

# 試験報告書

TEST REPORT

Report number 報告書番号 : KR20-SRT0028

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型式又は名称 Model name	: BSR10-C3
測定規格 Test procedure	: 特小移動体検知センサー (24.15GHz) 特定無線設備の技術基準適合証明等に関する規則 第2条第1項第8号の無線設備
測定方法 Test method	: 総務省告示第88号別表第22第16(告示13項)
測定日 Date of test	: 2020-12-14 ~ 2020-12-16
試験設備名 Name of facility	: KCTL Inc. 65 Sinwon-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, Korea
試験結果 Test Result	: PASS

この試験報告書における測定結果は試験された装置にのみ該当します。  
また、完全な複製を除き、当試験所の文書による承認なしに、報告書の一部分だけを複製することを禁止します。

The results in this report are applicable only to the equipment tested.

This report shall not be re-produced except in full without the written approval of **KCTL Inc.**

測定者;  
Tested by;



Jung won Seo

承認者;  
Authorized by;



Hee su Ahn

# 1. 試験結果 (Rated Voltage)

Test results  
S/N:3201216001

Environment of test room	Date of test	2020-12-14	2020-12-15	2020-12-16
	Temperature	21.5 °C	21.3 °C	22.1 °C
	Humidity	50.4 %	51.1 %	50.9 %

Peak Antenna Gain	11.98	dBi
Declaration Output Power	6	mW
	7.7815	dBm
<b>E.I.R.P.</b>	<b>19.7615</b>	<b>dBm</b>
Input Power Voltage	12.0	VDC

Tested Circuit Insertion Loss		0	dB
Transmission Time	ON TIME (1sec or less)	-Not applicable-	sec
	OFF TIME (0.1sec or more)	-Not applicable-	sec
	Ratio	-Not applicable-	%
Packet Type (Mode)		-Not applicable-	mode

Using TDF and offset function in Spectrum Analyzer.

Measurement of plots are included Loss value.

(Att : Cable loss + EUT cable: 0.5dB offset )

Test category ;	Specified low power radio equipment (Moving body detection sensors)
The reason why the tests are performed only at Rated Voltageoltage;	

Channel Number			Ch.	0	0	0			
Frequency Measurements			GHz		24.15		Result	Limit	Note
Frequency Tolerance	Normal state	Lower	GHz		24.0545		PASS	24.05GHz or more	
		Upper			24.2457		PASS	24.25GHz or below	
	After the vibration test (Lowest Frequency :5Hz)	Lower	GHz		24.0542		PASS	24.05GHz or more	
		Upper			24.2451		PASS	24.25GHz or below	
	temperature (-20 °C)	Lower	GHz		24.0540		PASS	24.05GHz or more	
		Upper			24.2454		PASS	24.25GHz or below	
	temperature (60 °C)	Lower	GHz		24.0548		PASS	24.05GHz or more	
		Upper			24.2455		PASS	24.25GHz or below	
	After the humidity test 35 °C、-95%	Lower	GHz		24.0574		PASS	24.05GHz or more	
		Upper			24.2455		PASS	24.25GHz or below	
Occupied Bandwidth			MHz		191.1753		PASS	200MHz or below	
RF Output Power			mW		6.966		PASS	20mW or below	
RF Output Power Tolerance			%		16.104419		PASS	+50 to -50%	
Unwanted (Spurious) Emission Strength	30 to 1000MHz	uW			0.00001		PASS	2.5uW or below	
		MHz			544.070		----		
	1 to 6GHz	uW			0.00017		PASS	2.5uW or below	
		MHz			4269.200		----		
	6 to 12GHz	uW			0.00374		PASS	2.5uW or below	
		MHz			6062.900		----		
	12 to 18GHz	uW			0.04710		PASS	2.5uW or below	
		MHz			12033.000		----		
	18 to 23.65GHz	uW			0.01734		PASS	2.5uW or below	
		MHz			18183.400		----		
	24.65GHz to 30GHz	uW			0.00154		PASS	2.5uW or below	
		MHz			28313.800		----		
	30GHz to 35GHz	uW			0.00353		PASS	2.5uW or below	
		MHz			30307.200		----		
	35GHz to 40GHz	uW			0.00794		PASS	2.5uW or below	
		MHz			36366.100		----		
	40GHz to 45GHz	uW			0.00113		PASS	2.5uW or below	
		MHz			44697.800		----		
	45GHz to 49GHz	uW			0.01517		PASS	2.5uW or below	
		MHz			48422.600		----		
	23.65 to 24.65GHz *1 *2	uW					NA	2.5uW or below	Not support Non-Modulation
		MHz					----		

