RF Exposure Study - Engineering Analysis per

FCC 2.1093

Industry Canada RSS-102

CGR1240
FCC ID : LDKALTMT0556
IC : 2461B-ALTMT0556

Supplementary Appendix to Report EDCS# 1104807

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1.0: Attestation Statement of Compliance

The Cisco Systems CGR1240 with modules have been evaluated for Maximum Permissible Exposure in compliance with 47 Code of Federal Regulations 2.1093. The evaluation was in accordance with methodology as referenced in FCC Bulletin OET 65C (rev 01-01) by Compliance Certification Services This report serves as the additional technical analysis of the Cisco radio modules

This study addresses the addition of an additional pair of transmitters using the data derived in the afore mentioned report # 1104807.

The limits used for this evaluation are in line with the recommendations of the World Health Organizations (WHO) International Committee on Non Ionizing Radiation Protection (ICNIRP) as well as the American National Standards Institute (ANSI) C95.1.

The limits chosen are of **General Population/Uncontrolled Exposure**. The device is pole mounted. The device is high enough that it is not accessible by the general public

This analysis also complies with the requirements stated in Industry Canada RSS-102 as well as the applicable Australian and New Zealand regulations.

Only the following case scenario was used which are:
MC8705 3G Module : FCC ID: N7NMC8705 , IC : 2417C-MC8705
RF900 Module : FCC ID: SK9ITR9002, IC : 864G-ITR9002
CGR 1240 WLAN: FCC ID: LDKALTMT0556, IC: 2461B-ALTMT0556

Output power listed is conducted. The antenna(s) used for this device must be installed to provide a separation distance of at least 20 cm from all persons, and may only be co-located or operating in conjunction with the following devices: (1) Up to 2 modular transmitters identified by FCC ID: N7NMC8705, only 1 of which may transmit simultaneously with all the other transmitters and (2) Up to 2 modular transmitter identified by FCC ID: SK9ITR9002, only 1 of which may transmit simultaneously with all the other transmitters. Installers must be provided with antenna installation and transmitter operating conditions for satisfying RF exposure compliance.

Based on the study this case scenario, the General Population/Uncontrolled Exposure and the minimum recommended distance is around 20cm (8 inches) from the antenna.

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2.0 EUT Description.

Cisco Connected Grid Router CGR1240 with installed:
Sierra Wireless MC8705 3G Module
Itron RF900 radio Module
2.4GHz WLAN

3.0 Methodology

All calculations were made in accordance with ANSI C95.1, and FCC OET 65C.

4.0 Technical Requirements

4.1 Single Band Operation – Limits

FCC Limits for Maximum Permissible Exposure (MPE)

(A) Limits for Occupational/Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $\|E\|^2$, $\|H\|^2$ or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	$(900/f^2)$*	6
30-300	61.4	0.163	1.0	6
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6

(B) Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $\|E\|^2$, $\|H\|^2$ or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	$(180/f^2)$*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/1500	30
1500-100,000	--	--	1.0	30

f = frequency in MHz *Plane-wave equivalent power density

NOTE 1: See Section 1 for discussion of exposure categories.

NOTE 2: The averaging time for General Population/Uncontrolled exposure to fixed transmitters is not applicable for mobile and portable transmitters. See 47 CFR §§2.1091 and 2.1093 on source-based time-averaging requirements for mobile and portable transmitters.

5.0 Calculations

The Power Density (mW/cm2) is calculated as follows:

$S = PG(Duty\ Cycle) / 4\pi R^2$

Where:
S = power density (in appropriate units, e.g. mW/cm2)
P = power input to the antenna (in appropriate units, e.g., mW)
G = power gain of the antenna in the direction of interest relative to an isotropic radiator
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

6.0 Results

Test Reports used in evaluation are :

1. Sierra Wireless 3G module Report No.: SRTC2010-H024-E0017, Date 2010.12.02 RF Exposure for MC8705 wireless modem
2. ITRON RF900 Module RF exposure report: ACS Report Number: 11-0104.W06.11.A
3. Cisco CGR1240 WLAN report : EDCS# 1104807

Tx	Frequency (MHz)	MPE Distance (cm)	Peak Tx Power (dBm)	Radio Power (mW)	Ant Gain (dBi)	Ant Gain (mW eq)	Duty Cycle	Power Density (mW/cm^2)	Limit (mW/cm^2)	% of Std
Tx1	824 - 849	20	32.8	1905.5	2.4	1.74	0.50[1]	**0.33**	0.566	0.58
Tx2	902 - 928	20	28.0	628.1	2.9	1.95	1.0[2]	**0.24**	0.601	0.40
Tx3	1850 - 1910	20	30.0	1000.0	2.4	1.74	0.5[3]	**0.17**	1	0.17
Tx4	2412 - 2462	20	11.3	13.48	4.0	2.51	1.0[4]	**0.01**	1	0.01

Note 1 - where DutyCycle is 0.5 for GPRS operation (the worst case) and R is 20 cm. See RF Exposure report FCC:ID: N7NMC8705

Note 2 - For 900 MHz ISM band, these are TDD radios and with very low payloads, we expect the duty cycle to be on the order of 5 – 10%. For our calculation we conservatively use 100%

Note 3 - For 3G 1900 MHz, where DutyCycle is 0.5 (the worst case) and R is 20 cm. See RF Exposure report FCC:ID: N7NMC8705

Note 4 - For WiFi 2400 MHz, for worst case 100%.

Calculations with additional transmitters

The 3G radio operates in either the 824-849MHz band or 1850–1910MHz Band but not both at same time.

