



| Ref Leve | 20.00 dBm | Offset 1 | LO.77 dB 👄 | RBW 100 k | Hz | | | | |
|------------|----------------------|--------------------------------|----------------------------|---------------------|----------------------------|----------------------------|------------------------|-------------------|--------------------------|
| Att | 20 dE | SWT | 30.1 ms 👄 | VBW 300 k | Hz Mode | Auto Swee | D | | |
| 1Pk View | 10 | | | | | | | | |
| | | | | | N | 11[1] | | 57 | -57.89 dBn |
| 10 dBm | | | | | | | | | |
| 0 dBm | | | | | | | | | |
| -10 dBm | | | | | | | | | |
| -20 dBm | D1 -15.230 | dBm | | | | | | | |
| -30 dBm | | | | | | | | | |
| -40 dBm | | | | | | | | | |
| -50 dBm | | | | | MI | | | | |
| -60 dBm | TRANSPORT OF THE | - Anthe Loopathing | THE TRAVISION AND P | and with a put of p | name in the second | | uther and the state | allas addisor | |
| 70 dBm- | entipatènnes failus. | riphicerisional actions in the | Allenne antinet e du plate | n flembrudthide | unde planten ag kontraljan | A Line 2 grand of Low Line | ala bahana ana ana ana | a contrained alo- | A Mail Manufacture and A |
| Start 30.0 | MHz | I | | 3000 | 1 pts | | | Sto | 00 1.0 GHz |











Fig.51 Conducted Spurious Emission (CH0, Center Frequency), LE Coded S=8



Fig.52 Conducted Spurious Emission (CH0, 30MHz -1GHz), LE Coded S=8





Fig.53 Conducted Spurious Emission (CH0, 1GHz-26.5GHz), LE Coded S=8



Fig.54 Conducted Spurious Emission (CH19, Center Frequency), LE Coded S=8





| Ref Leve | el 20.00 dBm | Offset | 10.59 dB 👄 | RBW 100 k | Hz | | | | |
|------------|----------------------------------------------------------------------------------------------------------------|------------------------|------------------------------|-----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------------|----------------------------------------------------------------------------------------------------------------|--------------------------|
| Att | 20 dB | SWT | 30.1 ms 👄 | VBW 300 k | Hz Mode | Auto Swee | р | | |
| 1Pk View | 10 | | | | | | | | |
| | | | | | M | 1[1] | | 72 | -57.62 dBm 4.9660 MHz |
| 10 dBm | | | | | | | | | |
| 0 dBm | - | | | | | | | | |
| -10 dBm | | | | | | | | | |
| -20 dBm | D1 -15.400 | dBm | - | | | | | | |
| -30 dBm | | | | | | | | | |
| -40 dBm— | | | | | | | | | |
| -50 dBm | | | | | | | M1 | | |
| -60 dBm | | all work must yet a | and an entry of the | and the space of the second | and the states of the states o | an manadan man | Hanna | and the second | alling's minimariants |
| -70 dBm— | and a static | noveli in provingen el | an a fan de la general fan a | and the second secon | Hallon Orden and de | a ago da sera a | and the second second | and a second | a anna fitainn aird |
| Start 30.0 | MHz | | | 3000 | 1 nts | | | St | nn 1.0 GHz |











