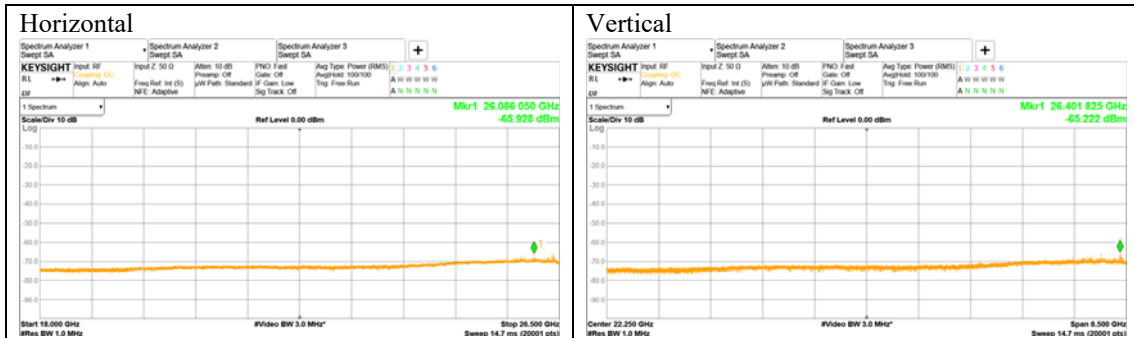


18 GHz - 26.5 GHz

Chart



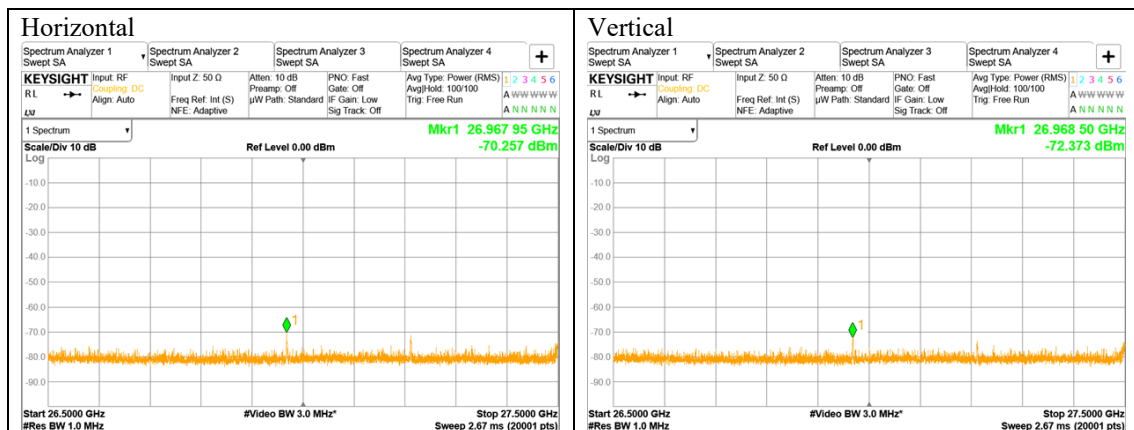
Emissions detected. The measurement results are as shown in the table below.

Result

Rx Antenna Polarity [H/V]	Frequency [GHz]	Reading (AV) [dBm]	Meas. Distance [m]	CF [dB]	Corrected EIRP (AV) [dBm]	Limit EIRP [dBm]	Margin [dB]
H	26.086	-64.66	1.0	17.92	-46.74	-13	33.74
V	26.402	-64.68	1.0	18.62	-46.06	-13	33.06

26.5 GHz - 27.5 GHz

Chart



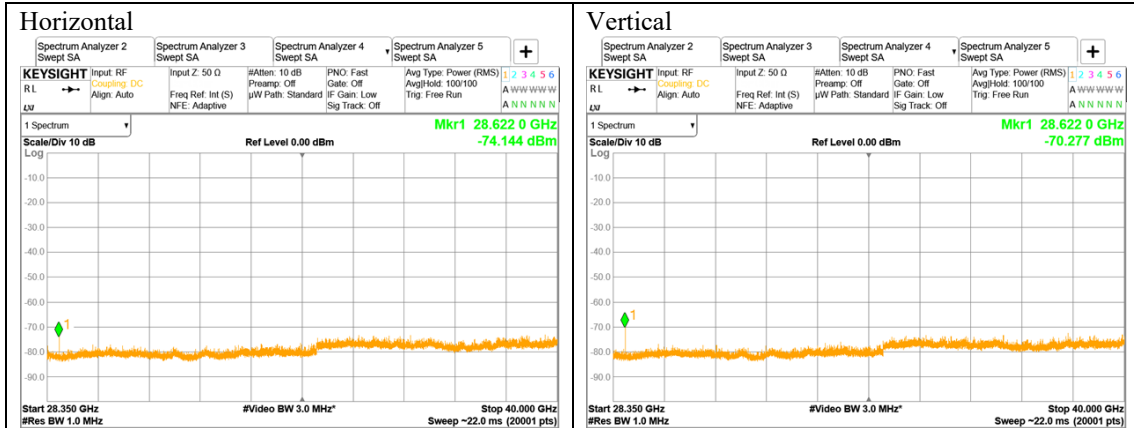
Emissions detected. The measurement results are as shown in the table below.

Result

Rx Antenna Polarity [H/V]	Frequency [GHz]	Reading (AV) [dBm]	Meas. Distance [m]	CF [dB]	Corrected EIRP (AV) [dBm]	Limit EIRP [dBm]	Margin [dB]
H	26.968	-70.02	0.5	45.99	-24.03	-13	11.03
V	26.969	-70.91	0.5	45.99	-24.92	-13	11.92

28.35 GHz - 40 GHz

Chart



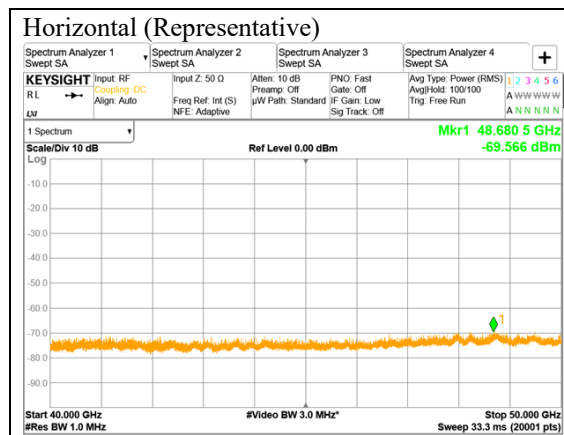
Emissions detected. The measurement results are as shown in the table below.

Result

Rx Antenna Polarity [H/V]	Frequency [GHz]	Reading (AV) [dBm]	Meas. Distance [m]	CF [dB]	Corrected EIRP (AV) [dBm]	Limit EIRP [dBm]	Margin [dB]
H	28.622	-69.30	0.5	46.49	-22.81	-13	9.81
V	28.622	-67.68	0.5	46.49	-21.19	-13	8.19

40 GHz - 50 GHz

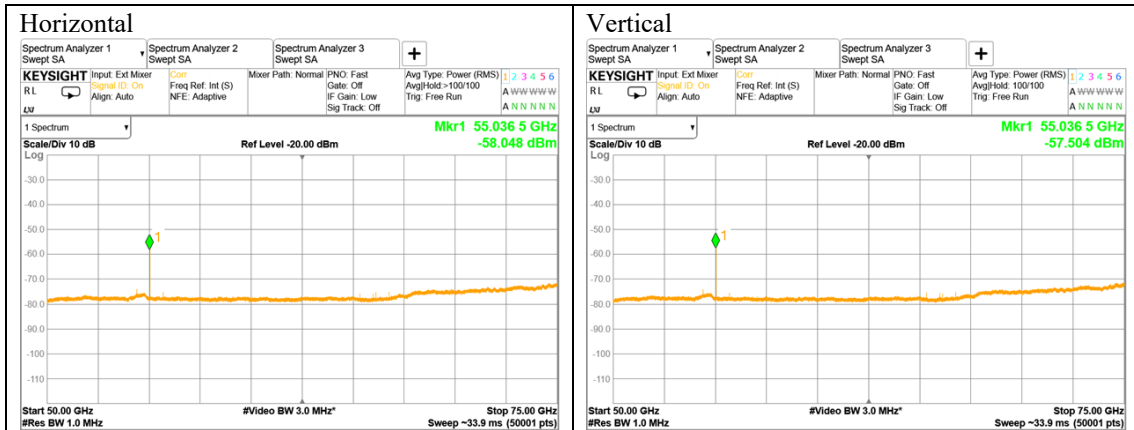
Chart



No Emissions detected.

50 GHz - 75 GHz

Chart



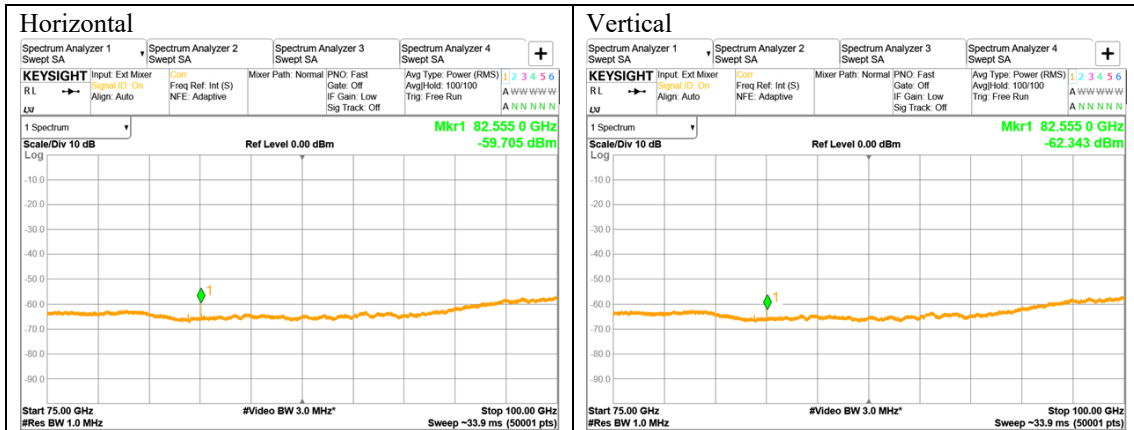
Emissions detected. The measurement results are as shown in the table below.

