B04684 RF Exposure Exhibit

BT BLE (and simultaneous MPE Calculation)

| | Model: | B04684 | Test Number | : 230821B | | | | |
|--|---|-------------------------------|--|------------------------------------|----------------------|--------------------|---------------------|---------------|
| MPE Calculator | RF Exposure uses EIRP for a | calculation. EIRP is based of | n TX power added to the antenna g | gain in dBi. | | | | |
| | dBi = dB gain compared to a | n isotropic radiator. | | | | | | |
| | S = power density in mW/cn | n^2 | | | | | | |
| | Trar | smitter Output power (dBm | 4.23 | | | | | |
| | Tra | nsmitter Output power (mW | 2.65 | | | | | |
| Output Power for % | duty Cycle operation (Watts) | 100 | 0.0026 | | Antenna Gain (dBi) | 2.2 | | |
| | Output Power for 100% | duty Cycle operation (Watts | 0.003 | Ante | nna Gain (Numeric) | 1.66 | | |
| T- E (AUL-) | 2142 | Coloria (Wette | 0.003 | JD J . 0 17 JD | | 2.17 | | |
| Tx Frequency (MHz) | 2442 | Calculation power (Watts | 0.003 | dBd + 2.1 / = dB1 | dB1 to dBd | 2.17 | | |
| | C | alculation power (EIRP mW | 4.40 | | Antenna Gain (dBd) | 0.03 | | |
| Cable Loss (dB) | 0.0 | Adjusted Power (dBm | 4.23 | Antenr | na minus cable (dBi) | 2.20 | | |
| | | | | | | | | |
| | Calculated ERP (mw) | 2.667 | | EIRP = Pe | o(dBM) + Gain (dB) | | | |
| | Calculated EIRP (mw) | 4.395 | | R | adiated (EIRP) dBm | 6.430 | | |
| | ```` | | | | ERP = EIRP - 2.17 | iB | | |
| | | EIRP | | F | Radiated (ERP) dBm | 4.260 | | |
| | Power density (S) mW/c | $m^2 =$ | | | , í | | | |
| | | 4 p r^2 | | | | | | |
| | r (am) FIBB (mW) | | | | | | | |
| | I (CIII) EIRP (IIIW) | | | | | | | |
| | | | | | | | | |
| | Occupational Limit | FCC radio f | requency radiation exposure limits | per 1.1310 | | | | |
| | 5 mW/am ² | Erequency (MHz) | Occupational Limit (mW/2) | Dublic Limit (mW/m ²) | | | | |
| | o mw/cm | 20,200 | occupational Limit (mw/cm) | r ublic Limit (mw/cm) | | | | |
| 51 | U W/m ² | 30-300 | 1 | 0.2 | | | | |
| | General Public Limit | 300-1,500 | ť/300 | t/1500 | | | | |
| | 1 mW/cm ² | 1,500-10,000 | 5 | 1 | | | | |
| 10 | 0 W/m ² | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | Occupational Limit | | | | | | | |
| $0.6455 f^{0.}$ | .5 W/m ² | IC radio fre | uency radiation exposure limits pe | er RSS-102 | | | | |
| 20,7 | 7 | Eraguanay (MHz) | | Dublin Linuit (MU/m ²) | | | | |
| 39. | / w/m | Trequency (MTIZ) | Occupational Limit (w/m) | Public Limit (w/m) | | | | |
| | General Public Limit | 100-6,000 | $0.6455f^{3.3}$ | | | | | |
| $0.02619f^{0.683}$ | ³⁴ W/m ² | W/m ² 6,000-15,000 | | | | | | |
| 5.4 | 4 W/m ² | 48-300 | | 1.291 | | | | |
| | | 300-6.000 | | $0.02619f^{0.6834}$ | | | | |
| | | 6,000-15,000 | 50 | 10 | | | | |
| | | 0,000 10,000 | 50 | 10 | | | | |
| f = Transmit Frequeenv (MHz | 0 | | | f (MHz) - | 2442 | MHz | | |
| P - Power Input to Antenna (| (mW) | | | P(mW) = | 2.112 | mW | | |
| Pute and (newstern of constitution) | | | | $T_{T}(mw) =$ | 2.03 | 0/ | | |
| Dury cycle (percentage of operation) | | | | % = | 100 | % | | |
| P _A = Adjusted Power due to Duty cycle or Cable Loss (mW) | | | | $P_A(mW) =$ | 2.65 mW | | | |
| G _N = Numeric Gain of the Antenna | | | | GN (numeric) = | 1.66 numeric | | | |
| $S_{20} =$ Power Density of device | at 20cm (mW/m ²) | | $S_{20} = (P_A G_N) / (4\pi R_{20})^2$ | $S_{20} (mW/m^2) =$ | 0.0009 | mW/cm ² | | |
| S_{20} = Power Density of device at 20cm (W/m ²) | | | $S_{20} = (P_A G_N) / (4\pi R_{20})^2$ | $S_{20} (W/m^2) =$ | 0.0087 | W/m ² | | |
| Sr = Power Density Limit (W/ | /m ²) | | 20 . 11 10 . 20 | S_{r} (W/m ²)- | 5 412 | W/m^2 | | |
| | B. F.C. Elson G. C. F. | | D - d | D_ (11/11)= | 0.02 | •••/111 | | |
| $R_{\rm C} = Minimum$ distance to the | e Radiating Element for Compliance (| cm) | $R_C = V(P_A G_N / 4\pi s_i)$ | $R_{C}(cm) =$ | 0.8 | 0.8 cm | | |
| $S_C =$ Power Density of the dev | vice at the Compliance Distance R _C (V | V/m ²) | $S_{C}=(P_{A}G_{N})/(4\pi R_{C})^{2}$ | $S_{C}(W/m^{2}) =$ | 5.41 | W/m ² | | |
| R ₂₀ = 20cm | | | | R20= | 20 | cm | | |
| | | | | | | | | |
| | For Complaince with Canada | General Population Limits, | User Manual must indicate a minir | num seperation distance of | 0.8 | cm | | |
| | Or in Meters for | or Complaince with Canada | General Population Limits, a minir | num seperation distance of | 0.01 | Meters | | |
| | | | | | | | | |
| Summary: Standalone M | IPE Calculations and Summary | / | | | | | | |
| Band (MHZ) | Tx Duty Cycle (%) | Tx Frequeny (MHz) | Power Total (mW) | Antenna Gain (numeric) | $S_L (W/m^2)$ | $S_{20} (W/m^2)$ | R _C (cm) | $S_C (W/m^2)$ |
| 2402-2480 BLE | 100 | 2442 | 2.65 | 1.66 | 5.412 | 0.0087 | 0.8 | 5.41 |
| 2402-2480 WiFi | 100 | 2412 | 36.90 | 1.66 | 5.366 | 0.1218 | 0.8 | 5.41 |
| 5150-5250 | 100 | 5180 | 20.89 | 2.17 | 9.047 | 0.0902 | 2.0 | 9.05 |
| 5725-5850 | 100 | 5745 | 39.81 | 2.17 | 9.710 | 0.1719 | 2.7 | 9.71 |
| | | | | | | | | |
| | | | | | | | | |
| | Simlutaneous MPE Calculati | on | 1 | | | | | |
| | BIE | 576 | Note: The only possible | simultaneous transmit a | ombinations in th | is design are: | | |
| BLE 5./G | | | Note: The only possible simultaneous transmit combinations in this design are: | | | | | |
| Ix Frequeny (MHz) | Tx Frequeny (MHz) 2442 5745 | | 45 BLE and 5.1G WiFi | | | | | |
| $S_{20} (W/m^2)$ | 0.0087 | 0.1719 | BLE and 5.7G WiFi * | • | | | | |
| $S_L (W/m^2)$ | 5.412 | 9.710 | * Worst case | | | | | |
| Power Ratio (Sr / S20) | 0.002 | 0.01 | 3 | | | | | |
| Sum of Power | r Ratios at 20cm (Tv1 ± Tv2) | 0.010 | BLE and 5 7G WiEi cor | nhination still below th | e limit of 1 for an | m of MPF Pot | ios | |