Scenerio 1 :
MC8705 3G Module operating in the 824-849 Band
RF900 Module
CGR1240 WLAN

TX1 + TX2 + n/a + TX4 = % of standard
(0.58) + (0.40) + n/a + (0.01) = 0.99

$D_{(estimate)} = 20 * \sqrt{\%}$
D = 19.89cm which is less than 20cm recommended

Scenerio 2 :
MC8705 3G Module operating in the 1850-1910 Band
RF900 Module
CGR1240 WLAN

n/a + TX2 + TX3 + TX4 = % of standard
n/a + (0.40) + (0.17) + (0.01) = 0.58

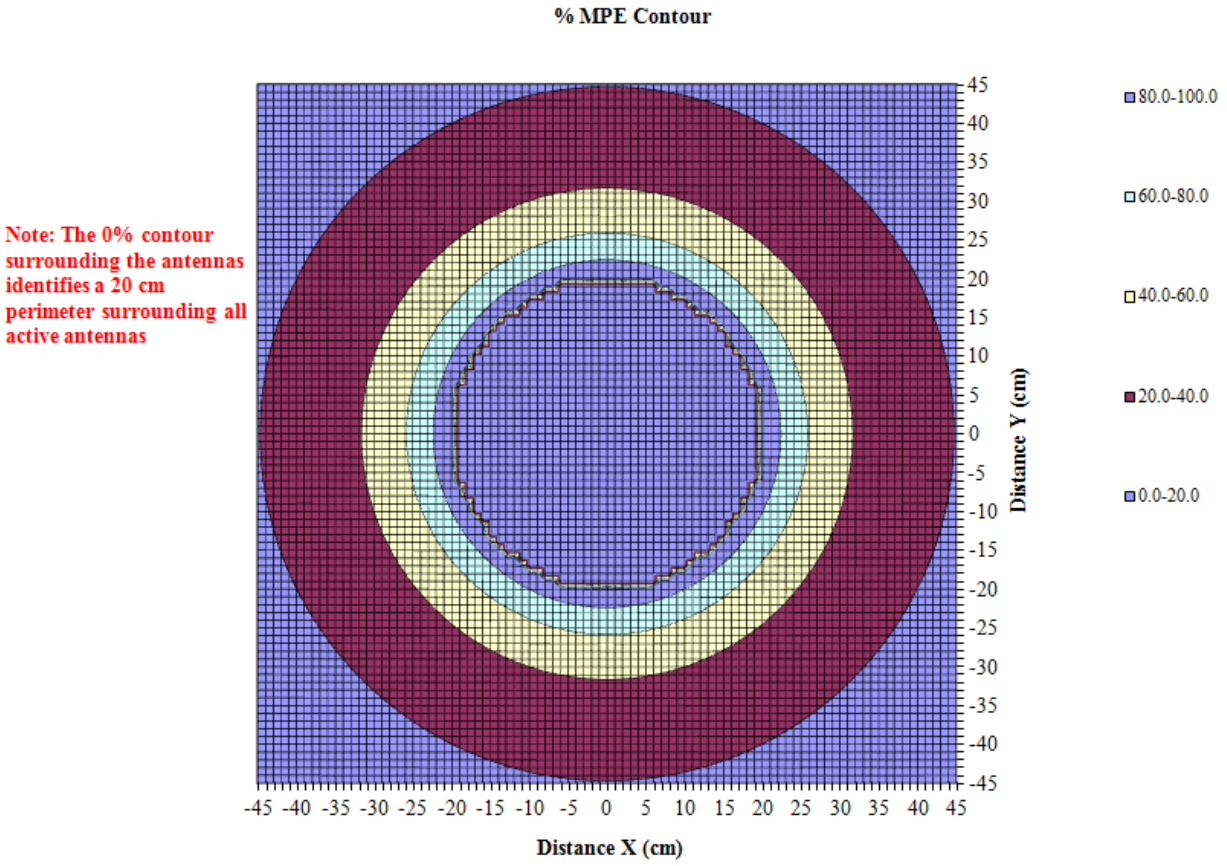
$D_{(estimate)} = 20 * \sqrt{\%}$

D = 15.23cm which is less than 20cm recommended

The configuration above co-location calculation is for **General Population/Uncontrolled exposure**. The minimum distance recommended is **20cm (8 inches)** when all antennas are within 20cm of each other.

Below is %MPE contour map & Table using the MPE-mobile worksheet found on FCC website

(http://transition.fcc.gov/oet/ea/presentations/files/oct05/MPE-mobile.xls)



