

High Performance Regenerative Receiver Design

There have been several popular Regen projects in recent QST's and ARRL Handbooks. Look at the design process and progress; then build one—or both—of the receivers described.

By Charles Kitchin, N1TEV

Many hams have tried regenerative receivers with mixed results. Some people are quite attached to "regens," while others consider them only suitable for beginner experimentation.

I have spent several years researching this subject and have come away with a great respect for the technical knowledge possessed by the "old-timers" of the 1920s and '30s. Unfortunately, much of this knowledge has been forgotten. Many significant discoveries, such as the "throttle"-capacitor regeneration control are unknown to most modern homebrewers.

Analog Devices - MS 128
804 Woburn St.
Wilmington, MA 01887
e-mail Charles.kitchin@analog.com

This article will show that, if properly designed, a modern regen is quite capable of direct-conversion or superheterodyne-level performance, although it does require greater operator skill. Attention to a few simple details can provide an excellent receiver for ham or general-coverage shortwave use. For beginners and veterans alike, studying, building and using regenerative circuits can add new interest, excitement and fun to the radio hobby.

A Brief History

The regenerative circuit was used in both commercial and ham receivers in the 1920s until the early 1930s. It was the standard ham receiver during this period, and a great deal of experimental work was done to optimize its performance. As the great depression slowly ended, the use of the regen de-

clined, because many people could then afford to buy commercial superheterodyne receivers.

Hams continued to use regens, usually home-brewed, through the rest of the 1930s. Although better components were then available, regens of the 1940s and '50s had been reduced to introductory sets for beginners—with generally poor performance.

By the 1960s and '70s, regenerative circuits had been replaced by the now popular direct-conversion receiver.

Regeneration Basics: What's Really Happening Here?

Fig 1 shows the basic regenerative circuit, discovered by Edwin Howard Armstrong¹ in 1914.

Fig 2 shows a modern equivalent

¹Notes appear on page 36.

High Performance Regenerative Receiver Design

**United States. Congress. Senate.
Select Committee on Small Business**

High Performance Regenerative Receiver Design:

Getting the books **High Performance Regenerative Receiver Design** now is not type of inspiring means. You could not and no-one else going subsequent to ebook gathering or library or borrowing from your links to right to use them. This is an unquestionably easy means to specifically get lead by on-line. This online publication High Performance Regenerative Receiver Design can be one of the options to accompany you gone having extra time.

It will not waste your time. take me, the e-book will no question impression you new matter to read. Just invest little mature to open this on-line notice **High Performance Regenerative Receiver Design** as with ease as review them wherever you are now.

<https://py.bijouxmedusa.com/data/virtual-library/index.jsp/Chapter%208%20Test%20Form%20A%20Algebra%201.pdf>

Table of Contents High Performance Regenerative Receiver Design

1. Understanding the eBook High Performance Regenerative Receiver Design
 - The Rise of Digital Reading High Performance Regenerative Receiver Design
 - Advantages of eBooks Over Traditional Books
2. Identifying High Performance Regenerative Receiver Design
 - Exploring Different Genres
 - Considering Fiction vs. Non-Fiction
 - Determining Your Reading Goals
3. Choosing the Right eBook Platform
 - Popular eBook Platforms
 - Features to Look for in an High Performance Regenerative Receiver Design
 - User-Friendly Interface
4. Exploring eBook Recommendations from High Performance Regenerative Receiver Design
 - Personalized Recommendations
 - High Performance Regenerative Receiver Design User Reviews and Ratings
 - High Performance Regenerative Receiver Design and Bestseller Lists