| Juli of Fowel | $\frac{1}{1} \operatorname{radios} at 200 \operatorname{H} (1X1 + 1X2)$ | 0.015 | DEE and 5.70 will con | nomation still DelOW II | ic mint of 1 101 Su | in or wir E Kal | 103 | |
| R | equirement – 2 of MPE Rat | $10 \ge 1$ | | | | | | |

Rogers Labs, a division of The Compatibility Center LLCGarmin International, Inc.7915 Nieman RoadFCC ID: IPH-B4684IC: 1792A-B4684PMN: B04684Lenexa, KS 66214Test: 230821BSN's: 3444728450, 3448895433, 3459126162, 3459126224Phone/Fax: (913) 660-0666Test to: 47CFR 15C, RSS-Gen RSS-247Date: April 26, 2024Revision 1File: B04684 RF ExposurePage 1 of 4

2.4GHz

| | Model: B04684 | | | Test Number: | | | | | |
|--|--|--|---|--|------------------------------------|--------------------------|-------------------------------------|---------------------|-------------------|
| MPE Calculator | RF Exposure uses EIRP for calculation. EIRP is based or | | | n TX power added to the antenna gain in dBi. | | | | | |
| | dBi = dB gain compared to a | an isotropic radiator | r. | | | | | | |
| | $S = power density in mW/cm^2$ | | | 15 (7) | | | | | |
| | Tra | nsmitter Output pov | wer (dBm) | 15.67 | | | | | |
| Output Power for % | duty Cycle operation (Watts) | insmitter Output po | 100 wer | 0.0369 | | Antenna Gain (dBi) | 2.2 | | |
| Output I ower for 70 | Output Power for 100% | duty Cycle operation | on (Watts) | 0.037 | Ante | enna Gain (Numeric) | 1.66 | | |
| Ty Frequency (MHz) | 2412 | Calculation now | ver (Watts) | 0.037 | dBd + 2.17 - dBi | dBi to dBd | 2 17 | | |
| TX Frequency (WITE) | 2412 | | | 0.037 | ubu + 2.17 – ubi | | 2.17 | | |
| Cabla Loss (dP) | | Calculation power (EIRP | | 61.24 | Antenna minus cable (dBi) | | 0.03 | | |
| Cable Loss (ub) | 0.0 | Aujusteu 100 | wei (ubiii) | Antenna n | | lia lillilus cable (ubi) | 2.20 | | |
| | Calculated ERP (mw) | 37.154 | | | EIRP = P | o(dBM) + Gain (dB) | | | |
| | Calculated EIRP (mw) | 61.235 | | | Radiated (EIRP) dBm 17.5 | | | | |
| | | EIDD | | | ERP = EIRP - 2.17 | | lB | | |
| | Power density (S) mW/ | $cm^2 = \frac{EIRP}{4 p r^2}$ | | | Radiated (ERP) dBm 15. | | 15.700 | | |
| | i ower density (b) muy | | | | | | | | |
| | | | | | | | | | |
| | r (cm) EIRP (mW) | | | | | | | | |
| | | | | | | | | | |
| | Occupational Limit | FC | CC radio fr | equency radiation exposure limits | per 1.1310 | | | | |
| : | 5 mW/cm ² | Frequency (M | /Hz) | Occupational Limit (mW/cm ²) | Public Limit (mW/cm ²) | | | | |
| 50 | 0 W/m ² | 30-300 | 00 | 1 | 0.2 | | | | |
| | General Public Limit | 300-1,500 | | f/300 | f/1500 | | | | |
| : | mW/cm ² 1,500-10,000 | | 00 | 5 | 1 | | | | |
| 10 | 0 W/m ² | | | | | | | | |
| | | | | | | | | | |
| | 0 | | | | | | | | |
| و دروه وا | 5 Uccupational Limit | 10 | andia fara | | - DEE 102 | | | | |
| 0.6455f** | W/m | E a a | (III) | uency radiation exposure minis pe | D 11: V 1: 000 2 | | | | |
| 39.3 | General Public Limit 100 | | (IHZ) | Occupational Limit (W/m ⁻) | Public Limit (W/m ⁻) | | | | |
| o oo cao 40.683 | General Public Limit | 100-6,00 | 0 | 0.6455f | | | | | |
| 0.02619f ^{0.005} | W/m ² | 6,000-15,0 | 00 | 50 | 1 201 | | | | |
| 5.4 | 4 W/m ² | 48-300 | 0 | | 1.291 | | | | |
| | | 300-6,000 | | 50 | 0.02619f | | | | |
| | | 0,000-13,0 | 00 | 50 | 10 | | | | |
| f = Transmit Frequecny (MHz |) | | | | f (MHz) = | 2412 | MHz | | |
| P _T = Power Input to Antenna (| mW) | | | | $P_{T}(mW) =$ | 36.90 | mW | | |
| Duty cycle (percentage of oper | ration) | | | | % = | 100 | % | | |
| P _A = Adjusted Power due to D | uty cycle or Cable Loss (mW) | | | | $P_A(mW) =$ | 36.90 | mW | | |
| G _N = Numeric Gain of the Ant | lenna | | | | GN (numeric) = | 1.66 | numeric | | |
| S_{20} = Power Density of device at 20cm (mW/m ²) | | $S_{20} = (P_A G_N) / (4\pi R_{20})^2$ | $S_{20} (mW/m^2) =$ | 0.0122 | 0.0122 mW/cm ² | | | | |
| S20 = Power Density of device | S_{20} = Power Density of device at 20cm (W/m ²) | | $S_{20} = (P_A G_N) / (4\pi R_{20})^2$ | $S_{20} (W/m^2) =$ | 0.1218 | W/m ² | | | |
| $S_L =$ Power Density Limit (W/m ²) | | | | $S_{L} (W/m^2) =$ | 5.366 | W/m ² | | | |
| $R_{\rm C}$ = Minimum distance to the Radiating Element for Compliance (cm) | | | | $R_C = \sqrt{(P_A G_N / 4\pi s_i)}$ | $R_{C}(cm) =$ | 3.0 | cm | | |
| S_C = Power Density of the device at the Compliance Distance R_C (W/m ²) | | | $S_{C} = (P_{A}G_{N})/(4\pi R_{C})^{2}$ | $S_{C}(W/m^{2}) =$ | 5.37 W/m ² | | | | |
| R ₂₀ = 20cm | | | | R20= 2 | | cm | | | |
| | | | | | | | | | |
| | For Complaince with Canada General Population Limits, U | | | Jser Manual must indicate a minimum seperation distance of | | 3.0 | cm Matara | | |
| Or in Meters for Complaince with Canada C | | seneral Population Limits, a minin | ium seperation distance of | 0.03 | wieters | | | | |
| Summary: Standalone M | PE Calculations and Summar | у | | | | | | | |
| Band (MHZ) | Tx Duty Cycle (%) | Tx Frequeny (| MHz) | Power Total (mW) | Antenna Gain (numeric) | $S_L(W/m^2)$ | S ₂₀ (W/m ²) | R _C (cm) | $S_{C} (W/m^{2})$ |
| 2402-2480 | 100 | 2412 | | 36.90 | 1.66 | 5.366 | 0.1218 | 3.0 | 5.37 |
| | | | | | | | | | |

Rogers Labs, a division of The Compatibility Center LLCGarmin International, Inc.7915 Nieman RoadFCC ID: IPH-B4684IC: 1792A-B4684PMN: B04684Lenexa, KS 66214Test: 230821BSN's: 3444728450, 344895433, 3459126162, 3459126224Phone/Fax: (913) 660-0666Test to: 47CFR 15C, RSS-Gen RSS-247Date: April 26, 2024Revision 1File: B04684 RF ExposurePage 2 of 4

5.1 GHz

| MPE Calculation RF Dynamic user DBP (Processing) DB | Model: P04684 | | | | Test Number | | | | | |
|---|--|---|------------------------------|--|--|------------------------------------|--------------------------------------|-------------------------------------|-----------------------|------------------|