Secondaryarily Emitted Radio Wave Strength  (RX Spurious Emission)  ANT1	30 to 1000MHz *3	uW		0.000002		PASS	2.5uW or below	
		MHz		551.820		-----		
	1 to 7GHz *3	uW		0.00015		PASS	2.5uW or below	
		MHz		2633.400		-----		
	7 to 14GHz *3	uW		0.00006		PASS	2.5uW or below	
		MHz		13542.000		-----		
	14 to 21GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		20129.400		-----		
	21 to 28GHz *3	uW		0.00013		PASS	2.5uW or below	
		MHz		26010.500		-----		
	28 to 35GHz *3	uW		0.00029		PASS	2.5uW or below	
		MHz		31031.500		-----		
	35 to 42GHz *3	uW		0.00028		PASS	2.5uW or below	
		MHz		37087.400		-----		
	42 to 49GHz *3	uW		0.00224		PASS	2.5uW or below	
		MHz		48807.700		-----		
Secondaryarily Emitted Radio Wave Strength  (RX Spurious Emission)  ANT2	30 to 1000MHz *3	uW		0.000001		PASS	2.5uW or below	
		MHz		499.500		-----		
	1 to 7GHz *3	uW		0.00019		PASS	2.5uW or below	
		MHz		2633.400		-----		
	7 to 14GHz *3	uW		0.00006		PASS	2.5uW or below	
		MHz		13688.800		-----		
	14 to 21GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		20555.900		-----		
	21 to 28GHz *3	uW		0.00014		PASS	2.5uW or below	
		MHz		27954.500		-----		
	28 to 35GHz *3	uW		0.00028		PASS	2.5uW or below	
		MHz		31171.300		-----		
	35 to 42GHz *3	uW		0.00027		PASS	2.5uW or below	
		MHz		35828.700		-----		
	42 to 49GHz *3	uW		0.00241		PASS	2.5uW or below	
		MHz		48185.300		-----		
Secondaryarily Emitted Radio Wave Strength  (RX Spurious Emission)  ANT3	30 to 1000MHz *3	uW		0.000001		PASS	2.5uW or below	
		MHz		462.670		-----		
	1 to 7GHz *3	uW		0.00011		PASS	2.5uW or below	
		MHz		2633.400		-----		
	7 to 14GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		13618.900		-----		
	14 to 21GHz *3	uW		0.00004		PASS	2.5uW or below	
		MHz		19569.900		-----		
	21 to 28GHz *3	uW		0.00014		PASS	2.5uW or below	
		MHz		26003.500		-----		
	28 to 35GHz *3	uW		0.00030		PASS	2.5uW or below	
		MHz		31094.400		-----		
	35 to 42GHz *3	uW		0.00033		PASS	2.5uW or below	
		MHz		35730.800		-----		
	42 to 49GHz *3	uW		0.00224		PASS	2.5uW or below	
		MHz		48982.500		-----		
Secondaryarily Emitted Radio Wave Strength  (RX Spurious Emission)  ANT4	30 to 1000MHz *3	uW		0.000001		PASS	2.5uW or below	
		MHz		551.820		-----		
	1 to 7GHz *3	uW		0.00021		PASS	2.5uW or below	
		MHz		3430.600		-----		
	7 to 14GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		13535.000		-----		
	14 to 21GHz *3	uW		0.00004		PASS	2.5uW or below	
		MHz		19472.000		-----		
	21 to 28GHz *3	uW		0.00014		PASS	2.5uW or below	
		MHz		26024.500		-----		
	28 to 35GHz *3	uW		0.00034		PASS	2.5uW or below	
		MHz		31024.500		-----		
	35 to 42GHz *3	uW		0.00031		PASS	2.5uW or below	
		MHz		38996.500		-----		
	42 to 49GHz *3	uW		0.00186		PASS	2.5uW or below	
		MHz		48660.800		-----		

Secondaryly Emitted Radio Wave Strength  (RX Spurious Emission)  ANT5	30 to 1000MHz *3	uW		0.000001		PASS	2.5uW or below	
		MHz		546.980		-----		
	1 to 7GHz *3	uW		0.00007		PASS	2.5uW or below	
		MHz		2117.900		-----		
	7 to 14GHz *3	uW		0.00004		PASS	2.5uW or below	
		MHz		13590.900		-----		
	14 to 21GHz *3	uW		0.00004		PASS	2.5uW or below	
		MHz		20674.800		-----		
	21 to 28GHz *3	uW		0.00015		PASS	2.5uW or below	
		MHz		26045.500		-----		
	28 to 35GHz *3	uW		0.00028		PASS	2.5uW or below	
		MHz		31157.300		-----		
	35 to 42GHz *3	uW		0.00029		PASS	2.5uW or below	
		MHz		35849.700		-----		
	42 to 49GHz *3	uW		0.00209		PASS	2.5uW or below	
		MHz		48779.700		-----		
Secondaryly Emitted Radio Wave Strength  (RX Spurious Emission)  ANT6	30 to 1000MHz *3	uW		0.000001		PASS	2.5uW or below	
		MHz		556.670		-----		
	1 to 7GHz *3	uW		0.00034		PASS	2.5uW or below	
		MHz		2147.900		-----		
	7 to 14GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		13681.800		-----		
	14 to 21GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		20814.700		-----		
	21 to 28GHz *3	uW		0.00014		PASS	2.5uW or below	
		MHz		26010.500		-----		
	28 to 35GHz *3	uW		0.00029		PASS	2.5uW or below	
		MHz		31122.400		-----		
	35 to 42GHz *3	uW		0.00028		PASS	2.5uW or below	
		MHz		35793.700		-----		
	42 to 49GHz *3	uW		0.00225		PASS	2.5uW or below	
		MHz		48234.300		-----		
Secondaryly Emitted Radio Wave Strength  (RX Spurious Emission)  ANT7	30 to 1000MHz *3	uW		0.000001		PASS	2.5uW or below	
		MHz		546.010		-----		
	1 to 7GHz *3	uW		0.00023		PASS	2.5uW or below	
		MHz		2633.400		-----		
	7 to 14GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		13583.900		-----		
	14 to 21GHz *3	uW		0.00004		PASS	2.5uW or below	
		MHz		19765.700		-----		
	21 to 28GHz *3	uW		0.00016		PASS	2.5uW or below	
		MHz		26003.500		-----		
	28 to 35GHz *3	uW		0.00038		PASS	2.5uW or below	
		MHz		31059.400		-----		
	35 to 42GHz *3	uW		0.00030		PASS	2.5uW or below	
		MHz		41919.600		-----		
	42 to 49GHz *3	uW		0.00200		PASS	2.5uW or below	
		MHz		48220.300		-----		
Secondaryly Emitted Radio Wave Strength  (RX Spurious Emission)  ANT8	30 to 1000MHz *3	uW		0.000001		PASS	2.5uW or below	
		MHz		479.150		-----		
	1 to 7GHz *3	uW		0.00020		PASS	2.5uW or below	
		MHz		2645.400		-----		
	7 to 14GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		13604.900		-----		
	14 to 21GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		20618.900		-----		
	21 to 28GHz *3	uW		0.00013		PASS	2.5uW or below	
		MHz		26010.500		-----		
	28 to 35GHz *3	uW		0.00028		PASS	2.5uW or below	
		MHz		31129.400		-----		
	35 to 42GHz *3	uW		0.00028		PASS	2.5uW or below	
		MHz		37031.500		-----		
	42 to 49GHz *3	uW		0.00218		PASS	2.5uW or below	
		MHz		48744.800		-----		