Fig.57 Conducted Spurious Emission (CH39, Center Frequency), LE Coded S=8



Fig.58 Conducted Spurious Emission (CH39, 30MHz -1GHz), LE Coded S=8





Fig.59 Conducted Spurious Emission (CH39, 1GHz-26.5GHz), LE Coded S=8



Fig.60 Conducted Spurious Emission (CH0, Center Frequency), LE Coded S=2





| Att | 20 dB | SWT | 30.1 ms 👄 | VBW 300 k | Hz Mode | Auto Swee | 5 | | |
|------------|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------|-----------------------------|-------------------------|------------------------------------------|-----------------------|-------------------|----------------------------------------------------------------------------------------------------------------|
| Count 10/ | 10 | | | | | | | | |
| IFK VIEW | | | | | M | 11[1] | | 74 | -58.10 dBn |
| 10 dBm | | | | | | | | | |
| 0 dBm | | | | | | | | | |
| -10 dBm | | | | | | | | | |
| -20 dBm | D1 -14.960 | dBm | | | | | | | |
| -30 dBm— | | | | | | | | - | |
| -40 dBm— | | | | | | | | | |
| -50 dBm— | | | | | | | M1 | | |
| 160 dBm | and treasing participations | ter and the second | and the stands | and a design of the | and all and a second of | a state in the second of the | Launderhand | and the later of | in a lata luna |
| -70 dBm | (¹ 11) ₁ 011-1010-1010-1010-0 | 1949 and a start and a start and a start a star | alijang ng n | and an all of the second of | New Academic State | i na | an and a start of the | g saladan bahada. | and and a second se |
| Start 30.0 | MHz | | <u> </u> | 3000 | 1 pts | | | Ste | pp 1.0 GHz |

Fig.61 Conducted Spurious Emission (CH0, 30MHz -1GHz), LE Coded S=2



Fig.62 Conducted Spurious Emission (CH0, 1GHz-26.5GHz), LE Coded S=2





Fig.63 Conducted Spurious Emission (CH19, Center Frequency), LE Coded S=2



Fig.64 Conducted Spurious Emission (CH19, 30MHz -1GHz), LE Coded S=2





Fig.65 Conducted Spurious Emission (CH19, 1GHz-26.5GHz), LE Coded S=2









| Ref Leve | 20.00 dBm 20 dB | SWT | 10.77 dB 👄 | NBW 300 L | HZ HZ Mode | Auto Swoe | 20 | | |
|------------|-----------------------|----------------------------|--------------------------------------|---------------------------------------------------------|-------------------------------|-------------------------|-------------------------|------------------------------------------|-------------------------|
| Count 10/: | 10 | J | 50.1 m5 🖶 | 1011 300 1 | anz moue | Auto Swee | sh | | |
| 1Pk View | | | | | | | | | |
| | | | | | M | 1[1] | | 600 | 57.99 dBm |
| 10 dBm | | | - | o | | | - | 02: | 00000 MH2 |
| 0 dBm | | | | | | | × | | |
| -10 dBm | | | | | | | | | |
| -20 dBm | D1 -14.560 | dBm | | | | | 2 | | |
| -30 dBm | | | | | | | | | |
| -40 dBm— | | | | | | | | | |
| -50 dBm | | | | | | 141 | | | |
| -60 dBminn | - | "BUTTING SHOLE | - | and the state | and the property of the state | | hi Diadahati | teres, elleptication | na pir the stude of the |
| -70 dBm | ilistere en districe. | <u>difi panana kapatan</u> | ale pitter dig ting fint, dente y be | a bren en antier en | ana inan' na mananitra n | solution and the second | a state producer of the | an a | |
| Start 30.0 | MHz | | | 3000 | 1 nts | | | Str | n 1.0 GHz |









A.6 Transmitter Spurious Emission - Radiated

Measurement Limit:

| Standard | Limit |
|----------------------------------------|------------------------------|
| FCC 47 CFR Part 15.247, 15.205, 15.209 | 20dB below peak output power |

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

Limit in restricted band:

| Frequency of emission (MHz) | Field strength(µV/m) | Measurement distance(meters) |
|--------------------------------|----------------------|---------------------------------|
| 0.009-0.490 | 2400/F(kHz) | 300 |
| 0.490-1.705 | 24000/F(kHz) | 30 |
| 1.705-30.0 | 30 | 30 |
| 30-88 | 100 | 3 |
| 88-216 | 150 | 3 |
| 216-960 | 200 | 3 |
| Above 960 | 500 | 3 |

Test Condition:

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

| Frequency of emission (MHz) | RBW/VBW | Sweep Time(s) |
|--------------------------------|---------------|---------------|
| 30-1000 | 120kHz/300kHz | 5 |
| 1000-4000 | 1MHz/3MHz | 15 |
| 4000-18000 | 1MHz/3MHz | 40 |
| 18000-26500 | 1MHz/3MHz | 20 |

Note: According to the performance evaluation, the radiated emission margin of EUT is over 20dB in the band from 9kHz to 30MHz.Therefore, the measurement starts from 30MHz to tenth harmonic. The measurement results include the horizontal polarization and vertical polarization measurements.