| In It Candidie If it:= dip is accurate tau in sector (it) or it cando the analyze in tau. If it:= dip is accurate tau in sector (it) or it cando to it cando the analyze in tau. If it:= dip is accurate tau in sector (it) or it cando to it cando to it cando to it. S = poer division Ward? Transitie to pays power (Ward) 13.0 Output Poer fin V day Cycle operation (Ward) 0.00 0.029 Accurate Cain (Bible) 2.8 Output Poer fin V day Cycle operation (Ward) 0.00 0.029 Accurate Cain (Bible) 2.8 Calculation power (BRP wW) 29.83 Accurate Cain (Bible) 2.8 Calculation power (BRP wW) 29.83 Accurate Cain (Numerco) 1.91 Calculated ERP (ww) 24.15 ERP = PueMA(N) - Gain (BN) 1.53 Calculated ERP (ww) 24.15 ERP = PueMA(N) - Gain (BN) 1.53 Calculated ERP (ww) 24.15 Reduced (ERP, HBM) 1.83.0 Wun ⁻¹ Wun ⁻² IPP - Cando (RC) (FM) 1.33 Wun ⁻² IPP - PueMA(N) - Gain (BN) 1.53 Calculated ERP (WW) 24.15 Calculate (RP) (HB) 1.54 Wun ⁻² IPP - PueMA(N) - Gain (BN) 1.54 Wun ⁻² IPP - PueMA - 1.131 IPP - PueMA - 1.131 | MPE Calculator | Model: B04684 | | | n TV power added to the antenna g | | | | | |
| S = poer dusty in Wart? Figure 13.0 Figure 2000 Figure 200 | | dBi – dB gain compared to a | an isotropic radiate | ns Daseu O | ii 1X power added to the antenna g | | | | | |
| Comparison (CBm) 13.30 Instantic Optic previor (Wb) 13.30 Dispar Neuron Call (B) 2.8 Outpue Power for Me day Cycle opension (Wato) 0.02 Autenna Cain (Mb) 2.8 Outpue Power for Me day Cycle opension (Wato) 0.02 Autenna Cain (Mb) 2.8 Th Progenery (Mb) 0.93 (Salutation preve (FBP eW) 9.85 Autenna Cain (Mb) 0.63 Cable Laws (B) 0.0 Agenera Cain (Mb) 0.63 1.91 1.91 Cable Laws (B) 0.0 Agenera Cain (Mb) 0.63 1.91 1.91 Cable Laws (B) 0.0 Agenera Cain (Mb) Calculate DEP (Ma) 1.91 1.91 Cable Laws (B) 0.00 Agenera Cain (Mb) Calculate DEP (Mb) Calcu | | S = nower density in mW/cr | n^2 | л. | | | | | | |
| Unscale Tangenite Open power (Wats) 10.89 Antenas Gain (Man / State) 2.17 Output Power far (Mar Cycle opension (Wats) 0.02 Antenas Gain (Man / State) 2.17 Th (requescy (MBL) 3.18 Calculation power (RPR w) 9.83 Antenas Gain (Man / State) 2.17 Calculation power (RPR w) 9.83 Antenas Gain (Man / State) 2.30 2.30 Calculation (SPR (RPR w)) 9.84 Antenas Gain (Man / State) 2.30 2.30 Calculated ERP (mov) 25.15 ERP = hvd(RM) - Gain (Man / State) 1.55 2.30 2.30 Calculated ERP (mov) 25.15 ERP = hvd(RM) - Gain (Man / State) 1.55 2.30 2.30 Frequency (MBz) Comparison of Linit Frequency (MBz) Comparison of Linit 1.55 2.30< | | 5 – power density in inw/en | n 2 nsmitter Output po | wer (dBm) | 13.20 | | | | | |
| Oorpe Power for Varty (-) expendent within your program (-) 100 0.023 Autensa Gain (Numeric) 1.51 Th Frequency (MHz) 0.82 Autensa Gain (Numeric) 1.51 1.51 Th Frequency (MHz) Calculation power (BRP RW) 9.931 Autensa Gain (Numeric) 1.91 Calculate ERP (mv) 24.155 Calculate ERP (mv) 29.811 Autensa Gain (Numeric) 1.91 Calculate ERP (mv) 24.155 Calculate ERP (mv) 29.811 ERP - PERP-217.68 Reading (ERP) 40m 1.55 Calculate ERP (mv) 29.811 FCC radio frequency matching regard (ERP) 40m 1.83 1.83 1.83 S mV(m) ² Frequency (MHz) Comparison (ERP) 40m 1.81 1.83 1.83 S mV(m) ² Frequency (MHz) Comparison (ERP) 40m 1.81 1.83 1.83 S mV(m) ² Frequency (MHz) Comparison (ERP) 40m 1.90 | | Tra | nsmitter Output pe | ower (mW | 20.89 | | | | | |
| Opport With is Opport Prover for 100% day Cycle operation (Waths) 0.02 Autema Gain (Manucris) 1.91 Th Frequency (MHz) 5180 Calculation power (Waths) 0.02 disk1 - 2.17 - dis disk1 - 2.17 disk1 - 2.17 Calculation power (BRP mW) 9.9.91 Autema Gain (Manucris) 0.83 disk1 - 2.17 | Output Power for % | duty Cycle operation (Watts) | iisiinttei Output p | 100 | 0.0209 | | Antenna Gain (dBi) | 2.8 | | |
| Operation Oracle Out Other and Source and Source Out The Propensity (MHz) 5180 Calculation power (MBz) 0.002 dBls - 2.17 - 8. Calculation power (EBP nW) 39.81 Antenna mion calle (MB) 2.08 Calculation power (EBP nW) 39.81 Antenna mion calle (MB) 2.08 Calculation power (EBP nW) 31.30 Antenna mion calle (MB) 2.08 Calculation power (EBP nW) 31.30 Antenna mion calle (MB) 1.01 Calculation power (EBP nW) BBP BBP BBP 1.01 Calculation Power (MB) Ferrare Rained (EBP) (BBN 1.0500 Win** EPCC radio frequency radiation exposure limits per 1.1310 BBP 1.0330 1.01 Win** Win** Occupational Limit (WWm*) Pablic Limit (mWm*) 1.02 Cencer Pablic Limit Tecepacey (ME) Occupational Limit (WWm*) Pablic Limit (mWm*) 1.01 0.045100 S0 1.00 S 1.01 1.02 General Pablic Limit Condo frequency radiation exposure limits per 825-102 1. | Output I ower for 70 | Output Power for 100% | duty Cycle operat | ion (Watts) | 0.02 | Ante | nna Gain (Numeric) | 1.91 | | |
| Cateloring power (ERP PW) 39.81 American Gain (dBd) 0.65 Cateloring power (ERP PW) 13.20 Anterna mins calle (dB) 2.00 Cateloring power (ERP PW) 13.20 Anterna mins calle (dB) 2.00 Cateloring (RP) with 31.55 ERP = Pac(dM) + fain (dB) 1.55 Cateloring (RP) with with 35.11 ERP = Pac(dM) + fain (dB) 1.55 Power dassity (S) mW(with 4 p r ²) Figure (RP) 1.600 FEP = ERP - 2.17 dB With 30.00 Comparison Limit 0 (MW(with 4 p r ²) Figure (RW) 1.530 1.600 S With 3 300.10 Power dassity (S) mW(with 3 000 1.02 1.02 General Public Limit 0.00 5 1 0.02 1.02 With 3 1.500-10.000 5 1 1.02 With 3 Frequency (MHz) Comparison Limit (WW) Polic Limit (WW) 1.02 With 3 Frequency (MHz) Comparison Limit (WW) 1.02 1.02 With 3 Frequency (MHz) Comparison Limit (WW) Polic Limit (WW) 1.02 With 3 Gen | Tx Frequency (MHz) | 5180 | Calcualtion pov | wer (Watts) | 0.02 | dBd + 2.17 = dBi | dBi to dBd | 2.17 | | |