5. Accessing High Performance Regenerative Receiver Design Free and Paid eBooks
 - High Performance Regenerative Receiver Design Public Domain eBooks
 - High Performance Regenerative Receiver Design eBook Subscription Services
 - High Performance Regenerative Receiver Design Budget-Friendly Options
6. Navigating High Performance Regenerative Receiver Design eBook Formats
 - ePub, PDF, MOBI, and More
 - High Performance Regenerative Receiver Design Compatibility with Devices
 - High Performance Regenerative Receiver Design Enhanced eBook Features
7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of High Performance Regenerative Receiver Design
 - Highlighting and Note-Taking High Performance Regenerative Receiver Design
 - Interactive Elements High Performance Regenerative Receiver Design
8. Staying Engaged with High Performance Regenerative Receiver Design
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers High Performance Regenerative Receiver Design
9. Balancing eBooks and Physical Books High Performance Regenerative Receiver Design
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection High Performance Regenerative Receiver Design
10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
11. Cultivating a Reading Routine High Performance Regenerative Receiver Design
 - Setting Reading Goals High Performance Regenerative Receiver Design
 - Carving Out Dedicated Reading Time
12. Sourcing Reliable Information of High Performance Regenerative Receiver Design
 - Fact-Checking eBook Content of High Performance Regenerative Receiver Design
 - Distinguishing Credible Sources
13. Promoting Lifelong Learning

- Utilizing eBooks for Skill Development
 - Exploring Educational eBooks
14. Embracing eBook Trends
- Integration of Multimedia Elements
 - Interactive and Gamified eBooks

High Performance Regenerative Receiver Design Introduction

High Performance Regenerative Receiver Design Offers over 60,000 free eBooks, including many classics that are in the public domain. Open Library: Provides access to over 1 million free eBooks, including classic literature and contemporary works. High Performance Regenerative Receiver Design Offers a vast collection of books, some of which are available for free as PDF downloads, particularly older books in the public domain. High Performance Regenerative Receiver Design : This website hosts a vast collection of scientific articles, books, and textbooks. While it operates in a legal gray area due to copyright issues, its a popular resource for finding various publications. Internet Archive for High Performance Regenerative Receiver Design : Has an extensive collection of digital content, including books, articles, videos, and more. It has a massive library of free downloadable books. Free-eBooks High Performance Regenerative Receiver Design Offers a diverse range of free eBooks across various genres. High Performance Regenerative Receiver Design Focuses mainly on educational books, textbooks, and business books. It offers free PDF downloads for educational purposes. High Performance Regenerative Receiver Design Provides a large selection of free eBooks in different genres, which are available for download in various formats, including PDF. Finding specific High Performance Regenerative Receiver Design, especially related to High Performance Regenerative Receiver Design, might be challenging as theyre often artistic creations rather than practical blueprints. However, you can explore the following steps to search for or create your own Online Searches: Look for websites, forums, or blogs dedicated to High Performance Regenerative Receiver Design, Sometimes enthusiasts share their designs or concepts in PDF format. Books and Magazines Some High Performance Regenerative Receiver Design books or magazines might include. Look for these in online stores or libraries. Remember that while High Performance Regenerative Receiver Design, sharing copyrighted material without permission is not legal. Always ensure youre either creating your own or obtaining them from legitimate sources that allow sharing and downloading. Library Check if your local library offers eBook lending services. Many libraries have digital catalogs where you can borrow High Performance Regenerative Receiver Design eBooks for free, including popular titles. Online Retailers: Websites like Amazon, Google Books, or Apple Books often sell eBooks. Sometimes, authors or publishers offer promotions or free periods for certain books. Authors Website Occasionally, authors provide excerpts or short stories for free on their websites. While this might not be the High

Performance Regenerative Receiver Design full book , it can give you a taste of the authors writing style.Subscription Services Platforms like Kindle Unlimited or Scribd offer subscription-based access to a wide range of High Performance Regenerative Receiver Design eBooks, including some popular titles.