Antenna No.		Total	1	2	3	4	5	6
Tx Status			On	Off	On	On	Off	Off
Frequency	MHz		836	1850	908	2450	836	5800
MPE Limit	mW/cm^2		0.56	0.00	0.61	1.00	0.00	0.00
Max % MPE	%	99.8	58.9	0.0	40.2	0.6	0.0	0.0
Power	(W)	1.591	0.950	0.000	0.628	0.013	0.000	0.000
Antenna Gain	dBi		2.40	2.40	2.90	4.00	2.40	1.00
EIRP	(W)	2.91	1.651	0.000	1.225	0.033	0.000	0.000
X	(cm)		0.0	0.0	0.0	0.0	0.0	8.0
Y	(cm)		0.0	0.0	0.0	0.0	0.0	0.0
Sector			FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
Arc			FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
q_1	degs	input	-120	-120	-120	-120	-120	-120
q_2			60	60	60	60	60	60
q_1		actual	-120	-120	-120	-120	-120	-120
q_2			60	60	60	60	60	60
	-45	-44	-43	-42	-41	-40	-39	-38
45	9.9	10.1	10.3	10.5	10.8	11.0	11.3	11.5
44	10.1	10.3	10.5	10.8	11.0	11.3	11.6	11.8
43	10.3	10.5	10.8	11.1	11.3	11.6	11.8	12.1
42	10.5	10.8	11.1	11.3	11.6	11.9	12.2	12.4
41	10.8	11.0	11.3	11.6	11.9	12.2	12.5	12.8
40	11.0	11.3	11.6	11.9	12.2	12.5	12.8	13.1
39	11.3	11.6	11.8	12.2	12.5	12.8	13.1	13.5
38	11.5	11.8	12.1	12.4	12.8	13.1	13.5	13.8
37	11.8	12.1	12.4	12.7	13.1	13.4	13.8	14.2
36	12.0	12.4	12.7	13.0	13.4	13.8	14.2	14.6
35	12.3	12.6	13.0	13.4	13.7	14.1	14.5	15.0
34	12.6	12.9	13.3	13.7	14.1	14.5	14.9	15.4
33	12.8	13.2	13.6	14.0	14.4	14.8	15.3	15.8
32	13.1	13.5	13.9	14.3	14.8	15.2	15.7	16.2
31	13.4	13.8	14.2	14.7	15.1	15.6	16.1	16.6
30	13.7	14.1	14.5	15.0	15.5	16.0	16.5	17.0
29	13.9	14.4	14.8	15.3	15.8	16.4	16.9	17.5
28	14.2	14.7	15.2	15.7	16.2	16.7	17.3	17.9
27	14.5	15.0	15.5	16.0	16.6	17.1	17.7	18.4
26	14.8	15.3	15.8	16.4	16.9	17.5	18.2	18.8
25	15.1	15.6	16.1	16.7	17.3	17.9	18.6	19.3
24	15.4	15.9	16.5	17.1	17.7	18.3	19.0	19.8
23	15.6	16.2	16.8	17.4	18.1	18.8	19.5	20.2
22	15.9	16.5	17.1	17.8	18.4	19.2	19.9	20.7
21	16.2	16.8	17.4	18.1	18.8	19.6	20.4	21.2
20	16.5	17.1	17.8	18.5	19.2	20.0	20.8	21.7
19	16.7	17.4	18.1	18.8	19.6	20.4	21.2	22.1
18	17.0	17.7	18.4	19.1	19.9	20.8	21.6	22.6
17	17.3	17.9	18.7	19.4	20.3	21.1	22.1	23.0
16	17.5	18.2	19.0	19.8	20.6	21.5	22.5	23.5
15	17.7	18.5	19.3	20.1	20.9	21.9	22.9	23.9
14	18.0	18.7	19.5	20.4	21.3	22.2	23.3	24.3
13	18.2	19.0	19.8	20.7	21.6	22.6	23.6	24.8
12	18.4	19.2	20.0	20.9	21.9	22.9	24.0	25.1
11	18.6	19.4	20.3	21.2	22.2	23.2	24.3	25.5
10	18.8	19.6	20.5	21.4	22.4	23.5	24.6	25.9
9	19.0	19.8	20.7	21.6	22.7	23.8	24.9	26.2
8	19.1	20.0	20.9	21.8	22.9	24.0	25.2	26.5
7	19.3	20.1	21.0	22.0	23.1	24.2	25.4	26.7
6	19.4	20.2	21.2	22.2	23.3	24.4	25.6	27.0
5	19.5	20.4	21.3	22.3	23.4	24.6	25.8	27.2
4	19.6	20.5	21.4	22.4	23.5	24.7	26.0	27.3
3	19.6	20.5	21.5	22.5	23.6	24.8	26.1	27.5
2	19.7	20.6	21.5	22.6	23.7	24.9	26.2	27.6
1	19.7	20.6	21.6	22.6	23.7	24.9	26.2	27.6
0	19.7	20.6	21.6	22.6	23.8	25.0	26.3	27.7
-1	19.7	20.6	21.6	22.6	23.7	24.9	26.2	27.6
-2	19.7	20.6	21.5	22.6	23.7	24.9	26.2	27.6
-3	19.6	20.5	21.5	22.5	23.6	24.8	26.1	27.5
-4	19.6	20.5	21.4	22.4	23.5	24.7	26.0	27.3
-5	19.5	20.4	21.3	22.3	23.4	24.6	25.8	27.2
-6	19.4	20.2	21.2	22.2	23.3	24.4	25.6	27.0
-7	19.3	20.1	21.0	22.0	23.1	24.2	25.4	26.7
-8	19.1	20.0	20.9	21.8	22.9	24.0	25.2	26.5
-9	19.0	19.8	20.7	21.6	22.7	23.8	24.9	26.2
-10	18.8	19.6	20.5	21.4	22.4	23.5	24.6	25.9
-11	18.6	19.4	20.3	21.2	22.2	23.2	24.3	25.5
-12	18.4	19.2	20.0	20.9	21.9	22.9	24.0	25.1
-13	18.2	19.0	19.8	20.7	21.6	22.6	23.6	24.8
-14	18.0	18.7	19.5	20.4	21.3	22.2	23.3	24.3
-15	17.7	18.5	19.3	20.1	20.9	21.9	22.9	23.9
-16	17.5	18.2	19.0	19.8	20.6	21.5	22.5	23.5
-17	17.3	17.9	18.7	19.4	20.3	21.1	22.1	23.0
-18	17.0	17.7	18.4	19.1	19.9	20.8	21.6	22.6
-19	16.7	17.4	18.1	18.8	19.6	20.4	21.2	22.1
-20	16.5	17.1	17.8	18.5	19.2	20.0	20.8	21.7
-21	16.2	16.8	17.4	18.1	18.8	19.6	20.4	21.2
-22	15.9	16.5	17.1	17.8	18.4	19.2	19.9	20.7
-23	15.6	16.2	16.8	17.4	18.1	18.8	19.5	20.2
-24	15.4	15.9	16.5	17.1	17.7	18.3	19.0	19.8
-25	15.1	15.6	16.1	16.7	17.3	17.9	18.6	19.3
-26	14.8	15.3	15.8	16.4	16.9	17.5	18.2	18.8
-27	14.5	15.0	15.5	16.0	16.6	17.1	17.7	18.4
-28	14.2	14.7	15.2	15.7	16.2	16.7	17.3	17.9
-29	13.9	14.4	14.8	15.3	15.8	16.4	16.9	17.5
-30	13.7	14.1	14.5	15.0	15.5	16.0	16.5	17.0
-31	13.4	13.8	14.2	14.7	15.1	15.6	16.1	16.6
-32	13.1	13.5	13.9	14.3	14.8	15.2	15.7	16.2
-33	12.8	13.2	13.6	14.0	14.4	14.8	15.3	15.8
-34	12.6	12.9	13.3	13.7	14.1	14.5	14.9	15.4