| Cable Loss (dB) 0.0 Adjusted Power (dBn) 13.30 Autername train Net (dBn) 2.80 Calculated EBP (mw) 24.155 EIRP = Po(dBM) - Gain (dBn) 1.55 EAcland CBP (mB) 24.15 EIRP = Po(dBM) - Gain (dBn) 1.55 Calculated EBP (mw) 24.155 EIRP = Po(dBM) - Gain (dBn) 1.55 EAcland CBP (dBn) 1.50 Power density (S) ==Hight = IIPP IERP = Fo(dBM) IIIIN For exposure finits per 1.1510 IIIIN IIIIN S mW(m² IIIIN Foreexy (MBL) Occupational Limit (mW(m²)) Public Limit (mW(m²)) IIIIN IIIIIN IIIIIN IIIIIIIN IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII | | C | alculation power (| FIRP mW | 39.81 | | Antenna Gain (dBd) | 0.63 | | |
| Calcular Link (m) Cost Attenue (clin (most)) 1.91 Calculated ERP (mw) 24.155 ERP = Po(28M) in Chansely 1.91 Calculated ERP (mw) 24.155 ERP = Po(28M) in Chansely 1.00 Power density (S) = #Uerr 4 p.*2 Rained (ERP) dBm 13.80 Power density (S) = #Uerr 4 p.*2 Rained (ERP) dBm 13.80 r(m) ERP Property malation exposure limits per L1310 FRP = FRP = 20.151 S mV(m ²) Dool 10 Occupational Limit Occupational Limit Occupational Limit W(m ²) Dool 10 Occupational Limit Occupational Limit Occupational Limit Occupational Limit W(m ²) Ereado frequency radiation exposure limits per L1310 Frequency OHE0 Central Mole (Limit Disol 0.000 S Occupational Limit 000.1500 CS00 I I I Vm ² Ereado frequency radiation exposure limits per RSS-102 I I I Occupational Limit Gool 5.000 S0 I I I Objordenergenergenergenities Frequency OHE0 | Cable Loss (dB) | 00 | Calculation power (EIRI III) | | 13 20 | Δ ntenn | a minus cable (dBi) | 2.80 | | |
| Calculated ERP (my) 20.815 FIRP - PortBMD 1.55 Calculated ERP (my) 20.811 Reference (ERP) (BR) 16.00 Power density (S) =#U(m) EIPP Reference (ERP) (BR) 13.830 Occupational Limit FEC endition (ERP) (BR) 13.830 13.830 Occupational Limit FEC endition frequency inflation exposure limits per 1.1310 13.830 13.830 S mW(m ²) 30.300 1 0.2 1.00 1.00 General Public Limit 300-1500 F300 6.000 1 1.00 1.00 0.65557 ⁴ Wm ² 1.500-10000 5 1 1.00 | Cable Loss (ub) | 0.0 | / ujusteu i e | wei (ubiii) | 15.20 | Ante | ana Gain (Numeric) | 1.91 | | |
| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$ | | Calculated ERP (mw) | 24 155 | | | EIRP = Pc | (dBM) + Gain (dB) | 1.55 | | |
| $\begin{array}{ c c c c c c c c c c c c c c c c c c c$ | | Calculated EIRP (mw) | 39.811 | | | R | diated (EIRP) dBm | 16 000 | | |
| ERP Radiated (ERP) dBn 13.830 Power density (S) myters ² 4 p.r 2 1 13.830 1 r (m) ERP (mW) 1 1 1 1 Occupational Limit FCC radio frequency inflation exposure limits per 1.1310 1 1 1 S Win ² 30.300 1 0.22 1 1 General Public Limit 1.500-10,000 S 1 1 1 1 Win ² 1.500-10,000 S 1 | | | 55.011 | | | | ERP = EIRP - 2.17 | 1B | | |
| $ \begin{array}{c c c c c c c c c c c c c c c c c c c $ | | | EIRP | | | R | adiated (ERP) dBm | 13.830 | | |
| 4 p r2 r (m) EIR (mW) r (m) EIR (mW) r (m) EIR (mW) 5 0ccupational Limit mV(m ²) Frequency (MHz) Occupational Limit (mW(m ²)) Public Limit (mW(m ²)) 5 0 wm ² 303:00 1 0.2 6 0ccupational Limit mV(m ²) 303:00 1 0.2 6 0 wm ² 303:00 1 0.2 6 mV(m ²) 303:00 1 0.2 9 W(m ²) 1.500-10.000 5 1 0 0ccupational Limit mV(m ²) Frequency (MHz) 0ccupational Limit (W(m ³) Public Limit (W(m ³)) 0 0c455f ⁴⁵ W(m ²) Erequency (MHz) 0ccupational Limit (W(m ³)) Public Limit (W(m ³)) 0 0c455f ⁴⁵ W(m ²) 60:00-15:000 50 1 0 0ccupational Limit 0ccupational Limit (W(m ³)) Public Limit (W(m ³)) 100 1 0 0c455f ⁴⁵ W(m ²) 6:00:01:5:000 50 10 1 1 100:05:000 50 <td< td=""><td></td><td>Power density (S) mW/</td><td>cm² =</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<> | | Power density (S) mW/ | cm ² = | | | | | | | |
| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$ | | | 4 p r^2 | | | | | | | |
| Occupational Limit mW:m ² FCC radio frequency adiation exposure limits per 1.1310 Image: constraint of the second secon | | r (cm) FIRP (mW) | | | | | | | | |
| Occupational Linit mW\m² FCC and frequency milition exposure limits per 1.1310 mW\m² Interms (mV\m²) Preprint 30:300 | | | | | | | | | | |
| Occupational Limit FFC cndor Frequency miltion exposure limits per L1310 Image: miltion exposure limits per L1310 I | | | | | | | | | | |
| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$ | | Occupational Limit | F | CC radio f | requency radiation exposure limits | per 1.1310 | | | | |
| 50 W/m ² 30.300 1 0.2 300-1,500 (700 (1500 (1500 (1500 10 W/m ² 300-1,500 5 1 1 10 W/m ² 100 S 1 1 0.6455f ⁴⁵ W/m ² Frequency (MHz) Occupational Limit 1 1 0.6455f ⁴⁵ W/m ² Frequency (MHz) Occupational Limit (W/m ²) Public Limit (W/m ²) 1 1 0.025197 ⁴⁶³⁴ W/m ² 6.000-15.000 S0 1.291 1 1 1 0.025197 ⁴⁶³⁴ W/m ² 6.000-15.000 S0 1.291 1 1 1 1 0.025197 ⁴⁶³⁴ W/m ² 6.000-15.000 S0 10 1 | 5 | 5 mW/cm ² | Frequency (| MHz) | Occupational Limit (mW/cm ²) | Public Limit (mW/cm ²) | | | | |
| General Public Limit 3001,500 (7300 (7500 1 mW(m ²) 1,500-10,000 5 1 10 W/m ² Occupational Limit 0.64557 ^{db} W/m ² 0.64557 ^{db} W/m ² Cradio frequency radiation exposure limits per RSS-102 0.64557 ^{db} W/m ² Frequency (MHz) Occupational Limit (W/m ²) Public Limit (W/m ²) 0.026107 ^{dbML} W/m ² 6.000-15.000 50 1291 1 m/m ² 6.000-15.000 50 100 10 w/m ² 6.000-15.000 50 100 < | 5(| W/m^2 | 30-300 |) | 1 | 0.2 | | | | |
| Occuration Joint Caning Joint Caning </td <td></td> <td>General Public Limit</td> <td colspan="2">300.1.500</td> <td>f/300</td> <td>f/1500</td> <td></td> <td></td> <td></td> <td></td> | | General Public Limit | 300.1.500 | | f/300 | f/1500 | | | | |
| $\begin{array}{ c c c c c c } \hline \begin{tabular}{ c c c c c c c } \hline \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$ | 1 | mW/cm ² 1 500-10 000 | | 5 | 1 | | | | | |
| $\begin{array}{ c c c c c c c c c c c c c c c c c c c$ | 10 | | 1,500-10, | 000 | 5 | 1 | | | | |
| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$ | 10 | W/m ⁻ | | | | | | | | |
