TOBY Part of the Cotecns Group

Temperature:	26.3 ℃		Relative Humidity:	54.6%
Test Voltage:	AC 120V/60H	łz		
Terminal:	Neutral			
Test Mode:	Mode 1			Con Bu
Remark:	Only worse c	ase is reported		1 4
80.0 dBuV				
30 × 1 × 1 × 1 × 1 × 1 × 1 × 1 × 1 × 1 ×	MMM MMM			up:
0.150	0.5	(MHz)	5	30.000

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1900	21.51	11.09	32.60	64.03	-31.43	QP
2		0.1900	0.84	11.09	11.93	54.03	-42.10	AVG
3		0.3180	14.42	10.96	25.38	59.76	-34.38	QP
4		0.3180	-1.81	10.96	9.15	49.76	-40.61	AVG
5		0.5660	14.91	10.91	25.82	56.00	-30.18	QP
6		0.5660	0.37	10.91	11.28	46.00	-34.72	AVG
7	*	0.6540	16.19	10.89	27.08	56.00	-28.92	QP
8		0.6540	1.72	10.89	12.61	46.00	-33.39	AVG
9		1.1460	6.60	10.68	17.28	56.00	-38.72	QP
10		1.1460	-3.00	10.68	7.68	46.00	-38.32	AVG
11		1.8020	2.41	10.57	12.98	56.00	-43.02	QP
12		1.8020	-4.14	10.57	6.43	46.00	-39.57	AVG

Remark: 1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)

2. Margin (dB) =QuasiPeak/Average (dBuV)-Limit (dBuV)



Attachment B--Unwanted Emissions Data

---Radiated Unwanted Emissions

9 KHz~30 MHz

From 9 KHz to 30 MHz: Conclusion: PASS

Note: The amplitude of spurious emissions which are attenuated by more than 20dB Below the permissible value has no need to be reported.

30MHz~1GHz

Temperature	23.8℃			Relative	Humidity	. 50	3%
		(00)		Relative	inamaty	. 0	570
Test Voltage:	AC 120V	/60Hz				-	
Ant. Pol.	Horizont	al	- N	NULS	-		
Test Mode:	Mode 1						
Remark:	Only worse case is reported.						
80.0 dBuV/m							_
70							
60							
50					(RF)FCC 15	C 3M Radiatio	° _
50					margin -o o	B	
40							6
30				3		u manur	will and peak
20	1 X			Mana Marine			
10		alf the company of the state of the state of the	And and a second se				
0							
-10							
-20	60.00		(MHz)	300	00		1000.000
		_					
No.	requency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	44.5868	40.34	-22.74	17.60	40.00	-22.40	peak
2	65.1145	39.72	-24.04	15.68	40.00	-24.32	peak
3 2	210.7860	44.96	-24.38	20.58	43.50	-22.92	peak
4 3	368.1116	38.04	-18.85	19.19	46.00	-26.81	peak
5 6	647.3856	37.48	-12.04	25.44	46.00	-20.56	peak
6 * 8	393.8567	38.30	-7.64	30.66	46.00	-15.34	peak

*:Maximum data x:Over limit !:over margin

Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. QuasiPeak (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)
- 3. Margin (dB) = QuasiPeak (dBµV/m)-Limit QPK(dBµV/m)



Те	mper	ature:	23.8°	С			Relative H	umidi	ty:	56%	
Те	st Vo	ltage:	AC 1	20V/60H	Ηz						
Ar	nt. Po	Ι.	Vertic	cal	2	-0	29		611	197	-
Те	st Mo	de:	Mode	e 1				120			037
Re	emark		Only	worse c	ase	is reported	1011			1.1	
80.	0 dBu	V/m									
70											
60											
50									(RFJFCC 150 Margin-6-dB	3M Radiation	
40											
30		1							-	ł	And to the seak
20		Å.	2			3	4 X	to make	- Annen	And a stand of the	
10	mand	lynam ^{ar} hinne	w mu	-water and a speed	however	ment the Way W	got my new weeks	huper the second of			
0											
-10											
-20	20.000		0.00			(111-)		00.00			1000 000
	30.000		60.00			(M12)	ال -				1000.000
	No.	Freque (MH	ency z)	Readi (dBu)	ng V)	Factor (dB/m)	Level (dBuV/m	l) (dE	.imit BuV/m)	Margin (dB)	Detector
	1 *	44.12	202	47.8	3	-22.76	25.07	4	0.00	-14.93	peak
	-			10.0	-					10.00	

1 *	44.1202	47.83	-22.76	25.07	40.00	-14.93	peak
2	59.6493	43.68	-23.61	20.07	40.00	-19.93	peak
3	174.4241	43.83	-23.39	20.44	43.50	-23.06	peak
4	210.0482	44.81	-24.42	20.39	43.50	-23.11	peak
5	463.9696	39.32	-16.29	23.03	46.00	-22.97	peak
6	787.8513	37.07	-9.36	27.71	46.00	-18.29	peak

*:Maximum data x:Over limit !:over margin

- Remark: 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB) 2. QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = QuasiPeak (dBµV/m)-Limit QPK(dBµV/m)

Above 1-25GHz

Temperature:	23.8℃	Relative Humidity:	56%
Test Voltage:	DC 3.7V		
Ant. Pol.	Horizontal		The second se
Test Mode:	TX GFSK Mode 2402MHz	CO I	TUP

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4801.690	75.28	-10.03	65.25	74.00	-8.75	peak
2 *	4805.425	61.39	-10.03	51.36	54.00	-2.64	AVG

Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
 Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)

4. The tests evaluated1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.8 °C	Relative Humidity:	56%
Test Voltage:	DC 3.7V	1000	THE REAL
Ant. Pol.	Vertical	ang)	THU:
Test Mode:	TX GFSK Mode 2402MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4803.055	61.05	-10.02	51.03	54.00	-2.97	AVG
2	4805.940	76.41	-10.03	66.38	74.00	-7.62	peak

Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)
- 3. Margin (dB) = Peak/AVG (dBµV/m)-Limit PK/AVG(dBµV/m)

4. The tests evaluated1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.



Temperature:	23.8℃	Relative Humidity:	56%
Test Voltage:	DC 3.7V		
Ant. Pol.	Horizontal		CONBL.
Test Mode:	TX GFSK Mode 2441MHz		200

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4881.875	61.24	-9.88	51.36	54.00	-2.64	AVG
2	4881.890	76.09	-9.88	66.21	74.00	-7.79	peak

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)

2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)

3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)

4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.

