Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**
Title	**Simulation data (point to point links interfering with PMP systems)**
Date Submitted	**2001-09-13**
Source(s)	Philip Whitehead Radiant Networks Plc The Mansion, Chesterford Park Little Chesterford, Essex CB10 1XL UK Voice: +44 1799 533600 Fax: +44 1799 533601 mailto:pw@radiantnetworks.co.uk
Re:	Amendment to Coexistence Recommended Practice
Abstract	This paper contains the full listings of data from simulations of point to point links interfering with PMP base stations and subscriber stations, as discussed at session #15.
Purpose	For the archive of simulation methods and results.
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Simulation data (point to point links interfering with PMP systems) Interference

Philip Whitehead
Radiant Networks Plc

1. Simulation data

The following sets of data were produced to compile contribution IEEE C802.16.2a-01/03. The information is provided for archiving, to allow full traceability of the simulation work

Each set of simulation data begins with a listing of the parameter values used, followed by a table of results.

Created by RECIPE V1.0 on 28 August 2001 at 14:54:32
as C:\My Documents\wpdocs\802.16\Denver_01\sim_PP_1.txt

frequency (GHz) = 28
node max tx pwr (dBm) = 25
node min tx pwr (dBm) = -12
apc step size (dB) = 4
half power beamwidth (deg) = 3
mesh horn gain (dBi) = 40
node rx pwr (dBm) = -73
mesh tot Y-dim (m) = 10000
mesh X-dim (m) = 5000
node density (/sq km) = 10
percentage tx = 12.5
node ht above roof (m) = 3
building density (/sq km) = 750
fractional building area = 0.1
terrain parameter (m) = 7
min link (m) = 50
max link (m) = 1000
distance to BS (m) = 18000
BS height (m) = 45
BS sector (deg) = 90
BS horn gain (dBi) = 19
subscriber height (m) = 5
subscriber horn gain (dBi) = 36
distance past BS (m) = 1000
air temp (deg C) = 15
pressure (mbar) = 1013
water vapour (gm/cu m) = 7.5
dB/km = 0.10
polarisation = vertical
rain = none
run length = 10000
Compute at BS

dBm	events	prob	cum prob
-144	2	0.000200	0.002200
-143	1	0.000100	0.002300
-142	6	0.000600	0.002900
-141	12	0.001200	0.004100

-140	11	0.001100	0.005200
-139	14	0.001400	0.006600
-138	22	0.002200	0.008800
-137	42	0.004200	0.013000
-136	45	0.004500	0.017500
-135	60	0.006000	0.023500
-134	81	0.008100	0.031600
-133	73	0.007300	0.038900
-132	78	0.007800	0.046700
-131	94	0.009400	0.056100
-130	151	0.015100	0.071200
-129	184	0.018400	0.089600
-128	257	0.025700	0.115300
-127	292	0.029200	0.144500
-126	391	0.039100	0.183600
-125	504	0.050400	0.234000
-124	585	0.058500	0.292500
-123	667	0.066700	0.359200
-122	728	0.072800	0.432000
-121	799	0.079900	0.511900
-120	879	0.087900	0.599800
-119	980	0.098000	0.697800
-118	858	0.085800	0.783600
-117	670	0.067000	0.850600
-116	390	0.039000	0.889600
-115	199	0.019900	0.909500
-114	84	0.008400	0.917900
-113	46	0.004600	0.922500
-112	46	0.004600	0.927100
-111	42	0.004200	0.931300
-110	56	0.005600	0.936900
-109	47	0.004700	0.941600
-108	59	0.005900	0.947500
-107	65	0.006500	0.954000
-106	59	0.005900	0.959900
-105	75	0.007500	0.967400
-104	111	0.011100	0.978500
-103	138	0.013800	0.992300
-102	67	0.006700	0.999000
-101	5	0.000500	0.999500
-100	5	0.000500	1.000000

