- Terminal & Spare Battery Charging + BT-BR-EDR Mode

#### **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 & FCC15.247 Intentional Radiator

BT-BR-EDR Operating Mode: Continuous TX – BT-BR Mode-SISO-B.W. 1 MHz- GFSK-1Mbps –

Ch 39 (2441 MHz)- PWR+7dBm

Measured on line: N/L1

Diagram details: Shows the peak values as a sum of measured ports in maxhold mode

Environmental Conditions: Humidity: 42%rH; Temperature: 20°C

Operator: TFr

Comments: FALCON X4 internal & Spare Battery Charging + BT-BR-EDR Operating Mode

#### **EUT Information**

Manufacturer:Datalogic S.r.l.EUT MODEL:FALCON X4EuT Type:E00ANM4HS0GF0A4

 P/N:
 945550001

 S/N:
 Z17P02008

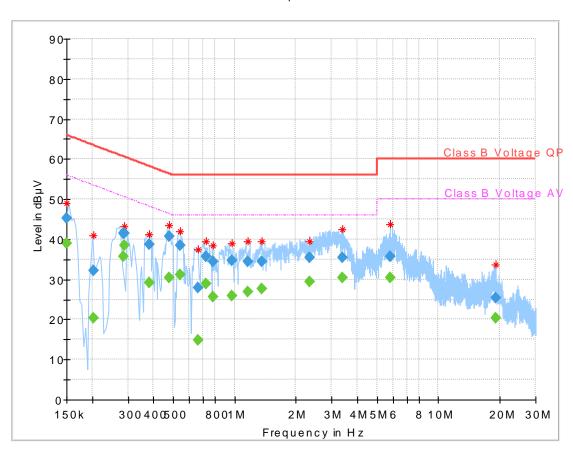
 HW Version:
 BETA

 SW Version:
 Android 4.4.4

 Firmware Version:
 2.01.46.20180109

 Input:
 Internal Battery chargin

Input: Internal Battery charging
Battery Type: BT-26 | Li-ion|3.7V DC 5200mAh (2 Cylindrical Cells)





# $\underline{Final}\underline{Result}$

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Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBμV)	Limit (dBµV)	
0.150000		39.02	56.00	
0.150000	45.26		66.00	
0.203281		20.32	53.48	
0.203281	32.24		63.48	
0.285938		35.74	50.64	
0.285938	41.36		60.64	
0.288594		38.52	50.56	
0.288594	41.53		60.56	
0.380156		29.20	48.28	
0.380156	38.63		58.28	
0.476719	40.85		56.40	
0.476719		30.45	46.40	
0.543125		31.17	46.00	
0.543125	38.39		56.00	
0.660781		14.88	46.00	
0.660781	27.98		56.00	
0.723281		29.00	46.00	
0.723281	35.66		56.00	
0.786406		25.62	46.00	
0.786406	34.52		56.00	
0.965469		25.93	46.00	
0.965469	34.79		56.00	
1.160781		26.87	46.00	
1.160781	34.40		56.00	
1.355625	34.54		56.00	
1.355625		27.59	46.00	
2.339375		29.35	46.00	
2.339375	35.45		56.00	
3.387500	35.49		56.00	
3.387500		30.32	46.00	
5.824375	35.66		60.00	
5.824375		30.51	50.00	
19.074844		20.25	50.00	
19.074844	25.49		60.00	