

1~67GHz Coaxial Broadband Coupler

YX-C20-1G-67G-2-1.85(F)

Features:

- Frequency Range,1GHz~67GHz
- Low VSWR, 1.4:1@1GHz~67GHz Typ.
- Low Insertion loss, 1.8dB@1GHz~67GHz Typ.
- High Directivity,15dB@1GHz~67GHz Typ
- Compact design,58.00*15.00*12.70mm

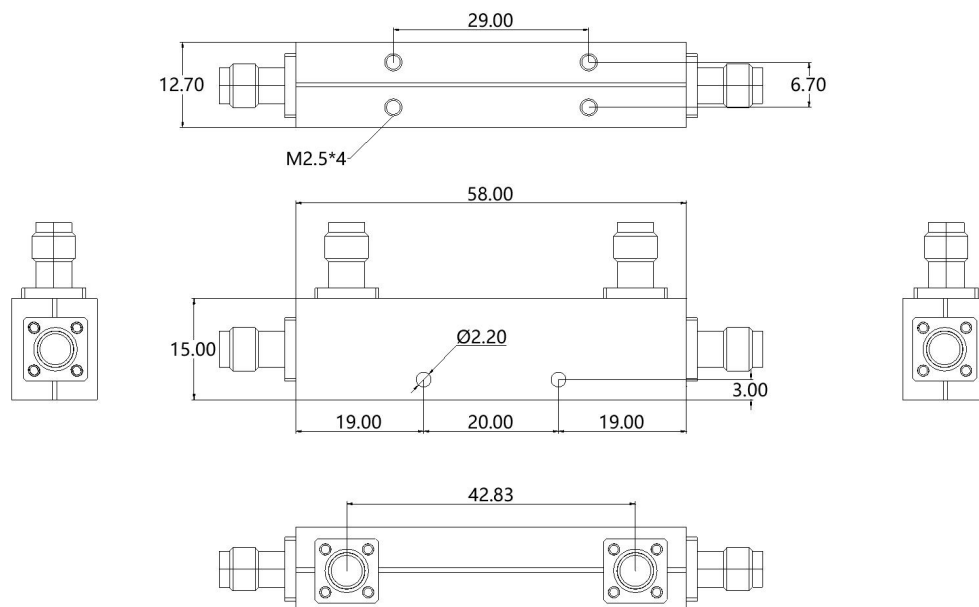


Electrical Specifications:

Item	Specification		
Operating frequency range	1-20GHz	20-40GHz	40-67GHz
VSWR Max.	≤1.2	≤1.5	≤1.7
Insertion loss(dB) Max.	≤1.5	≤2	≤2.8
Coupling(dB)	20±1		
Coupling Flatness(dB) Max.	≤±2.0		
Directivity(dB) Max.	≥18	≥15	≥10
Impedance	50Ω		
Average Power	20W cw		
Peak Power	200W (10% DutyCycle,5ms PulseWidth) If the VSWR of the backend equipment is better than 1.2, the peak power can reach 500W		
Connectors	V1.85mm-Female		

Outline Drawing:

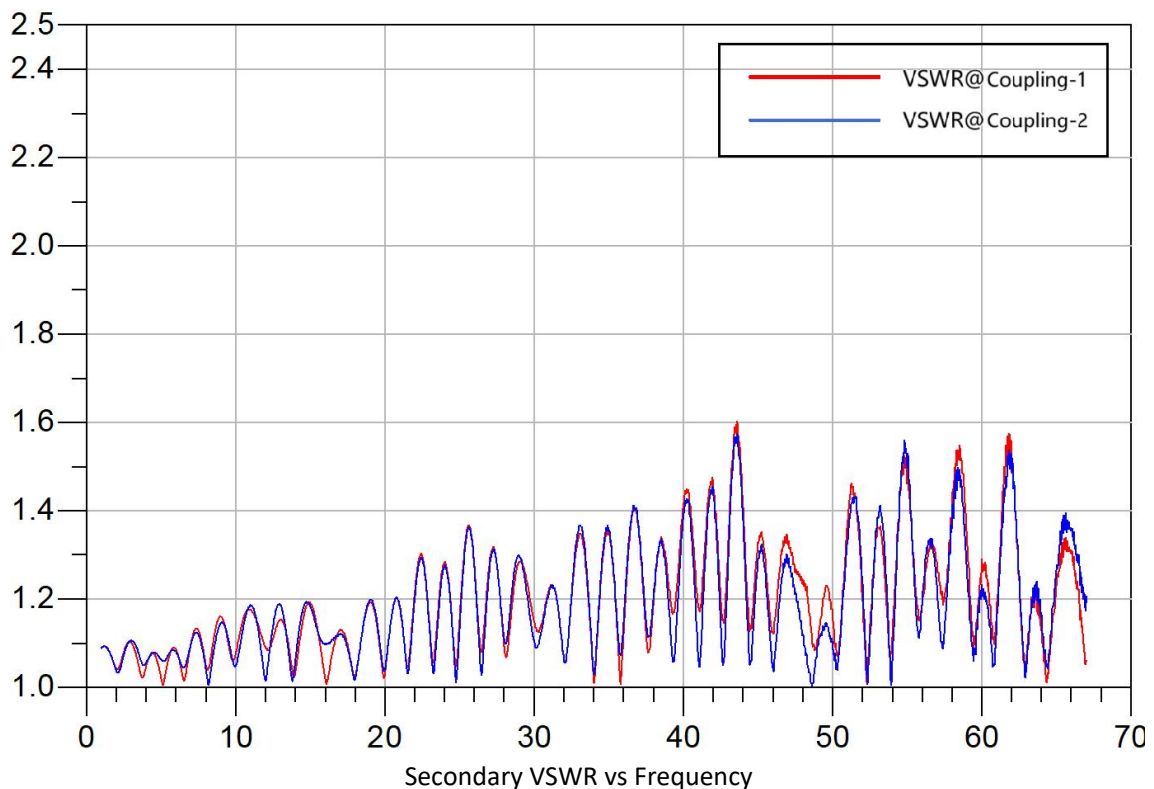
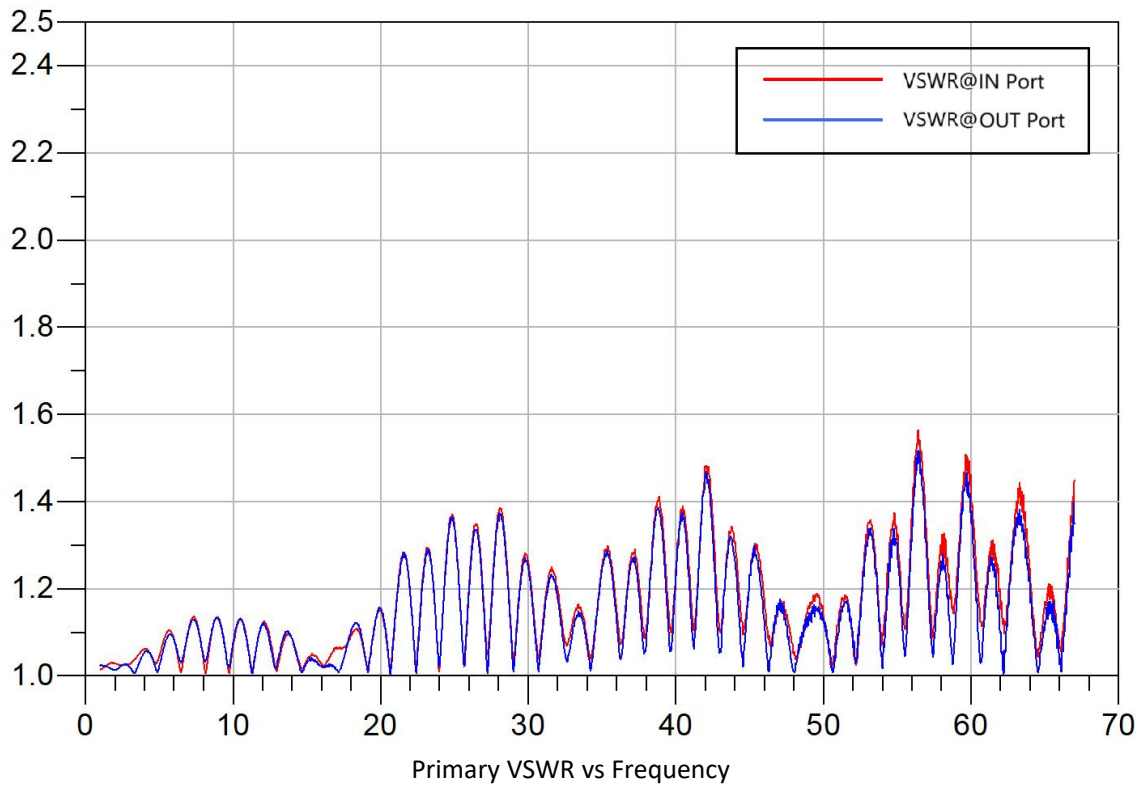
All Dimensions in mm:



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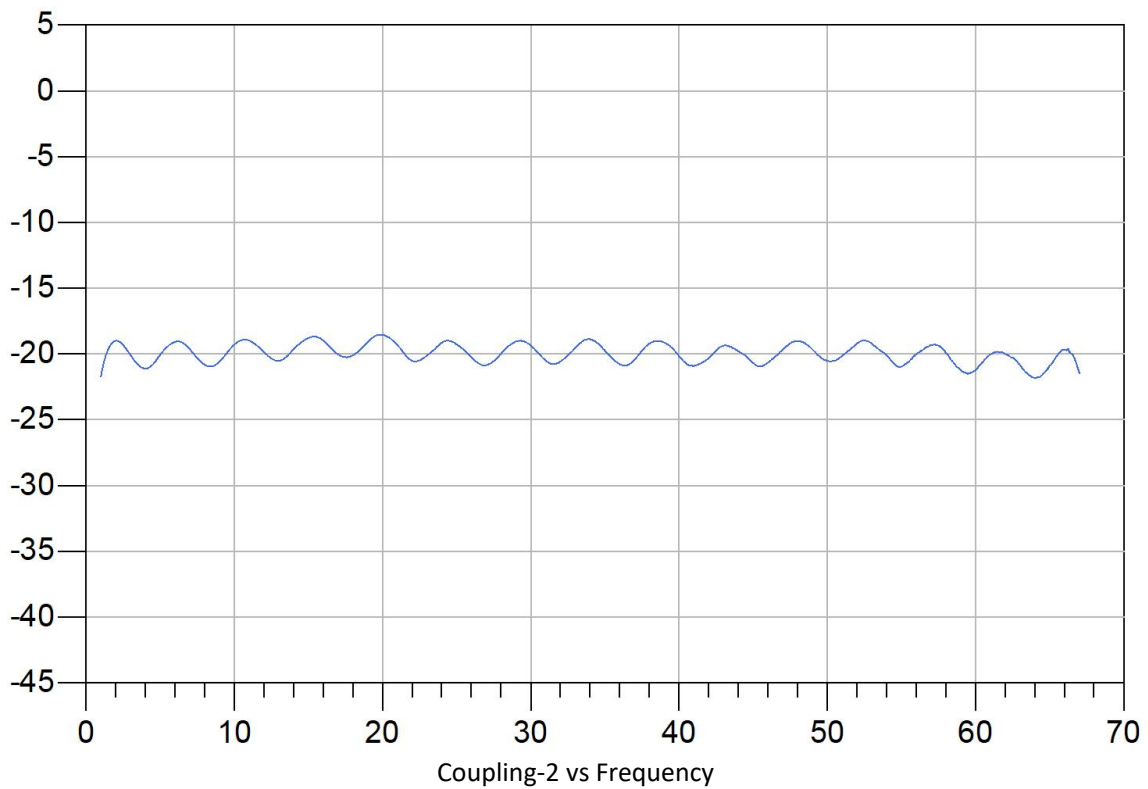