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as C:\My Documents\wpdocs\802.16\Denver_01\sim_PP_2.txt

frequency (GHz) = 28
node max tx pwr (dBm) = 25
node min tx pwr (dBm) = -12
apc step size (dB) = 4
half power beamwidth (deg) = 3
mesh horn gain (dBi) = 40
node rx pwr (dBm) = -73
mesh tot Y-dim (m) = 10000
mesh X-dim (m) = 5000
node density (/sq km) = 10
percentage tx = 12.5
node ht above roof (m) = 3
building density (/sq km) = 750

fractional building area = 0.1
terrain parameter (m) = 7
min link (m) = 50
max link (m) = 1000
distance to BS (m) = 18000
BS height (m) = 45
BS sector (deg) = 90
BS horn gain (dBi) = 19
subscriber height (m) = 5
subscriber horn gain (dBi) = 36
distance past BS (m) = 1000
air temp (deg C) = 15
pressure (mbar) = 1013
water vapour (gm/cu m) = 7.5
dB/km = 0.10
polarisation = vertical
rain = storm
rain rate = 32
dB/km = 4.79
min dia (km) = 1
max dia (km) = 3
run length = 8356
Compute at BS

dBm	events	prob	cum prob
-148	2	0.000239	0.002154
-147	0	0.000000	0.002154
-146	2	0.000239	0.002393
-145	0	0.000000	0.002393
-144	1	0.000120	0.002513
-143	4	0.000479	0.002992
-142	4	0.000479	0.003471
-141	9	0.001077	0.004548
-140	14	0.001675	0.006223
-139	12	0.001436	0.007659
-138	28	0.003351	0.011010
-137	28	0.003351	0.014361
-136	52	0.006223	0.020584
-135	72	0.008617	0.029201
-134	58	0.006941	0.036142
-133	75	0.008976	0.045117
-132	76	0.009095	0.054213
-131	115	0.013763	0.067975
-130	136	0.016276	0.084251
-129	190	0.022738	0.106989
-128	238	0.028483	0.135472
-127	322	0.038535	0.174007
-126	402	0.048109	0.222116
-125	478	0.057204	0.279320
-124	490	0.058640	0.337961
-123	591	0.070728	0.408688
-122	582	0.069651	0.478339
-121	707	0.084610	0.562949
-120	722	0.086405	0.649354
-119	766	0.091671	0.741024
-118	643	0.076951	0.817975
-117	456	0.054572	0.872547
-116	227	0.027166	0.899713

-115	120	0.014361	0.914074
-114	68	0.008138	0.922212
-113	38	0.004548	0.926759
-112	35	0.004189	0.930948
-111	34	0.004069	0.935017
-110	39	0.004667	0.939684
-109	40	0.004787	0.944471
-108	49	0.005864	0.950335
-107	41	0.004907	0.955242
-106	57	0.006821	0.962063
-105	58	0.006941	0.969004
-104	101	0.012087	0.981091
-103	100	0.011967	0.993059
-102	51	0.006103	0.999162
-101	1	0.000120	0.999282
-100	5	0.000598	0.999880
-99	1	0.000120	1.000000

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frequency (GHz) = 28
node max tx pwr (dBm) = 25
node min tx pwr (dBm) = -12
apc step size (dB) = 4
half power beamwidth (deg) = 2
mesh horn gain (dBi) = 42
node rx pwr (dBm) = -73
mesh tot Y-dim (m) = 10000
mesh X-dim (m) = 5000
node density (/sq km) = 10
percentage tx = 12.5
node ht above roof (m) = 3
building density (/sq km) = 750
fractional building area = 0.1
terrain parameter (m) = 7
min link (m) = 50
max link (m) = 1000
distance to BS (m) = 18000
BS height (m) = 45
BS sector (deg) = 90
BS horn gain (dBi) = 19
subscriber height (m) = 5
subscriber horn gain (dBi) = 36
distance past BS (m) = 1000
air temp (deg C) = 15
pressure (mbar) = 1013
water vapour (gm/cu m) = 7.5
dB/km = 0.10
polarisation = vertical
rain = none
run length = 10000
Compute at BS

dBm	events	prob	cum prob
-141	2	0.000200	0.001900
-140	11	0.001100	0.003000
-139	11	0.001100	0.004100