Result

Rx Antenna Polarity [H/V]	Frequency [GHz]	Reading (AV) [dBm]	Meas. Distance [m]	CF [dB]	Corrected EIRP (AV) [dBm]	Limit EIRP [dBm]	Margin [dB]
H	55.037	-56.30	2.0	23.73	-32.56	-13	19.56
V	55.037	-55.20	2.0	23.73	-31.47	-13	18.47

75 GHz - 100 GHz

Chart



Emissions detected. The measurement results are as shown in the table below.

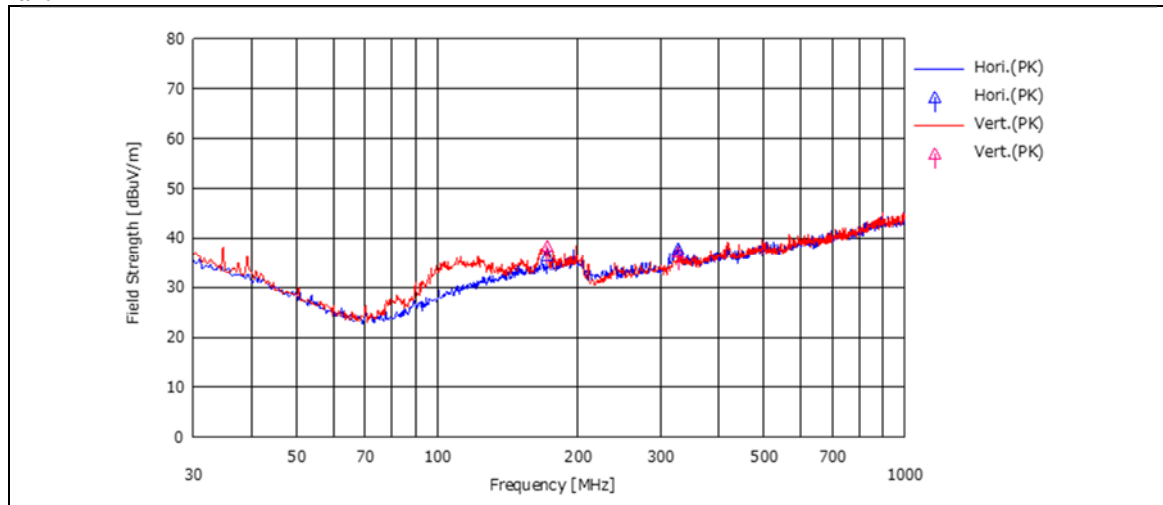
Result

Rx Antenna Polarity [H/V]	Frequency [GHz]	Reading (AV) [dBm]	Meas. Distance [m]	CF [dB]	Corrected EIRP (AV) [dBm]	Limit EIRP [dBm]	Margin [dB]
H	82.555	-56.09	2.0	19.53	-36.56	-13	23.56
V	82.555	-57.28	2.0	19.53	-37.75	-13	24.75

Band n261, Antenna #1

30 MHz - 1000 MHz

Chart



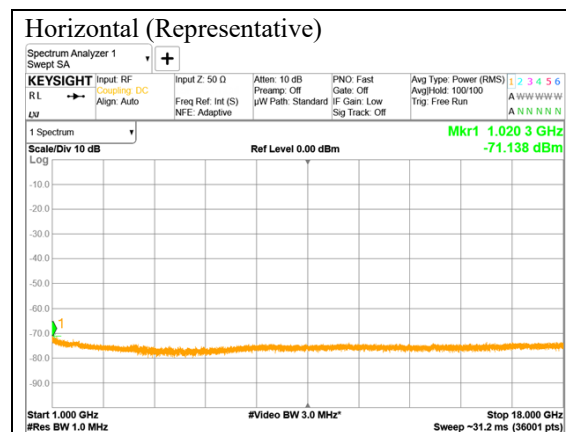
Emissions detected. The measurement results are as shown in the table below.

Result

Rx Ant Polarity	Freq. [MHz]	Reading (PK) [dBuV]	Ant. Factor [dB/m]	Loss [dB]	Amp. Gain [dB]	Field Strength <i>E</i> [dBuV/m]	Meas. distance <i>D</i> [m]	Corrected EIRP (PK) [dBm]	Limit EIRP [dBm]	Margin [dB]
H	171.819	40.82	15.89	7.97	28.13	36.55	3.0	-58.71	-13	45.71
	327.652	41.58	15.24	9.01	27.90	37.93	3.0	-57.33	-13	44.33
V	171.819	42.77	15.89	7.97	28.13	38.50	3.0	-56.76	-13	43.76
	327.652	40.83	15.24	9.01	27.90	37.18	3.0	-58.08	-13	45.08

1 GHz - 18 GHz

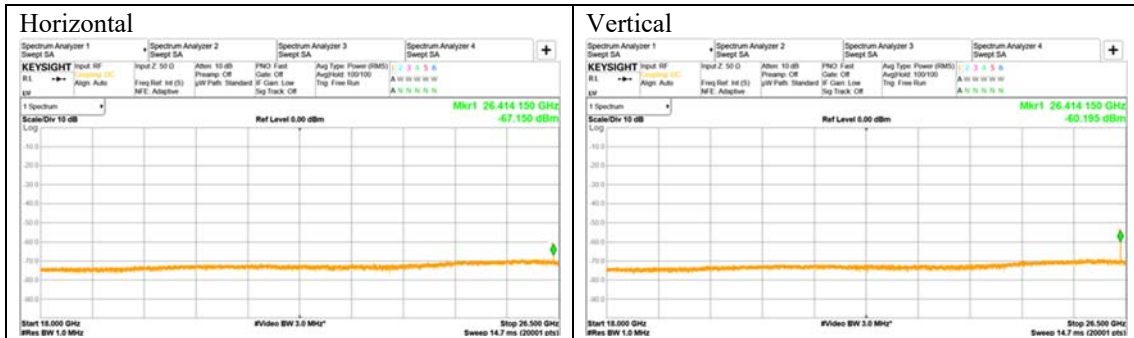
Chart



No Emissions detected.

18 GHz - 26.5 GHz

Chart



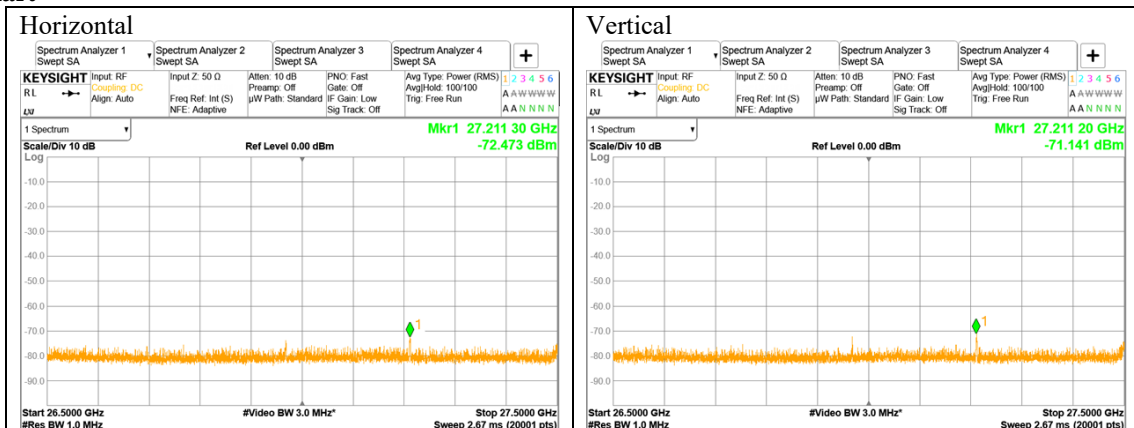
Emissions detected. The measurement results are as shown in the table below.

Result

Rx Antenna Polarity [H/V]	Frequency [GHz]	Reading (AV) [dBm]	Meas. Distance [m]	CF [dB]	Corrected EIRP (AV) [dBm]	Limit EIRP [dBm]	Margin [dB]
H	26.414	-54.35	1.0	18.64	-35.72	-13	22.72
V	26.414	-58.18	1.0	18.64	-39.54	-13	26.54

26.5 GHz - 27.5 GHz

Chart



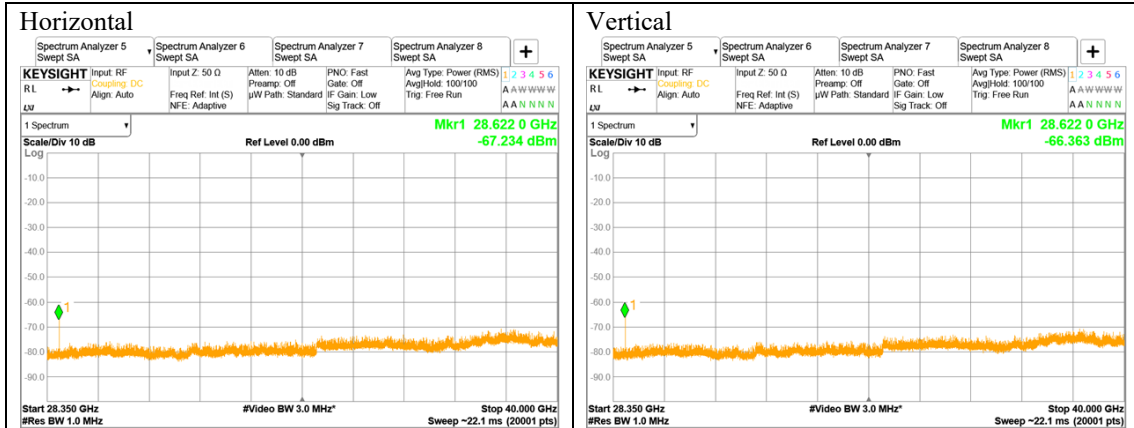
Emissions detected. The measurement results are as shown in the table below.