Antenna No.			0	1	0	0	1	1	Tx Off									
	-37	-36	-35	-34	-33	-32	-31	-30	-29	-28	-27	-26	-25	-24	-23	-22	-21	-20
45	11.8	12.0	12.3	12.6	12.8	13.1	13.4	13.7	13.9	14.2	14.5	14.8	15.1	15.4	15.6	15.9	16.2	16.5
44	12.1	12.4	12.6	12.9	13.2	13.5	13.8	14.1	14.4	14.7	15.0	15.3	15.6	15.9	16.2	16.5	16.8	17.1
43	12.4	12.7	13.0	13.3	13.6	13.9	14.2	14.5	14.8	15.2	15.5	15.8	16.1	16.5	16.8	17.1	17.4	17.8
42	12.7	13.0	13.4	13.7	14.0	14.3	14.7	15.0	15.3	15.7	16.0	16.4	16.7	17.1	17.4	17.8	18.1	18.5
41	13.1	13.4	13.7	14.1	14.4	14.8	15.1	15.5	15.8	16.2	16.6	16.9	17.3	17.7	18.1	18.4	18.8	19.2
40	13.4	13.8	14.1	14.5	14.8	15.2	15.6	16.0	16.4	16.7	17.1	17.5	17.9	18.3	18.8	19.2	19.6	20.0
39	13.8	14.2	14.5	14.9	15.3	15.7	16.1	16.5	16.9	17.3	17.7	18.2	18.6	19.0	19.5	19.9	20.4	20.8
38	14.2	14.6	15.0	15.4	15.8	16.2	16.6	17.0	17.5	17.9	18.4	18.8	19.3	19.8	20.2	20.7	21.2	21.7
37	14.6	15.0	15.4	15.8	16.2	16.7	17.1	17.6	18.1	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.1	22.6
36	15.0	15.4	15.8	16.3	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.8	21.3	21.9	22.4	23.0	23.5
35	15.4	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.9	20.4	21.0	21.6	22.2	22.8	23.4	24.0	24.6
34	15.8	16.3	16.8	17.3	17.8	18.3	18.9	19.4	20.0	20.6	21.2	21.8	22.4	23.1	23.7	24.3	25.0	25.7
33	16.2	16.7	17.3	17.8	18.3	18.9	19.5	20.1	20.7	21.3	22.0	22.6	23.3	24.0	24.7	25.4	26.1	26.8
32	16.7	17.2	17.8	18.3	18.9	19.5	20.1	20.8	21.4	22.1	22.8	23.5	24.2	25.0	25.7	26.5	27.3	28.0
31	17.1	17.7	18.3	18.9	19.5	20.1	20.8	21.5	22.2	22.9	23.6	24.4	25.2	26.0	26.8	27.6	28.5	29.3
30	17.6	18.2	18.8	19.4	20.1	20.8	21.5	22.2	22.9	23.7	24.5	25.3	26.2	27.1	27.9	28.9	29.8	30.7
29	18.1	18.7	19.3	20.0	20.7	21.4	22.2	22.9	23.7	24.6	25.4	26.3	27.2	28.2	29.1	30.1	31.1	32.2
28	18.5	19.2	19.9	20.6	21.3	22.1	22.9	23.7	24.6	25.5	26.4	27.3	28.3	29.4	30.4	31.5	32.6	33.7
27	19.0	19.7	20.4	21.2	22.0	22.8	23.6	24.5	25.4	26.4	27.4	28.4	29.5	30.6	31.7	32.9	34.1	35.4
26	19.5	20.2	21.0	21.8	22.6	23.5	24.4	25.3	26.3	27.3	28.4	29.5	30.7	31.9	33.1	34.4	35.7	37.1
25	20.0	20.8	21.6	22.4	23.3	24.2	25.2	26.2	27.2	28.3	29.5	30.7	31.9	33.2	34.6	36.0	37.5	39.0
24	20.5	21.3	22.2	23.1	24.0	25.0	26.0	27.1	28.2	29.4	30.6	31.9	33.2	34.7	36.1	37.7	39.3	40.9
23	21.0	21.9	22.8	23.7	24.7	25.7	26.8	27.9	29.1	30.4	31.7	33.1	34.6	36.1	37.7	39.4	41.2	43.0
22	21.5	22.4	23.4	24.3	25.4	26.5	27.6	28.9	30.1	31.5	32.9	34.4	36.0	37.7	39.4	41.2	43.2	45.2
21	22.1	23.0	24.0	25.0	26.1	27.3	28.5	29.8	31.1	32.6	34.1	35.7	37.5	39.3	41.2	43.2	45.3	47.5
20	22.6	23.5	24.6	25.7	26.8	28.0	29.3	30.7	32.2	33.7	35.4	37.1	39.0	40.9	43.0	45.2	47.5	49.9
19	23.1	24.1	25.2	26.3	27.5	28.8	30.2	31.7	33.2	34.9	36.6	38.5	40.5	42.6	44.9	47.3	49.8	52.5
18	23.6	24.6	25.8	27.0	28.3	29.6	31.1	32.6	34.3	36.0	37.9	39.9	42.1	44.4	46.8	49.4	52.2	55.2
17	24.1	25.2	26.4	27.6	29.0	30.4	31.9	33.6	35.3	37.2	39.2	41.4	43.7	46.2	48.8	51.7	54.7	58.0
16	24.6	25.7	27.0	28.3	29.7	31.2	32.8	34.5	36.4	38.4	40.5	42.8	45.3	48.0	50.9	54.0	57.3	60.9
15	25.0	26.3	27.5	28.9	30.4	32.0	33.7	35.5	37.5	39.6	41.9	44.3	47.0	49.8	53.0	56.3	60.0	63.9
14	25.5	26.8	28.1	29.5	31.1	32.7	34.5	36.4	38.5	40.7	43.2	45.8	48.6	51.7	55.1	58.7	62.7	67.0
13	26.0	27.3	28.6	30.1	31.7	33.5	35.3	37.4	39.5	41.9	44.5	47.3	50.3	53.6	57.2	61.1	65.5	70.2
12	26.4	27.7	29.2	30.7	32.4	34.2	36.1	38.2	40.5	43.0	45.7	48.7	51.9	55.5	59.3	63.6	68.3	73.4
11	26.8	28.2	29.7	31.3	33.0	34.9	36.9	39.1	41.5	44.1	47.0	50.1	53.5	57.3	61.4	66.0	71.0	76.6
10	27.2	28.6	30.1	31.8	33.6	35.5	37.6	39.9	42.4	45.2	48.2	51.5	55.1	59.1	63.5	68.4	73.8	79.9
9	27.5	29.0	30.6	32.3	34.1	36.1	38.3	40.7	43.3	46.2	49.3	52.7	56.6	60.8	65.5	70.7	76.5	83.0
8	27.9	29.4	31.0	32.7	34.6	36.7	39.0	41.4	44.1	47.1	50.4	54.0	58.0	62.4	67.3	72.9	79.1	86.1
7	28.2	29.7	31.3	33.1	35.1	37.2	39.5	42.1	44.9	47.9	51.3	55.1	59.2	63.9	69.1	74.9	81.5	88.9
