

Test report No:
NIE: 86166RAN.002A2

Assessment report

RF EXPOSURE REPORT ACCORDING TO FCC 47 CFR Part 2.1093 FCC 47 CFR Part 1.1307

(*) Identification of item under evaluation	Telematic control unit with wireless technologies, used in automotive industry.
(*) Trademark	VW AG
(*) Model and /or type reference	TCKMOD12N00B, TCKMOD11000B
(*) Other identification of the product	IMEI TAC : 35420570 (NAR) - Model Name UMCSTD35HN HW version : X10 SW version : X067 FCC ID: T8GCONMODMEB IC: 6434A-CONMODMEB
(*) Features	GSM, UMTS, LTE, 5G, Bluetooth EDR, BT Low-Energy, Wi-Fi, GNSS receiver
(*) Manufacturer	HARMAN BECKER AUTOMOTIVE SYSTEMS GMBH BECKER-GOERING-STR. 16; 76307 KARLSBAD GERMANY
Test method requested, standard	FCC 47 CFR Part 2.1093. Radiofrequency radiation exposure evaluation: portable devices. FCC 47 CFR Part 1.1307: Actions that may have a significant environmental effect, for which Environmental Assessments (EAs) must be prepared.
Summary	IN COMPLIANCE
Approved by (name / position & signature)	Manuel García Antennas Lab Technical Responsible 74862741H 74862741H MANUEL MANUEL GARCÍA GARCÍA (C:A29507456) (C:A29507456) 2026.04.29 16:54:38 +02'00'
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Data provided by the client

The following data has been provided by the client:

1. Information relating to the description of the sample ("Identification of the item under evaluation", "Trademark", "Model and/or type reference", "General description of the device", "Other identification of the product").
2. Maximum output power, maximum antenna gains and use distance information.
3. The device under evaluation consists of a Telematics control unit with wireless technologies, used in automotive, equipped with one modem, OEM. This unit was designed for automotive usage and contains the following features: GSM, UMTS, LTE, 5G, GNSS, Wi-Fi (a, b, g, n, ac,ax), Bluetooth Low Energy (BTLE) and Bluetooth EDR.

DEKRA Testing and Certification S.A.U. declines any responsibility with respect to the information provided by the client and that may affect the validity of results.

Identification of the client

HARMAN BECKER AUTOMOTIVE SYSTEMS GMBH
BECKER-GOERING-STR. 16; 76307 KARLSBAD GERMANY

Document history

Report number	Date	Description
86166RAN.002	2026-04-24	First release
86166RAN.002A1	2026-04-28	Information about antennas, separation distance for BTWLAN1 and BTWLAN2 and simultaneous transmission calculation have been updated. This test report cancels and replaces test report 86166RAN.002.
86166RAN.002A2	2026-04-29	The Total Estimated SAR values have been included. This test report cancels and replaces test report 86166RAN.002A1.

Appendix A: FCC RF Exposure assessment result

General description of the device under evaluation

Table 1 provides details for the RF Evaluation, based on the following declared device specifications:

Description and technologies: the device under evaluation consists of a Telematics control unit with wireless technologies, used in automotive, equipped with one modem, OEM and supports the following radios technologies: GSM, UMTS, LTE, 5G, GNSS, Wi-Fi (a, b, g, n, ac, ax), Bluetooth Low Energy (BTLE) and Bluetooth EDR. The RF Exposure evaluation applies only to all transmission technologies supported by the device.

The RF Exposure assessment for technologies GSM, UMTS and LTE using Internal antenna CONMOD and LTE_3 (3J0.035.534) has already been evaluated through SAR tests, with results and compliance documented in DEKRA Testing and Certification (Suzhou) Co., Ltd. test report 2630262R.701. The maximum measured values will be used in simultaneous transmission calculations as part of the RF Exposure assessment.

The RF Exposure assessment for technologies GSM, UMTS, LTE and 5G using LTE_1 and LTE_2 (3WA.035.507.A), Wi-Fi (a, b, g, n, ac, ax) using BTWLAN 1 (5B4.035.510), BTWLAN2 (5B4.035.510) and BTWLAN3 (3WA.035.507.A), Bluetooth Low Energy (BTLE) using BLE_1 (3WA.035.507.A) have already been evaluated through SAR tests, with results and compliance documented in Verkotan Oy test report FCC ISED_SAR report_CONMOD+5B4.035.510_ID7966_20032026. The maximum measured values will be used to calculate the Total Exposure Ratio (TER) as part of the RF Exposure assessment.

Evaluation Distance: For the purpose of the RF exposure assessment, the separation distance is defined as the minimum distance between the user and/or bystander and the antenna and/or radiating element of the device, or the outer surface of the device, as applicable. Each separation distance applied during the assessment is clearly identified in this RF exposure technical brief. The separation distances selected for each antenna are based on the device's intended/foreseeable use and the antenna locations; where multiple user interactions are possible, conservative (minimum) separation distances were applied.

Transmitter / Antenna ID	Applied separation distance
BTWLAN 1 (5B4.035.510)	46 mm
BTWLAN 2 (5B4.035.510)	10 mm
BTWLAN 2 (5B4.035.510) (Bluetooth module)	46 mm
BTWLAN 3 (3WA.035.507.A)	10 mm
BLE_1 (3WA.035.507.A) (Bluetooth Chipset)	10 mm
LTE_1 (3WA.035.507.A)	10 mm
LTE_2 (3WA.035.507.A)	10 mm
LTE_3 (3J0.035.534)	60 mm
Internal antenna CONMOD	10 mm

Table 1: Transmitter applied separation distance

Maximum output power:

Values corresponding to maximum output power have been declared by the device manufacturer. These values are stated in modules manufacturer's datasheets.

The device manufacturer has declared the maximum output power values, as documented in the official manufacturer's datasheets.

Antennas: the device supports several antennas for the following transmission technologies:

Transmitter / Antenna ID	Technology / Band
BTWLAN 1 (5B4.035.510)	Wi-Fi 2.45 GHz
BTWLAN 2 (5B4.035.510)	BT (module) 2.45 GHz / Wi-Fi 5 GHz
BTWLAN 3 (3WA.035.507.A)	Wi-Fi 2.45 GHz/5 GHz
BLE_1 (3WA.035.507.A)	BT (chipset) 2.45 GHz
LTE_1 (3WA.035.507.A)	Cellular
LTE_2 (3WA.035.507.A)	Cellular
LTE_3 (3J0.035.534)	Cellular
Internal antenna CONMOD	Cellular

Table 2: List of antennas evaluated

The manufacturer has declared the maximum peak gain values, as stated in the antenna manufacturer's datasheet.