| Occupational LimitImage: Comparison of the sequency radiation exposure limits per RSS-102Image: Comparison of the sequency radiation exposure limits per RSS-102Image: Comparison of the sequency radiation exposure limits per RSS-102Image: Comparison of the sequency radiation exposure limits per RSS-102Image: Comparison of the sequency radiation exposure limits per RSS-102Image: Comparison of the sequency radiation exposure limits per RSS-102Image: Comparison of the sequency radiation exposure limits per RSS-102Image: Comparison of the sequency radiation exposure limits per RSS-102Image: Comparison of the sequency radiation exposure limits per RSS-102Image: Comparison of the sequency radiation exposure limits per RSS-102Image: Comparison of the sequency radiation exposure limits per RSS-102Image: Comparison of the sequency radiation exposure limits per RSS-102Image: Comparison of the sequency radiation exposure limits per RSS-102Image: Comparison of the sequency radiation exposure limits per RSS-102Image: Comparison of the sequency radiation exposure limits per RSS-102Image: Comparison of the sequency radiation exposure limits per RSS-102Image: Comparison of the sequency radiation exposure limits per RSS-102Image: Comparison of the sequency radiation exposure limits per RSS-102Image: Comparison of the sequency radiation exposure limits per RSS-102Image: Comparison of the sequence radiation exposure limits per RSS-102Image: Comparison of the sequence radiation exposure limits per RSS-102Image: Comparison of the sequence radiation exposure rad | | | | | | | | | | |
| Occupational Limit 0.6455/ ³⁵ Wm ² IC radio frequency radiation exposure limits per RSS-102 Image: Colspan="2">Image: Colspan="2" Colspan="2">Image: Colspan="2" Cols | | Occurrentional Limit | | | | | | | | |
| U04325/ 57.8 W/m2 It ratio requerely function exposure imits per Ros-10.2 Iteration exposure imits per Ros-10.2 S7.8 W/m2 Frequency (MHz) Occupational Limit (W/m2) Image: Comparison of the comp | 0 6455 0 | | T. | andia fra | | - DSS 102 | | | | |
| S/A W/m ² Prequency (MHz) Occupational Limit (W/m ²) Public Limit (W/m ²) General Public Limit 100-6,000 0.0455 p^{45} Image: Constraint of the constrai | 0.64555 | W/m | Frequency (MUz) | | quency radiation exposure mints pe | r KSS-102 | | | | |
| General Public Limit 100-6,000 0.6455 g/s 0.02619/ ⁶⁴⁸³ W/m ² 6.000-15.000 50 1.291 9.0 W/m ² 48-300 1.291 1.291 100-6000 0.02619/ ⁶⁴⁸³⁴ 6.000-15.000 50 10 f = Transmit Frequescy (MHz) 6.000-15.000 50 10 10 f = Transmit Frequescy (MHz) f (MHz) = 5180 MHz 100 % 10 p = Power Input to Antenna (mV) 0 Pr (mV) = 20.8930 mV 10 Daty cycle (percentage of operation) g = 100 % 20.8930 mV 100 % Ges = Numeric Gain of the Antenna (mV) Spa=Power Density of device at 20cm (mWm ²) Spa=(PAG_N)(4RR_{20}) ² Spa (mVm ²) = 0.1090 mW/cm ² Spa = 100 % | 57.8 | 3 W/m² | Trequency (MHZ) | | Occupational Limit (W/m ²) | Public Limit (W/m ²) | | | | |
| 0.02619/0484 W/m ² 6,000-15,000 50 1.291 6.00 0.02619/04834 9.0 W/m ² 48300 0.02619/04834 0.02619/04834 6.00 0.02619/04834 6,000-15,000 50 10 6.00 50 10 6.00 | | General Public Limit | 100-6,00 | 00 | $0.6455f^{0.5}$ | | | | | |
| 9.0 W/m ² 48-300 1.291 1.291 1.291 300-6,000 0.02619/0834 0.02619/0834 0.02619/0834 0.02619/0834 0.02619/0834 0.02619/0834 0.02619/0834 0.02619/0834 0.02619/0834 0.02619/0834 0.02619/0834 0.02619/0834 0.00000 0.00000 | $0.02619f^{0.6834}$ | W/m ² | 6,000-15, | 000 | 50 | | | | | |
| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$ | 9.0 | W/m ² | 48-300 |) | | 1.291 | | | | |
| f = Transmit Frequeenty (MHz)6,000-15,0005010f = Transmit Frequeenty (MHz)f (MHz) =5180 MHz1P ₁ = Power Input to Antenna (mW)P ₁ (mW) =20,8930 mW100 %Duty cycle (preentage of operation)% =100 %100 %P ₄ = Adjusted Power due to Daty cycle or Cable Loss (mW)P ₄ (mW) =20,8930 mW100 %G _N = Numeric Gain of the AntennaGN (numeric) =2.17 numeric3Syn = Power Density of device at 20cm (mW/m ²)S ₂₀ =(P _A G _N)/(4RR ₂₀) ² S ₂₀ (mW/m ²) =0.0090 mW/cm ² Syn = Power Density of device at 20cm (Wm ²)S ₂₀ =(P _A G _N)/(4RR ₂₀) ² S ₂₀ (mW/m ²) =0.0090 mW/cm ² Syn = Power Density of device at 20cm (Wm ²)S ₂₀ =(P _A G _N)/(4RR ₂₀) ² S ₂₀ (mW/m ²) =0.0090 mW/cm ² S ₁₀ = Power Density of the device at the Compliance (cm)R _c =\sqrt{P _A G _N /4Rs,0R _c (cm) =2.0 cmR _c = Minimum distance to the Raiding Element for Compliance (cm)R _c =\sqrt{P _A G _N /4Rc,0 ² }S _C (W/m ²) =9.047 W/m ² S ₂₀ = Dower Density of the device at the Compliance Distance R _c (W/m ²)S ₂ =(P _A G _N)(4RR _C) ² S _C (W/m ²) =9.047 W/m ² S ₂₀ = Dower Density of the device at the Compliance with Canada General Population Limits, User Manual must indicate a minimum seperation distance of0.02 Meters0.02 MetersSummary: Standalone MPE Calculations and SummaryPower Total (mW)Antenna Gain (numeric)S _L (W/m ²)S ₂₀ (W/m ²)R _c (cm) S _C (W/m ²)Slabel 20.2892.179.0470.0902 | | | 300-6,00 | 00 | | $0.02619 f^{0.6834}$ | | | | |
| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$ | | | 6,000-15, | 000 | 50 | 10 | | | | |
| It = Transmit Prequenty (MHz)f (MHz)5180 MHz P_{r} = Dover Input to Antenna (mW) P_{r} (mW) $Q_{0.890}$ mW $Q_{0.890}$ mWDuty cycle (percentage of operation) $\Re = 100 \%$ $\Re = 100 \%$ $R_{r} = A_{0.00} \%$ $R_{r} = A_{0.00} ref due to Duty cycle or Cable Loss (mW)P_{A} (mW) =20.890 mWQ_{0.890} mWG_{N} - Numeric Gain of the AntenaGN (numeric) =2.17 numericS_{m} = Power Density of device at 20cm (mW/m2)S_{20} = (P_{A}G_{N})/(4\pi R_{20})^2S_{20} (mW/m^2)0.0090 mW/cm^2S_{m} = Power Density of device at 20cm (W/m2)S_{20} = (P_{A}G_{N})/(4\pi R_{20})^2S_{20} (mW/m^2)0.0090 mW/cm^2S_{m} = Power Density finit (W/m2)S_{20} = (P_{A}G_{N})/(4\pi R_{20})^2S_{20} (W/m^2)0.0090 mW/cm^2S_{L} = Power Density finit (W/m2)S_{10} = (P_{A}G_{N})/(4\pi R_{20})^2S_{20} (W/m^2)0.0090 mW/cm^2S_{L} = Power Density of the device at the Compliance Distance (cm)R_{C} = \langle (P_{A}G_{N})/(4\pi R_{C})^2S_{C} (W/m^2)9.047 W/m^2S_{C} = Power Density of the device at the Compliance Distance R_{C} (W/m3)S_{C} = (P_{A}G_{N})/(4\pi R_{C})^2S_{C} (W/m^2)9.047 W/m^2S_{0} = 20cmR_{0} = 0R_{0} = 0R_{0} = 0R_{0} = 0R_{0} = 0S_{0} = 0 cmR_{0} = 0R_{0} = 0R_{0} = 0R_{0} = 0S_{0} = 0 cmR_{0} = 0R_{0} = 0R_{0} = 0R_{0} = 0S_{0} = 0 cmR_{0} = 0R_{0} = 0R_{0} = 0S_{0} = 0 cm<$ | | | | | | | | | | |