Measurement Results:

| Mode | Channel | Frequency Range | Test Results | Conclusion |
|-------|-----------------------|---------------------|-----------------------|------------|
| | 0 | 1 GHz ~18 GHz | Fig.69 | Р |
| | 19 | 1 GHz ~18 GHz | Fig.70 | Р |
| | 39 | 1 GHz ~18 GHz | Fig.71 | Р |
| | Restricted Band(CH0) | 2.38 GHz ~ 2.45 GHz | Fig.72 | Р |
| | Restricted Band(CH39) | 2.45 GHz ~ 2.5 GHz | Fig.73 | Р |
| | | 9 kHz ~30 MHz | Fig.74 | Р |
| | All channels | 30 MHz ~1 GHz | Fig.75 | Р |
| | | 18 GHz ~ 26.5 GHz | Fig.76 | Р |
| | 0 | 1 GHz ~18 GHz | Fig.77 | Р |
| | 19 | 1 GHz ~18 GHz | Fig.78 | Р |
| | 39 | 1 GHz ~18 GHz | Fig.79 | Р |
| | Restricted Band(CH0) | 2.38 GHz ~ 2.45 GHz | Fig.80 | Р |
| | Restricted Band(CH39) | 2.45 GHz ~ 2.5 GHz | Fig.81 | Р |
| | | 9 kHz ~30 MHz | Fig.82 | Р |
| | All channels | 30 MHz ~1 GHz | Fig.83 | Р |
| | | 18 GHz ~ 26.5 GHz | GHz ~ 26.5 GHz Fig.84 | |
| | 0 | 1 GHz ~18 GHz | Fig.85 | Р |
| | 19 | 1 GHz ~18 GHz | Fig.86 | Р |
| | 39 | 1 GHz ~18 GHz | Fig.87 | Р |
| LE | Restricted Band(CH0) | 2.38 GHz ~ 2.45 GHz | Fig.88 | Р |
| | Restricted Band(CH39) | 2.45 GHz ~ 2.5 GHz | Fig.89 | Р |
| 3=0 | | 9 kHz ~30 MHz | Fig.90 | Р |
| | All channels | 30 MHz ~1 GHz | Fig.91 | Р |
| | | 18 GHz ~ 26.5 GHz | Fig.92 | Р |
| | 0 | 1 GHz ~18 GHz | Fig.93 | Р |
| | 19 | 1 GHz ~18 GHz | Fig.94 | Р |
| | 39 | 1 GHz ~18 GHz | Fig.95 | Р |
| | Restricted Band(CH0) | 2.38 GHz ~ 2.45 GHz | Fig.96 | Р |
| Coded | Restricted Band(CH39) | 2.45 GHz ~ 2.5 GHz | Fig.97 | Р |
| 3=2 | | 9 kHz ~30 MHz | Fig.98 | Р |
| | All channels | 30 MHz ~1 GHz | Fig.99 | Р |
| | | 18 GHz ~ 26.5 GHz | Fig.100 | Р |



Worst Case Result LE 1M CH19 (1-18GHz)

| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Pol | Corr. (dB/m) |
|--------------------|---------------------|-------------------|----------------|-----|-----------------|
| 4880.400000 | 48.23 | 74.00 | 25.77 | Н | 3.7 |
| 11222.142857 | 47.84 | 74.00 | 26.16 | V | 9.7 |
| 14835.000000 | 51.31 | 74.00 | 22.69 | Н | 12.9 |
| 15860.571429 | 53.57 | 74.00 | 20.43 | V | 14.0 |
| 17059.285714 | 55.12 | 74.00 | 18.88 | V | 18.5 |
| 17919.857143 | 55.41 | 74.00 | 18.59 | Н | 18.9 |

| Frequency (MHz) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Pol | Corr. (dB/m) |
|--------------------|---------------------|-------------------|----------------|-----|-----------------|
| 4880.400000 | 37.31 | 54.00 | 16.69 | Н | 3.7 |
| 11222.142857 | 35.75 | 54.00 | 18.25 | V | 9.7 |
| 14835.000000 | 39.20 | 54.00 | 14.80 | Н | 12.9 |
| 15860.571429 | 40.69 | 54.00 | 13.31 | V | 14.0 |
| 17059.285714 | 42.46 | 54.00 | 11.54 | V | 18.5 |
| 17919.857143 | 43.31 | 54.00 | 10.69 | Н | 18.9 |