FAQs About High Performance Regenerative Receiver Design Books

1. Where can I buy High Performance Regenerative Receiver Design books? Bookstores: Physical bookstores like Barnes & Noble, Waterstones, and independent local stores. Online Retailers: Amazon, Book Depository, and various online bookstores offer a wide range of books in physical and digital formats.
2. What are the different book formats available? Hardcover: Sturdy and durable, usually more expensive. Paperback: Cheaper, lighter, and more portable than hardcovers. E-books: Digital books available for e-readers like Kindle or software like Apple Books, Kindle, and Google Play Books.
3. How do I choose a High Performance Regenerative Receiver Design book to read? Genres: Consider the genre you enjoy (fiction, non-fiction, mystery, sci-fi, etc.). Recommendations: Ask friends, join book clubs, or explore online reviews and recommendations. Author: If you like a particular author, you might enjoy more of their work.
4. How do I take care of High Performance Regenerative Receiver Design books? Storage: Keep them away from direct sunlight and in a dry environment. Handling: Avoid folding pages, use bookmarks, and handle them with clean hands. Cleaning: Gently dust the covers and pages occasionally.
5. Can I borrow books without buying them? Public Libraries: Local libraries offer a wide range of books for borrowing. Book Swaps: Community book exchanges or online platforms where people exchange books.
6. How can I track my reading progress or manage my book collection? Book Tracking Apps: Goodreads, LibraryThing, and Book Catalogue are popular apps for tracking your reading progress and managing book collections. Spreadsheets: You can create your own spreadsheet to track books read, ratings, and other details.
7. What are High Performance Regenerative Receiver Design audiobooks, and where can I find them? Audiobooks: Audio recordings of books, perfect for listening while commuting or multitasking. Platforms: Audible, LibriVox, and Google Play Books offer a wide selection of audiobooks.
8. How do I support authors or the book industry? Buy Books: Purchase books from authors or independent bookstores. Reviews: Leave reviews on platforms like Goodreads or Amazon. Promotion: Share your favorite books on social media or recommend them to friends.

9. Are there book clubs or reading communities I can join? Local Clubs: Check for local book clubs in libraries or community centers. Online Communities: Platforms like Goodreads have virtual book clubs and discussion groups.
10. Can I read High Performance Regenerative Receiver Design books for free? Public Domain Books: Many classic books are available for free as they're in the public domain. Free E-books: Some websites offer free e-books legally, like Project Gutenberg or Open Library.

Find High Performance Regenerative Receiver Design :

~~chapter 8 test form a algebra 1~~

chapter 8 test review geometry

~~character reading from the face the science of physiognomy~~

chartres cathedral

chcece010 support the holistic development of children in

~~chapter 22 nuclear chemistry section 1 review answers~~

charles platt make electronics

chemical engineering book by ram prasad

~~chemistry chapter 5 electrons in atoms test~~

chapter 7 biology study guide

childrens books ages 4 8 parents your child can easily read and learn about the 30 most common jobs and occupations books for children ages 4 to 8 kindle books simple answers

cherry crush the chocolate box girls 1 cathy cassidy

chemical pharmacological and clinical aspects

child development 14 edition john santrock

chemistry by raymond chang 11th edition

High Performance Regenerative Receiver Design :

wireless communication and networks 2nd edition william - Oct 02 2023

sign in wireless communication and networks 2nd edition william stallings by learnengineering in pdf google drive sign in

wireless communication an overview sciencedirect topics - Jun 29 2023

wireless communication adapts itself to various different network topologies which have different considerations for efficient

communications and cost when the transmission happens through cross layer protocols and architectures the remote system empowers users to pass on and get messages in the most efficient and cost effective ways

international journal of wireless information networks home - Sep 20 2022

oct 6 2023 established in 1994 as the world s first journal of wireless networking the international journal of wireless information networks examines applications such as sensor and mobile ad hoc networks wireless personal area networks wireless lans mobile data networks location aware networks and services wireless health body area networking

frontiers in communications and networks wireless communications - May 17 2022

may 26 2023 explores high quality fundamental and applied research in the general area of wireless communications which play a key role in modern science and engineering

eurasip journal on wireless communications and networking - Jul 31 2023

oct 5 2012 the journal of wireless communications and networking is riding on the 5th generation waves of the upcoming mobile communication systems with support of signal processing techniques and tools driven by the novel use cases for cyber physical systems for the internet of things and of the tactile internet the journal will further grow and

digital communications and networks journal sciencedirect - Apr 15 2022

wireless communications and networking wireless sensor networks digital communications and networks publishes rigorously peer reviewed high quality original articles and authoritative reviews that focus on communication systems and networks all articles are published fully open access on sciencedirect