-138	10	0.001000	0.005100
-137	13	0.001300	0.006400
-136	28	0.002800	0.009200
-135	36	0.003600	0.012800
-134	34	0.003400	0.016200
-133	61	0.006100	0.022300
-132	61	0.006100	0.028400
-131	75	0.007500	0.035900
-130	74	0.007400	0.043300
-129	105	0.010500	0.053800
-128	137	0.013700	0.067500
-127	211	0.021100	0.088600
-126	263	0.026300	0.114900
-125	336	0.033600	0.148500
-124	367	0.036700	0.185200
-123	511	0.051100	0.236300
-122	585	0.058500	0.294800
-121	710	0.071000	0.365800
-120	711	0.071100	0.436900
-119	812	0.081200	0.518100
-118	903	0.090300	0.608400
-117	960	0.096000	0.704400
-116	925	0.092500	0.796900
-115	695	0.069500	0.866400
-114	465	0.046500	0.912900
-113	203	0.020300	0.933200
-112	90	0.009000	0.942200
-111	41	0.004100	0.946300
-110	26	0.002600	0.948900
-109	26	0.002600	0.951500
-108	27	0.002700	0.954200
-107	39	0.003900	0.958100
-106	40	0.004000	0.962100
-105	46	0.004600	0.966700
-104	52	0.005200	0.971900
-103	56	0.005600	0.977500
-102	83	0.008300	0.985800
-101	87	0.008700	0.994500
-100	49	0.004900	0.999400
-99	5	0.000500	0.999900
-98	0	0.000000	0.999900
-97	1	0.000100	1.000000

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as C:\My Documents\wpdocs\802.16\Denver_01\sim_PP_4.txt

frequency (GHz) = 28
node max tx pwr (dBm) = 25
node min tx pwr (dBm) = -12
apc step size (dB) = 4
half power beamwidth (deg) = 2
mesh horn gain (dBi) = 42
node rx pwr (dBm) = -73
mesh tot Y-dim (m) = 10000
mesh X-dim (m) = 5000
node density (/sq km) = 10
percentage tx = 12.5
node ht above roof (m) = 1

building density (/sq km) = 750
fractional building area = 0.1
terrain parameter (m) = 7
min link (m) = 50
max link (m) = 1000
distance to BS (m) = 20000
BS height (m) = 45
BS sector (deg) = 90
BS horn gain (dBi) = 19
subscriber height (m) = 5
subscriber horn gain (dBi) = 36
distance past BS (m) = 1000
air temp (deg C) = 15
pressure (mbar) = 1013
water vapour (gm/cu m) = 7.5
dB/km = 0.10
polarisation = vertical
rain = none
run length = 10000
Compute at BS

dBm	events	prob	cum prob
-142	53	0.005300	0.045800
-141	86	0.008600	0.054400
-140	125	0.012500	0.066900
-139	126	0.012600	0.079500
-138	162	0.016200	0.095700
-137	211	0.021100	0.116800
-136	231	0.023100	0.139900
-135	219	0.021900	0.161800
-134	230	0.023000	0.184800
-133	200	0.020000	0.204800
-132	162	0.016200	0.221000
-131	191	0.019100	0.240100
-130	297	0.029700	0.269800
-129	331	0.033100	0.302900
-128	384	0.038400	0.341300
-127	455	0.045500	0.386800
-126	536	0.053600	0.440400
-125	616	0.061600	0.502000
-124	602	0.060200	0.562200
-123	563	0.056300	0.618500
-122	591	0.059100	0.677600
-121	580	0.058000	0.735600
-120	543	0.054300	0.789900
-119	559	0.055900	0.845800
-118	523	0.052300	0.898100
-117	395	0.039500	0.937600
-116	208	0.020800	0.958400
-115	93	0.009300	0.967700
-114	42	0.004200	0.971900
-113	14	0.001400	0.973300
-112	12	0.001200	0.974500
-111	14	0.001400	0.975900
-110	9	0.000900	0.976800
-109	19	0.001900	0.978700
-108	20	0.002000	0.980700
-107	20	0.002000	0.982700