6	28.4	30.0	31.7	33.5	35.5	37.7	40.0	42.7	45.5	48.7	52.2	56.1	60.4	65.2	70.7	76.8	83.7	91.6
5	28.6	30.2	31.9	33.8	35.8	38.1	40.5	43.2	46.1	49.4	53.0	57.0	61.4	66.4	72.1	78.4	85.7	94.0
4	28.8	30.4	32.2	34.1	36.1	38.4	40.9	43.6	46.6	49.9	53.6	57.7	62.3	67.4	73.3	79.9	87.4	96.0
3	29.0	30.6	32.4	34.3	36.4	38.7	41.2	43.9	47.0	50.4	54.1	58.3	63.0	68.3	74.2	81.0	88.7	97.6
2	29.1	30.7	32.5	34.4	36.5	38.8	41.4	44.2	47.3	50.7	54.5	58.7	63.5	68.8	74.9	81.8	89.7	98.8
1	29.1	30.8	32.6	34.5	36.6	39.0	41.5	44.3	47.4	50.9	54.7	59.0	63.8	69.2	75.3	82.3	90.3	99.6
0	29.2	30.8	32.6	34.5	36.7	39.0	41.5	44.4	47.5	50.9	54.8	59.1	63.9	69.3	75.5	82.5	90.5	99.8
-1	29.1	30.8	32.6	34.5	36.6	39.0	41.5	44.3	47.4	50.9	54.7	59.0	63.8	69.2	75.3	82.3	90.3	99.6
-2	29.1	30.7	32.5	34.4	36.5	38.8	41.4	44.2	47.3	50.7	54.5	58.7	63.5	68.8	74.9	81.8	89.7	98.8
-3	29.0	30.6	32.4	34.3	36.4	38.7	41.2	43.9	47.0	50.4	54.1	58.3	63.0	68.3	74.2	81.0	88.7	97.6
-4	28.8	30.4	32.2	34.1	36.1	38.4	40.9	43.6	46.6	49.9	53.6	57.7	62.3	67.4	73.3	79.9	87.4	96.0
-5	28.6	30.2	31.9	33.8	35.8	38.1	40.5	43.2	46.1	49.4	53.0	57.0	61.4	66.4	72.1	78.4	85.7	94.0
-6	28.4	30.0	31.7	33.5	35.5	37.7	40.0	42.7	45.5	48.7	52.2	56.1	60.4	65.2	70.7	76.8	83.7	91.6
-7	28.2	29.7	31.3	33.1	35.1	37.2	39.5	42.1	44.9	47.9	51.3	55.1	59.2	63.9	69.1	74.9	81.5	88.9
-8	27.9	29.4	31.0	32.7	34.6	36.7	39.0	41.4	44.1	47.1	50.4	54.0	58.0	62.4	67.3	72.9	79.1	86.1
-9	27.5	29.0	30.6	32.3	34.1	36.1	38.3	40.7	43.3	46.2	49.3	52.7	56.6	60.8	65.5	70.7	76.5	83.0
-10	27.2	28.6	30.1	31.8	33.6	35.5	37.6	39.9	42.4	45.2	48.2	51.5	55.1	59.1	63.5	68.4	73.8	79.9
-11	26.8	28.2	29.7	31.3	33.0	34.9	36.9	39.1	41.5	44.1	47.0	50.1	53.5	57.3	61.4	66.0	71.0	76.6
-12	26.4	27.7	29.2	30.7	32.4	34.2	36.1	38.2	40.5	43.0	45.7	48.7	51.9	55.5	59.3	63.6	68.3	73.4
-13	26.0	27.3	28.6	30.1	31.7	33.5	35.3	37.4	39.5	41.9	44.5	47.3	50.3	53.6	57.2	61.1	65.5	70.2
-14	25.5	26.8	28.1	29.5	31.1	32.7	34.5	36.4	38.5	40.7	43.2	45.8	48.6	51.7	55.1	58.7	62.7	67.0
-15	25.0	26.3	27.5	28.9	30.4	32.0	33.7	35.5	37.5	39.6	41.9	44.3	47.0	49.8	53.0	56.3	60.0	63.9
-16	24.6	25.7	27.0	28.3	29.7	31.2	32.8	34.5	36.4	38.4	40.5	42.8	45.3	48.0	50.9	54.0	57.3	60.9
-17	24.1	25.2	26.4	27.6	29.0	30.4	31.9	33.6	35.3	37.2	39.2	41.4	43.7	46.2	48.8	51.7	54.7	58.0
-18	23.6	24.6	25.8	27.0	28.3	29.6	31.1	32.6	34.3	36.0	37.9	39.9	42.1	44.4	46.8	49.4	52.2	55.2
-19	23.1	24.1	25.2	26.3	27.5	28.8	30.2	31.7	33.2	34.9	36.6	38.5	40.5	42.6	44.9	47.3	49.8	52.5
-20	22.6	23.5	24.6	25.7	26.8	28.0	29.3	30.7	32.2	33.7	35.4	37.1	39.0	40.9	43.0	45.2	47.5	49.9
-21	22.1	23.0	24.0	25.0	26.1	27.3	28.5	29.8	31.1	32.6	34.1	35.7	37.5	39.3	41.2	43.2	45.3	47.5
-22	21.5	22.4	23.4	24.3	25.4	26.5	27.6	28.9	30.1	31.5	32.9	34.4	36.0	37.7	39.4	41.2	43.2	45.2
-23	21.0	21.9	22.8	23.7	24.7	25.7	26.8	27.9	29.1	30.4	31.7	33.1	34.6	36.1	37.7	39.4	41.2	43.0
-24	20.5	21.3	22.2	23.1	24.0	25.0	26.0	27.1	28.2	29.4	30.6	31.9	33.2	34.7	36.1	37.7	39.3	40.9
-25	20.0	20.8	21.6	22.4	23.3	24.2	25.2	26.2	27.2	28.3	29.5	30.7	31.9	33.2	34.6	36.0	37.5	39.0
-26	19.5	20.2	21.0	21.8	22.6	23.5	24.4	25.3	26.3	27.3	28.4	29.5	30.7	31.9	33.1	34.4	35.7	37.1
-27	19.0	19.7	20.4	21.2	22.0	22.8	23.6	24.5	25.4	26.4	27.4	28.4	29.5	30.6	31.7	32.9	34.1	35.4
-28	18.5	19.2	19.9	20.6	21.3	22.1	22.9	23.7	24.6	25.5	26.4	27.3	28.3	29.4	30.4	31.5	32.6	33.7
-29	18.1	18.7	19.3	20.0	20.7	21.4	22.2	22.9	23.7	24.6	25.4	26.3	27.2	28.2	29.1	30.1	31.1	32.2
-30	17.6	18.2	18.8	19.4	20.1	20.8	21.5	22.2	22.9	23.7	24.5	25.3	26.2	27.1	27.9	28.9	29.8	30.7
-31	17.1	17.7	18.3	18.9	19.5	20.1	20.8	21.5	22.2	22.9	23.6	24.4	25.2	26.0	26.8	27.6	28.5	29.3
-32	16.7	17.2	17.8	18.3	18.9	19.5	20.1	20.8	21.4	22.1	22.8	23.5	24.2	25.0	25.7	26.5	27.3	28.0
-33	16.2	16.7	17.3	17.8	18.3	18.9	19.5	20.1	20.7	21.3	22.0	22.6	23.3	24.0	24.7	25.4	26.1	26.8
-34	15.8	16.3	16.8	17.3	17.8	18.3	18.9	19.4	20.0	20.6	21.2	21.8	22.4	23.1	23.7	24.3	25.0	25.7