LE 2M CH19 (1-18GHz)

| Frequency | MaxPeak | Limit | Margin | Pol | Corr. |
|--------------|----------|----------|--------|-----|--------|
| (MHz) | (dBµV/m) | (dBµV/m) | (dB) | FOI | (dB/m) |
| 4879.500000 | 48.48 | 74.00 | 25.52 | Н | 3.7 |
| 11044.285714 | 49.03 | 74.00 | 24.97 | V | 9.8 |
| 14899.285714 | 51.24 | 74.00 | 22.76 | Н | 13.0 |
| 15894.000000 | 53.16 | 74.00 | 20.84 | Н | 14.0 |
| 16890.000000 | 54.62 | 74.00 | 19.38 | V | 18.0 |
| 17979.857143 | 54.99 | 74.00 | 19.01 | V | 19.1 |

| Frequency | Average | Limit | Margin | Dol | Corr. |
|--------------|----------|----------|--------|-----|--------|
| (MHz) | (dBµV/m) | (dBµV/m) | (dB) | FOI | (dB/m) |
| 4879.500000 | 36.60 | 54.00 | 17.40 | Н | 3.7 |
| 11044.285714 | 36.02 | 54.00 | 17.98 | V | 9.8 |
| 14899.285714 | 39.18 | 54.00 | 14.82 | Н | 13.0 |
| 15894.000000 | 40.37 | 54.00 | 13.63 | Н | 14.0 |
| 16890.000000 | 42.37 | 54.00 | 11.63 | V | 18.0 |
| 17979.857143 | 42.73 | 54.00 | 11.27 | V | 19.1 |



LE Coded S=8 CH19 (1-18GHz)

| Frequency | MaxPeak | Limit | Margin | Pol | Corr. |
|--------------|----------|----------|--------|-----|--------|
| | (ασμν/៣) | (ασμν/៣) | (ab) | | (ab/m) |
| 4879.800000 | 49.18 | 74.00 | 24.82 | Н | 3.7 |
| 5920.200000 | 47.93 | 74.00 | 26.07 | Н | 4.6 |
| 8253.428572 | 45.99 | 74.00 | 28.01 | Н | 5.9 |
| 11135.571429 | 47.99 | 74.00 | 26.01 | Н | 9.7 |
| 15944.142857 | 51.95 | 74.00 | 22.05 | Н | 14.1 |
| 16905.857143 | 55.47 | 74.00 | 18.53 | Н | 18.1 |

| Frequency | Average | Limit | Margin | Pol | Corr. |
|--------------|----------|----------|--------|-----|--------|
| (MHz) | (dBµV/m) | (dBµV/m) | (dB) | FUI | (dB/m) |
| 4879.800000 | 38.26 | 54.00 | 15.74 | Н | 3.7 |
| 5920.200000 | 35.91 | 54.00 | 18.09 | Н | 4.6 |
| 8253.428572 | 34.05 | 54.00 | 19.95 | Н | 5.9 |
| 11135.571429 | 35.72 | 54.00 | 18.28 | Н | 9.7 |
| 15944.142857 | 39.85 | 54.00 | 14.15 | Н | 14.1 |
| 16905.857143 | 42.48 | 54.00 | 11.52 | Н | 18.1 |

LE Coded S=2 CH19 (1-18GHz)

| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Pol | Corr. (dB/m) |
|--------------------|---------------------|-------------------|----------------|-----|-----------------|
| 4879.800000 | 48.30 | 74.00 | 25.70 | Н | 3.7 |
| 11185.285714 | 47.52 | 74.00 | 26.48 | Н | 9.7 |
| 12417.428572 | 48.72 | 74.00 | 25.28 | Н | 11.4 |
| 14895.857143 | 51.83 | 74.00 | 22.17 | Н | 13.0 |
| 15934.714286 | 52.45 | 74.00 | 21.55 | Н | 14.1 |
| 17054.142857 | 55.31 | 74.00 | 18.69 | Н | 18.5 |

| Frequency (MHz) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Pol | Corr. (dB/m) |
|--------------------|---------------------|-------------------|----------------|-----|-----------------|
| 4879.800000 | 38.02 | 54.00 | 15.98 | Н | 3.7 |
| 11185.285714 | 35.66 | 54.00 | 18.34 | Н | 9.7 |
| 12417.428572 | 36.69 | 54.00 | 17.31 | Н | 11.4 |
| 14895.857143 | 39.31 | 54.00 | 14.69 | Н | 13.0 |
| 15934.714286 | 40.01 | 54.00 | 13.99 | Н | 14.1 |
| 17054.142857 | 42.43 | 54.00 | 11.57 | Н | 18.5 |

Note:

A "reference path loss" is established and the A_{Rpl} is the attenuation of "reference path loss", and Antenna Factor, the gain of the preamplifier, the cable loss. P_{Mea} is the field strength recorded from the instrument. The measurement results are obtained as described below:

Result= P_{Mea} +Cable Loss +Antenna Factor-Gain of the preamplifier.