The following table shows the information provided above:

Tech. / Mode	Operating Band	Frequency under evaluation (MHz)	Transmitting configuration	Maximum Conducted Output Power (Incl. Tune-Up) (dBm)	Duty Cycle (%)	Time Averaged Conducted Power (dBm)	BTWLAN 1 antenna peak gain (dBi)	BTWLAN 2 antenna peak gain (dBi)	BTWLAN 3 antenna peak gain (dBi)	BLE_1 antenna peak gain (dBi)	LTE_1 Antenna peak gain (dBi)	LTE_2 antenna peak gain (dBi)	LTE_3 antenna peak gain (dBi)	Internal CONMOD antenna peak gain (dBi)	Cable loss (dBi)	Maximum Averaged E.R.P (dBm)	Maximum Averaged E.R.P (mW)	Maximum Averaged Radiated Pow (dBm)
GSM	850	824 - 849	SISO	35.00	12.50	25.97	-	-	-	-	3.56	5.18	4.40	0.92	0.28	28.739	748.014	30.89
GPRS 1TX	850	824 - 849	SISO	35.00	12.50	25.97	-	-	-	-	3.56	5.18	4.40	0.92	0.28	28.739	748.014	30.89
GPRS 2TX	850	824 - 849	SISO	35.00	25.00	28.98	-	-	-	-	3.56	5.18	4.40	0.92	0.28	31.749	1496.03	33.90
GPRS 3TX	850	824 - 849	SISO	35.00	37.50	30.74	-	-	-	-	3.56	5.18	4.40	0.92	0.28	33.51	2244.04	35.66
GPRS 4TX	850	824 - 849	SISO	35.00	50.00	31.99	-	-	-	-	3.56	5.18	4.40	0.92	0.28	34.76	2992.06	36.91
EGPRS 1TX	850	824 - 849	SISO	35.00	12.50	25.97	-	-	-	-	3.56	5.18	4.40	0.92	0.28	28.739	748.014	30.89
EGPRS 2TX	850	824 - 849	SISO	35.00	25.00	28.98	-	-	-	-	3.56	5.18	4.40	0.92	0.28	31.749	1496.03	33.90
EGPRS 3TX	850	824 - 849	SISO	35.00	37.50	30.74	-	-	-	-	3.56	5.18	4.40	0.92	0.28	33.51	2244.04	35.66
EGPRS 4TX	850	824 - 849	SISO	35.00	50.00	31.99	-	-	-	-	3.56	5.18	4.40	0.92	0.28	34.76	2992.06	36.91
GSM	1900	1850 - 1910	SISO	32.00	12.50	22.97	-	-	-	-	7.44	10.76	6.00	0.39	0.43	31.019	1264.47	33.17
GPRS 1TX	1900	1850 - 1910	SISO	32.00	12.50	22.97	-	-	-	-	7.44	10.76	6.00	0.39	0.43	31.019	1264.47	33.17
GPRS 2TX	1900	1850 - 1910	SISO	32.00	25.00	25.98	-	-	-	-	7.44	10.76	6.00	0.39	0.43	34.029	2528.95	36.18
GPRS 3TX	1900	1850 - 1910	SISO	32.00	37.50	27.74	-	-	-	-	7.44	10.76	6.00	0.39	0.43	35.79	3793.42	37.94
GPRS 4TX	1900	1850 - 1910	SISO	32.00	50.00	28.99	-	-	-	-	7.44	10.76	6.00	0.39	0.43	37.04	5057.9	39.19
EGPRS 1TX	1900	1850 - 1910	SISO	32.00	12.50	22.97	-	-	-	-	7.44	10.76	6.00	0.39	0.43	31.019	1264.47	33.17
EGPRS 2TX	1900	1850 - 1910	SISO	32.00	25.00	25.98	-	-	-	-	7.44	10.76	6.00	0.39	0.43	34.029	2528.95	36.18
EGPRS 3TX	1900	1850 - 1910	SISO	32.00	37.50	27.74	-	-	-	-	7.44	10.76	6.00	0.39	0.43	35.79	3793.42	37.94
EGPRS 4TX	1900	1850 - 1910	SISO	32.00	50.00	28.99	-	-	-	-	7.44	10.76	6.00	0.39	0.43	37.04	5057.9	39.19