-106	23	0.002300	0.985000
-105	28	0.002800	0.987800
-104	25	0.002500	0.990300
-103	47	0.004700	0.995000
-102	36	0.003600	0.998600
-101	13	0.001300	0.999900
-100	1	0.000100	1.000000

Created by RECIPE V1.0 on 28 August 2001 at 15:02:06
as C:\My Documents\wpdocs\802.16\Denver_01\sim_PP_5.txt

frequency (GHz) = 28
node max tx pwr (dBm) = 25
node min tx pwr (dBm) = -12
apc step size (dB) = 4
half power beamwidth (deg) = 2
mesh horn gain (dBi) = 42
node rx pwr (dBm) = -73
mesh tot Y-dim (m) = 10000
mesh X-dim (m) = 5000
node density (/sq km) = 10
percentage tx = 12.5
node ht above roof (m) = 4
building density (/sq km) = 750
fractional building area = 0.1
terrain parameter (m) = 0
min link (m) = 50
max link (m) = 1000
distance to BS (m) = 32000
BS height (m) = 45
BS sector (deg) = 90
BS horn gain (dBi) = 19
subscriber height (m) = 5
subscriber horn gain (dBi) = 36
distance past BS (m) = 1000
air temp (deg C) = 15
pressure (mbar) = 1013
water vapour (gm/cu m) = 7.5
dB/km = 0.10
polarisation = vertical
rain = none
run length = 10000
Compute at BS

dBm	events	prob	cum prob
-118	3	0.000300	0.000300
-117	23	0.002300	0.002600
-116	161	0.016100	0.018700
-115	831	0.083100	0.101800
-114	1880	0.188000	0.289800
-113	1960	0.196000	0.485800
-112	843	0.084300	0.570100
-111	433	0.043300	0.613400
-110	419	0.041900	0.655300
-109	461	0.046100	0.701400
-108	533	0.053300	0.754700
-107	714	0.071400	0.826100
-106	948	0.094800	0.920900

-105	399	0.039900	0.960800
-104	248	0.024800	0.985600
-103	112	0.011200	0.996800
-102	28	0.002800	0.999600
-101	4	0.000400	1.000000

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as C:\My Documents\wpdocs\802.16\Denver_01\sim_PP_6.txt

frequency (GHz) = 28
node max tx pwr (dBm) = 25
node min tx pwr (dBm) = -12
apc step size (dB) = 4
half power beamwidth (deg) = 2
mesh horn gain (dBi) = 42
node rx pwr (dBm) = -73
mesh tot Y-dim (m) = 10000
mesh X-dim (m) = 5000
node density (/sq km) = 10
percentage tx = 12.5
node ht above roof (m) = 4
building density (/sq km) = 750
fractional building area = 0.1
terrain parameter (m) = 0
min link (m) = 50
max link (m) = 1000
distance to BS (m) = 32000
BS height (m) = 45
BS sector (deg) = 90
BS horn gain (dBi) = 19
subscriber height (m) = 5
subscriber horn gain (dBi) = 36
distance past BS (m) = 1000
air temp (deg C) = 15
pressure (mbar) = 1013
water vapour (gm/cu m) = 7.5
dB/km = 0.10
polarisation = vertical
rain = storm
rain rate = 32
dB/km = 4.79
min dia (km) = 1
max dia (km) = 3
run length = 10000
Compute at BS

dBm	events	prob	cum prob
-119	3	0.000300	0.000300
-118	7	0.000700	0.001000
-117	99	0.009900	0.010900
-116	423	0.042300	0.053200
-115	1290	0.129000	0.182200
-114	2036	0.203600	0.385800
-113	1572	0.157200	0.543000
-112	684	0.068400	0.611400
-111	397	0.039700	0.651100
-110	432	0.043200	0.694300
-109	425	0.042500	0.736800