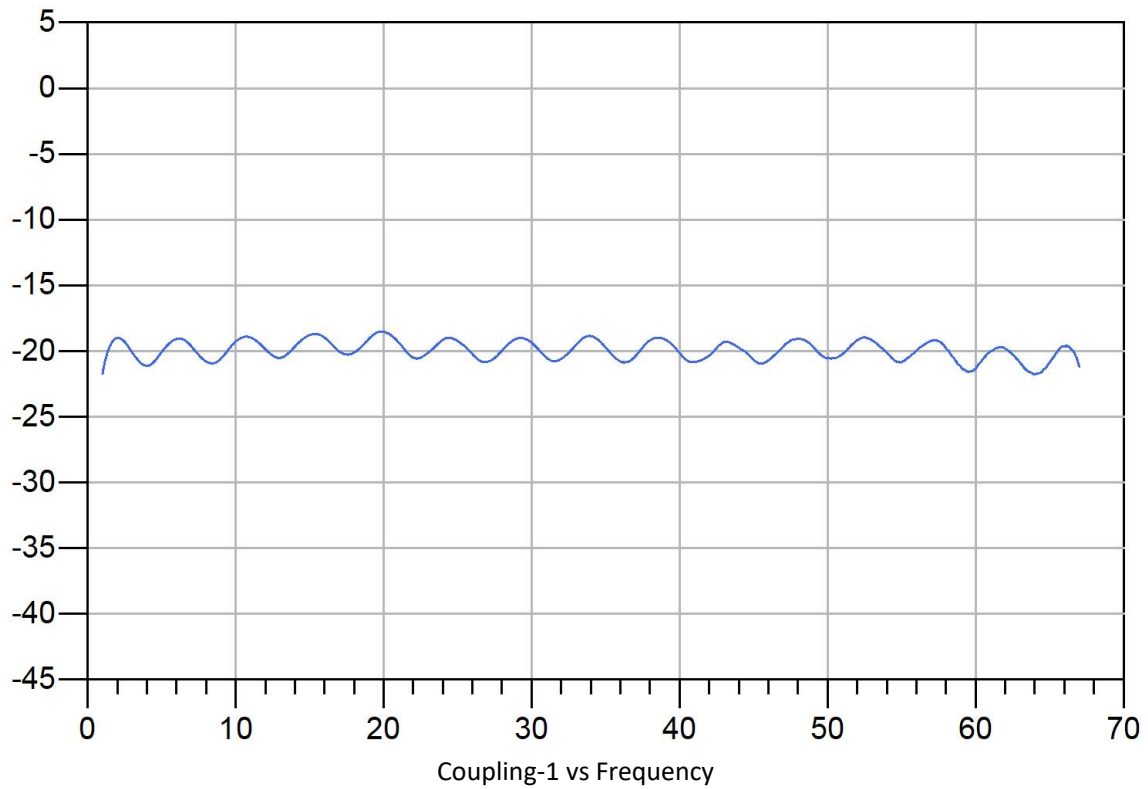
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