| Pr - Power Input to Antenna (mW)Pr - (mW) =20.8930 mWDuty cycle (precentage of operation) $\ensuremed bias (mW)$ $\ensuremed bias (mW)$ $\ensuremed bias (mW)$ $P_A = Adjusted Power due to Duty cycle or Cable Loss (mW)\ensuremed bias (mW)\ensuremed bias (mW)\ensuremed bias (mW)Q_A = Numeric Gain of the Antenna\ensuremed bias (mW/m^2)\ensuremed bias (mW/m^2)\ensuremed bias (mW/m^2)\ensuremed bias (mW/m^2)S_{20} = (P_A G_N)/(4\pi R_{20})^2\ensuremed bias (mW/m^2)\ensuremed bias (mW/m^2)\ensuremed bias (mW/m^2)\ensuremed bias (mW/m^2)S_{20} = Power Density of device at 20cm (M/m^2)\ensuremed bias (mm/m^2)\ensuremed bias (mm/m^2)\ensuremed bias (mm/m^2)\ensuremed bias (mm/m^2)S_{20} = Power Density of device at 20cm (M/m^2)\ensuremed bias (mm/m^2)\ensuremed bias (mm/m^2)\ensuremed bias (mm/m^2)\ensuremed bias (mm/m^2)S_{20} = Power Density Limit (W/m^2)\ensuremed bias (mm/m^2)\ensuremed bias (mm/m^2)\ensuremed bias (mm/m^2)\ensuremed bias (mm/m^2)\ensuremed bias (mm/m^2)S_c = Power Density of the device at the Compliance Compliance (cm)\ensuremed bias (mm/m^2)\ensuremed bias (mm/m^2)\ensuremed bias (mm/m^2)\ensuremed bias (mm/m^2)\ensuremed bias (mm/m^2)S_c = Power Density of the device at the Compliance with Canada General Population Limits, User Manual must indicate a minimum seperation distance of the d$ | f = Transmit Frequecny (MHz) | | | | | f (MHz) = | 5180 | MHz | | |
| Duty cycle (percentage of operation)9100 % $P_A = Adjusted Power due to Duty cycle or Cable Loss (mW)P_A (mW) =20.89 mWG_N = Numeric Gain of the AntennaGN (numeric) =2.17 numericS_{20} = Power Density of device at 20cm (mW/m²)S_{20} = (P_A G_N)/(4\pi R_{20})^2S_{20} (mW/m²) =0.0090 mW/cm²S_{30} = Power Density of device at 20cm (mW/m²)S_{20} = (P_A G_N)/(4\pi R_{20})^2S_{20} (mW/m²) =0.00902 W/m²S_{12} = Power Density of device at 20cm (W/m²)S_{20} = (P_A G_N)/(4\pi R_{20})^2S_{20} (W/m²) =0.00902 W/m²S_L = Power Density Limit (W/m²)S_{20} = (P_A G_N)/(4\pi R_{20})^2S_{20} (W/m²) =0.0470 W/m²R_c = Mininum distance to the Radiating Element for Compliance (cm)R_c = \sqrt{P_A (s_M 4\pi s_0)}R_c (cm) =2.0 cmS_c = Power Density of the device at the Compliance Distance R_c (W/m²)S_c = (P_A G_N)/(4\pi R_c)^2S_c (W/m²) =9.047 W/m²R_{20} = 20cmR_{20} = 20cmR_{20} = 20cmR_{20} = 20cmR_{20} = 20cmWere Toompliance with Canada General Population Limits, User Manual must indicate a minimum seperation distance of 0.02 MetersSummary: Standalone MPE Calculations and SummaryWere Total (mW)Antenna Gain (numeric)S_L (W/m²)S_{20} (W/m²)R_c (cm)Summary: Standalone MPE Calculations and SummaryBand (MHZ)Tx Duty Cycle (%)Tx Frequeny (MHz)Power Total (mW)Antenna Gain (numeric)S_L (W/m²)S_{20} (W/m²)R_c (cm)S150-525$ | P_T = Power Input to Antenna (i | mW) | | | | $P_{T}(mW) =$ | 20.8930 | mW | | |
| $P_A = Adjusted Power due to Duty cycle or Cable Loss (mW)P_A (mW)20.89 \text{ mW}G_N = Numeric Gain of the AntennaGN (numeric) =2.17 \text{ numeric}S_{20} = Power Density of device at 20cm (mW/m2)S_{20} = (P_A G_N)/(4\pi R_{20})^2S_{20} (mW/m^2) =0.0090 \text{ mW/cm}^2S_{20} = Power Density of device at 20cm (W/m2)S_{20} = (P_A G_N)/(4\pi R_{20})^2S_{20} (mW/m^2) =0.0902 \text{ W/m}^2S_{L} = Power Density of device at 20cm (W/m2)S_{20} = (P_A G_N)/(4\pi R_{20})^2S_{20} (W/m^2) =0.0902 \text{ W/m}^2S_L = Power Density Limit (W/m2)S_L = Power Density for the device at the Compliance (cm)R_C = \sqrt{(P_A G_N)/(4\pi R_C)^2}R_C (cm) =2.0 \text{ cm}R_c = Minimum distance to the Radiating Element for Compliance Distance R_C (W/m^2)S_C = (P_A G_N)/(4\pi R_C)^2S_C (W/m^2) =9.047 \text{ W/m}^2R_{20} = 20cmR_C = \sqrt{(P_A G_N)/(4\pi R_C)^2}S_C (W/m^2) =9.047 \text{ W/m}^2M/m^2R_{20} = 20cmR_C = \sqrt{(P_A G_N)/(4\pi R_C)^2}S_C (W/m^2) =9.047 \text{ W/m}^2M/m^2R_{20} = 20cmR_C = \sqrt{(P_A G_N)/(4\pi R_C)^2}S_C (W/m^2) =9.047 \text{ W/m}^2M/m^2R_{20} = 20cmR_C = \sqrt{(P_A G_N)/(4\pi R_C)^2}S_C (W/m^2) =0.02 \text{ Meters}M/m^2R_{20} = 20cmR_C = \sqrt{(P_A G_N)/(4\pi R_C)^2}S_C (W/m^2) =S_C (W/m^2)S_C (W/m^2)R_{20} = 20cmR_C = \sqrt{(P_A G_N)/(4\pi R_C)^2}S_C (W/m^2) =S_C (W/m^2) =S_C (W/m^2)S_{20} = M/m^2S_{20} (W/m^2) =S_C (W/m^2) =$ | Duty cycle (percentage of oper- | ation) | | | | % = | 100 | % | | |
| $G_N = Numeric Gain of the AntennaGN (numeric) =2.17 numeric2.15 numericS_{20} = Power Density of device at 20cm (mW/m²)S_{20}=(P_AG_N)/(4\pi R_{20})^2S_{20} (mW/m²) =0.0090 \text{ mW/cm²}0.0090 \text{ mW/cm²}S_{20} = Power Density of device at 20cm (W/m²)S_{20}=(P_AG_N)/(4\pi R_{20})^2S_{20} (W/m²) =0.00902 \text{ W/m²}0.00902 \text{ W/m²}S_L = Power Density of device at 20cm (W/m²)S_{20}=(P_AG_N)/(4\pi R_{20})^2S_{20} (W/m²) =0.00902 \text{ W/m²}0.00902 \text{ W/m²}S_L = Power Density Limit (W/m²)R_C = \sqrt{(P_AG_N/4\pi S_L)}R_C (cm) =2.0 \text{ cm}0.00902 \text{ cm}R_c = Nininum distance to the Radiating Element for Compliance (cm)R_c = \sqrt{(P_AG_N/4\pi S_L)^2}S_C (W/m²) =9.047 \text{ W/m²}0.0090 \text{ cm}S_c = Power Density of the device at the Compliance Distance R_c (W/m²)S_c = (P_AG_N)/(4\pi R_c)^2S_C (W/m²) =9.047 \text{ W/m²}0.000 \text{ cm}R_{20} = 20cmR_{20} = 20 \text{ cm}R_{20} = 20cmOr in Meters for Compliance with Canada General Population Limits, User Manual must indicate a minimum seperation distance of0.002 \text{ Meters}0.002 \text{ Meters}Summary: Standalone MPE Calculations and SummaryS_{20} (W/m²)Power Total (mW)Antenna Gain (numeric)S_L (W/m²)S_{20} (W/m²)R_c (cm) S_c (W/m²)S_{150-5250}100518020.892.179.0470.09022.0 9.05$ | $P_A = Adjusted$ Power due to Duty cycle or Cable Loss (mW) | | | | $P_A(mW) =$ | 20.89 | mW | | | |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | G _N = Numeric Gain of the Antenna | | | | GN (numeric) = | 2.17 | numeric | | | |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | S_{20} = Power Density of device at 20cm (mW/m ²) | | | $S_{20} = (P_A G_N) / (4\pi R_{20})^2$ | $S_{20} (mW/m^2) =$ | 0.0090 mW/cm ² | | | | |