\*1: Except to 24.25GHz from 24.05GH z .

\*2: If not the state of the non-modulated continuous wave in the operational state of the device does not perform the measurement.

\*3: If you can not only received in the operational state of the device, and are not tested.

# 1. 試験結果 (+10% Voltage)

Test results  
S/N:3201216001

Environment of test room	Date of test	2020-12-14	2020-12-15	2020-12-16
	Temperature	21.5 °C	21.3 °C	22.1 °C
	Humidity	50.4 %	51.1 %	50.9 %

Peak Antenna Gain	11.98	dBi
Declaration Output Power	6	mW
	7.7815	dBm
<b>E.I.R.P.</b>	<b>19.7615</b>	<b>dBm</b>
Input Power Voltage	26.4	VDC

Tested Circuit Insertion Loss		0	dB
Transmission Time	ON TIME (1sec or less)	-Not applicable-	sec
	OFF TIME (0.1sec or more)	-Not applicable-	sec
	Ratio	-Not applicable-	%
Packet Type (Mode)		-Not applicable-	mode

Using TDF and offset function in Spectrum Analyzer.

Measurement of plots are included Loss value.

(Att : Cable loss + EUT cable: 0.5dB offset )

Test category ;	Specified low power radio equipment (Moving body detection sensors)
The reason why the tests are performed only at rated voltage;	

Channel Number			Ch.	0	0	0			
Frequency Measurements			GHz		24.15		Result	Limit	Note
Frequency Tolerance	Normal state	Lower	GHz		24.0541		PASS	24.05GHz or more	
		Upper			24.2454		PASS	24.25GHz or below	
	After the vibration test (Lowest Frequency :5Hz)	Lower	GHz		24.0546		PASS	24.05GHz or more	
		Upper			24.2452		PASS	24.25GHz or below	
	temperature (-20 °C)	Lower	GHz		24.0548		PASS	24.05GHz or more	
		Upper			24.2454		PASS	24.25GHz or below	
	temperature (60 °C)	Lower	GHz		24.0549		PASS	24.05GHz or more	
		Upper			24.2451		PASS	24.25GHz or below	
	After the humidity test 35 °C、-95%	Lower	GHz		24.0541		PASS	24.05GHz or more	
Upper				24.2451		PASS	24.25GHz or below		
Occupied Bandwidth			MHz		191.2159		PASS	200MHz or below	
RF Output Power			mW		6.966		PASS	20mW or below	
RF Output Power Tolerance			%		16.104419		PASS	+50 to -50%	
Unwanted (Spurious) Emission Strength	30 to 1000MHz	uW			0.00001		PASS	2.5uW or below	
		MHz			432.630		----		
	1 to 6GHz	uW			0.00014		PASS	2.5uW or below	
		MHz			2645.900		----		
	6 to 12GHz	uW			0.00376		PASS	2.5uW or below	
		MHz			6050.900		----		
	12 to 18GHz	uW			0.04624		PASS	2.5uW or below	
		MHz			12122.900		----		
	18 to 23.65GHz	uW			0.01766		PASS	2.5uW or below	
		MHz			18183.400		----		
	24.65GHz to 30GHz	uW			0.00129		PASS	2.5uW or below	
		MHz			28260.300		----		
	30GHz to 35GHz	uW			0.00375		PASS	2.5uW or below	
		MHz			31066.400		----		
	35GHz to 40GHz	uW			0.00794		PASS	2.5uW or below	
		MHz			36366.100		----		
	40GHz to 45GHz	uW			0.00089		PASS	2.5uW or below	
		MHz			44677.800		----		
	45GHz to 49GHz	uW			0.01222		PASS	2.5uW or below	
		MHz			48490.500		----		
	23.65 to 24.65GHz *1 *2	uW					NA	2.5uW or below	Not support Non-Modulation
		MHz					----		