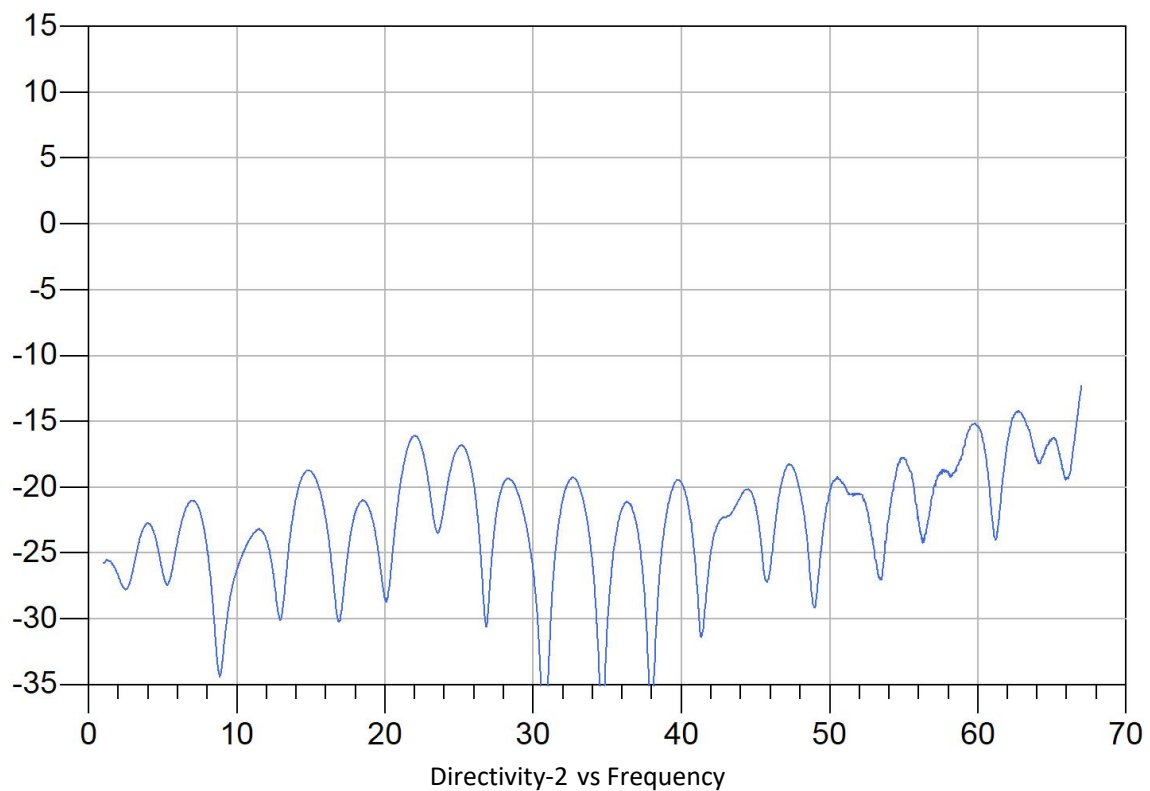
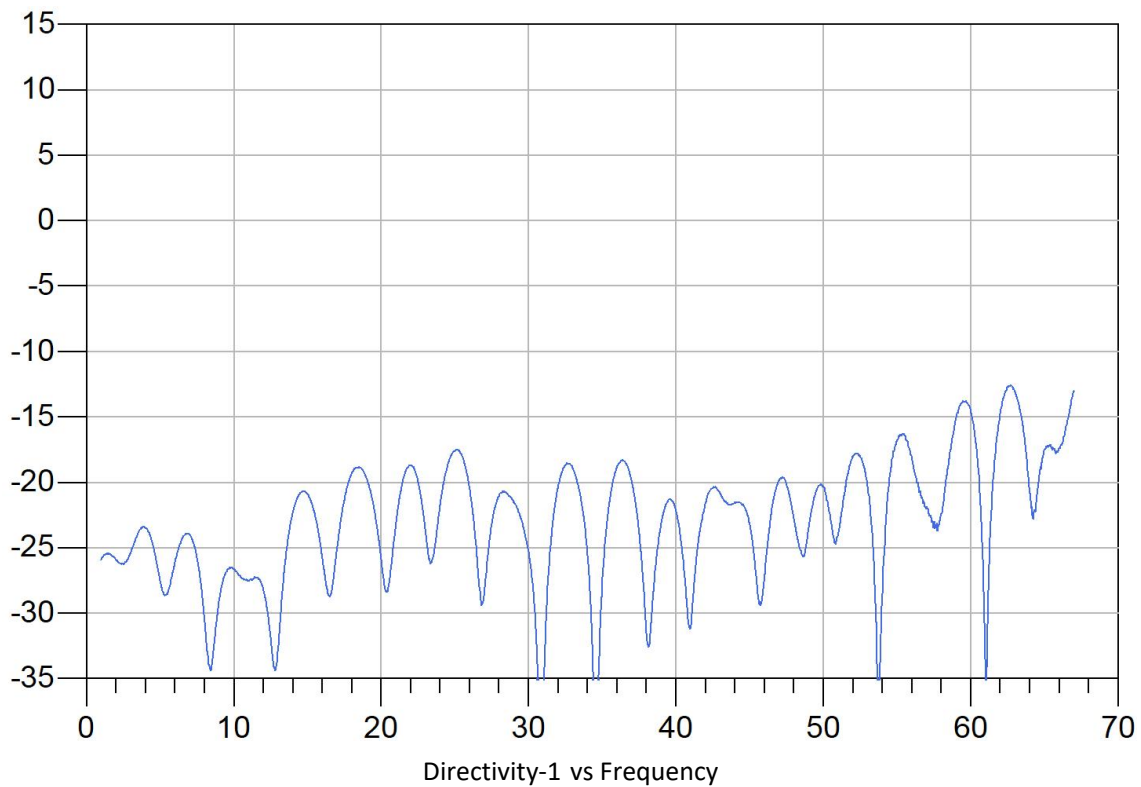
Test Data:



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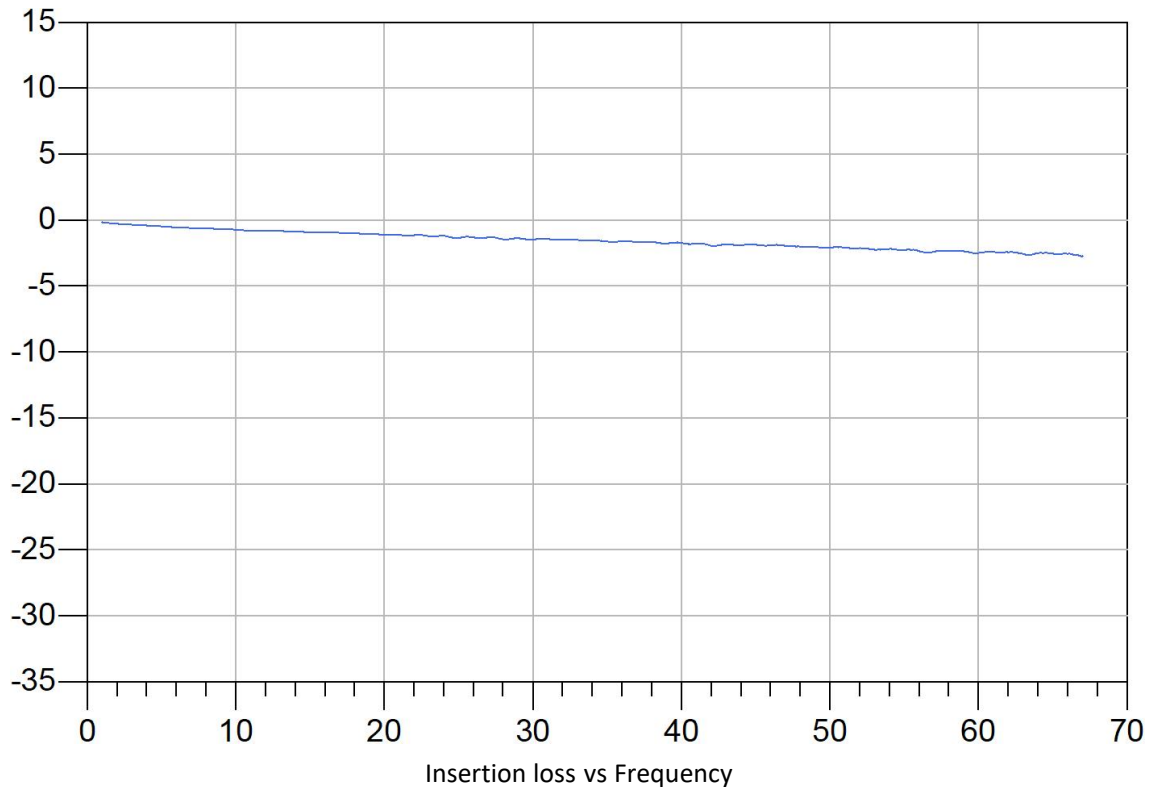
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Performance Data:

Freq.	VSWR (:1)				Coupling (dB)		Directivity (dB)		Insertion loss (dB)
	Primary IN	Primary OUT	Secondary-1	Secondary-2	IN-1	OUT-2	IN-2	OUT-1	IN-OUT
1 GHz	1.02	1.02	1.09	1.09	21.71	21.71	25.88	25.76	-0.17
2 GHz	1.01	1.03	1.04	1.04	19.00	19.01	25.91	26.78	-0.28
3 GHz	1.02	1.03	1.10	1.11	20.10	20.11	25.41	26.29	-0.36
4 GHz	1.05	1.06	1.05	1.06	21.13	21.12	23.47	22.76	-0.42
5 GHz	1.02	1.05	1.02	1.06	20.08	20.08	27.50	26.43	-0.49
6 GHz	1.08	1.08	1.09	1.08	19.08	19.09	26.20	24.11	-0.56
7 GHz	1.11	1.11	1.10	1.10	19.65	19.65	24.06	21.03	-0.61
8 GHz	1.04	1.03	1.05	1.04	20.80	20.82	30.24	24.64	-0.63
9 GHz	1.13	1.13	1.16	1.15	20.59	20.60	29.13	33.54	-0.70
10 GHz	1.08	1.07	1.08	1.05	19.28	19.29	26.65	26.25	-0.73
11 GHz	1.06	1.07	1.18	1.19	18.97	18.99	27.44	23.75	-0.79
12 GHz	1.12	1.12	1.09	1.01	19.86	19.86	28.23	24.00	-0.82
13 GHz	1.03	1.02	1.15	1.19	20.52	20.54	32.99	29.92	-0.83
14 GHz	1.09	1.09	1.03	1.06	19.65	19.65	22.33	20.88	-0.89
15 GHz	1.03	1.04	1.19	1.18	18.79	18.79	20.94	18.81	-0.92
16 GHz	1.02	1.03	1.02	1.10	18.99	18.98	25.70	22.35	-0.95
17 GHz	1.01	1.07	1.13	1.12	20.04	20.04	25.14	29.85	-0.97
18 GHz	1.11	1.09	1.02	1.02	20.12	20.11	19.36	21.93	-1.02
19 GHz	1.03	1.03	1.19	1.20	19.07	19.09	19.68	21.87	-1.05
20 GHz	1.16	1.15	1.03	1.04	18.53	18.55	25.91	28.51	-1.11