| $S_L = Power Density Limit (W/m^2)$ $S_L (W/m^2) =$ 9.047 W/m^2 M/m^2 $R_c = Minimum distance to the Radiating Element for Compliance (cm) R_c = \sqrt{(P_A G_A/4\pi_S)} R_C (cm) = 2.0 cm M/m^2 S_c = Power Density of the device at the Compliance Distance R_c (W/m^2) S_c = (P_A G_N)/(4\pi R_c)^2 S_C (W/m^2) = 9.047 W/m^2 M/m^2 M/m^2 R_{20} = 20cm R_{20} = 20 cm M/m^2 $ | S_{20} = Power Density of device at 20cm (W/m ²) | | | $S_{20}=(P_AG_N)/(4\pi R_{20})^2$ | $S_{20} (W/m^2) =$ | 0.0902 W/m ² | | | | |
| R_c = Minimum distance to the Radiating Element for Compliance (cm) $R_c = \sqrt{(P_A G_N/4\pi s_c)}$ $R_C (cm) =$ 2.0 cm cm <td colspan="3">$S_L =$ Power Density Limit (W/m²)</td> <td></td> <td>$S_L (W/m^2) =$</td> <td>9.047</td> <td>W/m²</td> <td></td> <td></td> | $S_L =$ Power Density Limit (W/m ²) | | | | $S_L (W/m^2) =$ | 9.047 | W/m ² | | | |
| S _C = Power Density of the device at the Compliance Distance R _c (W/m ²) S _C =(P _A G _N)/(4\pi R _C) ² S _C (W/m ²) = 9.047 W/m ² Image: Compliance W/m ² R ₂₀ = 20cm R20 R20 R20 20 cm Image: Compliance W/m ² < | R_{C} = Minimum distance to the Radiating Element for Compliance (cm) | | | $R_C {=} \sqrt{(P_A G_N {4\pi s_i})}$ | $R_{C}(cm) =$ | 2.0 | cm | | | |
| R20 = 20cm R20 = 20 cm R20 = 20 cm For Compliance with Canada General Population Limits, User Manual must indicate a minimum seperation distance of Or in Meters for Compliance with Canada General Population Limits, a minimum seperation distance of 0.02 Meters 2.0 cm 100 Summary: Standalone MPE Calculations and Summary Image: Calculation | S_{C} = Power Density of the device at the Compliance Distance R_{C} (W/m ²) | | | $S_{C} = (P_A G_N)/(4\pi R_C)^2$ | $S_{C}(W/m^{2}) =$ | 9.047 W/m^2 | | | | |
| Summary: Standalone MPE Calculations and Summary Manual must indicate a minimum seperation distance of 0.02 Meters 2.0 cm Summary: Standalone MPE Calculations and Summary Mathema Gain (numeric) Summary: Standalone MPE Calculations and Summary Mathema Gain (numeric) Summary: Standalone MPE Calculations and Summary Mathema Gain (numeric) Summary: Standalone MPE Calculations and Summary Mathema Gain (numeric) Summary: Standalone MPE Calculations and Summary Mathema Gain (numeric) Summary: Standalone MPE Calculations and Summary Mathema Gain (numeric) Summary: Standalone MPE Calculations and Summary Mathema Gain (numeric) Summary: Standalone MPE Calculations and Summary Mathema Gain (numeric) Summary: Standalone MPE Calculations and Summary Mathema Gain (numeric) Summary: Standalone MPE Calculations and Summary Mathema Gain (numeric) Summary: Standalone MPE Calculations and Summary Mathema Gain (numeric) Summary: Standalone MPE Calculations and Summary Mathema Gain (numeric) Summary: Standalone MPE Calculations and Summary Mathema Gain (numeric) Summary: Standalone MPE Calculations and Summary Mathema Gain (numeric) Summary: Standalone MPE Calculations and Summary Mathema Gain (numeric) Summary: Standalone MPE Calculations and Summary Mathema Gain (numeric) Summary: Standalone MPE Calculations and Summary Mathema Gain (numeric) Summary: Standalone MPE Calculations and Summary Mathema Gain (numeric) | R ₂₀ = 20cm | | | | R20= | 20 | cm | | | |
| For Compliance with Canada General Population Limits, User Manual must indicate a minimum seperation distance of Or in Meters for Complaince with Canada General Population Limits, a minimum seperation distance of 0.02 Meters 2.0 cm 4 Summary: Standalone MPE Calculations and Summary Image: Calculation and Summa | | | | | | | | | | |
| Or in Meters for Complaince with Canada General Population Limits, a minimum seperation distance of 0.02 Meters 0.02 Meters Summary: Standalone MPE Calculations and Summary Image: Standalone MPE Calculations and Sum | | For Compliance with Canada | General Population | on Limits, U | User Manual must indicate a minin | num seperation distance of | 2.0 | cm | | |
| Summary: Standalone MPE Calculations and Summary Tx Duty Cycle (%) Tx Frequeny (MHz) Power Total (mW) Antenna Gain (numeric) S _L (W/m ²) S ₂₀ (W/m ²) R _C (cm) S _C (W/m ²) 5150-5250 100 5180 20.89 2.17 9.047 0.0902 2.0 9.05 | Or in Meters for Complaince with Canada G | | | | General Population Limits, a minin | num seperation distance of | a seperation distance of 0.02 Meters | | | |
| Summary standarone wire Calculations and SummaryTx Frequeny (MHz)Power Total (mW)Antenna Gain (numeric) S_L (W/m²) S_{20} (W/m²) R_C (cm) S_C (W/m²)5150-5250100518020.892.179.0470.09022.09.05 | Cummony Standalan M | DE Coloulations and Sur | | | | | | | | |
| Band (MHZ) Ix Duty Cycle (%) Ix Frequeny (MHZ) Power Total (mW) Antenna Gain (numeric) S_{L} (W/m ⁻) S_{20} (W/m ⁻) R_{C} (cm) S_{C} (W/m ⁻) 5150-5250 100 5180 20.89 2.17 9.047 0.0902 2.0 9.05 | Duminary: Standalone MI | T During Content of the Calculations and Summar | у — Г | | Deres T + 1 (MD | | 0 MU 2 | 0 011 2 | D () | 0 (111) 2. |