Secondaryly Emitted Radio Wave Strength  (RX Spurious Emission)  ANT1	30 to 1000MHz *3	uW		0.000001		PASS	2.5uW or below	
		MHz		548.920		-----		
	1 to 7GHz *3	uW		0.00013		PASS	2.5uW or below	
		MHz		2633.400		-----		
	7 to 14GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		13681.800		-----		
	14 to 21GHz *3	uW		0.00004		PASS	2.5uW or below	
		MHz		20157.300		-----		
	21 to 28GHz *3	uW		0.00013		PASS	2.5uW or below	
		MHz		26052.400		-----		
	28 to 35GHz *3	uW		0.00030		PASS	2.5uW or below	
		MHz		31087.400		-----		
	35 to 42GHz *3	uW		0.00032		PASS	2.5uW or below	
		MHz		38989.500		-----		
	42 to 49GHz *3	uW		0.00264		PASS	2.5uW or below	
		MHz		48779.700		-----		
Secondaryly Emitted Radio Wave Strength  (RX Spurious Emission)  ANT2	30 to 1000MHz *3	uW		0.000001		PASS	2.5uW or below	
		MHz		612.870		-----		
	1 to 7GHz *3	uW		0.00014		PASS	2.5uW or below	
		MHz		2627.400		-----		
	7 to 14GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		13542.000		-----		
	14 to 21GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		20996.500		-----		
	21 to 28GHz *3	uW		0.00013		PASS	2.5uW or below	
		MHz		27765.700		-----		
	28 to 35GHz *3	uW		0.00035		PASS	2.5uW or below	
		MHz		31017.500		-----		
	35 to 42GHz *3	uW		0.00028		PASS	2.5uW or below	
		MHz		35835.700		-----		
	42 to 49GHz *3	uW		0.00212		PASS	2.5uW or below	
		MHz		48255.200		-----		
Secondaryly Emitted Radio Wave Strength  (RX Spurious Emission)  ANT3	30 to 1000MHz *3	uW		0.000001		PASS	2.5uW or below	
		MHz		468.490		-----		
	1 to 7GHz *3	uW		0.00056		PASS	2.5uW or below	
		MHz		2447.600		-----		
	7 to 14GHz *3	uW		0.00004		PASS	2.5uW or below	
		MHz		13625.900		-----		
	14 to 21GHz *3	uW		0.00004		PASS	2.5uW or below	
		MHz		19982.500		-----		
	21 to 28GHz *3	uW		0.00013		PASS	2.5uW or below	
		MHz		26031.500		-----		
	28 to 35GHz *3	uW		0.00031		PASS	2.5uW or below	
		MHz		31101.400		-----		
	35 to 42GHz *3	uW		0.00033		PASS	2.5uW or below	
		MHz		38975.500		-----		
	42 to 49GHz *3	uW		0.00192		PASS	2.5uW or below	
		MHz		48758.700		-----		
Secondaryly Emitted Radio Wave Strength  (RX Spurious Emission)  ANT4	30 to 1000MHz *3	uW		0.000001		PASS	2.5uW or below	
		MHz		474.300		-----		
	1 to 7GHz *3	uW		0.00006		PASS	2.5uW or below	
		MHz		2141.900		-----		
	7 to 14GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		13590.900		-----		
	14 to 21GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		19283.200		-----		
	21 to 28GHz *3	uW		0.00013		PASS	2.5uW or below	
		MHz		26059.400		-----		
	28 to 35GHz *3	uW		0.00031		PASS	2.5uW or below	
		MHz		31010.500		-----		
	35 to 42GHz *3	uW		0.00029		PASS	2.5uW or below	
		MHz		38947.600		-----		
	42 to 49GHz *3	uW		0.00205		PASS	2.5uW or below	
		MHz		48339.200		-----		

Secondaryly Emitted Radio Wave Strength  (RX Spurious Emission)  ANT5	30 to 1000MHz *3	uW		0.000001		PASS	2.5uW or below	
		MHz		960.750		-----		
	1 to 7GHz *3	uW		0.00045		PASS	2.5uW or below	
		MHz		2501.500		-----		
	7 to 14GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		13576.900		-----		
	14 to 21GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		19583.900		-----		
	21 to 28GHz *3	uW		0.00014		PASS	2.5uW or below	
		MHz		26010.500		-----		
	28 to 35GHz *3	uW		0.00032		PASS	2.5uW or below	
		MHz		31164.300		-----		
	35 to 42GHz *3	uW		0.00028		PASS	2.5uW or below	
		MHz		35814.700		-----		
	42 to 49GHz *3	uW		0.00282		PASS	2.5uW or below	
		MHz		48835.700		-----		
Secondaryly Emitted Radio Wave Strength  (RX Spurious Emission)  ANT6	30 to 1000MHz *3	uW		0.000001		PASS	2.5uW or below	
		MHz		551.820		-----		
	1 to 7GHz *3	uW		0.00011		PASS	2.5uW or below	
		MHz		2117.900		-----		
	7 to 14GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		13583.900		-----		
	14 to 21GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		19709.800		-----		
	21 to 28GHz *3	uW		0.00014		PASS	2.5uW or below	
		MHz		26003.500		-----		
	28 to 35GHz *3	uW		0.00030		PASS	2.5uW or below	
		MHz		31024.500		-----		
	35 to 42GHz *3	uW		0.00029		PASS	2.5uW or below	
		MHz		39038.500		-----		
	42 to 49GHz *3	uW		0.00242		PASS	2.5uW or below	
		MHz		48346.200		-----		
Secondaryly Emitted Radio Wave Strength  (RX Spurious Emission)  ANT7	30 to 1000MHz *3	uW		0.000001		PASS	2.5uW or below	
		MHz		551.820		-----		
	1 to 7GHz *3	uW		0.00107		PASS	2.5uW or below	
		MHz		2411.600		-----		
	7 to 14GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		13674.800		-----		
	14 to 21GHz *3	uW		0.00004		PASS	2.5uW or below	
		MHz		19555.900		-----		
	21 to 28GHz *3	uW		0.00014		PASS	2.5uW or below	
		MHz		26059.400		-----		
	28 to 35GHz *3	uW		0.00031		PASS	2.5uW or below	
		MHz		31129.400		-----		
	35 to 42GHz *3	uW		0.00028		PASS	2.5uW or below	
		MHz		35674.800		-----		
	42 to 49GHz *3	uW		0.00211		PASS	2.5uW or below	
		MHz		48800.700		-----		
Secondaryly Emitted Radio Wave Strength  (RX Spurious Emission)  ANT8	30 to 1000MHz *3	uW		0.000002		PASS	2.5uW or below	
		MHz		539.230		-----		
	1 to 7GHz *3	uW		0.00022		PASS	2.5uW or below	
		MHz		1932.100		-----		
	7 to 14GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		13597.900		-----		
	14 to 21GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		20213.300		-----		
	21 to 28GHz *3	uW		0.00015		PASS	2.5uW or below	
		MHz		26003.500		-----		
	28 to 35GHz *3	uW		0.00032		PASS	2.5uW or below	
		MHz		31059.400		-----		
	35 to 42GHz *3	uW		0.00031		PASS	2.5uW or below	
		MHz		35863.600		-----		
	42 to 49GHz *3	uW		0.00214		PASS	2.5uW or below	
		MHz		48395.100		-----		