Result

Rx Antenna Polarity [H/V]	Frequency [GHz]	Reading (AV) [dBm]	Meas. Distance [m]	CF [dB]	Corrected EIRP (AV) [dBm]	Limit EIRP [dBm]	Margin [dB]
H	27.211	-70.52	0.5	46.15	-24.37	-13	11.37
V	27.211	-69.48	0.5	46.15	-23.33	-13	10.33

28.35 GHz - 40 GHz

Chart



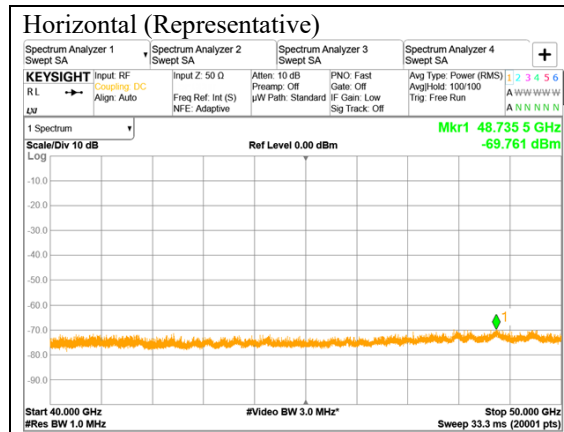
Emissions detected. The measurement results are as shown in the table below.

Result

Rx Antenna Polarity [H/V]	Frequency [GHz]	Reading (AV) [dBm]	Meas. Distance [m]	CF [dB]	Corrected EIRP (AV) [dBm]	Limit EIRP [dBm]	Margin [dB]
H	28.622	-66.70	0.5	46.49	-20.21	-13	7.21
V	28.622	-65.59	0.5	46.49	-19.10	-13	6.10

40 GHz - 50 GHz

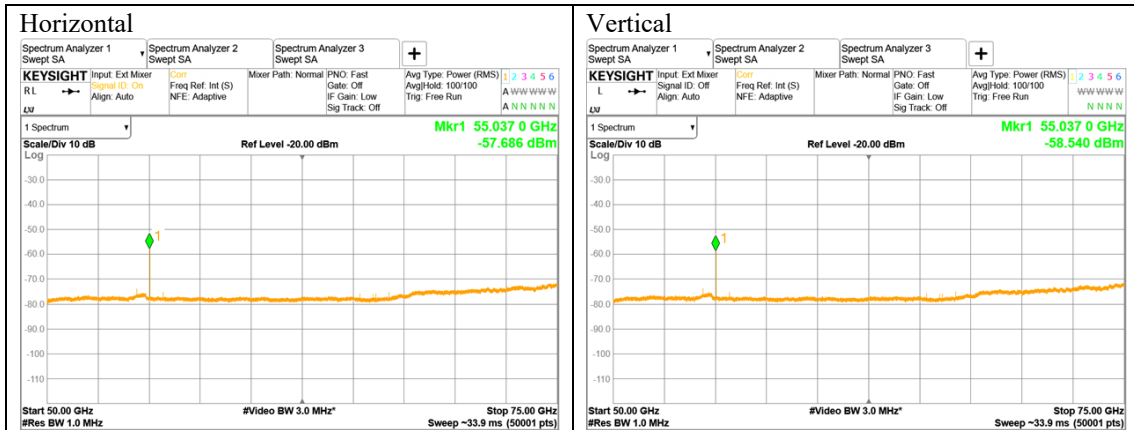
Chart



No Emissions detected.

50 GHz - 75 GHz

Chart



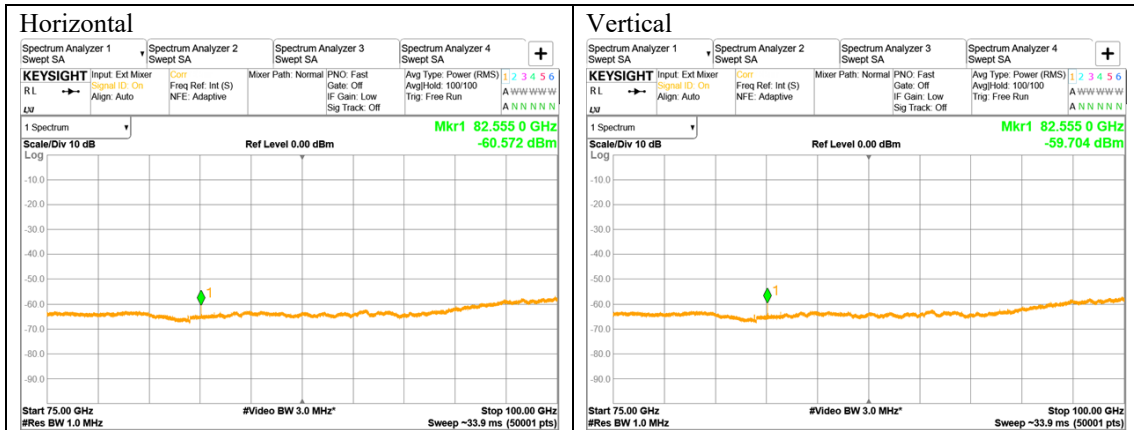
Emissions detected. The measurement results are as shown in the table below.

Result

Rx Antenna Polarity [H/V]	Frequency [GHz]	Reading (AV) [dBm]	Meas. Distance [m]	CF [dB]	Corrected EIRP (AV) [dBm]	Limit EIRP [dBm]	Margin [dB]
H	55.037	-55.39	2.0	23.73	-31.66	-13	18.66
V	55.037	-56.44	2.0	23.73	-32.71	-13	19.71

75 GHz - 100 GHz

Chart



Emissions detected. The measurement results are as shown in the table below.

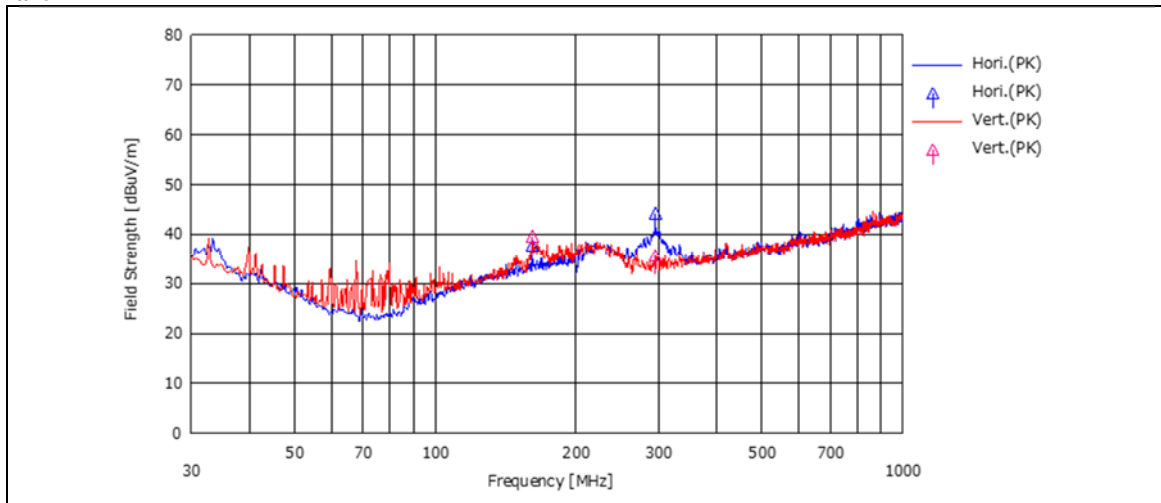
Result

Rx Antenna Polarity [H/V]	Frequency [GHz]	Reading (AV) [dBm]	Meas. Distance [m]	CF [dB]	Corrected EIRP (AV) [dBm]	Limit EIRP [dBm]	Margin [dB]
H	82.555	-57.20	2.0	19.53	-37.67	-13	24.67
V	82.555	-56.07	2.0	19.53	-36.53	-13	23.53

Band n261, Antenna #2

30 MHz - 1000 MHz

Chart



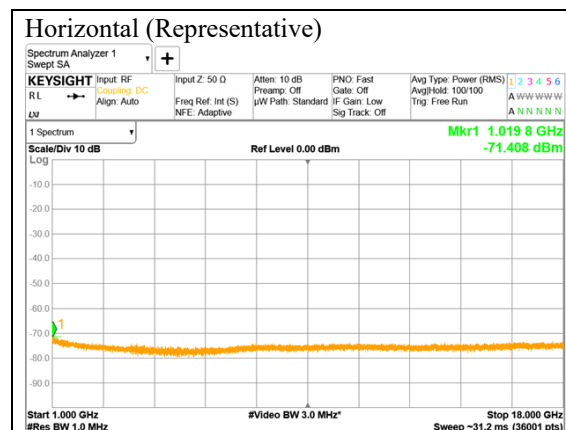
Emissions detected. The measurement results are as shown in the table below.