-108	467	0.046700	0.783500
-107	661	0.066100	0.849600
-106	841	0.084100	0.933700
-105	339	0.033900	0.967600
-104	192	0.019200	0.986800
-103	105	0.010500	0.997300
-102	21	0.002100	0.999400
-101	6	0.000600	1.000000

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as C:\My Documents\wpdocs\802.16\Denver_01\sim_PP_7.txt

frequency (GHz) = 28
node max tx pwr (dBm) = 30
node min tx pwr (dBm) = -12
apc step size (dB) = 4
half power beamwidth (deg) = 4
mesh horn gain (dBi) = 42
node rx pwr (dBm) = -73
mesh tot Y-dim (m) = 10000
mesh X-dim (m) = 5000
node density (/sq km) = 5
percentage tx = 12.5
node ht above roof (m) = 3
building density (/sq km) = 750
fractional building area = 0.1
terrain parameter (m) = 7
min link (m) = 50
max link (m) = 5000
distance to BS (m) = 20000
BS height (m) = 45
BS sector (deg) = 90
BS horn gain (dBi) = 19
subscriber height (m) = 5
subscriber horn gain (dBi) = 36
distance past BS (m) = 1000
air temp (deg C) = 15
pressure (mbar) = 1013
water vapour (gm/cu m) = 7.5
dB/km = 0.10
polarisation = vertical
rain = none
run length = 10000
Compute at BS

dBm	events	prob	cum prob
-143	4	0.000400	0.053300
-142	57	0.005700	0.059000
-141	125	0.012500	0.071500
-140	185	0.018500	0.090000
-139	190	0.019000	0.109000
-138	233	0.023300	0.132300
-137	303	0.030300	0.162600
-136	325	0.032500	0.195100
-135	354	0.035400	0.230500
-134	361	0.036100	0.266600
-133	298	0.029800	0.296400

-132	311	0.031100	0.327500
-131	289	0.028900	0.356400
-130	391	0.039100	0.395500
-129	532	0.053200	0.448700
-128	552	0.055200	0.503900
-127	547	0.054700	0.558600
-126	585	0.058500	0.617100
-125	522	0.052200	0.669300
-124	588	0.058800	0.728100
-123	496	0.049600	0.777700
-122	416	0.041600	0.819300
-121	359	0.035900	0.855200
-120	367	0.036700	0.891900
-119	336	0.033600	0.925500
-118	241	0.024100	0.949600
-117	110	0.011000	0.960600
-116	44	0.004400	0.965000
-115	20	0.002000	0.967000
-114	13	0.001300	0.968300
-113	14	0.001400	0.969700
-112	23	0.002300	0.972000
-111	10	0.001000	0.973000
-110	17	0.001700	0.974700
-109	23	0.002300	0.977000
-108	20	0.002000	0.979000
-107	23	0.002300	0.981300
-106	22	0.002200	0.983500
-105	19	0.001900	0.985400
-104	35	0.003500	0.988900
-103	53	0.005300	0.994200
-102	48	0.004800	0.999000
-101	9	0.000900	0.999900
-100	1	0.000100	1.000000

Created by RECIPE V1.0 on 29 August 2001 at 14:34:50
as C:\My Documents\wpdocs\802.16\Denver_01\sim_PP_8.txt

frequency (GHz) = 28
node max tx pwr (dBm) = 16
node min tx pwr (dBm) = -12
apc step size (dB) = 4
half power beamwidth (deg) = 4
mesh horn gain (dBi) = 40
node rx pwr (dBm) = -73
mesh tot Y-dim (m) = 10000
mesh X-dim (m) = 5000
node density (/sq km) = 5
percentage tx = 12.5
node ht above roof (m) = 3
building density (/sq km) = 750
fractional building area = 0.1
terrain parameter (m) = 7
min link (m) = 50
max link (m) = 5000
distance to BS (m) = 10000
BS height (m) = 45
BS sector (deg) = 90

