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i = 0, sum = 0.000000000000000000000000e+00
i = 100, sum = 1.6349840164184570312500000e+00
i = 200, sum = 1.6399466991424560546875000e+00
i = 300, sum = 1.6416064500808715820312500e+00
i = 400, sum = 1.6424369812011718750000000e+00
i = 500, sum = 1.6429359912872314453125000e+00
i = 600, sum = 1.6432688236236572265625000e+00
i = 700, sum = 1.6435064077377319335937500e+00
i = 800, sum = 1.6436847448348999023437500e+00
i = 900, sum = 1.6438237428665161132812500e+00
i = 1000, sum = 1.6439348459243774414062500e+00
i = 1100, sum = 1.6440250873565673828125000e+00
i = 1200, sum = 1.6441009044647216796875000e+00
i = 1300, sum = 1.6441645622253417968750000e+00
i = 1400, sum = 1.6442199945449829101562500e+00
i = 1500, sum = 1.6442676782608032226562500e+00
i = 1600, sum = 1.6443091630935668945312500e+00
i = 1700, sum = 1.6443449258804321289062500e+00
i = 1800, sum = 1.6443806886672973632812500e+00
i = 1900, sum = 1.6444082260131835937500000e+00
i = 2000, sum = 1.6444320678710937500000000e+00
i = 2100, sum = 1.6444559097290039062500000e+00
i = 2200, sum = 1.6444797515869140625000000e+00
i = 2300, sum = 1.6445035934448242187500000e+00
i = 2400, sum = 1.6445231437683105468750000e+00
i = 2500, sum = 1.6445350646972656250000000e+00
i = 2600, sum = 1.6445469856262207031250000e+00
i = 2700, sum = 1.6445589065551757812500000e+00
i = 2800, sum = 1.6445708274841308593750000e+00
i = 2900, sum = 1.6445827484130859375000000e+00
i = 3000, sum = 1.6445946693420410156250000e+00
i = 3100, sum = 1.6446065902709960937500000e+00
i = 3200, sum = 1.6446185111999511718750000e+00
i = 3300, sum = 1.6446304321289062500000000e+00
i = 3400, sum = 1.6446423530578613281250000e+00
i = 3500, sum = 1.6446542739868164062500000e+00
i = 3600, sum = 1.6446661949157714843750000e+00
i = 3700, sum = 1.6446781158447265625000000e+00
i = 3800, sum = 1.6446900367736816406250000e+00
i = 3900, sum = 1.6447019577026367187500000e+00
i = 4000, sum = 1.6447138786315917968750000e+00
Final Result:
i = 4097, sum = 1.6447253227233886718750000e+00
True convergent_value = 1.644934058189392089843750000000
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