See below for test graphs.

Conclusion: Pass

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Fig.69 Radiated Spurious Emission (GFSK, Ch0, 1 GHz ~18 GHz), LE 1M



Fig.70 Radiated Spurious Emission (GFSK, Ch19, 1 GHz ~18 GHz), LE 1M





Fig.71 Radiated Spurious Emission (GFSK, Ch39, 1 GHz ~18 GHz), LE 1M



Fig.72 Radiated Band Edges (GFSK, Ch0, 2380GHz~2450GHz), LE 1M





Fig.73 Radiated Band Edges (GFSK, Ch39, 2450GHz~2500GHz), LE 1M



Fig.74 Radiated Spurious Emission (All Channels, 9 kHz-30 MHz), LE 1M





Fig.75 Radiated Spurious Emission (All Channels, 30 MHz-1 GHz), LE 1M



Fig.76 Radiated Spurious Emission (All Channels, 18 GHz-26.5 GHz), LE 1M





Fig.77 Radiated Spurious Emission (GFSK, Ch0, 1 GHz ~18 GHz), LE 2M



Fig.78 Radiated Spurious Emission (GFSK, Ch19, 1 GHz ~18 GHz), LE 2M





Fig.79 Radiated Spurious Emission (GFSK, Ch39, 1 GHz ~18 GHz), LE 2M



Fig.80 Radiated Band Edges (GFSK, Ch0, 2380GHz~2450GHz), LE 2M





Fig.81 Radiated Band Edges (GFSK, Ch39, 2450GHz~2500GHz), LE 2M



Fig.82 Radiated Spurious Emission (All Channels, 9 kHz-30 MHz), LE 2M





Fig.83 Radiated Spurious Emission (All Channels, 30 MHz-1 GHz), LE 2M



Fig.84 Radiated Spurious Emission (All Channels, 18 GHz-26.5 GHz), LE 2M





Fig.85 Radiated Spurious Emission (GFSK, Ch0, 1 GHz ~18 GHz), LE Coded S=8



Fig.86 Radiated Spurious Emission (GFSK, Ch19, 1 GHz ~18 GHz), LE Coded S=8





Fig.87 Radiated Spurious Emission (GFSK, Ch39, 1 GHz ~18 GHz), LE Coded S=8



Fig.88 Radiated Band Edges (GFSK, Ch0, 2380GHz~2450GHz), LE Coded S=8





Fig.89 Radiated Band Edges (GFSK, Ch39, 2450GHz~2500GHz), LE Coded S=8



Fig.90 Radiated Spurious Emission (All Channels, 9 kHz-30 MHz), LE Coded S=8





Fig.91 Radiated Spurious Emission (All Channels, 30 MHz-1 GHz), LE Coded S=8



Fig.92 Radiated Spurious Emission (All Channels, 18 GHz-26.5 GHz), LE Coded S=8





Fig.93 Radiated Spurious Emission (GFSK, Ch0, 1 GHz ~18 GHz), LE Coded S=2



Fig.94 Radiated Spurious Emission (GFSK, Ch19, 1 GHz ~18 GHz), LE Coded S=2





Fig.95 Radiated Spurious Emission (GFSK, Ch39, 1 GHz ~18 GHz), LE Coded S=2



Fig.96 Radiated Band Edges (GFSK, Ch0, 2380GHz~2450GHz), LE Coded S=2





Fig.97 Radiated Band Edges (GFSK, Ch39, 2450GHz~2500GHz), LE Coded S=2



Fig.98 Radiated Spurious Emission (All Channels, 9 kHz-30 MHz), LE Coded S=2





Fig.99 Radiated Spurious Emission (All Channels, 30 MHz-1 GHz), LE Coded S=2



Fig.100 Radiated Spurious Emission (All Channels, 18 GHz-26.5 GHz), LE Coded S=2



A.7 AC Power line Conducted Emission

Test Condition:

| Voltage (V) | Frequency (Hz) |
|-------------|----------------|
| 120 | 60 |

Measurement Result and limit:

LE 1M-AE2, AE3

| Frequency range | Quasi-peak | Average-peak | Result (dBμV) | | Conclusion |
|-----------------|--------------|--------------|---------------|---------|------------|
| (MHz) | Limit (dBµV) | Limit (dBμV) | Traffic | ldle | Conclusion |
| 0.15 to 0.5 | 66 to 56 | 56 to 46 | | | |
| 0.5 to 5 | 56 | 46 | Fig.101 | Fig.102 | Р |
| 5 to 30 | 60 | 50 | | | |

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

LE 2M-AE2, AE3

| Frequency range | Quasi-peak | Average-peak | Result (dBμV) | | Conclusion | |
|------------------------------------------------------------------------------------------|--------------|--------------|---------------|---------|------------|--|
| (MHz) | Limit (dBµV) | Limit (dBμV) | Traffic | Idle | Conclusion | |
| 0.15 to 0.5 | 66 to 56 | 56 to 46 | | | | |
| 0.5 to 5 | 56 | 46 | Fig.103 | Fig.104 | Р | |
| 5 to 30 | 60 | 50 | | | | |
| NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 | | | | | | |

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

LE Coded-AE2, AE3

| Frequency range | Quasi-peak | Average-peak | Result (dBμV) | | Conclusion | | |
|------------------------------------------------------------------------------------------|--------------|--------------|---------------|---------|------------|--|--|
| (MHz) | Limit (dBµV) | Limit (dBµV) | Traffic | Idle | Conclusion | | |
| 0.15 to 0.5 | 66 to 56 | 56 to 46 | | | | | |
| 0.5 to 5 | 56 | 46 | Fig.105 | Fig.106 | Р | | |
| 5 to 30 | 60 | 50 | | | | | |
| NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 | | | | | | | |
| MHz to 0.5 MHz. | | | | | | | |

Note: The measurement results include the L1 and N measurements. AE2 was the model with the worst results in the test.

See below for test graphs. Conclusion: Pass





Fig.101 AC Power line Conducted Emission (Traffic), LE 1M

| Frequency | Quasi Peak | PE | Line | Corr. | Margin | Limit |
|-----------|------------|-----|------|-------|--------|--------|
| (IVIHZ) | (αΒμν) | | | (aB) | (aB) | (αθμν) |
| 0.430000 | 42.4 | GND | Ν | 9.7 | 14.9 | 57.3 |
| 0.482000 | 41.2 | GND | Ν | 9.7 | 15.1 | 56.3 |
| 0.538000 | 40.8 | GND | Ν | 9.7 | 15.2 | 56.0 |
| 0.630000 | 41.2 | GND | Ν | 9.6 | 14.8 | 56.0 |
| 0.698000 | 40.1 | GND | Ν | 9.6 | 15.9 | 56.0 |
| 0.750000 | 39.9 | GND | Ν | 9.6 | 16.1 | 56.0 |

Measurement Results: Quasi Peak

| Frequency | Average | DE | Lino | Corr. | Margin | Limit |
|-----------|---------|-----|------|-------|--------|--------|
| (MHz) | (dBµV) | FE | Line | (dB) | (dB) | (dBµV) |
| 0.422000 | 24.0 | GND | Ν | 9.7 | 23.4 | 47.4 |
| 0.482000 | 23.8 | GND | Ν | 9.7 | 22.5 | 46.3 |
| 0.526000 | 23.5 | GND | Ν | 9.7 | 22.5 | 46.0 |
| 0.582000 | 22.1 | GND | Ν | 9.6 | 23.9 | 46.0 |
| 0.638000 | 24.7 | GND | Ν | 9.6 | 21.3 | 46.0 |
| 0.738000 | 21.0 | GND | Ν | 9.6 | 25.0 | 46.0 |