\*1: Except to 24.25GHz from 24.05GH z .

\*2: If not the state of the non-modulated continuous wave in the operational state of the device does not perform the measurement.

\*3: If you can not only received in the operational state of the device, and are not tested.



# 1. 試験結果 (-10% Voltage)

Test results  
S/N:3201216001

Environment of test room	Date of test	2020-12-14	2020-12-15	2020-12-16
	Temperature	21.5 °C	21.3 °C	22.1 °C
	Humidity	50.4 %	51.1 %	50.9 %

Peak Antenna Gain	11.98	dBi
Declaration Output Power	6	mW
	7.7815	dBm
<b>E.I.R.P.</b>	<b>19.7615</b>	<b>dBm</b>
Input Power Voltage	8.1	VDC

Tested Circuit Insertion Loss		0	dB
Transmission Time	ON TIME (1sec or less)	-Not applicable-	sec
	OFF TIME (0.1sec or more)	-Not applicable-	sec
	Ratio	-Not applicable-	%
Packet Type (Mode)		-Not applicable-	mode

Using TDF and offset function in Spectrum Analyzer.

Measurement of plots are included Loss value.

(Att : Cable loss + EUT cable: 0.5dB offset )

Test category ;	Specified low power radio equipment (Moving body detection sensors)
The reason why the tests are performed only at rated voltage;	

Channel Number			Ch.	0	0	0			
Frequency Measurements			GHz		24.15		Result	Limit	Note
Frequency Tolerance	Normal state	Lower	GHz		24.0552		PASS	24.05GHz or more	
		Upper			24.2457		PASS	24.25GHz or below	
	After the vibration test (Lowest Frequency :5Hz)	Lower	GHz		24.0540		PASS	24.05GHz or more	
		Upper			24.2454		PASS	24.25GHz or below	
	temperature (-20 °C)	Lower	GHz		24.0552		PASS	24.05GHz or more	
		Upper			24.2452		PASS	24.25GHz or below	
	temperature (60 °C)	Lower	GHz		24.0539		PASS	24.05GHz or more	
		Upper			24.2452		PASS	24.25GHz or below	
	After the humidity test 35 °C、-95%	Lower	GHz		24.0540		PASS	24.05GHz or more	
		Upper			24.2454		PASS	24.25GHz or below	
Occupied Bandwidth			MHz		190.5444		PASS	200MHz or below	
RF Output Power			mW		6.966		PASS	20mW or below	
RF Output Power Tolerance			%		16.104419		PASS	+50 to -50%	
Unwanted (Spurious) Emission Strength	30 to 1000MHz	uW			0.00001		PASS	2.5uW or below	
		MHz			548.920		----		
	1 to 6GHz	uW			0.00014		PASS	2.5uW or below	
		MHz			4758.700		----		
	6 to 12GHz	uW			0.00416		PASS	2.5uW or below	
		MHz			6033.000		----		
	12 to 18GHz	uW			0.04667		PASS	2.5uW or below	
		MHz			12122.900		----		
	18 to 23.65GHz	uW			0.01706		PASS	2.5uW or below	
		MHz			18183.400		----		
	24.65GHz to 30GHz	uW			0.00136		PASS	2.5uW or below	
		MHz			25999.500		----		
	30GHz to 35GHz	uW			0.00323		PASS	2.5uW or below	
		MHz			30307.200		----		
	35GHz to 40GHz	uW			0.00822		PASS	2.5uW or below	
		MHz			36301.200		----		
	40GHz to 45GHz	uW			0.00091		PASS	2.5uW or below	
		MHz			44013.500		----		
	45GHz to 49GHz	uW			0.01309		PASS	2.5uW or below	
		MHz			48490.500		----		
	23.65 to 24.65GHz *1 *2	uW					NA	2.5uW or below	Not support Non-Modulation
		MHz					----		