Tech. / Mode	Operating Band	Frequency under evaluation (MHz)	Transmitting configuration	Maximum Conducted Output Power (Incl. Tune-Up) (dBm)	Duty Cycle (%)	Time Averaged Conducted Power (dBm)	BTWLAN 1 antenna peak gain (dBi)	BTWLAN 2 antenna peak gain (dBi)	BTWLAN 3 antenna peak gain (dBi)	BLE_1 antenna peak gain (dBi)	LTE_1 Antenna peak gain (dBi)	LTE_2 antenna peak gain (dBi)	LTE_3 antenna peak gain (dBi)	Internal CONMOD antenna peak gain (dBi)	Cable loss (dBi)	Maximum Averaged E.R.P (dBm)	Maximum Averaged E.R.P (mW)	Maximum Averaged Radiated Pow (dBm)
UMTS	II	1850 - 1910	SISO	25.00	100.00	25.00	-	-	-	-	7.44	10.76	6.00	0.39	0.43	33.05	2018.37	35.20
UMTS	IV	1710 - 1755	SISO	25.00	100.00	25.00	-	-	-	-	7.44	10.76	6.00	1.12	0.43	33.05	2018.37	35.20
UMTS	V	824 - 849	SISO	25.00	100.00	25.00	-	-	-	-	3.56	5.18	4.40	0.92	0.28	27.71	590.201	29.86
LTE	2	1850 - 1910	SISO	25.00	100.00	25.00	-	-	-	-	7.44	10.76	6.00	0.39	0.43	33.05	2018.37	35.20
LTE	4	1710 - 1755	SISO	25.00	100.00	25.00	-	-	-	-	7.44	10.76	6.00	1.12	0.43	33.05	2018.37	35.20
LTE	5	824 - 849	SISO	25.00	100.00	25.00	-	-	-	-	3.56	5.18	4.40	0.37	0.28	27.71	590.201	29.86
LTE	7	2500 - 2570	SISO	25.00	100.00	25.00	-	-	-	-	7.41	8.18	7.90	1.11	0.76	30.25	1059.25	32.40
LTE	12	699 - 716	SISO	25.00	100.00	25.00	-	-	-	-	3.56	5.18	4.70	0.66	0.28	27.77	598.412	29.92
LTE	13	777 - 787	SISO	25.00	100.00	25.00	-	-	-	-	3.56	5.18	4.40	1.38	0.28	27.77	598.412	29.92
LTE	14	788 - 798	SISO	25.00	100.00	25.00	-	-	-	-	3.56	5.18	4.40	1.33	0.28	27.77	598.412	29.92
LTE	17	704 - 716	SISO	25.00	100.00	25.00	-	-	-	-	3.56	5.18	4.70	0.66	0.28	27.77	598.412	29.92
LTE	25	1850 - 1915	SISO	25.00	100.00	25.00	-	-	-	-	7.44	10.76	6.00	0.39	0.43	33.05	2018.37	35.20
LTE	26	814 - 849	SISO	25.00	100.00	25.00	-	-	-	-	3.56	5.18	4.40	0.37	0.28	27.71	590.201	29.86
LTE	41	2496 - 2690	SISO	25.00	100.00	25.00	-	-	-	-	7.41	8.18	7.90	-1.42	0.76	30.25	1059.25	32.40
LTE	66	1710 - 1780	SISO	25.00	100.00	25.00	-	-	-	-	7.44	10.76	6.00	0.95	0.43	33.05	2018.37	35.20
LTE	71	663 - 698	SISO	25.00	100.00	25.00	-	-	-	-	3.56	5.18	4.60	-0.55	0.28	27.77	598.412	29.92
5G NR	n2	1850 - 1910	SISO	25.00	100.00	25.00	-	-	-	-	7.44	-	-	-	0.43	29.86	968.278	32.01
5G NR	n5	824 - 849	SISO	25.00	100.00	25.00	-	-	-	-	3.56	-	-	-	0.28	26.1	407.38	28.25
5G NR	n7	2500 - 2570	SISO	25.00	100.00	25.00	-	-	-	-	7.41	-	-	-	0.76	29.5	891.251	31.65
5G NR	n41	2496 - 2690	SISO	25.00	100.00	25.00	-	-	-	-	7.41	-	-	-	0.76	29.5	891.251	31.65

Tech. / Mode	Operating Band	Frequency under evaluation (MHz)	Transmitting configuration	Maximum Conducted Output Power (Incl. Tune-Up) (dBm)	Duty Cycle (%)	Time Averaged Conducted Power (dBm)	BTWLAN 1 antenna peak gain (dBi)	BTWLAN 2 antenna peak gain (dBi)	BTWLAN 3 antenna peak gain (dBi)	BLE_1 antenna peak gain (dBi)	LTE_1 Antenna peak gain (dBi)	LTE_2 antenna peak gain (dBi)	LTE_3 antenna peak gain (dBi)	Internal CONMOD antenna peak gain (dBi)	Cable loss (dBi)	Maximum Averaged E.R.P (dBm)	Maximum Averaged E.R.P (mW)	Maximum Averaged Radiated Pow (dBm)
5G NR	n66	1710 - 1780	SISO	25.00	100.00	25.00	-	-	-	-	7.44	-	-	-	0.43	29.86	968.278	32.01
5G NR	n71	663 - 698	SISO	25.00	100.00	25.00	-	-	-	-	3.56	-	-	-	0.28	26.13	410.204	28.28
5G NR	n77	3450 - 3650	SISO	28.00	100.00	28.00	-	-	-	-	7.33	-	-	-	1.28	31.9	1548.82	34.05
5G NR	n78	3450 - 3650	SISO	28.00	100.00	28.00	-	-	-	-	7.33	-	-	-	1.28	31.9	1548.82	34.05
802.11b/g/n	2.4 GHz	2412 - 2484	SISO	16.00	100.00	16.00	3.00	-	-	-	-	-	-	-	0.90	15.95	39.355	18.10
802.11b/g/n	2.4 GHz	2412 - 2484	UL MIMO	19.00	100.00	19.00	3.00	-	-	-	-	-	-	-	0.90	18.95	78.5236	21.10
802.11b/g/n	2.4 GHz	2412 - 2484	SISO	16.00	100.00	16.00	-	-	6.52	-	-	-	-	-	0.90	19.47	88.5116	21.62
802.11b/g/n	2.4 GHz	2412 - 2484	UL MIMO	19.00	100.00	19.00	-	-	6.52	-	-	-	-	-	0.90	21.06	127.644	23.21
802.11a/n/ac	5 GHz	5150 - 5850	SISO	11.00	100.00	11.00	-	5.00	7.52	-	-	-	-	-	2.50	16.37	43.3511	18.52
802.11a/n/ac	5 GHz	5150 - 5850	UL MIMO	14.00	100.00	14.00	-	5.00	7.52	-	-	-	-	-	2.50	17.548	56.8619	19.70
Bluetooth (Module)	2.4 GHz	2400 - 2483.5	SISO	-0.85	100.00	-0.85	-	3.00	-	-	-	-	-	-	0.90	-0.9	0.81283	1.25
BTLE (Module)	2.4 GHz	2400 - 2483.5	SISO	4.65	100.00	4.65	-	3.00	-	-	-	-	-	-	0.90	4.6	2.88403	6.75
BTLE (Chipset)	2.4 GHz	2400 - 2483.5	SISO	4.56	100.00	4.56	-	-	-	5.43	-	-	-	-	-	7.84	6.08135	9.99

Table 3: Equipment specifications

Simultaneous Transmission Conditions:

The device supports the following simultaneous transmissions modes:

Simultaneous Transmission Cases	Modes
Case 1	BTWLAN1: Wi-Fi 2.45GHz SISO + BTWLAN2: (Bluetooth)(module) + BTWLAN3 Not used + BLE_1 (BTLE Chipset) + cellular (CONMOD INTERNAL)
Case 2	BTWLAN1: Wi-Fi 2.45GHz SISO + BTWLAN2: Wi-Fi 5GHz SISO + BTWLAN3 Not used + BLE_1 (BTLE Chipset) + cellular (CONMOD INTERNAL)
Case 3	BTWLAN1: Wi-Fi 2.45GHz MIMO + BTWLAN2: (Bluetooth)(module) + BTWLAN3 (Wi-Fi 2.45GHz MIMO) + BLE_1 (BTLE Chipset)
Case 4	BTWLAN1: Not used (WIFI 5GHZ and 2.45GHZ MIMO cannot transmit at same time) + BTWLAN2: Wi-Fi 5GHz MIMO+ BTWLAN3 (Wi-Fi 5GHz MIMO) + BLE_1 (BTLE Chipset) + cellular (CONMOD INTERNAL)

Evaluation Results

In accordance with 47 CFR §§1.1307 and 2.1093, the RF exposure evaluation was performed using the minimum intended-use separation distances between each radiating structure and the user and/or bystanders, as summarized in Table 1.

BTWLAN 2, BTWLAN 3, BLE_1, LTE_1, LTE_2 and Internal CONMOD antennas (10 mm):

Tech / Mode	Operating Band	Frequency under evaluation (MHz)	Tx config	Distance (cm)	Time Averaged Conducted Power (mW)	Maximum Averaged E.R.P (mW)	§1.1307(b)(3).i.(A) Exposure Limit (mW)	§1.1307(b)(3).i.(C) Exposure Limit (mW)	§ 1.1307(b)(3).i.(B) Exposure Limit (mW)	Verdict
GSM	850	824 - 849	SISO	1.0	N/A	748.01449	N/A	N/A	24.953369	SAR test needed
GPRS 1TX	850	824 - 849	SISO	1.0	N/A	748.01449	N/A	N/A	24.953369	SAR test needed
GPRS 2TX	850	824 - 849	SISO	1.0	N/A	1496.0289	N/A	N/A	24.953369	SAR test needed
GPRS 3TX	850	824 - 849	SISO	1.0	N/A	2244.0434	N/A	N/A	24.953369	SAR test needed
GPRS 4TX	850	824 - 849	SISO	1.0	N/A	2992.0579	N/A	N/A	24.953369	SAR test needed
EGPRS 1TX	850	824 - 849	SISO	1.0	N/A	748.01449	N/A	N/A	24.953369	SAR test needed
EGPRS 2TX	850	824 - 849	SISO	1.0	N/A	1496.0289	N/A	N/A	24.953369	SAR test needed
EGPRS 3TX	850	824 - 849	SISO	1.0	N/A	2244.0434	N/A	N/A	24.953369	SAR test needed
EGPRS 4TX	850	824 - 849	SISO	1.0	N/A	2992.0579	N/A	N/A	24.953369	SAR test needed
GSM	1900	1850 - 1910	SISO	1.0	N/A	1264.4743	N/A	N/A	12.058824	SAR test needed
GPRS 1TX	1900	1850 - 1910	SISO	1.0	N/A	1264.4743	N/A	N/A	12.058824	SAR test needed
GPRS 2TX	1900	1850 - 1910	SISO	1.0	N/A	2528.9486	N/A	N/A	12.058824	SAR test needed
GPRS 3TX	1900	1850 - 1910	SISO	1.0	N/A	3793.4229	N/A	N/A	12.058824	SAR test needed
GPRS 4TX	1900	1850 - 1910	SISO	1.0	N/A	5057.8972	N/A	N/A	12.058824	SAR test needed
EGPRS 1TX	1900	1850 - 1910	SISO	1.0	N/A	1264.4743	N/A	N/A	12.058824	SAR test needed
EGPRS 2TX	1900	1850 - 1910	SISO	1.0	N/A	2528.9486	N/A	N/A	12.058824	SAR test needed
EGPRS 3TX	1900	1850 - 1910	SISO	1.0	N/A	3793.4229	N/A	N/A	12.058824	SAR test needed
EGPRS 4TX	1900	1850 - 1910	SISO	1.0	N/A	5057.8972	N/A	N/A	12.058824	SAR test needed
UMTS	II	1850 - 1910	SISO	1.0	N/A	2018.3663	N/A	N/A	12.058824	SAR test needed
UMTS	IV	1710 - 1755	SISO	1.0	N/A	2018.3663	N/A	N/A	12.741350	SAR test needed
UMTS	V	824 - 849	SISO	1.0	N/A	590.20108	N/A	N/A	24.953369	SAR test needed
LTE	2	1850 - 1910	SISO	1.0	N/A	2018.3663	N/A	N/A	12.058824	SAR test needed
LTE	4	1710 - 1755	SISO	1.0	N/A	2018.3663	N/A	N/A	12.741350	SAR test needed
LTE	5	824 - 849	SISO	1.0	N/A	590.20108	N/A	N/A	24.953369	SAR test needed
LTE	7	2500 - 2570	SISO	1.0	N/A	1059.2537	N/A	N/A	9.9415422	SAR test needed
LTE	12	699 - 716	SISO	1.0	N/A	598.41159	N/A	N/A	29.182139	SAR test needed
LTE	13	777 - 787	SISO	1.0	N/A	598.41159	N/A	N/A	26.387575	SAR test needed