	-19	-18	-17	-16	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5
45	16.7	17.0	17.3	17.5	17.7	18.0	18.2	18.4	18.6	18.8	19.0	19.1	19.3	19.4	19.5
44	17.4	17.7	17.9	18.2	18.5	18.7	19.0	19.2	19.4	19.6	19.8	20.0	20.1	20.2	20.4
43	18.1	18.4	18.7	19.0	19.3	19.5	19.8	20.0	20.3	20.5	20.7	20.9	21.0	21.2	21.3
42	18.8	19.1	19.4	19.8	20.1	20.4	20.7	20.9	21.2	21.4	21.6	21.8	22.0	22.2	22.3
41	19.6	19.9	20.3	20.6	20.9	21.3	21.6	21.9	22.2	22.4	22.7	22.9	23.1	23.3	23.4
40	20.4	20.8	21.1	21.5	21.9	22.2	22.6	22.9	23.2	23.5	23.8	24.0	24.2	24.4	24.6
39	21.2	21.6	22.1	22.5	22.9	23.3	23.6	24.0	24.3	24.6	24.9	25.2	25.4	25.6	25.8
38	22.1	22.6	23.0	23.5	23.9	24.3	24.8	25.1	25.5	25.9	26.2	26.5	26.7	27.0	27.2
37	23.1	23.6	24.1	24.6	25.0	25.5	26.0	26.4	26.8	27.2	27.5	27.9	28.2	28.4	28.6
36	24.1	24.6	25.2	25.7	26.3	26.8	27.3	27.7	28.2	28.6	29.0	29.4	29.7	30.0	30.2
35	25.2	25.8	26.4	27.0	27.5	28.1	28.6	29.2	29.7	30.1	30.6	31.0	31.3	31.7	31.9
34	26.3	27.0	27.6	28.3	28.9	29.5	30.1	30.7	31.3	31.8	32.3	32.7	33.1	33.5	33.8
33	27.5	28.3	29.0	29.7	30.4	31.1	31.7	32.4	33.0	33.6	34.1	34.6	35.1	35.5	35.8
32	28.8	29.6	30.4	31.2	32.0	32.7	33.5	34.2	34.9	35.5	36.1	36.7	37.2	37.7	38.1
31	30.2	31.1	31.9	32.8	33.7	34.5	35.3	36.1	36.9	37.6	38.3	39.0	39.5	40.0	40.5
30	31.7	32.6	33.6	34.5	35.5	36.4	37.4	38.2	39.1	39.9	40.7	41.4	42.1	42.7	43.2
29	33.2	34.3	35.3	36.4	37.5	38.5	39.5	40.5	41.5	42.4	43.3	44.1	44.9	45.5	46.1
28	34.9	36.0	37.2	38.4	39.6	40.7	41.9	43.0	44.1	45.2	46.2	47.1	47.9	48.7	49.4
27	36.6	37.9	39.2	40.5	41.9	43.2	44.5	45.7	47.0	48.2	49.3	50.4	51.3	52.2	53.0
26	38.5	39.9	41.4	42.8	44.3	45.8	47.3	48.7	50.1	51.5	52.7	54.0	55.1	56.1	57.0
25	40.5	42.1	43.7	45.3	47.0	48.6	50.3	51.9	53.5	55.1	56.6	58.0	59.2	60.4	61.4
24	42.6	44.4	46.2	48.0	49.8	51.7	53.6	55.5	57.3	59.1	60.8	62.4	63.9	65.2	66.4
23	44.9	46.8	48.8	50.9	53.0	55.1	57.2	59.3	61.4	63.5	65.5	67.3	69.1	70.7	72.1
22	47.3	49.4	51.7	54.0	56.3	58.7	61.1	63.6	66.0	68.4	70.7	72.9	74.9	76.8	78.4
21	49.8	52.2	54.7	57.3	60.0	62.7	65.5	68.3	71.0	73.8	76.5	79.1	81.5	83.7	85.7
20	52.5	55.2	58.0	60.9	63.9	67.0	70.2	73.4	76.6	79.9	83.0	86.1	88.9	91.6	94.0
19	55.3	58.3	61.4	64.7	68.1	71.7	75.3	79.1	82.8	86.6	90.3	94.0	97.4	0.0	0.0
18	58.3	61.6	65.1	68.8	72.7	76.8	81.0	85.3	89.7	94.2	98.6	0.0	0.0	0.0	0.0
17	61.4	65.1	69.1	73.3	77.7	82.3	87.2	92.2	97.4	0.0	0.0	0.0	0.0	0.0	0.0
16	64.7	68.8	73.3	78.0	83.0	88.3	94.0	99.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	68.1	72.7	77.7	83.0	88.7	94.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	71.7	76.8	82.3	88.3	94.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	75.3	81.0	87.2	94.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	79.1	85.3	92.2	99.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	82.8	89.7	97.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	86.6	94.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	90.3	98.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	94.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	97.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-7	97.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-8	94.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-9	90.3	98.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-10	86.6	94.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-11	82.8	89.7	97.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-12	79.1	85.3	92.2	99.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-13	75.3	81.0	87.2	94.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-14	71.7	76.8	82.3	88.3	94.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-15	68.1	72.7	77.7	83.0	88.7	94.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-16	64.7	68.8	73.3	78.0	83.0	88.3	94.0	99.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-17	61.4	65.1	69.1	73.3	77.7	82.3	87.2	92.2	97.4	0.0	0.0	0.0	0.0	0.0	0.0
-18	58.3	61.6	65.1	68.8	72.7	76.8	81.0	85.3	89.7	94.2	98.6	0.0	0.0	0.0	0.0
-19	55.3	58.3	61.4	64.7	68.1	71.7	75.3	79.1	82.8	86.6	90.3	94.0	97.4	0.0	0.0
-20	52.5	55.2	58.0	60.9	63.9	67.0	70.2	73.4	76.6	79.9	83.0	86.1	88.9	91.6	94.0
-21	49.8	52.2	54.7	57.3	60.0	62.7	65.5	68.3	71.0	73.8	76.5	79.1	81.5	83.7	85.7
-22	47.3	49.4	51.7	54.0	56.3	58.7	61.1	63.6	66.0	68.4	70.7	72.9	74.9	76.8	78.4
-23	44.9	46.8	48.8	50.9	53.0	55.1	57.2	59.3	61.4	63.5	65.5	67.3	69.1	70.7	72.1
-24	42.6	44.4	46.2	48.0	49.8	51.7	53.6	55.5	57.3	59.1	60.8	62.4	63.9	65.2	66.4
-25	40.5	42.1	43.7	45.3	47.0	48.6	50.3	51.9	53.5	55.1	56.6	58.0	59.2	60.4	61.4
-26	38.5	39.9	41.4	42.8	44.3	45.8	47.3	48.7	50.1	51.5	52.7	54.0	55.1	56.1	57.0
-27	36.6	37.9	39.2	40.5	41.9	43.2	44.5	45.7	47.0	48.2	49.3	50.4	51.3	52.2	53.0
-28	34.9	36.0	37.2	38.4	39.6	40.7	41.9	43.0	44.1	45.2	46.2	47.1	47.9	48.7	49.4
-29	33.2	34.3	35.3	36.4	37.5	38.5	39.5	40.5	41.5	42.4	43.3	44.1	44.9	45.5	46.1
-30	31.7	32.6	33.6	34.5	35.5	36.4	37.4	38.2	39.1	39.9	40.7	41.4	42.1	42.7	43.2
-31	30.2	31.1	31.9	32.8	33.7	34.5	35.3	36.1	36.9	37.6	38.3	39.0	39.5	40.0	40.5
-32	28.8	29.6	30.4	31.2	32.0	32.7	33.5	34.2	34.9	35.5	36.1	36.7	37.2	37.7	38.1
-33	27.5	28.3	29.0	29.7	30.4	31.1	31.7	32.4	33.0	33.6	34.1	34.6	35.1	35.5	35.8
-34	26.3	27.0	27.6	28.3	28.9	29.5	30.1	30.7	31.3	31.8	32.3	32.7	33.1	33.5	33.8