Secondaryly Emitted Radio Wave Strength  (RX Spurious Emission)  ANT1	30 to 1000MHz *3	uW		0.000002		PASS	2.5uW or below	
		MHz		550.850		-----		
	1 to 7GHz *3	uW		0.00044		PASS	2.5uW or below	
		MHz		2447.600		-----		
	7 to 14GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		13695.800		-----		
	14 to 21GHz *3	uW		0.00006		PASS	2.5uW or below	
		MHz		19604.900		-----		
	21 to 28GHz *3	uW		0.00013		PASS	2.5uW or below	
		MHz		26003.500		-----		
	28 to 35GHz *3	uW		0.00035		PASS	2.5uW or below	
		MHz		31003.500		-----		
	35 to 42GHz *3	uW		0.00031		PASS	2.5uW or below	
		MHz		35828.700		-----		
	42 to 49GHz *3	uW		0.00227		PASS	2.5uW or below	
		MHz		48828.700		-----		
Secondaryly Emitted Radio Wave Strength  (RX Spurious Emission)  ANT2	30 to 1000MHz *3	uW		0.000001		PASS	2.5uW or below	
		MHz		545.040		-----		
	1 to 7GHz *3	uW		0.00016		PASS	2.5uW or below	
		MHz		2633.400		-----		
	7 to 14GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		13549.000		-----		
	14 to 21GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		20982.500		-----		
	21 to 28GHz *3	uW		0.00016		PASS	2.5uW or below	
		MHz		26024.500		-----		
	28 to 35GHz *3	uW		0.00029		PASS	2.5uW or below	
		MHz		31073.400		-----		
	35 to 42GHz *3	uW		0.00026		PASS	2.5uW or below	
		MHz		36045.500		-----		
	42 to 49GHz *3	uW		0.00201		PASS	2.5uW or below	
		MHz		47821.700		-----		
Secondaryly Emitted Radio Wave Strength  (RX Spurious Emission)  ANT3	30 to 1000MHz *3	uW		0.000001		PASS	2.5uW or below	
		MHz		733.030		-----		
	1 to 7GHz *3	uW		0.00020		PASS	2.5uW or below	
		MHz		2639.400		-----		
	7 to 14GHz *3	uW		0.00006		PASS	2.5uW or below	
		MHz		13611.900		-----		
	14 to 21GHz *3	uW		0.00004		PASS	2.5uW or below	
		MHz		20108.400		-----		
	21 to 28GHz *3	uW		0.00015		PASS	2.5uW or below	
		MHz		26003.500		-----		
	28 to 35GHz *3	uW		0.00034		PASS	2.5uW or below	
		MHz		31024.500		-----		
	35 to 42GHz *3	uW		0.00029		PASS	2.5uW or below	
		MHz		39017.500		-----		
	42 to 49GHz *3	uW		0.00199		PASS	2.5uW or below	
		MHz		48283.200		-----		
Secondaryly Emitted Radio Wave Strength  (RX Spurious Emission)  ANT4	30 to 1000MHz *3	uW		0.000001		PASS	2.5uW or below	
		MHz		551.820		-----		
	1 to 7GHz *3	uW		0.00010		PASS	2.5uW or below	
		MHz		2429.600		-----		
	7 to 14GHz *3	uW		0.00007		PASS	2.5uW or below	
		MHz		13681.800		-----		
	14 to 21GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		20653.800		-----		
	21 to 28GHz *3	uW		0.00014		PASS	2.5uW or below	
		MHz		27912.600		-----		
	28 to 35GHz *3	uW		0.00037		PASS	2.5uW or below	
		MHz		31003.500		-----		
	35 to 42GHz *3	uW		0.00026		PASS	2.5uW or below	
		MHz		39150.300		-----		
	42 to 49GHz *3	uW		0.00217		PASS	2.5uW or below	
		MHz		48688.800		-----		