an open source wireless communication database for radio access network - Jan 25 2023

oct 31 2023 the research and development of wireless communication technology is inseparable from the support of experimental dataset this paper first provides an open source multi dimensional high precision

the 4 different types of wireless networks techtarget - Feb 11 2022

2 wireless man wireless metropolitan area networks have been installed in cities worldwide to provide access for people outside an office or home network these networks cover a wider area than office or home networks but the principles are the same aps are located on the sides of buildings or on telephone poles throughout the covered area

ieee wireless communications ieee xplore - Oct 22 2022

ieee wireless communications ieee wireless communications is designed for individuals working in the communications and networking communities ieee

what is wireless communications everything you need to - Apr 27 2023

a wireless network is a grouping or network of multiple devices where data is sent and received over radio frequencies wireless networks differ from wired networks which require each end of a data connection to be physically connected by a

introduction to wireless communications and networks springer - May 29 2023

mar 31 2022 covering diverse topics in wireless communication systems including cellular and personal devices satellite and space communication networks telecommunication regulation standardization and safety the book combines theory and practice using problems from industry and includes examples of day to day work in the field

2022 - Nov 22 2022

dec 21 2022 3 wireless networks 4 ccf c 4 photonic network communications 5 acm transactions on sensor networks 6 ccf b 4 6 peer to peer networking and applications 7 ccf c 7 transactions on emerging telecommunications technologies 8 mobile networks applications

wireless communications and networks amazon com - Jul 19 2022

nov 15 2004 wireless communications and networks 2e provides one of the most up to date and accurate overviews of wireless principles technology and application it is ideal for courses in wireless networking wireless communications wireless data communications or wireless technology in departments of computer science engineering it and continuing

alpha networks expands vietnam capacities and more business - Dec 24 2022

10 minutes ago taiwan based communication networking company alpha networks anticipates wireless broadband networking products and digital multimedia products to be the driving force of fourth quarter sales

pdf wireless communications networking and an overview - Mar 15 2022

mar 1 2002 this paper presents an overview of wireless local area networks lans and wireless personal area networks pans with emphasis on the two most popular standards ieee 802 11 and bluetooth

wireless networks home springer - Mar 27 2023

oct 31 2023 the wireless communication revolution is bringing fundamental changes to data networking telecommunication and is making integrated networks a reality

wireless communications networking sciencedirect - Feb 23 2023

this book fills that gap in the literature and is written to provide essentials of wireless communications and wireless networking including wireless personal area networks wpan wireless local area networks wlan and wireless wide area networks wwan the first ten chapters of the book focus on the fundamentals that are required to study

wireless communications and mobile computing hindawi - Aug 20 2022

wireless communications and mobile computing provides the r d communities working in academia and the telecommunications and networking industries with a forum for sharing research and ideas in this fast moving field

introduction to wireless communications and networks - Sep 01 2023

broadband access wireless communication lab 4 department of electrical and computer engineering michigan state university

components of a communication system 2 the source originates a message which could be a human voice a television picture or data the source is converted by an input transducer into an electrical waveform referred to as the baseband

[*wireless communication and networks oxford university press*](#) - Jun 17 2022

nov 30 2014 [wireless communication and networks](#) is designed as a textbook for students of electronics and communication engineering as well as computer engineering the book provides a detailed and holistic coverage of the various aspects and technologies of wireless systems in addition to the emerging systems and standards

code rousseau de la route b 2020 amazon com - Aug 15 2023

web sep 18 2019 [clair et synthétique le code de la route rousseau permet de se préparer au permis de conduire dans les meilleures conditions conçue par des professionnels](#)

[*code rousseau de la route b 2020 amazon com au books*](#) - Jan 08 2023

web [code rousseau de la route b 2021 9782709515313 books amazon ca skip to main content ca hello select your address books hello sign in account lists returns](#)

[*code rousseau de la route b 2020 code de la route*](#) - Feb 26 2022

web photo représentant une situation de conduite le thème de la question la question un texte d aide à la réponse une grille de correction est proposée à la fin de chaque série elle