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	Primary IN	Primary OUT	Secondary-1	Secondary-2	IN-1	OUT-2	IN-2	OUT-1	IN-OUT
21 GHz	1.14	1.15	1.18	1.18	19.35	19.34	23.21	20.10	-1.14
22 GHz	1.19	1.19	1.22	1.20	20.51	20.52	18.73	16.11	-1.16
23 GHz	1.26	1.27	1.13	1.13	20.13	20.13	23.67	20.13	-1.24
24 GHz	1.03	1.02	1.28	1.28	19.14	19.15	21.84	21.40	-1.21
25 GHz	1.34	1.35	1.16	1.14	19.25	19.29	17.71	17.01	-1.36
26 GHz	1.21	1.21	1.27	1.27	20.24	20.27	20.52	19.87	-1.31
27 GHz	1.15	1.16	1.28	1.27	20.83	20.86	28.56	28.78	-1.32
28 GHz	1.36	1.38	1.09	1.10	19.96	19.97	21.00	19.72	-1.46
29 GHz	1.01	1.04	1.28	1.30	19.05	19.07	21.48	20.56	-1.38
30 GHz	1.25	1.26	1.15	1.11	19.38	19.37	25.33	26.20	-1.47
31 GHz	1.11	1.13	1.22	1.22	20.50	20.50	37.99	35.46	-1.44
32 GHz	1.18	1.19	1.06	1.06	20.58	20.58	20.35	20.99	-1.49
33 GHz	1.10	1.13	1.35	1.36	19.52	19.54	18.94	19.66	-1.51
34 GHz	1.07	1.08	1.01	1.03	18.87	18.89	25.52	25.81	-1.56
35 GHz	1.24	1.25	1.35	1.35	19.74	19.74	27.75	30.69	-1.62
36 GHz	1.12	1.15	1.13	1.16	20.80	20.78	18.88	21.65	-1.62
37 GHz	1.26	1.28	1.36	1.36	20.40	20.44	19.98	23.05	-1.67
38 GHz	1.08	1.11	1.19	1.20	19.18	19.22	31.55	39.02	-1.66
39 GHz	1.35	1.38	1.23	1.19	19.12	19.14	23.07	22.08	-1.78
40 GHz	1.23	1.24	1.42	1.39	20.17	20.17	22.22	19.68	-1.75
41 GHz	1.16	1.20	1.18	1.07	20.84	20.91	30.97	26.80	-1.79
42 GHz	1.46	1.48	1.46	1.44	20.33	20.33	21.62	25.03	-1.95
43 GHz	1.06	1.10	1.33	1.29	19.33	19.38	20.99	22.38	-1.85
44 GHz	1.26	1.31	1.41	1.38	19.75	19.79	21.62	20.79	-1.91
45 GHz	1.23	1.23	1.33	1.29	20.68	20.70	23.29	21.41	-1.88
46 GHz	1.13	1.17	1.12	1.04	20.71	20.66	27.37	26.19	-1.92
47 GHz	1.15	1.15	1.32	1.28	19.67	19.69	19.87	18.69	-1.95
48 GHz	1.01	1.05	1.24	1.12	19.08	19.02	22.73	20.36	-2.00
49 GHz	1.14	1.16	1.11	1.10	19.68	19.68	23.59	29.30	-2.06
50 GHz	1.13	1.13	1.16	1.09	20.55	20.52	20.36	20.75	-2.07
51 GHz	1.09	1.12	1.37	1.33	20.24	20.16	24.57	20.07	-2.09
52 GHz	1.08	1.08	1.20	1.24	19.18	19.23	18.18	20.70	-2.13
53 GHz	1.31	1.35	1.36	1.38	19.21	19.24	20.55	24.73	-2.26
54 GHz	1.02	1.10	1.12	1.06	20.16	20.13	28.39	22.23	-2.19
55 GHz	1.30	1.32	1.46	1.51	20.85	20.97	17.04	17.98	-2.28
56 GHz	1.32	1.38	1.19	1.19	19.98	20.04	18.33	22.84	-2.36
57 GHz	1.28	1.31	1.28	1.22	19.24	19.37	22.38	20.30	-2.42
58 GHz	1.26	1.30	1.40	1.38	19.81	19.91	22.52	19.01	-2.37
59 GHz	1.16	1.20	1.34	1.27	21.22	21.23	15.29	17.45	-2.36

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60 GHz	1.35	1.44	1.29	1.23	21.33	21.26	14.78	15.55	-2.52
61 GHz	1.18	1.20	1.18	1.15	20.03	20.06	35.23	22.76	-2.42
62 GHz	1.10	1.15	1.50	1.49	19.84	20.01	14.95	16.87	-2.45
63 GHz	1.32	1.37	1.07	1.05	20.88	20.85	13.17	14.54	-2.57
64 GHz	1.19	1.25	1.14	1.17	21.78	21.84	20.95	18.30	-2.55
65 GHz	1.12	1.16	1.23	1.27	20.87	20.91	17.90	16.51	-2.54
66 GHz	1.04	1.07	1.30	1.35	19.64	19.68	17.76	19.12	-2.57
67 GHz	1.35	1.45	1.06	1.21	21.18	21.46	12.84	12.45	-2.74



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