BS horn gain (dBi) = 19
subscriber height (m) = 20
subscriber horn gain (dBi) = 36
distance past BS (m) = 5000
air temp (deg C) = 15
pressure (mbar) = 1013
water vapour (gm/cu m) = 7.5
dB/km = 0.10
polarisation = vertical
rain = none
run length = 10000
Compute at subscriber

dBm	events	prob	cum prob
-143	12	0.001200	0.664300
-142	70	0.007000	0.671300
-141	148	0.014800	0.686100
-140	155	0.015500	0.701600
-139	188	0.018800	0.720400
-138	151	0.015100	0.735500
-137	135	0.013500	0.749000
-136	107	0.010700	0.759700
-135	68	0.006800	0.766500
-134	77	0.007700	0.774200
-133	49	0.004900	0.779100
-132	80	0.008000	0.787100
-131	111	0.011100	0.798200
-130	116	0.011600	0.809800
-129	143	0.014300	0.824100
-128	121	0.012100	0.836200
-127	99	0.009900	0.846100
-126	112	0.011200	0.857300
-125	107	0.010700	0.868000
-124	115	0.011500	0.879500
-123	142	0.014200	0.893700
-122	136	0.013600	0.907300
-121	120	0.012000	0.919300
-120	125	0.012500	0.931800
-119	87	0.008700	0.940500
-118	93	0.009300	0.949800
-117	53	0.005300	0.955100
-116	42	0.004200	0.959300
-115	57	0.005700	0.965000
-114	32	0.003200	0.968200
-113	48	0.004800	0.973000
-112	51	0.005100	0.978100
-111	49	0.004900	0.983000
-110	29	0.002900	0.985900
-109	19	0.001900	0.987800
-108	20	0.002000	0.989800
-107	18	0.001800	0.991600
-106	15	0.001500	0.993100
-105	22	0.002200	0.995300
-104	10	0.001000	0.996300
-103	11	0.001100	0.997400
-102	7	0.000700	0.998100
-101	1	0.000100	0.998200
-100	3	0.000300	0.998500

-99	1	0.000100	0.998600
-98	0	0.000000	0.998600
-97	1	0.000100	0.998700
-96	1	0.000100	0.998800
-95	1	0.000100	0.998900
-94	1	0.000100	0.999000
-93	1	0.000100	0.999100
-92	2	0.000200	0.999300
-91	1	0.000100	0.999400
-90	0	0.000000	0.999400
-89	1	0.000100	0.999500
-88	1	0.000100	0.999600
-87	0	0.000000	0.999600

Created by RECIPE V1.0 on 29 August 2001 at 14:36:48
as C:\My Documents\wpdocs\802.16\Denver_01\sim_PP_9.txt

frequency (GHz) = 28
node max tx pwr (dBm) = 16
node min tx pwr (dBm) = -12
apc step size (dB) = 4
half power beamwidth (deg) = 4
mesh horn gain (dBi) = 40
node rx pwr (dBm) = -73
mesh tot Y-dim (m) = 10000
mesh X-dim (m) = 5000
node density (/sq km) = 5
percentage tx = 12.5
node ht above roof (m) = 3
building density (/sq km) = 750
fractional building area = 0.1
terrain parameter (m) = 7
min link (m) = 50
max link (m) = 5000
distance to BS (m) = 12000
BS height (m) = 45
BS sector (deg) = 90
BS horn gain (dBi) = 19
subscriber height (m) = 15
subscriber horn gain (dBi) = 36
distance past BS (m) = 5000
air temp (deg C) = 15
pressure (mbar) = 1013
water vapour (gm/cu m) = 7.5
dB/km = 0.10
polarisation = vertical
rain = none
run length = 10000
Compute at subscriber

dBm	events	prob	cum prob
-143	3	0.000300	0.993000
-142	2	0.000200	0.993200
-141	2	0.000200	0.993400
-140	3	0.000300	0.993700
-139	5	0.000500	0.994200
-138	3	0.000300	0.994500