Fig.102 AC Power line Conducted Emission (Idle), LE 1M

| Measurement | Results: | Quasi | Peak |
|-------------|-----------------|-------|------|
| | | | |

| Frequency | Quasi Peak | DE | Lino | Corr. | Margin | Limit |
|-----------|------------|-----|------|-------|--------|--------|
| (MHz) | (dBµV) | FE | Line | (dB) | (dB) | (dBµV) |
| 0.422000 | 42.2 | GND | Ν | 9.7 | 15.2 | 57.4 |
| 0.490000 | 40.0 | GND | Ν | 9.7 | 16.2 | 56.2 |
| 0.526000 | 40.7 | GND | Ν | 9.7 | 15.3 | 56.0 |
| 0.650000 | 41.5 | GND | Ν | 9.6 | 14.5 | 56.0 |
| 0.706000 | 41.1 | GND | Ν | 9.6 | 14.9 | 56.0 |
| 0.734000 | 39.3 | GND | Ν | 9.6 | 16.7 | 56.0 |

| Frequency | Average | PE | Line | Corr. | Margin | Limit |
|-----------|---------|-----|------|-------|--------|--------|
| (MHz) | (dBµV) | | Line | (dB) | (dB) | (dBµV) |
| 0.490000 | 22.2 | GND | N | 9.7 | 24.0 | 46.2 |
| 0.538000 | 22.2 | GND | Ν | 9.7 | 23.8 | 46.0 |
| 0.598000 | 22.4 | GND | N | 9.6 | 23.6 | 46.0 |
| 0.650000 | 24.8 | GND | Ν | 9.6 | 21.2 | 46.0 |
| 0.750000 | 21.4 | GND | Ν | 9.6 | 24.6 | 46.0 |
| 1.310000 | 21.2 | GND | Ν | 9.6 | 24.8 | 46.0 |





Fig.103 AC Power line Conducted Emission (Traffic), LE 2M

| Frequency | Quasi Peak | DE | Lino | Corr. | Margin | Limit |
|-----------|------------|-----|------|-------|--------|--------|
| (MHz) | (dBµV) | FE | Line | (dB) | (dB) | (dBµV) |
| 0.430000 | 42.1 | GND | Ν | 9.7 | 15.2 | 57.3 |
| 0.474000 | 40.0 | GND | Ν | 9.7 | 16.5 | 56.4 |
| 0.538000 | 40.4 | GND | Ν | 9.7 | 15.6 | 56.0 |
| 0.630000 | 40.7 | GND | Ν | 9.6 | 15.3 | 56.0 |
| 0.710000 | 38.2 | GND | Ν | 9.6 | 17.8 | 56.0 |
| 0.758000 | 38.4 | GND | Ν | 9.6 | 17.6 | 56.0 |

Measurement Results: Quasi Peak

| Frequency | Average | DE | Lino | Corr. | Margin | Limit |
|-----------|---------|-----|------|-------|--------|--------|
| (MHz) | (dBµV) | FE | Line | (dB) | (dB) | (dBµV) |
| 0.474000 | 22.0 | GND | Ν | 9.7 | 24.5 | 46.4 |
| 0.534000 | 22.0 | GND | Ν | 9.7 | 24.0 | 46.0 |
| 0.586000 | 22.4 | GND | Ν | 9.6 | 23.6 | 46.0 |
| 0.642000 | 24.5 | GND | Ν | 9.6 | 21.5 | 46.0 |
| 0.742000 | 21.9 | GND | Ν | 9.6 | 24.1 | 46.0 |
| 0.850000 | 21.6 | GND | Ν | 9.6 | 24.4 | 46.0 |





Fig.104 AC Power line Conducted Emission (Idle), LE 2M

| Frequency | Quasi Peak | DE | Lino | Corr. | Margin | Limit |
|-----------|------------|-----|------|-------|--------|--------|
| (MHz) | (dBµV) | FE | Line | (dB) | (dB) | (dBµV) |
| 0.434000 | 42.2 | GND | Ν | 9.7 | 15.0 | 57.2 |
| 0.542000 | 40.9 | GND | Ν | 9.7 | 15.1 | 56.0 |
| 0.654000 | 40.2 | GND | Ν | 9.6 | 15.8 | 56.0 |
| 0.706000 | 41.1 | GND | Ν | 9.6 | 14.9 | 56.0 |
| 0.762000 | 39.4 | GND | Ν | 9.6 | 16.6 | 56.0 |
| 0.814000 | 39.0 | GND | Ν | 9.6 | 17.0 | 56.0 |