Result

Rx Ant Polarity	Freq. [MHz]	Reading (PK) [dBuV]	Ant. Factor [dB/m]	Loss [dB]	Amp. Gain [dB]	Field Strength <i>E</i> [dBuV/m]	Meas. distance <i>D</i> [m]	Corrected EIRP (PK) [dBm]	Limit EIRP [dBm]	Margin [dB]
H	161.258	42.59	15.45	7.90	28.19	37.75	3.0	-57.51	-13	44.51
	295.914	49.21	14.04	8.77	27.72	44.30	3.0	-50.96	-13	37.96
V	161.258	44.52	15.45	7.90	28.19	39.68	3.0	-55.58	-13	42.58
	295.914	40.64	14.04	8.77	27.72	35.73	3.0	-59.53	-13	46.53

1 GHz - 18 GHz

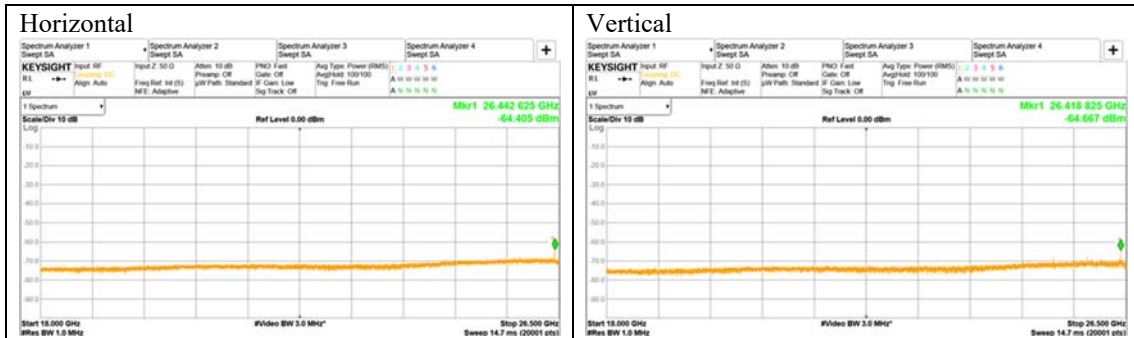
Chart



No Emissions detected.

18 GHz - 26.5 GHz

Chart



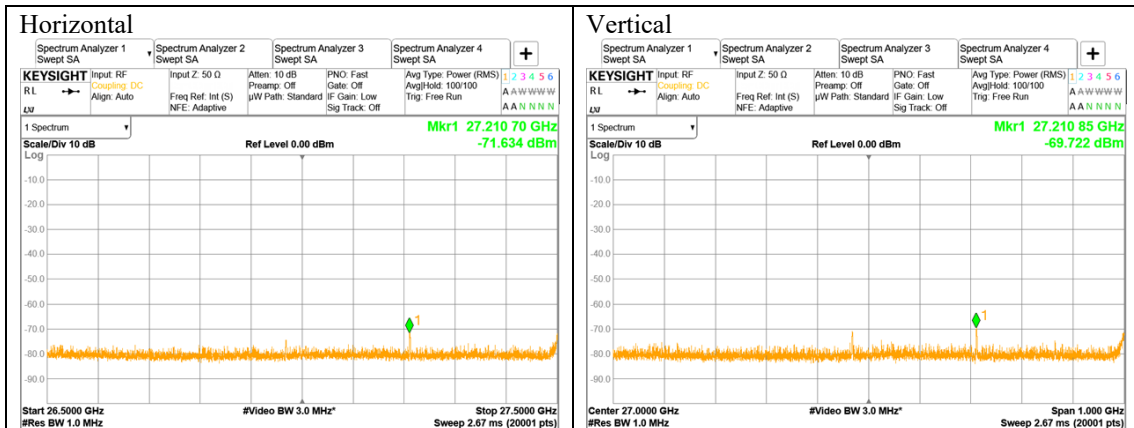
Emissions detected. The measurement results are as shown in the table below.

Result

Rx Antenna Polarity [H/V]	Frequency [GHz]	Reading (AV) [dBm]	Meas. Distance [m]	CF [dB]	Corrected EIRP (AV) [dBm]	Limit EIRP [dBm]	Margin [dB]
H	26.443	-61.60	1.0	18.70	-42.90	-13	29.90
V	26.419	-62.62	1.0	18.65	-43.97	-13	30.97

26.5 GHz - 27.5 GHz

Chart



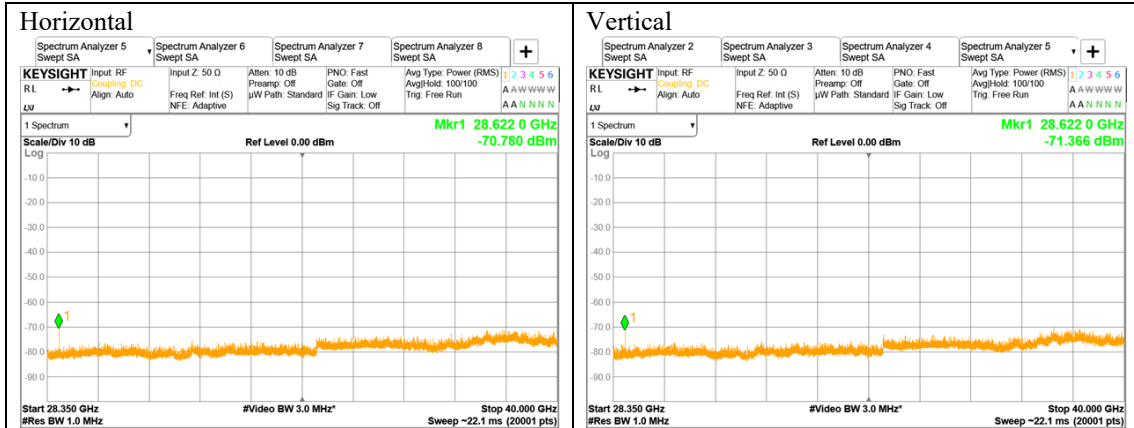
Emissions detected. The measurement results are as shown in the table below.

Result

Rx Antenna Polarity [H/V]	Frequency [GHz]	Reading (AV) [dBm]	Meas. Distance [m]	CF [dB]	Corrected EIRP (AV) [dBm]	Limit EIRP [dBm]	Margin [dB]
H	27.211	-69.41	0.5	46.15	-23.26	-13	10.26
V	27.211	-68.94	0.5	46.15	-22.79	-13	9.79

28.35 GHz - 40 GHz

Chart



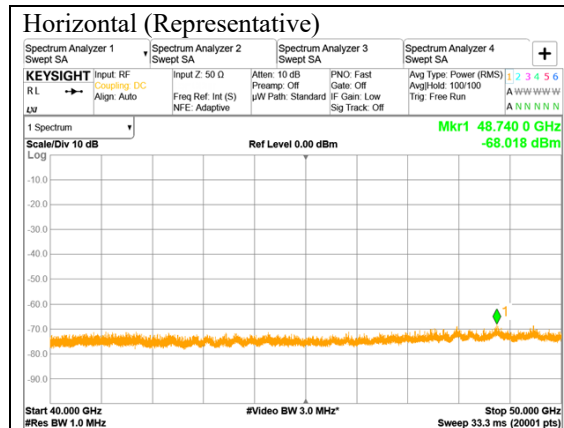
Emissions detected. The measurement results are as shown in the table below.

Result

Rx Antenna Polarity [H/V]	Frequency [GHz]	Reading (AV) [dBm]	Meas. Distance [m]	CF [dB]	Corrected EIRP (AV) [dBm]	Limit EIRP [dBm]	Margin [dB]
H	28.622	-70.10	0.5	46.49	-23.61	-13	10.61
V	28.622	-66.90	0.5	46.49	-20.41	-13	7.41

40 GHz - 50 GHz

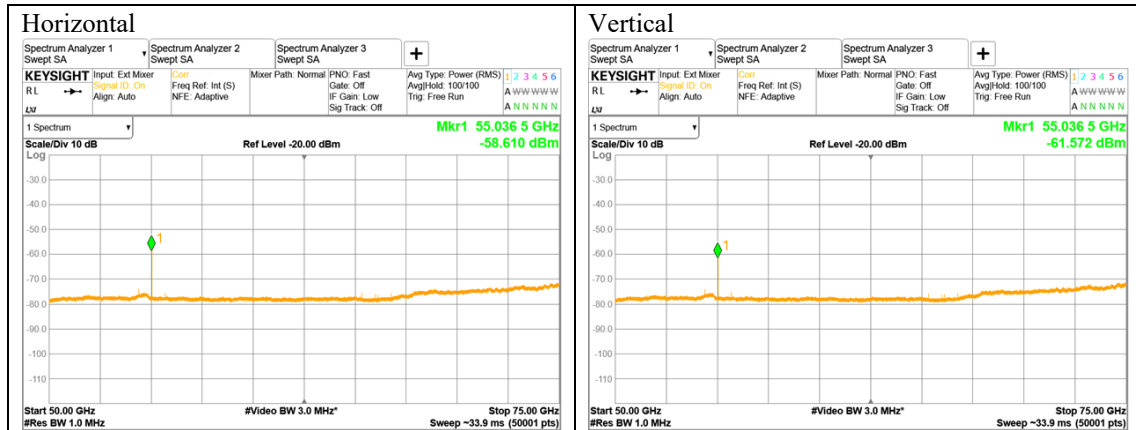
Chart



No Emissions detected.