-137	3	0.000300	0.994800
-136	3	0.000300	0.995100
-135	3	0.000300	0.995400
-134	2	0.000200	0.995600
-133	2	0.000200	0.995800
-132	1	0.000100	0.995900
-131	2	0.000200	0.996100
-130	2	0.000200	0.996300
-129	0	0.000000	0.996300
-128	2	0.000200	0.996500
-127	4	0.000400	0.996900
-126	4	0.000400	0.997300
-125	3	0.000300	0.997600
-124	3	0.000300	0.997900
-123	3	0.000300	0.998200
-122	1	0.000100	0.998300
-121	2	0.000200	0.998500
-120	2	0.000200	0.998700
-119	2	0.000200	0.998900
-118	0	0.000000	0.998900
-117	0	0.000000	0.998900
-116	3	0.000300	0.999200
-115	1	0.000100	0.999300
-114	1	0.000100	0.999400
-113	2	0.000200	0.999600
-112	0	0.000000	0.999600
-111	0	0.000000	0.999600
-110	2	0.000200	0.999800
-109	1	0.000100	0.999900
-108	0	0.000000	0.999900
-107	0	0.000000	0.999900
-106	0	0.000000	0.999900
-105	0	0.000000	0.999900
-104	0	0.000000	0.999900
-103	0	0.000000	0.999900
-102	0	0.000000	0.999900
-101	0	0.000000	0.999900
-100	0	0.000000	0.999900
-99	0	0.000000	0.999900
-98	0	0.000000	0.999900
-97	0	0.000000	0.999900
-96	1	0.000100	1.000000
-86	1	0.000100	0.999700
-85	2	0.000200	0.999900
-84	1	0.000100	1.000000

Created by RECIPE V1.0 on 29 August 2001 at 14:38:56
as C:\My Documents\wpdocs\802.16\Denver_01\sim_PP_10.txt

frequency (GHz) = 28
node max tx pwr (dBm) = 16
node min tx pwr (dBm) = -12
apc step size (dB) = 4
half power beamwidth (deg) = 4
mesh horn gain (dBi) = 40
node rx pwr (dBm) = -73
mesh tot Y-dim (m) = 10000

mesh X-dim (m) = 5000
node density (/sq km) = 5
percentage tx = 12.5
node ht above roof (m) = 3
building density (/sq km) = 750
fractional building area = 0.1
terrain parameter (m) = 7
min link (m) = 50
max link (m) = 5000
distance to BS (m) = 35000
BS height (m) = 45
BS sector (deg) = 90
BS horn gain (dBi) = 19
subscriber height (m) = 20
subscriber horn gain (dBi) = 36
distance past BS (m) = 5000
air temp (deg C) = 15
pressure (mbar) = 1013
water vapour (gm/cu m) = 7.5
dB/km = 0.10
polarisation = vertical
rain = none
run length = 10000
Compute at subscriber

dBm	events	prob	cum prob
-147	2	0.000200	0.941700
-146	7	0.000700	0.942400
-145	8	0.000800	0.943200
-144	13	0.001300	0.944500
-143	8	0.000800	0.945300
-142	18	0.001800	0.947100
-141	10	0.001000	0.948100
-140	15	0.001500	0.949600
-139	32	0.003200	0.952800
-138	18	0.001800	0.954600
-137	23	0.002300	0.956900
-136	21	0.002100	0.959000
-135	16	0.001600	0.960600
-134	29	0.002900	0.963500
-133	40	0.004000	0.967500
-132	30	0.003000	0.970500
-131	34	0.003400	0.973900
-130	39	0.003900	0.977800
-129	26	0.002600	0.980400
-128	15	0.001500	0.981900
-127	15	0.001500	0.983400
-126	8	0.000800	0.984200
-125	14	0.001400	0.985600
-124	18	0.001800	0.987400
-123	20	0.002000	0.989400
-122	19	0.001900	0.991300
-121	13	0.001300	0.992600
-120	15	0.001500	0.994100
-119	19	0.001900	0.996000
-118	7	0.000700	0.996700
-117	9	0.000900	0.997600
-116	4	0.000400	0.998000