-35	12.3	12.6	13.0	13.4	13.7	14.1	14.5	15.0	15.4	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.9	20.4	21.0	21.6	22.2	22.8	23.4	24.0	24.6	25.2	25.8	26.4	27.0	27.5	28.1	28.6	29.2	29.7	30.1	30.6	31.0	31.3	31.7	31.9
-36	12.0	12.4	12.7	13.0	13.4	13.8	14.2	14.6	15.0	15.4	15.8	16.3	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.8	21.3	21.9	22.4	23.0	23.5	24.1	24.6	25.2	25.7	26.3	26.8	27.3	27.7	28.2	28.6	29.0	29.4	29.7	30.0	30.2
-37	11.8	12.1	12.4	12.7	13.1	13.4	13.8	14.2	14.6	15.0	15.4	15.8	16.2	16.7	17.1	17.6	18.1	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.1	22.6	23.1	23.6	24.1	24.6	25.0	25.5	26.0	26.4	26.8	27.2	27.5	27.9	28.2	28.4	28.6
-38	11.5	11.8	12.1	12.4	12.8	13.1	13.5	13.8	14.2	14.6	15.0	15.4	15.8	16.2	16.6	17.0	17.5	17.9	18.4	18.8	19.3	19.8	20.2	20.7	21.2	21.7	22.1	22.6	23.0	23.5	23.9	24.3	24.8	25.1	25.5	25.9	26.2	26.5	26.7	27.0	27.2
-39	11.3	11.6	11.8	12.2	12.5	12.8	13.1	13.5	13.8	14.2	14.5	14.9	15.3	15.7	16.1	16.5	16.9	17.3	17.7	18.2	18.6	19.0	19.5	19.9	20.4	20.8	21.2	21.6	22.1	22.5	22.9	23.3	23.6	24.0	24.3	24.6	24.9	25.2	25.4	25.6	25.8
-40	11.0	11.3	11.6	11.9	12.2	12.5	12.8	13.1	13.4	13.8	14.1	14.5	14.8	15.2	15.6	16.0	16.4	16.7	17.1	17.5	17.9	18.3	18.8	19.2	19.6	20.0	20.4	20.8	21.1	21.5	21.9	22.2	22.6	22.9	23.2	23.5	23.8	24.0	24.2	24.4	24.6
-41	10.8	11.0	11.3	11.6	11.9	12.2	12.5	12.8	13.1	13.4	13.7	14.1	14.4	14.8	15.1	15.5	15.8	16.2	16.6	16.9	17.3	17.7	18.1	18.4	18.8	19.2	19.6	19.9	20.3	20.6	20.9	21.3	21.6	21.9	22.2	22.4	22.7	22.9	23.1	23.3	23.4
-42	10.5	10.8	11.1	11.3	11.6	11.9	12.2	12.4	12.7	13.0	13.4	13.7	14.0	14.3	14.7	15.0	15.3	15.7	16.0	16.4	16.7	17.1	17.4	17.8	18.1	18.5	18.8	19.1	19.4	19.8	20.1	20.4	20.7	20.9	21.2	21.4	21.6	21.8	22.0	22.2	22.3
-43	10.3	10.5	10.8	11.1	11.3	11.6	11.8	12.1	12.4	12.7	13.0	13.3	13.6	13.9	14.2	14.5	14.8	15.2	15.5	15.8	16.1	16.5	16.8	17.1	17.4	17.8	18.1	18.4	18.7	19.0	19.3	19.5	19.8	20.0	20.3	20.5	20.7	20.9	21.0	21.2	21.3
-44	10.1	10.3	10.5	10.8	11.0	11.3	11.6	11.8	12.1	12.4	12.6	12.9	13.2	13.5	13.8	14.1	14.4	14.7	15.0	15.3	15.6	15.9	16.2	16.5	16.8	17.1	17.4	17.7	17.9	18.2	18.5	18.7	19.0	19.2	19.4	19.6	19.8	20.0	20.1	20.2	20.4
-45	9.9	10.1	10.3	10.5	10.8	11.0	11.3	11.5	11.8	12.0	12.3	12.6	12.8	13.1	13.4	13.7	13.9	14.2	14.5	14.8	15.1	15.4	15.6	15.9	16.2	16.5	16.7	17.0	17.3	17.5	17.7	18.0	18.2	18.4	18.6	18.8	19.0	19.1	19.3	19.4	19.5