Measurement Results: Quasi Peak

| Frequency | Average | PE | Lino | Corr. | Margin | Limit |
|-----------|---------|-----|------|-------|--------|--------|
| (MHz) | (dBµV) | | Line | (dB) | (dB) | (dBµV) |
| 0.490000 | 21.9 | GND | Ν | 9.7 | 24.3 | 46.2 |
| 0.542000 | 22.3 | GND | Ν | 9.7 | 23.7 | 46.0 |
| 0.598000 | 21.5 | GND | Ν | 9.6 | 24.5 | 46.0 |
| 0.650000 | 23.6 | GND | Ν | 9.6 | 22.4 | 46.0 |
| 0.762000 | 21.5 | GND | Ν | 9.6 | 24.5 | 46.0 |
| 0.978000 | 22.6 | GND | Ν | 9.6 | 23.4 | 46.0 |





Fig.105 AC Power line Conducted Emission (Traffic), LE Coded

| Frequency | Quasi Peak | PE | Lino | Corr. | Margin | Limit |
|-----------|------------|-----|------|-------|--------|--------|
| (MHz) | (dBµV) | | Line | (dB) | (dB) | (dBµV) |
| 0.242000 | 38.84 | GND | Ν | 10 | 23.18 | 62.03 |
| 0.406000 | 40.35 | GND | Ν | 10 | 17.38 | 57.73 |
| 0.626000 | 41.83 | GND | L1 | 10 | 14.17 | 56.00 |
| 0.738000 | 40.75 | GND | Ν | 10 | 15.25 | 56.00 |
| 1.250000 | 38.88 | GND | L1 | 10 | 17.12 | 56.00 |
| 22.078000 | 36.33 | GND | Ν | 10 | 23.67 | 60.00 |

Measurement Results: Quasi Peak

| Frequency | Average | PE | Lino | Corr. | Margin | Limit |
|-----------|---------|-----|------|-------|--------|--------|
| (MHz) | (dBµV) | | Line | (dB) | (dB) | (dBµV) |
| 0.238000 | 23.78 | GND | Ν | 10 | 28.38 | 52.17 |
| 0.410000 | 24.83 | GND | L1 | 10 | 22.82 | 47.65 |
| 0.610000 | 25.05 | GND | Ν | 10 | 20.95 | 46.00 |
| 0.738000 | 24.19 | GND | L1 | 10 | 21.81 | 46.00 |
| 1.346000 | 22.63 | GND | L1 | 10 | 23.37 | 46.00 |
| 2.294000 | 18.75 | GND | L1 | 10 | 27.25 | 46.00 |





Fig.106 AC Power line Conducted Emission (Idle), LE Coded

| Frequency | Quasi Peak | DE | Lino | Corr. | Margin | Limit |
|-----------|------------|-----|------|-------|--------|--------|
| (MHz) | (dBµV) | FE | Line | (dB) | (dB) | (dBµV) |
| 0.158000 | 43.97 | GND | Ν | 10 | 21.60 | 65.57 |
| 0.290000 | 40.22 | GND | Ν | 10 | 20.30 | 60.52 |
| 0.650000 | 42.24 | GND | Ν | 10 | 13.76 | 56.00 |
| 0.738000 | 42.08 | GND | Ν | 10 | 13.92 | 56.00 |
| 1.314000 | 38.87 | GND | L1 | 10 | 17.13 | 56.00 |
| 2.538000 | 32.49 | GND | Ν | 10 | 23.51 | 56.00 |

Measurement Results: Quasi Peak

Measurement Results: Average

| Frequency | Average | DE | Lino | Corr. | Margin | Limit |
|-----------|---------|-----|------|-------|--------|--------|
| (MHz) | (dBµV) | FE | Line | (dB) | (dB) | (dBµV) |
| 0.162000 | 28.52 | GND | Ν | 10 | 26.84 | 55.36 |
| 0.418000 | 25.12 | GND | Ν | 10 | 22.37 | 47.49 |
| 0.578000 | 22.36 | GND | Ν | 10 | 23.64 | 46.00 |
| 0.738000 | 26.39 | GND | Ν | 10 | 19.61 | 46.00 |
| 1.314000 | 21.58 | GND | L1 | 10 | 24.42 | 46.00 |
| 19.122000 | 24.43 | GND | Ν | 10 | 25.57 | 50.00 |

END OF REPORT