| 5150-5250 100 5180 20.89 2.17 9.047 0.0902 2.0 9.05 | Dand (MHZ) | 1x Duty Cycle (%) | 1 x Frequeny | (MHZ) | Power Total (mW) | Antenna Gain (numeric) | S _L (W/m ⁻) | S ₂₀ (W/m ⁻) | $\kappa_{\rm C}$ (cm) | $S_{C}(W/m^{2})$ |
| | 5150-5250 | 5150-5250 100 5180 | | 20.89 | 2.17 | 9.047 | 0.0902 | 2.0 | 9.05 | |

Rogers Labs, a division of The Compatibility Center LLCGarmin International, Inc.7915 Nieman RoadFCC ID: IPH-B4684IC: 1792A-B4684PMN: B04684Lenexa, KS 66214Test: 230821BSN's: 3444728450, 3448895433, 3459126162, 3459126224Phone/Fax: (913) 660-0666Test to: 47CFR 15C, RSS-Gen RSS-247Date: April 26, 2024Revision 1File: B04684 RF ExposurePage 3 of 4

5.7 GHz

| | Model: B04684 | | | Test Number: | | | | | |
|--|--|------------------------------------|---|---|------------------------------------|----------------------|------------------|-------------|---------------|
| MPE Calculator | RF Exposure uses EIRP for calculation. EIRP is based on | | | on TX power added to the antenna gain in dBi. | | | | | |
| | dBi = dB gain compared to a | in isotropic radiato | r. | | | | | | |
| | S = power density in mW/cn | n^2 | | | | | | | |
| | Trar | smitter Output por | wer (dBm) | 16.00 | | | | | |
| | Tra | nsmitter Output po | ower (mW) | 39.81 | | | • • | | |
| Output Power for % | duty Cycle operation (Watts) | 1. 6.1 | 100 | 0.0398 | | Antenna Gain (dBi) | 2.8 | | |
| | Output Power for 100% | duty Cycle operation | on (Watts) | 0.04 | Ante | enna Gain (Numeric) | 1.91 | | |
| Tx Frequency (MHz) | 5745 | Calcualtion pow | ver (Watts) | 0.04 | dBd + 2.17 = dBi | i dBi to dBd | 2.17 | | |
| | C | alculation power (H | EIRP mW) | 75.86 | | Antenna Gain (dBd) | 0.63 | | |
| Cable Loss (dB) | 0.0 Adjusted I | | wer (dBm) | 16.00 | Anten | na minus cable (dBi) | 2.80 | | |
| | | 16.006 | | | Ante | enna Gain (Numeric) | 1.91 | | |
| | Calculated ERP (mw) | 46.026 | | | EIRF = FO(dBM) + Gall(dB) | | 1.55 | | |
| | Calculated EIRP (IIIW) | /5.858 | | | K | EDD - EIDD 2 17 dP | | | |
| | | EIRP | | | ī | ERP = EIRP - 2.17 | 16 630 | | |
| | Power density (S) mW/d | cm ² = | | | 1 | Caulateu (EKF) ubili | 10.050 | | |
| | | 4 p r^2 | | | | | | | |
| | r (am) EIDD (mW) | _ | | | | | | | |
| | I (CIII) EIKF (IIIW) | | | | | | | | |
| | | | | | | | | | |
| | Occupational Limit | FC | CC radio fi | equency radiation exposure limits | per 1.1310 | | | | |
| 5 | 5 mW/cm ² | Frequency (M | MHz) | Occupational Limit (mW/cm ²) | Public Limit (mW/cm ²) | | | | |
| 50 | W/m ² | 30-300 | | 1 | 0.2 | | | | |
| | General Public Limit | 300-1,500 | | f/300 | f/1500 | | | | |
| 1 | mW/cm ² 1,500-10,00 | | 000 | 5 | 1 | | | | |
| 10 | W/m ² | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | Occupational Limit | | | | | | | | |
| 0.6455 <i>f</i> ^{0.5} 60.9 | 5 W/m ² | m ² IC radio free | | uency radiation exposure limits pe | r RSS-102 | | | | |
| | W/m ² | W/m ² Frequency (MHz) | | Occupational Limit (W/m ²) | Public Limit (W/m ²) | | | | |
| | General Public Limit | 100-6,00 | 0 | $0.6455 f^{0.5}$ | , í | | | | |
| $0.02619 t^{0.6834}$ | W/m ² | 6.000-15.0 | 000 | 50 | | | | | |
| 97 | W/m^2 | 48-300 | | | 1 291 | | | | |
| | •••/III | 200 € 00 | 0 | | 0.02610.40.6834 | | | | |
| | | 6 000 15 0 | 000 | 50 | 10 | | | | |
| | | 0,000-13,0 | 100 | 50 | 10 | | | | |
| f = Transmit Frequecny (MHz) |) | | | | f (MHz) = | 5745 | MHz | | |
| P _T = Power Input to Antenna (1 | mW) | | | | $P_{\pi}(mW) =$ | 39 8107 | mW | | |
| Duty cycle (percentage of oper | ation) | | | | % = | 100 | % | | |
| $P_{A} = Adjusted Power due to Di$ | uty cycle or Cable Loss (mW) | | | | P. (mW) = | 30.81 | mW | | |
| $G_N = Numeric Gain of the Anti-$ | enna | | | | GN (numeric) = | 2 17 | numeric | | |
| S ₂₀ = Power Density of device | $S_{N} = Power Density of device at 20cm (mW/m2)$ | | $S_{22} = (P_1 G_{22})/(4\pi R_{22})^2$ | $S_{cr} (mW/m^2) =$ | 0.0172 | mW/cm ² | | | |
| S ₂₀ = 1 over Density of device | $S_{20} = Power Density of device at 20cm (m/w/m)$ | | | $S_{20} - (\Gamma_A G_N)/(4\pi R_{20})^2$ | $S_{20}(mw/m) = 0$ | 0.0172 | | | |
| $S_{20} =$ rower bensity of device at 20cm (W/m) | | $S_{20} = (r_A G_N)/(4\pi K_{20})$ | $S_{20}(W/M) =$ | 0.1/19 | w/m | | | | |
| $S_L =$ Power Density Limit (W/m ²) | | | 1 | $S_L (W/m^2)=$ | 9.710 | W/m² | | | |
| R_{C} = Minimum distance to the Radiating Element for Compliance (cm) | | | $R_C = \sqrt{(P_A G_N / 4\pi s_i)}$ | $R_{C}(cm) =$ | 2.7 | cm | | | |
| S_C = Power Density of the device at the Compliance Distance R_C (W/m ²) | | | $S_{C} = (P_{A}G_{N})/(4\pi R_{C})^{2}$ | $S_{C}(W/m^{2}) =$ | 9.710 | W/m ² | | | |
| R ₂₀ = 20cm | | | | R20= | 20 | cm | | | |
| | For Compliance with Court | Conorol Doculation | n Lineita T | Icor Monuel must in directe a minim | um conception distance of | 0.7 | am | | |
| | Or in Meters for Compliance with Canada General Population Limits, U | | | General Population Limits, a minin | num seperation distance of | 0.03 | Meters | | |
| | | | | · · · | | | | | |
| Summary: Standalone M | PE Calculations and Summar | у | | | | | | | |
| Band (MHZ) | Tx Duty Cycle (%) | Tx Frequeny (| (MHz) | Power Total (mW) | Antenna Gain (numeric) | $S_L (W/m^2)$ | $S_{20} (W/m^2)$ | $R_{C}(cm)$ | $S_C (W/m^2)$ |
| 5725-5850 | 100 | 5745 | | 39.81 | 2.17 | 9.710 | 0.1719 | 2.7 | 9.71 |
| | | | | | | | | | |

Rogers Labs, a division of The Compatibility Center LLCGarmin International, Inc.7915 Nieman RoadFCC ID: IPH-B4684IC: 1792A-B4684PMN: B04684Lenexa, KS 66214Test: 230821BSN's: 3444728450, 3448895433, 3459126162, 3459126224Phone/Fax: (913) 660-0666Test to: 47CFR 15C, RSS-Gen RSS-247Date: April 26, 2024Revision 1File: B04684 RF ExposurePage 4 of 4