-115	4	0.000400	0.998400
-114	5	0.000500	0.998900
-113	3	0.000300	0.999200
-112	0	0.000000	0.999200
-111	3	0.000300	0.999500
-110	2	0.000200	0.999700
-109	0	0.000000	0.999700
-108	0	0.000000	0.999700
-107	0	0.000000	0.999700
-106	0	0.000000	0.999700
-105	1	0.000100	0.999800
-104	0	0.000000	0.999800
-103	0	0.000000	0.999800
-102	0	0.000000	0.999800
-101	0	0.000000	0.999800
-100	0	0.000000	0.999800
-99	0	0.000000	0.999800
-98	0	0.000000	0.999800
-97	1	0.000100	0.999900
-96	1	0.000100	1.000000

Created by RECIPE V1.0 on 29 August 2001 at 14:51:46
as C:\My Documents\wpdocs\802.16\Denver_01\sim_PP_11.txt

frequency (GHz) = 28
node max tx pwr (dBm) = 16
node min tx pwr (dBm) = -12
apc step size (dB) = 4
half power beamwidth (deg) = 4
mesh horn gain (dBi) = 40
node rx pwr (dBm) = -73
mesh tot Y-dim (m) = 10000
mesh X-dim (m) = 5000
node density (/sq km) = 5
percentage tx = 12.5
node ht above roof (m) = 3
building density (/sq km) = 750
fractional building area = 0.1
terrain parameter (m) = 7
min link (m) = 50
max link (m) = 5000
distance to BS (m) = 45000
BS height (m) = 45
BS sector (deg) = 90
BS horn gain (dBi) = 19
subscriber height (m) = 25
subscriber horn gain (dBi) = 36
distance past BS (m) = 5000
air temp (deg C) = 15
pressure (mbar) = 1013
water vapour (gm/cu m) = 7.5
dB/km = 0.10
polarisation = vertical
rain = none
run length = 10000
Compute at subscriber

dBm	events	prob	cum prob
-147	1	0.000100	0.672400
-146	12	0.001200	0.673600
-145	23	0.002300	0.675900
-144	54	0.005400	0.681300
-143	71	0.007100	0.688400
-142	94	0.009400	0.697800
-141	89	0.008900	0.706700
-140	92	0.009200	0.715900
-139	99	0.009900	0.725800
-138	109	0.010900	0.736700
-137	147	0.014700	0.751400
-136	227	0.022700	0.774100
-135	205	0.020500	0.794600
-134	211	0.021100	0.815700
-133	222	0.022200	0.837900
-132	187	0.018700	0.856600
-131	107	0.010700	0.867300
-130	113	0.011300	0.878600
-129	103	0.010300	0.888900
-128	90	0.009000	0.897900
-127	107	0.010700	0.908600
-126	146	0.014600	0.923200
-125	126	0.012600	0.935800
-124	94	0.009400	0.945200
-123	97	0.009700	0.954900
-122	86	0.008600	0.963500
-121	80	0.008000	0.971500
-120	65	0.006500	0.978000
-119	41	0.004100	0.982100
-118	32	0.003200	0.985300
-117	25	0.002500	0.987800
-116	25	0.002500	0.990300
-115	25	0.002500	0.992800
-114	26	0.002600	0.995400
-113	7	0.000700	0.996100
-112	3	0.000300	0.996400
-111	1	0.000100	0.996500
-110	1	0.000100	0.996600
-109	0	0.000000	0.996600
-108	4	0.000400	0.997000
-107	3	0.000300	0.997300
-106	1	0.000100	0.997400
-105	2	0.000200	0.997600
-104	3	0.000300	0.997900
-103	6	0.000600	0.998500
-102	4	0.000400	0.998900
-101	1	0.000100	0.999000
-100	4	0.000400	0.999400
-99	2	0.000200	0.999600
-98	3	0.000300	0.999900
-97	1	0.000100	1.000000

END of data