50 GHz - 75 GHz

Chart



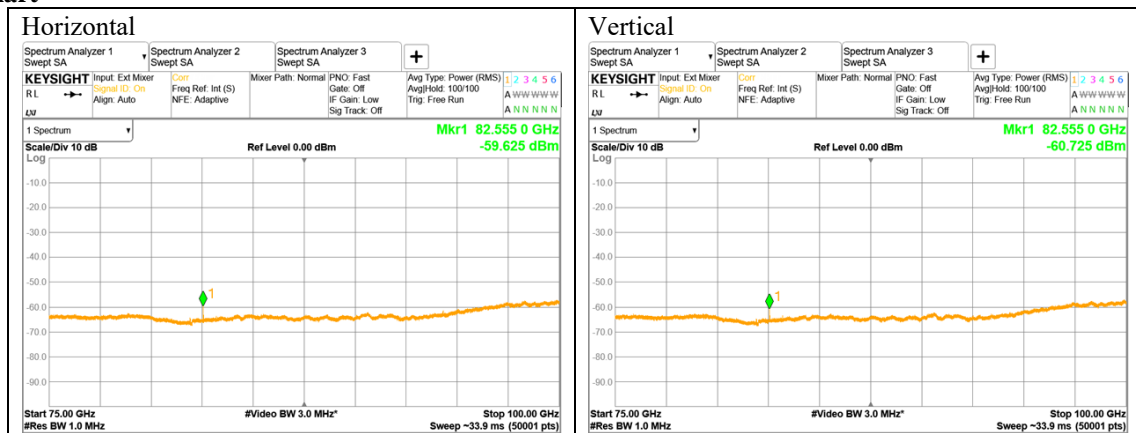
Emissions detected. The measurement results are as shown in the table below.

Result

Rx Antenna Polarity [H/V]	Frequency [GHz]	Reading (AV) [dBm]	Meas. Distance [m]	CF [dB]	Corrected EIRP (AV) [dBm]	Limit EIRP [dBm]	Margin [dB]
H	55.036	-56.04	2.0	23.73	-32.31	-13	19.31
V	55.036	-59.36	2.0	23.73	-35.63	-13	22.63

75 GHz - 100 GHz

Chart



Emissions detected. The measurement results are as shown in the table below.

Result

Rx Antenna Polarity [H/V]	Frequency [GHz]	Reading (AV) [dBm]	Meas. Distance [m]	CF [dB]	Corrected EIRP (AV) [dBm]	Limit EIRP [dBm]	Margin [dB]
H	82.555	-56.05	2.0	19.52	-36.53	-13	23.53
V	82.555	-57.60	2.0	19.53	-38.07	-13	25.07

A.5 Frequency stability

Band n258a, Antenna #0, Setting Frequency 24399.96 MHz

Test condition		Frequency [MHz]	Delta [Hz]
Temperature [deg. C]	Voltage		
50	100 % (AC)	24409.974564499	-117144.317
40	100 % (AC)	24409.890914070	-33493.888
30	100 % (AC)	24409.846510405	10909.777
20	100 % (AC)	24409.857420182	Reference
10	100 % (AC)	24409.903483478	-46063.296
0	100 % (AC)	24409.962339856	-104919.674
-10	100 % (AC)	24410.014960369	-157540.187
-20	100 % (AC)	24410.054311681	-196891.499
-30	100 % (AC)	24410.055898749	-198478.567
20	100 % (DC)	24409.899723866	-42303.684
20	115 % (AC)	24409.856837352	582.830
20	85 % (AC)	24409.856792246	627.936
20	115 % (DC)	24409.896678387	-39258.205
20	85 % (DC)	24409.895266812	-37846.630
20	End point (DC)	24409.893862138	-36441.956

Band n258b, Antenna #0, Setting Frequency 24800.04 MHz

Test condition		Frequency [MHz]	Delta [Hz]
Temperature [deg. C]	Voltage		
50	100 % (AC)	24810.055011914	-119476.311
40	100 % (AC)	24809.970272590	-34736.987
30	100 % (AC)	24809.923861170	11674.433
20	100 % (AC)	24809.935535603	Reference
10	100 % (AC)	24809.981349883	-45814.280
0	100 % (AC)	24810.042511531	-106975.928
-10	100 % (AC)	24810.096472181	-160936.578
-20	100 % (AC)	24810.135860990	-200325.387
-30	100 % (AC)	24810.137726408	-202190.805
20	100 % (DC)	24809.971774495	-36238.892
20	115 % (AC)	24809.935121409	414.194
20	85 % (AC)	24809.935022035	513.568
20	115 % (DC)	24809.968716105	-33180.502
20	85 % (DC)	24809.967517238	-31981.635
20	End point (DC)	24809.966175810	-30640.207

Band n260, Antenna #0, Setting Frequency 38499.96 MHz

Test condition		Frequency	Delta
Temperature [deg. C]	Voltage	[MHz]	[Hz]
50	100 % (AC)	38504.926352603	-130402.709
40	100 % (AC)	38504.851908047	-55958.153
30	100 % (AC)	38504.781504112	14445.782
20	100 % (AC)	38504.795949894	Reference
10	100 % (AC)	38504.867626627	-71676.733
0	100 % (AC)	38504.964872545	-168922.651
-10	100 % (AC)	38505.046683583	-250733.689
-20	100 % (AC)	38505.108637409	-312687.515
-30	100 % (AC)	38505.111636398	-315686.504
20	100 % (DC)	38504.843920996	-47971.102
20	115 % (AC)	38504.797821856	-1871.962
20	85 % (AC)	38504.797374799	-1424.905
20	115 % (DC)	38504.843733514	-47783.620
20	85 % (DC)	38504.844071723	-48121.829
20	End point (DC)	38504.844162633	-48212.739

Band n261, Antenna #0, Setting Frequency 27924.96 MHz

Test condition		Frequency	Delta
Temperature [deg. C]	Voltage	[MHz]	[Hz]
50	100 % (AC)	27929.931827384	-87921.533
40	100 % (AC)	27929.878804446	-34898.595
30	100 % (AC)	27929.838671570	5234.281
20	100 % (AC)	27929.843905851	Reference
10	100 % (AC)	27929.893004635	-49098.784
0	100 % (AC)	27929.964408918	-120503.067
-10	100 % (AC)	27930.022815982	-178910.131
-20	100 % (AC)	27930.067932106	-224026.255
-30	100 % (AC)	27930.069916696	-226010.845
20	100 % (DC)	27929.874990928	-31085.077
20	115 % (AC)	27929.842217009	1688.842
20	85 % (AC)	27929.841726357	2179.494
20	115 % (DC)	27929.874608024	-30702.173
20	85 % (DC)	27929.874102543	-30196.692
20	End point (DC)	27929.873421239	-29515.388

A.6 Test engineer and Test condition

Test Description	Date	Test Engineer	Test Place	Temperature [deg. C]	Humidity [% RH]
OBW	2022/2/21	Yuichiro Yamazaki	No.3 Semi Anechoic Chamber	20	31
EIRP	2022/2/22	Yuichiro Yamazaki	No.3 Semi Anechoic Chamber	19	30
	2022/2/23	Yuichiro Yamazaki	No.3 Semi Anechoic Chamber	20	29
	2022/2/24	Yuichiro Yamazaki	No.3 Semi Anechoic Chamber	22	30
	2022/2/26	Yuichiro Yamazaki	No.3 Semi Anechoic Chamber	22	32
	2022/2/27	Yuichiro Yamazaki	No.3 Semi Anechoic Chamber	23	36
	2022/2/28	Yuichiro Yamazaki	No.2 Semi Anechoic Chamber	20	42
	2022/3/1	Yuichiro Yamazaki	No.2 Semi Anechoic Chamber	21	45
	2022/3/2	Yuichiro Yamazaki	No.2 Semi Anechoic Chamber	22	48
	2022/3/10	Yuichiro Yamazaki	No.3 Semi Anechoic Chamber	20	29
	2022/3/11	Yuichiro Yamazaki	No.3 Semi Anechoic Chamber	21	27
	2022/3/12	Yuichiro Yamazaki	No.3 Semi Anechoic Chamber	21	33
	2022/3/28	Yuichiro Yamazaki	No.2 Semi Anechoic Chamber	22	33
	2022/3/29	Yuichiro Yamazaki	No.2 Semi Anechoic Chamber	23	40
	2022/3/30	Yuichiro Yamazaki	No.2 Semi Anechoic Chamber	22	41
OOB	2022/3/31	Yuichiro Yamazaki	No.2 Semi Anechoic Chamber	23	42
	2022/4/1	Yuichiro Yamazaki	No.2 Semi Anechoic Chamber	23	39
	2022/4/3	Yuichiro Yamazaki	No.2 Semi Anechoic Chamber	21	41
	2022/4/4	Yuichiro Yamazaki	No.2 Semi Anechoic Chamber	22	36
	2022/4/5	Yuichiro Yamazaki	No.2 Semi Anechoic Chamber	22	42
RSE	2022/3/9	Yuichiro Yamazaki	No.3 Semi Anechoic Chamber	20	30
	2022/3/13	Yuichiro Yamazaki	No.4 Semi Anechoic Chamber	23	37
	2022/3/28	Yuichiro Yamazaki	No.2 Semi Anechoic Chamber	23	32
	2022/4/6	Yuichiro Yamazaki	No.2 Semi Anechoic Chamber	23	42
	2022/4/7	Yuichiro Yamazaki	No.2 Semi Anechoic Chamber	23	40
	2022/4/8	Yuichiro Yamazaki	No.2 Semi Anechoic Chamber	22	41
	2022/4/10	Yuichiro Yamazaki	No.2 Semi Anechoic Chamber	24	39
	2022/4/11	Yuichiro Yamazaki	No.2 Semi Anechoic Chamber	22	44
	2022/4/12	Yuichiro Yamazaki	No.2 Semi Anechoic Chamber	23	42
	2022/4/13	Yuichiro Yamazaki	No.2 Semi Anechoic Chamber	24	54
	2022/4/14	Yuichiro Yamazaki	No.2 Semi Anechoic Chamber	21	58
2022/4/15	Yuichiro Yamazaki	No.2 Semi Anechoic Chamber	22	53	
Frequency Stability	2022/3/18	Yuichiro Yamazaki	No.6 Measurement Room	20	33
	2022/4/18	Yuichiro Yamazaki	No.6 Measurement Room	21	47

