

EUT Specification

| | |
|-----------------------------------|--|
| EUT | Porsche Classic radio navigation system |
| FCC ID | 2AD6S-PCRN2 |
| Frequency (Operating) band | <input type="checkbox"/> WLAN: 2.412GHz ~ 2.462GHz <input type="checkbox"/> WLAN: 5.18GHz ~ 5.32GHz / 5.50GHz ~ 5.70GHz <input type="checkbox"/> WLAN: 5.745GHz ~ 5825GHz <input checked="" type="checkbox"/> Others |
| Device category | <input type="checkbox"/> Portable (<20cm separation) <input checked="" type="checkbox"/> Mobile (>20cm separation) <input type="checkbox"/> Others ____ |
| Exposure classification | <input type="checkbox"/> Occupational/Controlled exposure (S = 5mW/cm ²) <input checked="" type="checkbox"/> General Population/Uncontrolled exposure (S=1mW/cm ²) |
| Antenna diversity | <input checked="" type="checkbox"/> Single antenna <input type="checkbox"/> Multiple antennas <input type="checkbox"/> Tx diversity <input type="checkbox"/> Rx diversity <input type="checkbox"/> Tx/Rx diversity |
| Max. output power | 2.40dBm(0.001738W) |
| Antenna gain (Max) | 0 dBi |
| Evaluation applied | <input checked="" type="checkbox"/> MPE Evaluation <input type="checkbox"/> SAR Evaluation |

Applicable Standard:

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J. Section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2m Normally can be maintained between the user and the device.

Limits for Maximum Permissible Exposure(MPE)

| Frequency Range(MHz) | Electric Field Strength(V/m) | Magnetic Field Strength(A/m) | Power Density(mW/cm ²) | Average Time |
|--|------------------------------|------------------------------|------------------------------------|--------------|
| (A) Limits for Occupational/Control Exposures | | | | |
| 0.3-3.0 | 614 | 1.63 | (100)* | 6 |
| 3.0-30 | 1842/f | 4.89/f | (900/f)* | 6 |
| 30-300 | 61.4 | 0.163 | 1.0 | 6 |
| 300-1500 | -- | -- | F/300 | 6 |
| 1500-100000 | -- | -- | 5 | 6 |
| (B) Limits for General Population/Uncontrol Exposures | | | | |
| 0.3-1.34 | 614 | 1.63 | (100)* | 30 |
| 1.34-30 | 824/f | 2.19/f | (180/f)* | 30 |
| 30-300 | 27.5 | 0.073 | 0.2 | 30 |
| 300-1500 | -- | -- | F/1500 | 30 |
| 1500-100000 | -- | -- | 1 | 30 |

Friis transmission formula: $P_d = (P_{out} * G) / (4 * \pi * R^2)$

Where

P_d = Power density in mW/cm², P_{out} =output power to antenna in Mw

G = gain of antenna in linear scale, π =3.1416

R = distance between observation point and center of the radiator in cm

P_d the limit of MPE, 1mW/cm². If we know the maximum gain of the antenna and total power input to the antenna, through the calculation, we will know the distance where the MPE limit is reached.

Measurement Result

| Channel Frequency (MHz) | Measurement Peak Output Power(dBm) | | |
|-------------------------|------------------------------------|-----------|-------|
| | GFSK | Π/4-DQPSK | 8DPSK |
| 2402 | -2.77 | -0.32 | 0.36 |
| 2441 | -0.86 | 1.52 | 2.15 |
| 2480 | -0.59 | 1.79 | 2.40 |

| Channel Frequency (MHz) | Tune up tolerance (dBm) | Max tune up conducted power(dBm) | Output Peak power (mW) | Ant. Gain (dBi) | Ant. Gain (numeric) | Power density at 20cm (mW/cm ²) | Power density Limits (mW/cm ²) |
|-------------------------|-------------------------|----------------------------------|------------------------|-----------------|---------------------|---|--|
| 2402 | -3±1 | -2 | 0.63 | 0 | 1 | 0.000126 | 1 |
| 2441 | -1±1 | 0 | 1.00 | 0 | 1 | 0.000199 | 1 |
| 2480 | -1±1 | 0 | 1.00 | 0 | 1 | 0.000199 | 1 |
| 2402 | 0±1 | 1 | 1.26 | 0 | 1 | 0.000250 | 1 |
| 2441 | 2±1 | 3 | 2.00 | 0 | 1 | 0.000397 | 1 |
| 2480 | 2±1 | 3 | 2.00 | 0 | 1 | 0.000397 | 1 |
| 2402 | 0±1 | 1 | 1.26 | 0 | 1 | 0.000250 | 1 |
| 2441 | 2±1 | 3 | 2.00 | 0 | 1 | 0.000397 | 1 |
| 2480 | 2±1 | 3 | 2.00 | 0 | 1 | 0.000397 | 1 |

Signature



Sam Lv

Manager

Date: 2015-02-05