Secondaryly Emitted Radio Wave Strength  (RX Spurious Emission)  ANT5	30 to 1000MHz *3	uW		0.000001		PASS	2.5uW or below	
		MHz		579.930		-----		
	1 to 7GHz *3	uW		0.00008		PASS	2.5uW or below	
		MHz		2147.900		-----		
	7 to 14GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		13681.800		-----		
	14 to 21GHz *3	uW		0.00004		PASS	2.5uW or below	
		MHz		20947.600		-----		
	21 to 28GHz *3	uW		0.00014		PASS	2.5uW or below	
		MHz		26045.500		-----		
	28 to 35GHz *3	uW		0.00027		PASS	2.5uW or below	
		MHz		31038.500		-----		
	35 to 42GHz *3	uW		0.00031		PASS	2.5uW or below	
		MHz		35793.700		-----		
	42 to 49GHz *3	uW		0.00197		PASS	2.5uW or below	
		MHz		48919.600		-----		
Secondaryly Emitted Radio Wave Strength  (RX Spurious Emission)  ANT6	30 to 1000MHz *3	uW		0.000001		PASS	2.5uW or below	
		MHz		593.490		-----		
	1 to 7GHz *3	uW		0.00028		PASS	2.5uW or below	
		MHz		2147.900		-----		
	7 to 14GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		13625.900		-----		
	14 to 21GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		20059.400		-----		
	21 to 28GHz *3	uW		0.00014		PASS	2.5uW or below	
		MHz		26017.500		-----		
	28 to 35GHz *3	uW		0.00028		PASS	2.5uW or below	
		MHz		31101.400		-----		
	35 to 42GHz *3	uW		0.00035		PASS	2.5uW or below	
		MHz		35772.700		-----		
	42 to 49GHz *3	uW		0.00217		PASS	2.5uW or below	
		MHz		48409.100		-----		
Secondaryly Emitted Radio Wave Strength  (RX Spurious Emission)  ANT7	30 to 1000MHz *3	uW		0.000001		PASS	2.5uW or below	
		MHz		484.960		-----		
	1 to 7GHz *3	uW		0.00016		PASS	2.5uW or below	
		MHz		2633.400		-----		
	7 to 14GHz *3	uW		0.00006		PASS	2.5uW or below	
		MHz		13590.900		-----		
	14 to 21GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		20562.900		-----		
	21 to 28GHz *3	uW		0.00012		PASS	2.5uW or below	
		MHz		26003.500		-----		
	28 to 35GHz *3	uW		0.00032		PASS	2.5uW or below	
		MHz		31010.500		-----		
	35 to 42GHz *3	uW		0.00026		PASS	2.5uW or below	
		MHz		38933.600		-----		
	42 to 49GHz *3	uW		0.00199		PASS	2.5uW or below	
		MHz		48702.800		-----		
Secondaryly Emitted Radio Wave Strength  (RX Spurious Emission)  ANT8	30 to 1000MHz *3	uW		0.000001		PASS	2.5uW or below	
		MHz		546.010		-----		
	1 to 7GHz *3	uW		0.00017		PASS	2.5uW or below	
		MHz		2633.400		-----		
	7 to 14GHz *3	uW		0.00005		PASS	2.5uW or below	
		MHz		13583.900		-----		
	14 to 21GHz *3	uW		0.00004		PASS	2.5uW or below	
		MHz		20562.900		-----		
	21 to 28GHz *3	uW		0.00014		PASS	2.5uW or below	
		MHz		26003.500		-----		
	28 to 35GHz *3	uW		0.00029		PASS	2.5uW or below	
		MHz		31017.500		-----		
	35 to 42GHz *3	uW		0.00028		PASS	2.5uW or below	
		MHz		35779.700		-----		
	42 to 49GHz *3	uW		0.00220		PASS	2.5uW or below	
		MHz		48737.800		-----		

\*1: Except to 24.25GHz from 24.05GH z .

\*2: If not the state of the non-modulated continuous wave in the operational state of the device does not perform the measurement.

\*3: If you can not only received in the operational state of the device, and are not tested.

## 2. 試験機器リスト

### Measurement equipment list

USE	Equipment	Company	Model No.	Serial No.	Calibrated by	Cal. Method	Cal. Due	Cal. Date
X	Signal generator	ROHDE&SCHWARZ	SMB100A	176206	HCT	ハ(c)	Jan. 2021	Jan. 21, 2020
X	Spectrum Analyzer	R&S	FSW50	101013	HCT	ハ(c)	Jul. 2021	Jul. 13, 2020
X	DC Power Supply	AGILENT	E3632A	MY40008800	HCT	ハ(c)	Jul. 2021	Jul. 28, 2020
X	Temp & Humid Chamber	Myeongseong R&P	CTHC-50P-DT	20150824-3	HCT	ハ(c)	Jul. 2021	Jul. 28, 2020
X	Vibration Meter	RION	VM-82	34385167	HCT	ハ(c)	Jul. 2021	Jul. 29, 2020
X	Vibration Tester	IMV	J240/SA4M	14101792	HCT	ハ(c)	May. 2021	May. 2, 2020
X	Pulse Power Meter	ANRITSU	ML2495A	1608009	HCT	ハ(c)	Jul. 2021	Jul. 29, 2020
X	Pulse Power Sensor	ANRITSU	MA2411B	1726174	HCT	ハ(c)	Jul. 2021	Jul. 29, 2020

Note1: "X" は使用した測定機器です。

"X" used equipment.

Note2: 校正期限は、校正を行った日の翌月から起算して1年以内です。

The validity of measurement equipment is one year from the first day of the following month of the calibration date.

Note3: 校正方法 ...

Cal.Method ...

i) : 国立研究開発法人情報通信研究機構（NICT）（以下「機構」という。）又は第百二条の十八第一項の指定校正

機関（TELEC, インターテックジャパン、キーサイト）が行う校正

a) : Calibration conducted by the National Institute of Information and Communications Technology ~ NICT ~ or a designated calibration agency under Article 102-18 paragraph (1) ~ TELEC Engineering Center, Intertek Japan K.K., Keysight Technologies, Inc ~.

d) : 計量法（平成四年法律第五十一号）第百三十五条 又は第百四十四条 の規定に基づく校正（JCSS 校正）

b) : Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Law (Law No. 51 of 1992) ~ Japan Calibration Service System ~

h) : 外国において行う校正であつて、機構又は第百二条の十八第一項の指定校正機関（TELEC, インターテックジャパン、キーサイト）が行う校正に相当するもの

c) : Calibration conducted in foreign countries, which shall be equivalent to the calibration conducted by the NICT or a designated

calibration agency under Article 102-18 paragraph (1) ~ TELEC Engineering Center, Intertek Japan K.K., Keysight Technologies, Inc ~.