Appendix B Test instruments

B.1 Test instruments

(1/2)

Test Item	Local ID	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
RE	COTS-MEMI-02	178648	EMI measurement program	TSJ (Techno Science Japan)	TEPTO-DV	-	-	-
RE	MAEC-02	142004	AC2_Semi Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 3m	DA-06902	05/26/2020	24
RE	MAEC-02-SVSWR	142006	AC2_Semi Anechoic Chamber(SVSWR)	TDK	Semi Anechoic Chamber 3m	DA-06902	04/09/2021	24
RE	MAEC-03	142008	AC3_Semi Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 3m	DA-10005	05/22/2020	24
RE	MAEC-03-SVSWR	142013	AC3_Semi Anechoic Chamber(SVSWR)	TDK	Semi Anechoic Chamber 3m	DA-10005	04/01/2021	24
RE	MAEC-04	142011	AC4_Semi Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 3m	DA-10005	05/25/2020	24
RE	MAT-07	141203	Attenuator(6dB)	Weinschel Corp	2	BK7970	11/09/2021	12
RE	MBA-08	141427	Biconical Antenna	Schwarzbeck Mess-Elektronik OHG	VHA9103B+B BA9106	08031	07/10/2021	12
RE	MCC-113	141217	Coaxial cable	Fujikura/Suhner/TSJ	5D-2W/SFM141/42 1-010/sucoform14 1-PE/RFM-E121(SW)	-/04178	06/02/2021	12
RE	MCC-12	141317	Coaxial Cable	UL Japan	-	-	09/06/2021	12
RE	MCC-218	141394	Microwave Cable	Junkosha	MWX221	1607S141(1 m) / 1608S264(5 m)	09/30/2021	12
RE	MCC-231	177964	Microwave Cable	Junkosha INC.	MMX221	1901S329(1m)/ 1902S579(5m)	03/15/2022	12
RE	MCC-241	196413	Microwave Cable	Huber+Suhner	SF101EA/11PC 24/11PC24/250 OMM	SN 800094/1EA	01/20/2022	12
RE	MCC-255	207745	Coaxial Cable	UL Japan	-	-	05/17/2021	12
RE	MCC-55	141326	Microwave Cable	Suhner	SUCOFLEX10 1	2874(1m) / 2877(5m)	03/15/2022	12
RE	MCH-04	141429	Temperature and Humidity Chamber	Espec	PL-2KP	14015723	08/05/2021	12
RE	MHA-02	141503	Horn Antenna 18-26.5GHz	EMCO	3160-09	1265	06/28/2021	12
RE	MHA-03	141504	Horn Antenna 26.5-40GHz	EMCO	3160-10	1150	09/03/2021	12
RE	MHA-07	142027	Horn Antenna	Custom Microwave Inc.	HO22R	10766-01	01/18/2022	12
RE	MHA-20	141507	Horn Antenna 1-18GHz	Schwarzbeck Mess-Elektronik OHG	BBHA9120D	258	11/09/2021	12
RE	MHA-24	142036	Horn Antenna	Custom Microwave Inc.	HO6R	-	09/30/2021	12
RE	MHA-27	142039	Horn Antenna	Custom Microwave Inc.	HO4R	-	09/30/2021	12
RE	MHA-31	142041	Horn Antenna	Oshima Prototype Engineering Co.	A16-187	1	09/30/2021	12
RE	MHA-33	180634	Horn Antenna	SAGE Millimeter, Inc.	SAZ-2410-15-S1	17343-01	06/24/2021	12
RE	MHA-35	180544	Horn Antenna	SAGE Millimeter, Inc.	SAZ-2410-10-S1	17343-01	06/24/2021	12
RE	MHF-29	154635	High Pass Filter 83 GHz - 110 GHz	Oshima Prototype Engineering Co.	A17-016	1	05/18/2021	12

(2/2)

Test Item	Local ID	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
RE	MJM-16	142183	Measure	KOMELON	KMC-36	-	-	-
RE	MJM-24	142225	Measure	ASKUL	-	-	-	-
RE	MJM-27	142228	Measure	KOMELON	KMC-36	-	-	-
RE	MJM-29	142230	Measure	KOMELON	KMC-36	-	-	-
RE	MLA-21	141265	Logperiodic Antenna (200-1000MHz)	Schwarzbeck Mess-Elektronik OHG	VUSLP9111B	9111B-190	07/10/2021	12
RE	MLPA-01	141254	Loop Antenna	Rohde & Schwarz	HFH2-Z2	100017	04/17/2021	12
RE	MMM-01	141542	Digital Tester	Fluke Corporation	FLUKE 26-3	78030611	08/10/2021	12
RE	MMM-08	141532	DIGITAL HiTESTER	HIOKI E.E. CORPORATION	3805	51201197	01/16/2022	12
RE	MMM-10	141545	DIGITAL HiTESTER	HIOKI E.E. CORPORATION	3805	51201148	01/16/2022	12
RE	MMM-18	141558	Digital Tester(TRUE RMS MULTIMETER)	Fluke Corporation	115	17930030	05/24/2021	12
RE	MMX-07	186076	Wave guide Harmonic Mixer	Keysight Technologies Inc	M1971V	MY56390208	05/18/2021	12
RE	MMX-08	186077	Wave guide Harmonic Mixer	Keysight Technologies Inc	M1971W	MY56390146	05/18/2021	12
RE	MMX-09	186079	Extension Module	Virginia Diodes, Inc.	SAX	SAX370	09/10/2021	12
RE	MMX-10	186080	Extension Module	Virginia Diodes, Inc.	SAX	SAX371	09/07/2021	12
RE	MOS-13	141554	Thermo-Hygrometer	CUSTOM. Inc	CTH-201	1301	01/10/2022	12
RE	MOS-14	141561	Thermo-Hygrometer	CUSTOM. Inc	CTH-201	1401	01/10/2022	12
RE	MOS-15	141562	Thermo-Hygrometer	CUSTOM. Inc	CTH-201	0010	01/10/2022	12
RE	MOS-41	192300	Thermo-Hygrometer	CUSTOM. Inc	CTH-201	0013	12/19/2021	12
RE	MPA-03	141577	Microwave System Power Amplifier	Keysight Technologies Inc	83050A	MY39500610	10/28/2021	12
RE	MPA-10	141579	Pre Amplifier	Keysight Technologies Inc	8449B	3008A02142	02/22/2022	12
RE	MPA-11	141580	MicroWave System Amplifier	Keysight Technologies Inc	83017A	MY39500779	03/17/2022	12
RE	MPA-13	141582	Pre Amplifier	SONOMA INSTRUMENT	310	260834	02/25/2022	12
RE	MPA-23	142055	Power Amplifier	SAGE Millimeter, Inc.	SBP-5037532015-1515-N1	11599-01	03/04/2022	12
RE	MPA-24	141594	Pre Amplifier	Keysight Technologies Inc	8447D	2944A10150	02/25/2022	12
RE	MPA-25	159919	Power Amplifier	SAGE Millimeter, Inc.	SBP-4035033018-2F2F-S1	12559-01	06/02/2021	12
RE	MPA-31	180607	Power Amplifier	SAGE Millimeter, Inc.	SBP-7531142515-1010-E1	17343-01	10/18/2021	12
RE	MSA-04	141885	Spectrum Analyzer	Keysight Technologies Inc	E4448A	US44300523	11/10/2021	12
RE	MSA-19	182484	Signal Analyzer	Keysight Technologies Inc	N9030B	MY57143159	06/18/2021	12
RE	MSA-20	212970	Signal Analyzer	Keysight Technologies Inc	N9030B	MY61330357	12/22/2021	12
RE	MTR-10	141951	EMI Test Receiver	Rohde & Schwarz	ESR26	101408	03/09/2021	12

*Hyphens for Last Calibration Date and Cal Int (month) are instruments that Calibration is not required (e.g. software), or instruments checked in advance before use.

The expiration date of the calibration is the end of the expired month.

As for some calibrations performed after the tested dates, those test equipment have been controlled by means of an unbroken chains of calibrations.

All equipment is calibrated with valid calibrations. Each measurement data is traceable to the national or international standards.