Tech / Mode	Operating Band	Frequency under evaluation (MHz)	Tx config	Distance (cm)	Time Averaged Conducted Power (mW)	Maximum Averaged E.R.P (mW)	§1.1307(b)(3).i.(A) Exposure Limit (mW)	§1.1307(b)(3).i.(C) Exposure Limit (mW)	§ 1.1307(b)(3).i.(B) Exposure Limit (mW)	Verdict
LTE	14	788 - 798	SISO	1.0	N/A	598.41159	N/A	N/A	26.036950	SAR test needed
LTE	17	704 - 716	SISO	1.0	N/A	598.41159	N/A	N/A	28.984888	SAR test needed
LTE	25	1850 - 1915	SISO	1.0	N/A	2018.3663	N/A	N/A	12.038333	SAR test needed
LTE	26	814 - 849	SISO	1.0	N/A	590.20108	N/A	N/A	25.244981	SAR test needed
LTE	41	2496 - 2690	SISO	1.0	N/A	1059.2537	N/A	N/A	9.6507508	SAR test needed
LTE	66	1710 - 1780	SISO	1.0	N/A	2018.3663	N/A	N/A	12.624652	SAR test needed
LTE	71	663 - 698	SISO	1.0	N/A	598.41159	N/A	N/A	30.687963	SAR test needed
5G NR	n2	1850 - 1910	SISO	1.0	N/A	968.27785	N/A	N/A	12.058824	SAR test needed
5G NR	n5	824 - 849	SISO	1.0	N/A	407.38027	N/A	N/A	24.953369	SAR test needed
5G NR	n7	2500 - 2570	SISO	1.0	N/A	891.25093	N/A	N/A	9.9415422	SAR test needed
5G NR	n41	2496 - 2690	SISO	1.0	N/A	891.25093	N/A	N/A	9.6507508	SAR test needed
5G NR	n66	1710 - 1780	SISO	1.0	N/A	968.27785	N/A	N/A	12.624652	SAR test needed
5G NR	n71	663 - 698	SISO	1.0	N/A	410.20410	N/A	N/A	30.687963	SAR test needed
5G NR	n77	3700 - 3980	SISO	1.0	N/A	1548.8166	N/A	N/A	7.4797739	SAR test needed
5G NR	n78	3700 - 3800	SISO	1.0	N/A	1548.8166	N/A	N/A	7.7083865	SAR test needed
802.11b/g/n	2.4 GHz	2412 - 2484	SISO	1.0	178.65	N/A	N/A	N/A	10.164110	SAR test needed
802.11b/g/n	2.4 GHz	2412 - 2484	UL MIMO	1.0	242.66	N/A	N/A	N/A	10.164110	SAR test needed
802.11a/n/ac	5 GHz	5150 - 5850	SISO	1.0	N/A	43.3511	N/A	N/A	5.8220376	SAR test needed
802.11a/n/ac	5 GHz	5150 - 5850	UL MIMO	1.0	N/A	56.8619	N/A	N/A	5.8220376	SAR test needed
BTLE (Chipset)	2.4 GHz	2400 - 2483.5	SISO	1.0	N/A	6.0813500	N/A	N/A	10.165441	Pass

Table 4: FCC Exemption Evaluation Result for 10mm distance transmitters

BTWLAN 1 (46 mm), BTWLAN 2 (Bluetooth module)(46 mm) and LTE_3 (60 mm):

Tech / Mode	Operating Band	Frequency under evaluation (MHz)	Tx config	Distance (cm)	Time Averaged Conducted Power (mW)	Maximum Averaged E.R.P (mW)	§1.1307(b)(3).i.(A) Exposure Limit (mW)	§1.1307(b)(3).i.(C) Exposure Limit (mW)	§ 1.1307(b)(3).i.(B) Exposure Limit (mW)	Verdict
GSM	850	824 - 849	SISO	6.0	N/A	748.0144938	N/A	N/A	309.5418798	SAR test needed
GPRS 1TX	850	824 - 849	SISO	6.0	N/A	748.0144938	N/A	N/A	309.5418798	SAR test needed
GPRS 2TX	850	824 - 849	SISO	6.0	N/A	1496.028988	N/A	N/A	309.5418798	SAR test needed
GPRS 3TX	850	824 - 849	SISO	6.0	N/A	2244.043481	N/A	N/A	309.5418798	SAR test needed
GPRS 4TX	850	824 - 849	SISO	6.0	N/A	2992.057975	N/A	N/A	309.5418798	SAR test needed
EGPRS 1TX	850	824 - 849	SISO	6.0	N/A	748.0144938	N/A	N/A	309.5418798	SAR test needed