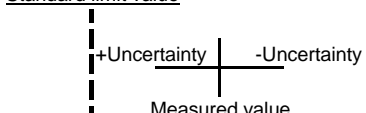
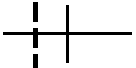
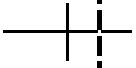
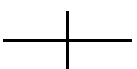
二) : イからハまでのいずれかに掲げる校正等を受けたものを用いて行う校正等

d) : Calibration conducted by using other equipment that listed above from a) to c)

### 3. 測定の不確かさ

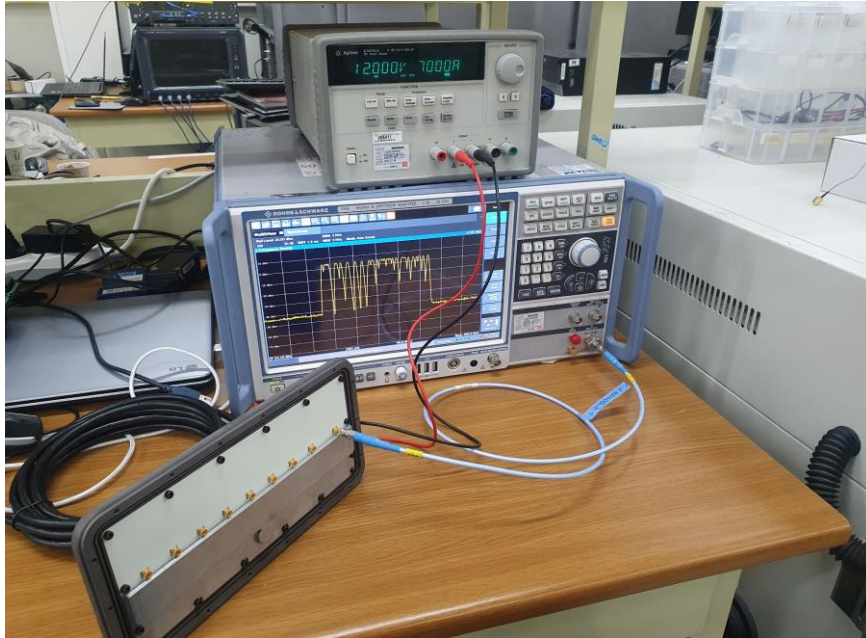
About uncertainty of measured value

Parameter	Uncertainty
Total RF power conducted	$\pm 1.3\text{dB}$
Spurious emissions conducted	$\pm 1.3\text{dB}$
Temperature	$\pm 2.1^\circ\text{C}$
Humidity	$\pm 5.7\%$

Judge	Measured value and standard limit value	
PASS	<b>Case1</b>  <p>Even if it takes uncertainty into consideration, a standard limit value is fulfilled.</p>	
	<b>Case2</b>  <p>Although measured value is in a standard limit value, a limit value won't be fulfilled if uncertainty is taken into consideration.</p>	
FAIL	<b>Case3</b>  <p>Although measured value exceeds a standard limit value, a limit value will be fulfilled if uncertainty is taken into consideration.</p>	
	<b>Case4</b>  <p>Even if it takes uncertainty into consideration, a standard limit value isn't fulfilled.</p>	

#### **4. 測定写真** *Photographs*

##### **Conducted Measurement Photo**



5. 測定チャート

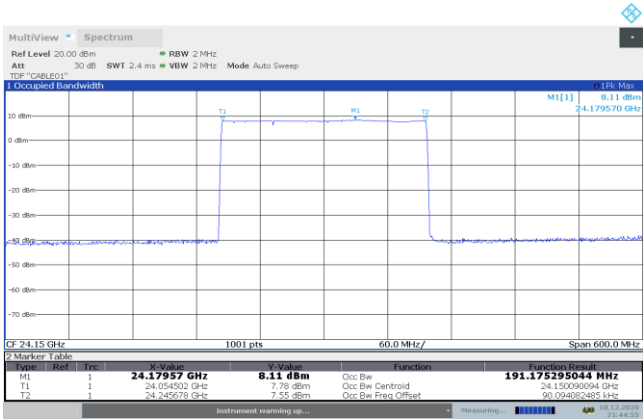
Test chart

5.1 周波数の偏差・占有周波数帯幅

Frequency tolerance / Occupied  
Rated Voltage

Ch.Low: xxGHz

Ch.Middle: 24.15 GHz



Ch.High: xxGHz

5. 測定チャート

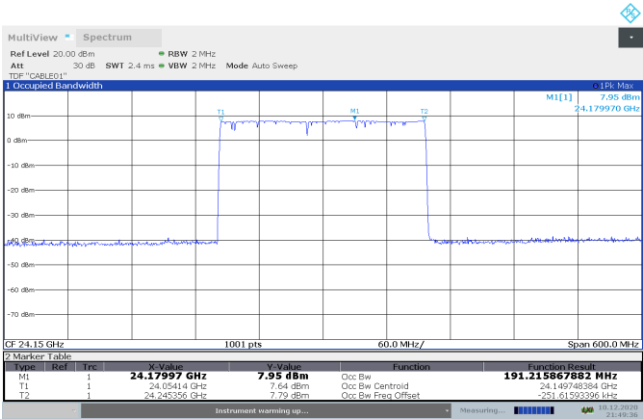
Test chart

5.1 周波数の偏差・占有周波数帯幅

Frequency tolerance / Occupied  
+10% Voltage

Ch.Low: xxGHz

Ch.Middle: 24.15 GHz



Ch.High: xxGHz