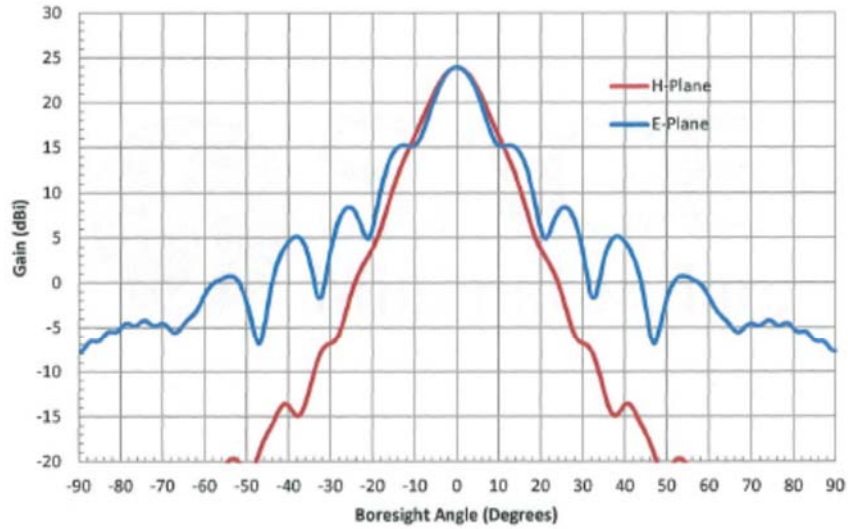
Test item: RE: Radiated Emission test

SAZ-2410-15-S1

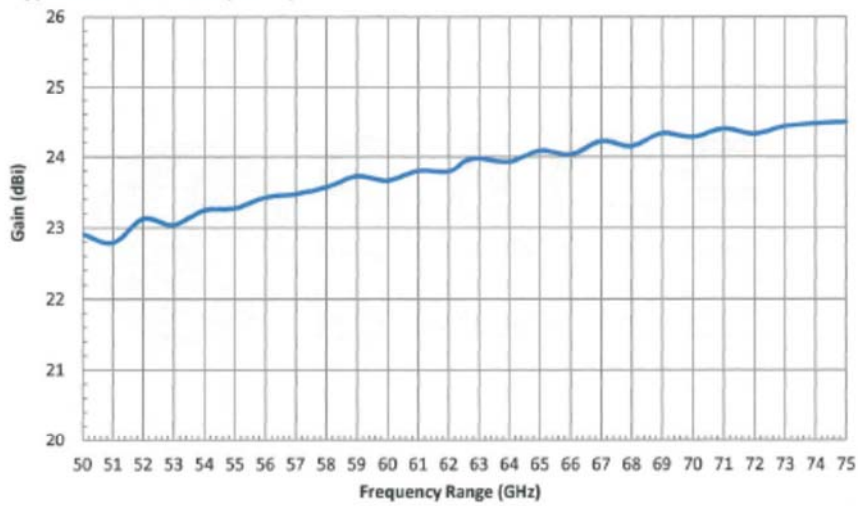
Rev. 1.1

WR-15 Standard Gain Horn Antenna, 24 dBi Gain

Typical Antenna Patterns @ 62.5 GHz



Typical Gain vs. Frequency



www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505
Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com



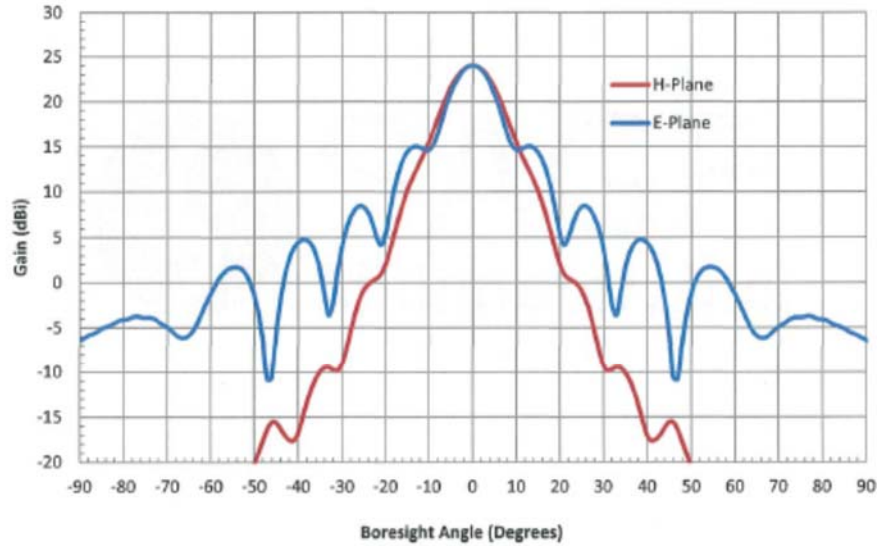
SAGE Millimeter, Inc.

SAZ-2410-10-S1

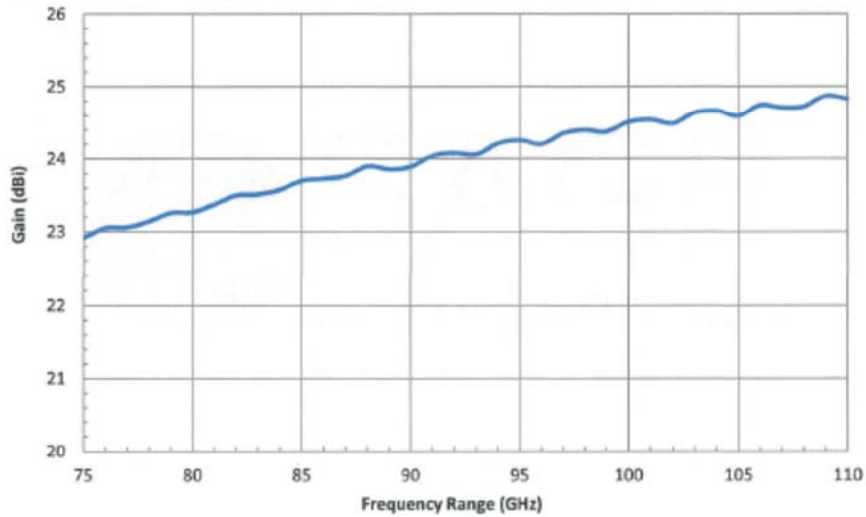
Rev. 1.0

WR-10 Standard Gain Horn Antenna, 24 dBi Gain

Typical Antenna Patterns @ 92 GHz



Typical Gain vs. Frequency



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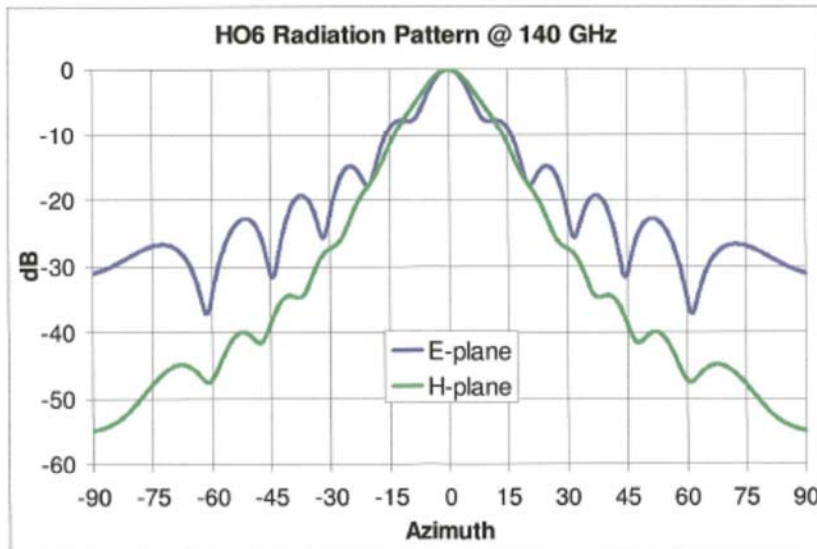
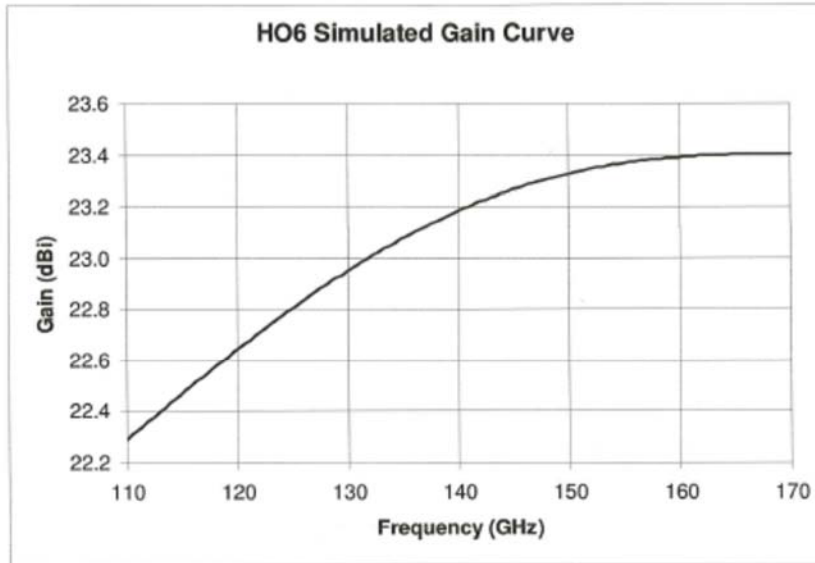


SAGE Millimeter, Inc.