| | | |

32.2	32.4	32.5	32.6	32.6	32.6	32.5	32.4	32.2	31.9	31.7	31.3	31.0	30.6	30.1	29.7	29.2	28.6	28.1	27.5	27.0	26.4	25.8	25.2	24.6	24.0	23.4	22.8	22.2	21.6	21.0	20.4	19.9	19.3	18.8	18.3	17.8	17.3	16.8	16.3	15.8	15.4	15.0	14.5	14.1	13.7	13.4	13.0	12.6	12.3
30.4	30.6	30.7	30.8	30.8	30.6	30.7	30.6	30.4	30.2	30.0	29.7	29.4	29.0	28.6	28.2	27.7	27.3	26.8	26.3	25.7	25.2	24.6	24.1	23.5	23.0	22.4	21.9	21.3	20.8	20.2	19.7	19.2	18.7	18.2	17.7	17.2	16.7	16.3	15.8	15.4	15.0	14.6	14.2	13.8	13.4	13.0	12.7	12.4	12.1
28.8	29.0	29.1	29.1	29.2	29.1	29.1	29.0	28.8	28.6	28.4	28.2	27.9	27.5	27.2	26.8	26.4	26.0	25.5	25.0	24.6	24.1	23.6	23.1	22.6	22.1	21.5	21.0	20.5	20.0	19.5	19.0	18.5	18.1	17.6	17.1	16.7	16.2	15.8	15.4	15.0	14.6	14.2	13.8	13.4	13.1	12.7	12.4	12.1	11.8
27.3	27.5	27.6	27.6	27.7	27.6	27.6	27.5	27.3	27.2	27.0	26.7	26.5	26.2	25.9	25.5	25.1	24.8	24.3	23.9	23.5	23.0	22.6	22.1	21.7	21.2	20.7	20.2	19.8	19.3	18.8	18.4	17.9	17.5	17.0	16.6	16.2	15.8	15.4	15.0	14.6	14.2	13.8	13.5	13.1	12.8	12.4	12.1	11.8	11.5
26.0	26.1	26.2	26.2	26.3	26.2	26.2	26.1	26.0	25.8	25.6	25.4	25.2	24.9	24.6	24.3	24.0	23.6	23.3	22.9	22.5	22.1	21.6	21.2	20.8	20.4	19.9	19.5	19.0	18.6	18.2	17.8	17.3	16.9	16.5	16.1	15.7	15.3	14.9	14.5	14.2	13.8	13.5	13.1	12.8	12.5	12.2	11.8	11.6	11.3
24.7	24.8	24.9	24.9	25.0	24.9	24.9	24.8	24.7	24.6	24.4	24.2	24.0	23.8	23.5	23.2	22.9	22.6	22.2	21.9	21.5	21.1	20.8	20.4	20.0	19.6	19.2	18.8	18.4	18.0	17.6	17.2	16.8	16.4	16.0	15.6	15.2	14.8	14.5	14.1	13.8	13.4	13.1	12.8	12.5	12.2	11.9	11.6	11.3	11.0
23.5	23.6	23.7	23.7	23.8	23.7	23.7	23.6	23.5	23.4	23.3	23.1	22.9	22.7	22.4	22.2	21.9	21.6	21.3	20.9	20.6	20.3	19.9	19.6	19.2	18.8	18.4	18.0	17.6	17.2	16.8	16.4	16.0	15.7	15.3	15.0	14.7	14.4	14.1	13.7	13.4	13.1	12.8	12.5	12.2	11.9	11.6	11.3	11.0	10.8
22.4	22.5	22.6	22.6	22.6	22.6	22.6	22.5	22.4	22.3	22.2	22.0	21.8	21.6	21.4	21.2	20.9	20.7	20.4	20.1	19.8	19.4	19.1	18.8	18.5	18.1	17.8	17.4	17.1	16.8	16.4	16.1	15.7	15.4	15.1	14.8	14.4	14.1	13.7	13.4	13.0	12.7	12.4	12.2	11.9	11.6	11.3	11.1	10.8	10.5
21.4	21.5	21.5	21.6	21.6	21.6	21.5	21.5	21.4	21.3	21.2	21.0	20.9	20.7	20.5	20.3	20.0	19.8	19.5	19.3	19.0	18.7	18.4	18.1	17.8	17.4	17.1	16.8	16.5	16.1	15.8	15.5	15.2	14.8	14.5	14.2	13.9	13.7	13.4	13.1	12.8	12.5	12.2	11.9	11.6	11.3	11.1	10.8	10.5	10.3
20.5	20.5	20.6	20.6	20.6	20.6	20.6	20.5	20.5	20.4	20.2	20.1	20.0	19.8	19.6	19.4	19.2	19.0	18.7	18.5	18.2	17.9	17.7	17.4	17.1	16.8	16.5	16.2	15.9	15.6	15.3	15.0	14.7	14.4	14.1	13.8	13.5	13.2	12.9	12.6	12.4	12.1	11.8	11.6	11.3	11.0	10.8	10.5	10.3	10.1
19.6	19.6	19.7	19.7	19.7	19.7	19.7	19.6	19.6	19.5	19.4	19.3	19.1	19.0	18.8	18.6	18.4	18.2	18.0	17.7	17.5	17.3	17.0	16.7	16.5	16.2	15.9	15.6	15.4	15.1	14.8	14.5	14.2	13.9	13.7	13.4	13.1	12.8	12.6	12.3	12.0	11.8	11.5	11.3	11.0	10.8	10.5	10.3	10.1	9.9

References

American National Standards Institute (ANSI), "Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," ANSI/IEEE C95.1-1992 (previously issued as IEEE C95.1-1991). Copyright 1992 by the Institute of Electrical and Electronics Engineers, Inc. (IEEE), New York, N.Y. 10017. For copies contact the IEEE: 1-800-678-4333 or 1-908-981-1393.

American National Standards Institute (ANSI), "Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave". ANSI/IEEE C95.3-1992. Copyright 1992, The Institute of Electrical and Electronics Engineers, Inc. (IEEE), New York, NY 10017. For copies contact the IEEE: 1-800-678-4333 or 1-908-981-1393.

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