Tech / Mode	Operating Band	Frequency under evaluation (MHz)	Tx config	Distance (cm)	Time Averaged Conducted Power (mW)	Maximum Averaged E.R.P (mW)	§1.1307(b)(3).i.(A) Exposure Limit (mW)	§1.1307(b)(3).i.(C) Exposure Limit (mW)	§1.1307(b)(3).i.(B) Exposure Limit (mW)	Verdict
EGPRS 2TX	850	824 - 849	SISO	6.0	N/A	1496.028988	N/A	N/A	309.5418798	SAR test needed
EGPRS 3TX	850	824 - 849	SISO	6.0	N/A	2244.043481	N/A	N/A	309.5418798	SAR test needed
EGPRS 4TX	850	824 - 849	SISO	6.0	N/A	2992.057975	N/A	N/A	309.5418798	SAR test needed
GSM	1900	1850 - 1910	SISO	6.0	N/A	1264.474318	N/A	N/A	330.6709843	SAR test needed
GPRS 1TX	1900	1850 - 1910	SISO	6.0	N/A	1264.474318	N/A	N/A	330.6709843	SAR test needed
GPRS 2TX	1900	1850 - 1910	SISO	6.0	N/A	2528.948636	N/A	N/A	330.6709843	SAR test needed
GPRS 3TX	1900	1850 - 1910	SISO	6.0	N/A	3793.422953	N/A	N/A	330.6709843	SAR test needed
GPRS 4TX	1900	1850 - 1910	SISO	6.0	N/A	5057.897271	N/A	N/A	330.6709843	SAR test needed
EGPRS 1TX	1900	1850 - 1910	SISO	6.0	N/A	1264.474318	N/A	N/A	330.6709843	SAR test needed
EGPRS 2TX	1900	1850 - 1910	SISO	6.0	N/A	2528.948636	N/A	N/A	330.6709843	SAR test needed
EGPRS 3TX	1900	1850 - 1910	SISO	6.0	N/A	3793.422953	N/A	N/A	330.6709843	SAR test needed
EGPRS 4TX	1900	1850 - 1910	SISO	6.0	N/A	5057.897271	N/A	N/A	330.6709843	SAR test needed
UMTS	II	1850 - 1910	SISO	6.0	N/A	2018.366364	N/A	N/A	330.6709843	SAR test needed
UMTS	IV	1710 - 1755	SISO	6.0	N/A	2018.366364	N/A	N/A	338.0692095	SAR test needed
UMTS	V	824 - 849	SISO	6.0	N/A	590.2010802	N/A	N/A	309.5418798	SAR test needed
LTE	2	1850 - 1910	SISO	6.0	N/A	2018.366364	N/A	N/A	330.6709843	SAR test needed
LTE	4	1710 - 1755	SISO	6.0	N/A	2018.366364	N/A	N/A	338.0692095	SAR test needed
LTE	5	824 - 849	SISO	6.0	N/A	590.2010802	N/A	N/A	309.5418798	SAR test needed
LTE	7	2500 - 2570	SISO	6.0	N/A	1059.253725	N/A	N/A	305.9825198	SAR test needed
LTE	12	699 - 716	SISO	6.0	N/A	598.4115951	N/A	N/A	298.750704	SAR test needed
LTE	13	777 - 787	SISO	6.0	N/A	598.4115951	N/A	N/A	305.6456308	SAR test needed
LTE	14	788 - 798	SISO	6.0	N/A	598.4115951	N/A	N/A	306.5737546	SAR test needed
LTE	17	704 - 716	SISO	6.0	N/A	598.4115951	N/A	N/A	299.2103259	SAR test needed
LTE	25	1850 - 1915	SISO	6.0	N/A	2018.366364	N/A	N/A	330.4450472	SAR test needed
LTE	26	814 - 849	SISO	6.0	N/A	590.2010802	N/A	N/A	308.7277703	SAR test needed
LTE	41	2496 - 2690	SISO	6.0	N/A	1059.253725	N/A	N/A	302.3535756	SAR test needed
LTE	66	1710 - 1780	SISO	6.0	N/A	2018.366364	N/A	N/A	336.8213615	SAR test needed
LTE	71	663 - 698	SISO	6.0	N/A	598.4115951	N/A	N/A	295.3630029	SAR test needed
802.11b/g/n	2.4 GHz	2412 - 2484	SISO	4.6	N/A	39.35550075	N/A	N/A*	186.100562	Pass
802.11b/g/n	2.4 GHz	2412 - 2484	UL MIMO	4.6	N/A	78.5235635	N/A	N/A*	186.100562	Pass
Bluetooth (Module)	2.4 GHz	2400 - 2483.5	SISO	4.6	N/A	0.81283052	N/A	N/A*	186.100562	Pass
BTLE (Module)	2.4 GHz	2400 - 2483.5	SISO	4.6	N/A	2.8840315	N/A	N/A*	186.100562	Pass

*: The device meets with "§1.1307(b)(3).i.(C)Exposure Limit in single mode, but to meets with simultaneous transmission, "§1.1307(b)(3).i.(B)Exposure Limit" has been applied.

The exemption does not apply to all technologies; therefore, a separate RF exposure evaluation is required. Maximum measured SAR values for GSM, UMTS and LTE for Internal and External antennas where measurements were needed to verify compliance are stated into DEKRA Testing and Certification (Suzhou) Co., Ltd. test report num. 2630262R.701:

- External antenna (LTE_3 – 60 mm)

Technology / Mode	Operating Band	Frequency under evaluation (MHz)	Maximum SAR 1-g (W/kg)	SAR 1-g Limit (W/kg)	Verdict
GPRS 850	850 MHz	836.6	0.167	1.600	Pass
GPRS 1900	1900 MHz	1880.0	0.049	1.600	Pass
UMTS	FDD II	1880.0	0.186	1.600	Pass
UMTS	FDD IV	1732.4	0.148	1.600	Pass
UMTS	FDD V	836.4	0.175	1.600	Pass
LTE	FDD 7	2535.0	0.165	1.600	Pass
LTE	FDD 12	707.5	0.086	1.600	Pass
LTE	FDD 13	782.0	0.104	1.600	Pass
LTE	FDD 14	793.0	0.156	1.600	Pass
LTE	FDD 25	1882.5	0.187	1.600	Pass
LTE	FDD 26	831.5	0.131	1.600	Pass
LTE	TDD 41	2593.0	0.127	1.600	Pass
LTE	FDD 66	1745.0	0.182	1.600	Pass
LTE	FDD 71	683.0	0.028	1.600	Pass

- Internal antenna (Internal CONMOD antenna – 10 mm):

Technology / Mode	Operating Band	Frequency under evaluation (MHz)	Maximum SAR 1-g (W/kg)	SAR 1-g Limit (W/kg)	Verdict
GPRS 850	850 MHz	836.6	0.589	1.600	Pass
GPRS 1900	1900 MHz	1880.0	0.371	1.600	Pass
UMTS	FDD II	1880.0	0.547	1.600	Pass
UMTS	FDD IV	1732.4	0.549	1.600	Pass
UMTS	FDD V	836.4	0.328	1.600	Pass
LTE	FDD 7	2535.0	1.131	1.600	Pass
LTE	FDD 12	707.5	0.266	1.600	Pass
LTE	FDD 13	782.0	0.339	1.600	Pass
LTE	FDD 14	793.0	0.444	1.600	Pass
LTE	FDD 25	1882.5	0.411	1.600	Pass
LTE	FDD 26	831.5	0.418	1.600	Pass
LTE	TDD 41	2593.0	0.667	1.600	Pass
LTE	FDD 66	1745.0	0.504	1.600	Pass
LTE	FDD 71	683.0	0.191	1.600	Pass

As the compliance criterion is fulfilled, each transmitting mode is in compliance with the RF Exposure requirements

The exemption does not apply to all technologies; therefore, a separate RF exposure evaluation is required. Maximum measured SAR values for GSM, UMTS, LTE, 5G NR, Wi-Fi 2,45 GHz, Wi-Fi 5GHz and BTLE for Cellular, BTWLAN 3 and BLE antennas where measurements were needed to verify compliance are stated into Verkotan Oy. test report num. FCC_ISED_SAR report_Roof Antenna_ID7966_31032026 and FCC ISED_SAR report_CONMOD+5B4.035.510_ID7966_20032026:

- LTE_1:**

Technology / Mode	Operating Band	Frequency under evaluation (MHz)	Maximum SAR 1-g (W/kg)	SAR 1-g Limit (W/kg)	Verdict
GPRS 850	850 MHz	824.2	0.440	1.600	Pass
GPRS 1900	1900 MHz	1850.2	0.120	1.600	Pass
UMTS	FDD II	1907.6	0.220	1.600	Pass
UMTS	FDD IV	1712.4	0.300	1.600	Pass
UMTS	FDD V	836.6	0.200	1.600	Pass
LTE	FDD 7	2560.0	0.010	1.600	Pass
LTE	FDD 12	704.0	0.140	1.600	Pass
LTE	FDD 13	779.5	0.230	1.600	Pass
LTE	FDD 14	793.0	0.210	1.600	Pass
LTE	FDD 25	1905.0	0.100	1.600	Pass
LTE	FDD 26	831.5	0.050	1.600	Pass
LTE	TDD 41	2506.0	0.022	1.600	Pass
LTE	FDD 66	1720.0	0.110	1.600	Pass
LTE	FDD 71	688.0	0.210	1.600	Pass
5G NR	n2	1860.0	0.060	1.600	Pass
5G NR	n5	834.0	0.230	1.600	Pass
5G NR	n7	2510.0	0.020	1.600	Pass
5G NR	n41	2592.9	0.040	1.600	Pass
5G NR	n66	1730.0	0.060	1.600	Pass
5G NR	n71	673.0	0.250	1.600	Pass
5G NR	n77	3930.0	0.020	1.600	Pass

As the compliance criterion is fulfilled, each transmitting mode is in compliance with the RF Exposure requirements

- LTE_2:**

Technology / Mode	Operating Band	Frequency under evaluation (MHz)	Maximum SAR 1-g (W/kg)	SAR 1-g Limit (W/kg)	Verdict
GPRS 850	850 MHz	848.8	0.280	1.600	Pass
GPRS 1900	1900 MHz	1880.0	0.070	1.600	Pass
UMTS	FDD II	1852.4	0.210	1.600	Pass

Technology / Mode	Operating Band	Frequency under evaluation (MHz)	Maximum SAR 1-g (W/kg)	SAR 1-g Limit (W/kg)	Verdict
UMTS	FDD IV	1752.6	0.270	1.600	Pass
UMTS	FDD V	836.6	0.140	1.600	Pass
LTE	FDD 7	2560.0	0.190	1.600	Pass
LTE	FDD 12	704.0	0.100	1.600	Pass
LTE	FDD 13	779.5	0.090	1.600	Pass
LTE	FDD 14	790.5	0.110	1.600	Pass
LTE	FDD 25	1860.0	0.300	1.600	Pass
LTE	FDD 26	841.5	0.040	1.600	Pass
LTE	TDD 41	2506.0	0.090	1.600	Pass
LTE	FDD 66	1720.0	0.420	1.600	Pass
LTE	FDD 71	673.0	0.140	1.600	Pass

As the compliance criterion is fulfilled, each transmitting mode is in compliance with the RF Exposure requirements

- BTWLAN 1:

Technology / Mode	Operating Band	Frequency under evaluation (MHz)	Maximum SAR 1-g (W/kg)	SAR 1-g Limit (W/kg)	Verdict
802.11b	2.45 GHz	2462.0	0.412	1.600	Pass

As the compliance criterion is fulfilled, each transmitting mode is in compliance with the RF Exposure requirements

- BTWLAN 2:

Technology / Mode	Operating Band	Frequency under evaluation (MHz)	Maximum SAR 1-g (W/kg)	SAR 1-g Limit (W/kg)	Verdict
802.11a	U-NII-1	5180.0	0.099	1.600	Pass
802.11a	U-NII-3	5785.0	0.012	1.600	Pass

As the compliance criterion is fulfilled, each transmitting mode is in compliance with the RF Exposure requirements

- BTWLAN 3:

Technology / Mode	Operating Band	Frequency under evaluation (MHz)	Maximum SAR 1-g (W/kg)	SAR 1-g Limit (W/kg)	Verdict
802.11b	2.45 GHz	2412.0	0.001	1.600	Pass
802.11a	U-NII-1	5220.0	0.000	1.600	Pass
802.11a	U-NII-3	5785.0	0.000	1.600	Pass

As the compliance criterion is fulfilled, each transmitting mode is in compliance with the RF Exposure requirements

- **BLE_1:**

Technology / Mode	Operating Band	Frequency under evaluation (MHz)	Maximum SAR 1-g (W/kg)	SAR 1-g Limit (W/kg)	Verdict
BLE (Chipset)	2.45 GHz	2442.0	0.000	1.600	Pass

As the compliance criterion is fulfilled, each transmitting mode is in compliance with the RF Exposure requirements

Estimated SAR from exemption values:

BTWLAN1: Wi-Fi 2.45GHz SISO: $(39.35550075\text{mW}/186.100562\text{mW}) * 1.6 \text{ W/Kg} = 0.338 \text{ W/Kg}$

BTWLAN2: (Bluetooth)(module): $(2.8840315\text{mW}/186.100562\text{mW}) * 1.6 \text{ W/Kg} = 0.025 \text{ W/Kg}$

BTWLAN1: Wi-Fi 2.45GHz MIMO: $(78.5235635\text{mW}/186.100562\text{mW}) * 1.6 \text{ W/Kg} = 0.675 \text{ W/Kg}$

Simultaneous transmission assessment:

The device under evaluation can transmit simultaneously using GSM, UMTS, LTE, 5G NR, Wi-Fi 2,45 GHz, Wi-Fi 5GHz and BTLE transmitters, therefore the most conservative approach for the evaluation of the simultaneous transmission will be:

Simultaneous transmission configurations	Total Estimated SAR (W/Kg)	Verdict ($\Sigma \leq 1.6\text{W/Kg}$)
BTWLAN1: Wi-Fi 2.45GHz SISO + BTWLAN2: (Bluetooth)(module) + BTWLAN3 Not used + BLE_1 (BTLE Chipset) + cellular (CONMOD INTERNAL)	1.494	Pass
BTWLAN1: Wi-Fi 2.45GHz SISO + BTWLAN2: Wi-Fi 5GHz SISO + BTWLAN3 Not used + BLE_1 (BTLE Chipset) + cellular (CONMOD INTERNAL)	1.568	Pass
BTWLAN1: Wi-Fi 2.45GHz MIMO + BTWLAN2: (Bluetooth)(module) + BTWLAN3 (Wi-Fi 2.45GHz MIMO)) + BLE_1 (BTLE Chipset)	0.701	Pass
BTWLAN1: Not used (WIFI 5GHZ and 2.45GHZ MIMO cannot transmit at same time) + BTWLAN2: Wi-Fi 5GHz MIMO+ BTWLAN3 (Wi-Fi 5GHz MIMO)) + BLE_1 (BTLE Chipset) + cellular (CONMOD INTERNAL)	1.230	Pass

Table 5: Total Estimated SAR Result.