5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.8℃	Relative Humidity:	56%
Test Voltage:	DC 3.7V		A DE
Ant. Pol.	Vertical	TUP	
Test Mode:	TX GFSK Mode 2441MHz		100

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4881.575	60.24	-9.88	50.36	54.00	-3.64	AVG
2	4884.005	74.72	-9.88	64.84	74.00	-9.16	peak

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)

2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)

3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)

4. The tests evaluated1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.



23.8℃	Relative Humidity:	56%
DC 3.7V		
Horizontal		20
TX GFSK Mode 2480MHz		COD3
	23.8℃ DC 3.7V Horizontal TX GFSK Mode 2480MHz	23.8°CRelative Humidity:DC 3.7VHorizontalTX GFSK Mode 2480MHz

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4959.135	59.77	-9.66	50.11	54.00	-3.89	AVG
2	4962.355	75.01	-9.65	65.36	74.00	-8.64	peak

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)

- 2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)
- 3. Margin (dB) = Peak/AVG (dBµV/m)-Limit PK/AVG(dBµV/m)

4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.

5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.8°C	Relative Humidity:	56%
Test Voltage:	DC 3.7V		
Ant. Pol.	Vertical	The state	
Test Mode:	TX GFSK Mode 2480MHz	00000	

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4961.610	60.01	-9.65	50.36	54.00	-3.64	AVG
2	4961.660	74.79	-9.65	65.14	74.00	-8.86	peak

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)

2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)

3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)

4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.



Temperature:	23.8℃	Relative Humidity:	56%
Test Voltage:	DC 3.7V	TUUL -	A UU
Ant. Pol.	Horizontal		
Test Mode:	TX π/4-DQPSK Mode 240	2MHz	any s

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4802.880	77.38	-10.02	67.36	74.00	-6.64	peak
2 *	4804.915	60.51	-10.03	50.48	54.00	-3.52	AVG

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)
- 3. Margin (dB) = Peak/AVG (dBµV/m)-Limit PK/AVG(dBµV/m)

4. The tests evaluated1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.

5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.8℃	Relative Humidity:	56%
Test Voltage:	DC 3.7V		
Ant. Pol.	Vertical		an!
Test Mode:	TX π/4-DQPSK Mode 24	02MHz	

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4801.650	60.35	-10.03	50.32	54.00	-3.68	AVG
2	4802.330	76.60	-10.02	66.58	74.00	-7.42	peak

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)

2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)

3. Margin (dB) = Peak/AVG (dBµV/m)-Limit PK/AVG(dBµV/m)

4. The tests evaluated1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. 5. No report for the emission which more than 20dB below the prescribed limit.



Temperature:	23.8℃	Relative Humidity:	56%		
Test Voltage:	DC 3.7V				
Ant. Pol.	Horizontal		L'un		
Test Mode:	TX π/4-DQPSK Mode 244	1MHz	0030		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4880.980	75.14	-9.89	65.25	74.00	-8.75	peak
2 *	4882.580	60.20	-9.88	50.32	54.00	-3.68	AVG

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)
- 3. Margin (dB) = Peak/AVG (dBµV/m)-Limit PK/AVG(dBµV/m)

4. The tests evaluated1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.

5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.8°C	Relative Humidity:	56%
Test Voltage:	DC 3.7V		0000
Ant. Pol.	Vertical		
Test Mode:	TX π/4-DQPSK Mode 244	1MHz	

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4881.955	60.20	-9.88	50.32	54.00	-3.68	AVG
2	4882.010	75.92	-9.88	66.04	74.00	-7.96	peak

Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)
- 3. Margin (dB) = Peak/AVG (dBµV/m)-Limit PK/AVG(dBµV/m)

4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.



Temperature:	23.8℃	Relative Humidity:	56%			
Test Voltage:	DC 3.7V	TU'L	a w			
Ant. Pol.	Horizontal					
Test Mode:	TX π/4-DQPSK Mode 2480	MHz	m BL			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4958.555	73.82	-9.66	64.16	74.00	-9.84	peak
2 *	4958.840	59.98	-9.66	50.32	54.00	-3.68	AVG

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB) 2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)
- 3. Margin (dB) = Peak/AVG (dBµV/m)-Limit PK/AVG(dBµV/m)

4. The tests evaluated1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.

5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.8℃	Relative Humidity:	56%
Test Voltage:	DC 3.7V		
Ant. Pol.	Vertical		and a
Test Mode:	TX π/4-DQPSK Mode	2480MHz	

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4961.155	73.71	-9.65	64.06	74.00	-9.94	peak
2 *	4961.850	60.87	-9.65	51.22	54.00	-2.78	AVG

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)

- 2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)
- 3. Margin (dB) = Peak/AVG (dBµV/m)-Limit PK/AVG(dBµV/m)

4. The tests evaluated1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.

5. No report for the emission which more than 20dB below the prescribed limit.

-----END OF REPORT-----