MHA-24



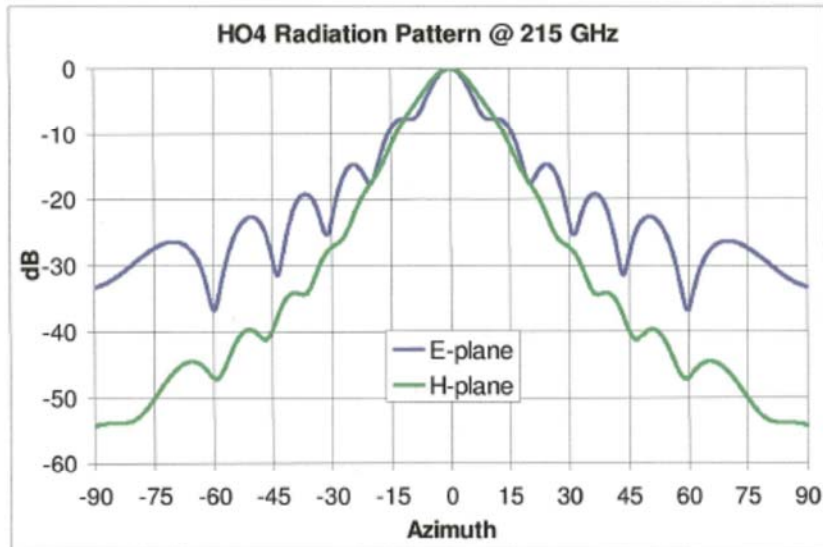
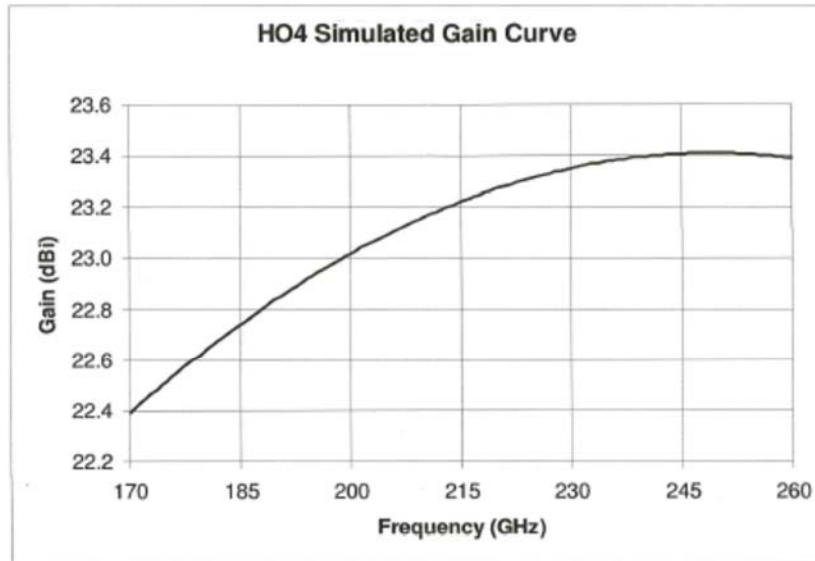
24 Boston Court
Longmont, CO 80501
303 651-0707(P)
303 651-0708(F)
www.custommicrowave.com



MHA-27



24 Boston Court
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303 651-0708(F)
www.custommicrowave.com



MMX-07



管理No.: MMX-07

定期点検の検証記録
Verification Record of Periodical Inspection

品名	Wave guide Harmonic Mixer	型名	M1971V
製造業者	Keysight Technologies Inc	製造番号	MY56390208
実施者	本社EMC試験所 福井 康之		
許容差	±3 dB以内		
不確かさ(±)	2.18 dB 20210106 ミリ波校正パジェットより		

上記の不確かさは、使用標準器を含む校正に関連する要素の合成標準不確かさに包含係数k=2を掛けた拡張不確かさであり、信頼度95%で真値が校正値の近くに存在する範囲を示します。

点検環境	23 deg. C	50 % RH
点検方法	13-EM-W0445 33項	
点検場所	本社EMC試験所 第11計測室	

使用機器

管理コード	型式	品名	製造番号	校正日
MSG-12	E8257D	Signal Generator	US49280311	2020/11/02
MCC-55	SUCOFLEX101	Microwave Cable	2874(1m) / 2877(5m)	2021/03/02
MFT-01	MUT-10-LF000	Fullband Tripler	039	Pre Check
MISO-03	FBI-15-RSES0	Waveguide Isolator	1858	Pre Check
MPSE-07	W8486A	Power sensor	MY44420112	2020/07/17
MPM-15	N1914A	Power Meter	MY53060017	2020/06/10
MSA-19	N9030B	Signal Analyzer	MY57143159	2020/06/24

判定: 合格

点検日: 2021年5月18日

承認
Approved by 橋本 典久
〒516-0021 三重県伊勢市朝熊町4383-326
株式会社 UL Japan
本社EMC試験所 機器管理責任者代理

13-QA-F0432 2013.01.11 Issue #. 2.0

MMX-08



管理No.: MMX-08

定期点検の検証記録
Verification Record of Periodical Inspection

品名	Wave guide Harmonic Mixer	型名	M1971W
製造業者	Keysight Technologies Inc	製造番号	MY56390146
実施者	本社EMC試験所 福井 康之		
許容差	±3 dB以内		
不確かさ(±)	2.165 dB 20210106 ミリ波校正バジェットより		

上記の不確かさは、使用標準器を含む校正に関連する要素の合成標準不確かさに包含係数 $k=2$ を掛けた拡張不確かさであり、信頼度95%で真値が校正値の近くに存在する範囲を示します。

点検環境	23 deg. C	50 % RH
点検方法	13-EM-W0445 33項	
点検場所	本社EMC試験所 第11計測室	

使用機器

管理コード	型式	品名	製造番号	校正日
MSG-12	E8257D	Signal Generator	US49280311	2020/11/02
MCC-55	SUCOFLEX101	Microwave Cable	2874(1m)/ 2877(5m)	2021/03/02
MFT-01	MUT-10-LF000	Fullband Tripler	039	Pre Check
MISO-02	FBI-10-RSES0	Waveguide Isolator	1191	Pre Check
MPSE-08	W8486A	Power sensor	MY44420107	2020/07/02
MPM-15	N1914A	Power Meter	MY53060017	2020/06/10
MSA-19	N9030B	Signal Analyzer	MY57143159	2020/06/24

判定: 合格

点検日: 2021年5月18日

承認

Approved by 橋本 典久

〒516-0021 三重県伊勢市朝熊町4383-326

株式会社 UL Japan

本社EMC試験所 機器管理責任者代理

13-QA-F0432 2013.01.11 Issue #: 2.0

MMX-09



管理 No.: MMX-09

定期点検の検証記録

Verification Record of Periodical Inspection

品名	Extension Module	型名	SAX
製造業者	Virginia Diodes, Inc.	製造番号	SAX370
実施者	本社 EMC 試験所 山中涼太		
許容差	スペクトルアナライザの読み値に Extension Module のメーカーロス値を足した値とカロリメータの読み値との差分が± 4.0 dB 以内である事。 来年以降は基準値と比較して± 3dB 以内(Conversion Loss Factor の許容差)とする。		
不確かさ(±)	5.6 dB ミリ波不確かさ 20211010 バジェットシート参照		

上記の不確かさは、使用標準器を含む校正に関連する要素の合成標準不確かさに包含係数 $k=2$ を掛けた拡張不確かさであり、信頼度 95% で真値が校正値の近くに存在する範囲を示します。
*点検値は四捨五入を行うため、最終桁に誤差が生じる可能性があります。

点検環境	25 deg.C	41 %RH
点検方法	Work Instructions-ULID-003607 (DCS:13-EM-W0445) 33 項	
点検場所	本社 EMC 試験所 第 6 計測室	

使用機器

管理コード	型式	品名	製造番号	校正日
MSG-12	E8257D	Signal Generator	US49280311	2020/11/02
MSG-12-06	E8257DS06	Millimeter wave source module	US46460105	2020/11/09
MET-01	MUT-10-LF000	Full band Tripler	39	Pre Check
MISO-04	STF-06-S1	D-Band Faraday Isolator	15235-01	Pre Check
MAT-103	LSA-06-R0000	Level Set Attenuator	093	2020/12/21
MSA-19	N9030B	Signal Analyzer	MY57143159	2021/06/18
EST-71	PM4	Power Meter	137V	2021/06/22
MCC-55	SUCOFLEX101	Microwave Cable	2874(1m)	2021/03/02

上記の校正試験に使用した標準器は、有効期限内の中間で点検が行われています。

判定: 合格

承認
Approved by 橋本 典久
〒516-0021 三重県伊勢市朝熊町 4383-326
株式会社 UL Japan
本社 EMC 試験所

点検日: 2021 年 9 月 10 日

点検データは別紙「MMX-09_検査データ.xlsx」参照

13-QA-F0432 2021.06.17 Issue #: 3.0

MMX-10



Virginia Diodes, Inc
979 2nd St. SE
Suite 309
Charlottesville, VA 22902
Phone: 434-297-3257
Fax: 434-297-3258

Certificate of Conformance


To: Keysight Technologies, Inc.
1400 FOUNTAINGROVE PARKWAY
DOCK 2LS
Santa Rosa, CA 95403-1799
United States

From: Virginia Diodes, Inc
979 2nd St. SE
Suite 309
Charlottesville, VA 22902

Packing List No: 211651	Today's Date: 05/14/21
Shipping Date: 05/13/21	PO Number: warranty

Quantity Shipped	Unit	Description	Order-Job Number
1	EA	REPAIR - VDIWR4.3SAX N9029-80114 Rev - 001 / SN: SAX 371	R040921KEY-01

The VDI product(s) in this shipment meet(s) the guidelines for performance specifications established in accordance with the corresponding Purchase Order. Data presented in the User Guide, where applicable, has been obtained in accordance with VDI's Quality Management System. All instruments, used to obtain data, which require calibration have been calibrated with equipment traceable to the National Institute of Standards and Technology (NIST) and through NIST to the International System of Units (SI).



Authorized Signature
Virginia Diodes, Inc