Simultaneous transmission configurations	TER Result	Verdict ($\Sigma \leq 1$)
BTWLAN1: Wi-Fi 2.45GHz SISO + BTWLAN2: (Bluetooth)(module) + BTWLAN3 Not used + BLE_1 (BTLE Chipset) + cellular (CONMOD INTERNAL)	0.9338	Pass
BTWLAN1: Wi-Fi 2.45GHz SISO + BTWLAN2: Wi-Fi 5GHz SISO + BTWLAN3 Not used + BLE_1 (BTLE Chipset) + cellular (CONMOD INTERNAL)	0.980	Pass
BTWLAN1: Wi-Fi 2.45GHz MIMO + BTWLAN2: (Bluetooth)(module) + BTWLAN3 (Wi-Fi 2.45GHz MIMO)) + BLE_1 (BTLE Chipset)	0.438	Pass
BTWLAN1: Not used (WIFI 5GHZ and 2.45GHZ MIMO cannot transmit at same time) + BTWLAN2: Wi-Fi 5GHz MIMO+ BTWLAN3 (Wi-Fi 5GHz MIMO)) + BLE_1 (BTLE Chipset) + cellular (CONMOD INTERNAL)	0.7688	Pass

Table 6: Simultaneous transmission Result.

As the compliance criteria is fulfilled, simultaneous transmission condition is in compliance with the RF exposure requirements.

Appendix B: FCC RF Exposure information

RF Exposure determination of exemption

According to FCC 47 CFR §1.1307 (b)(3) Determination of exemption:

(i) For single RF sources (i.e., any single fixed RF source, mobile device, or portable device, as defined in paragraph (b)(2), a single RF source is exempt if:

(A) The available maximum time-averaged power is no more than 1 mW, regardless of separation distance. This exemption may not be used in conjunction with other exemption criteria other than those in paragraph (b)(3)(ii)(A) of this section. Medical implant devices may only use this exemption and that in paragraph (b)(3)(ii)(A);

(B) Or the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold Pth (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive). Pth is given by:

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

Where

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right) \text{ and } f \text{ is in GHz;}$$

and

$$ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

d = the separation distance (cm);

(C) Or using Table 1 and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in Table 1 to apply, R must be at least λ/2π, where λ is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of λ/4 or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

TABLE 1 TO §1.1307(b)(3)(i)(C)—SINGLE RF SOURCES SUBJECT TO ROUTINE ENVIRONMENTAL EVALUATION

RF Source frequency (MHz)	Threshold ERP (watts)
0.3-1.34	1,920 R ² .
1.34-30	3,450 R ² /f ² .
30-300	3.83 R ² .
300-1,500	0.0128 R ² f.
1,500-100,000	19.2R ² .

(ii) For multiple RF sources: Multiple RF sources are exempt if:

(A) The available maximum time-averaged power of each source is no more than 1 mW and there is a separation distance of two centimeters between any portion of a radiating structure operating and the nearest portion of any other radiating structure in the same device, except if the sum of multiple sources is less than 1 mW during the time-averaging period, in which case they may be treated as a single source (separation is not required). This exemption may not be used in conjunction with other exemption criteria other than those in paragraph (b)(3)(i)(A) of this section. Medical implant devices may only use this exemption and that in paragraph (b)(3)(i)(A).

(B) in the case of fixed RF sources operating in the same time-averaging period, or of multiple mobile or portable RF sources within a device operating in the same time averaging period, if the sum of the fractional contributions to the applicable thresholds is less than or equal to 1 as indicated in the following equation.

$$\sum_{i=1}^a \frac{P_i}{P_{th,i}} + \sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^c \frac{Evaluated_k}{Exposure Limit_k} \leq 1$$

Where:

a = number of fixed, mobile, or portable RF sources claiming exemption using paragraph (b)(3)(i)(B) of this section for Pth, including existing exempt transmitters and those being added.

b = number of fixed, mobile, or portable RF sources claiming exemption using paragraph (b)(3)(i)(C) of this section for Threshold ERP, including existing exempt transmitters and those being added.

c = number of existing fixed, mobile, or portable RF sources with known evaluation for the specified minimum distance including existing evaluated transmitters.

Pi = the available maximum time-averaged power or the ERP, whichever is greater, for fixed, mobile, or portable RF source i at a distance between 0.5 cm and 40 cm (inclusive).

Pth,i = the exemption threshold power (Pth) according to paragraph (b)(3)(i)(B) of this section for fixed, mobile, or portable RF source i.

ERPj = the ERP of fixed, mobile, or portable RF source j.

ERPth,j = exemption threshold ERP for fixed, mobile, or portable RF source j, at a distance of at least $\lambda/2\pi$ according to the applicable formula of paragraph (b)(3)(i)(C) of this section.

Evaluated,k = the maximum reported SAR or MPE of fixed, mobile, or portable RF source k either in the device or at the transmitter site from an existing evaluation at the location of exposure.

Exposure Limit,k = either the general population/uncontrolled maximum permissible exposure (MPE) or specific absorption rate (SAR) limit for each fixed, mobile, or portable RF source k, as applicable from §1.1310 of this chapter.

The available maximum time-averaged power or effective radiated power (ERP), can be calculated using the following formula to assess compliance with the Exemption Limits:

$$P_{E.I.R.P.} = P_T + G_T - L_C$$

Where:

P_T = transmitter time-averaged output power (including Duty Cycle and tune-up tolerance, if applicable)

G_T = gain of the transmitting antenna

L_C = signal attenuation in the connecting cable between the transmitter and the antenna if applicable

$$P_{E.R.P.} = P_{E.I.R.P.} - 2.15 \text{ dB}$$