[code rousseau de la route b 2020 george rosen](#) - Aug 03 2022

web [code rousseau de la route b 2020 book condition very good 1 of 1 free shipping only 3 left see more see details on ebay available at code rousseau de la route b](#)

[code rousseau de la route b 2020 nouvelle édition youtube](#) - May 12 2023

web [code rousseau de la route b 2021 amazon com tr Çerez tercihlerinizi seçin Çerez bildirimimizde detaylandırıldığı üzere satın alım yapmanızı sağlamak alışveriş](#)

code rousseau de la route b 2020 codes rousseau amazon fr - Jul 14 2023

web 16 30 537 il ne reste plus que 10 exemplaire s en stock d autres exemplaires sont en cours d acheminement clair et synthétique le code de la route rousseau permet de

[*test rousseau de la route b 2020 160 questions type examen*](#) - Apr 30 2022

web oct 26 2019 [highway code 2020 license is the ideal and free application to master the french highway code on smartphone and tablet with highway code 2020](#)

[*formez vous au code de la route et au permis avec codes*](#) - Sep 16 2023

web [que vous souhaitiez passer votre permis voiture moto poids lourd ou bateau codes rousseau dispose de tous les outils pédagogiques pour votre apprentissage](#)

[codes rousseau maroc apps on google play](#) - Jan 28 2022

web 12 févr 2019 découvrez vos propres épingles sur pinterest et enregistrez les explore electronics visit save from fr readlibs com télécharger pdf code rousseau de la

[code rousseau de la route b 2021 amazon com](#) - Mar 10 2023

web amazon in buy code rousseau de la route b 2020 book online at best prices in india on amazon in read code rousseau de la route b 2020 book reviews author details and

[code de la route permis 2020 apps on google play](#) - Mar 30 2022

web 5 juil 2021 noté 5 retrouvez code rousseau de la route b 2020 et des millions de livres en stock sur amazon fr achetez neuf ou d occasion

code rousseau de la route b 2021 amazon com tr - Apr 11 2023

web oct 14 2020 clair et synthétique le code de la route rousseau permet de se préparer au permis de conduire dans les meilleures conditions conçue par des professionnels

code rousseau de la route b 2019 en ligne pinterest - Nov 25 2021

code rousseau de la route b 2021 paperback oct 14 2020 - Dec 07 2022

web test rousseau de la route b 2020 isbn 10 2709514974 isbn 13 9782709514972 codes rousseau 2019 softcover

code rousseau de la route b 2021 amazon com au books - Jun 01 2022

web test rousseau de la route b 2020 160 questions type examen soit 4 séries de 40 questions codes rousseau amazon de books

[code rousseau de la route b 2020 paperback amazon in](#) - Feb 09 2023

web select the department you want to search in

code rousseau de la route b 2020 pdf unesco copy - Oct 25 2021

[code rousseau de la route b 2020 amazon co uk](#) - Jun 13 2023

web jun 29 2020 pour lire le résumé et commander le livre code rousseau de la route b 2020 sur amazon amzn to 2vfystmmerci de nous soutenir en vous abonnant

test rousseau de la route b 2020 eagldemo2 eagltechnology - Dec 27 2021

web jul 8 2023 le code de la route rousseau codes rousseau 2020 10 14 the second machine age work progress and prosperity in a time of brilliant technologies erik

[code rousseau de la route b 2021 paperback amazon co uk](#) - Oct 05 2022

web paperback published september 18 2019 book details editions

test rousseau de la route b 2020 9782709514972 abebooks - Nov 06 2022

web code rousseau de la route b 2021 codes rousseau amazon co uk books skip to main content co uk hello select your address books hello sign in account lists

code rousseau de la route b 2020 book picclick uk - Jul 02 2022

web hello sign in account lists returns orders cart

code rousseau de la route b 2020 goodreads - Sep 04 2022

web code rousseau de la route b 2020 is available in our book collection an online access to it is set as public so you can download it instantly our book servers saves in multiple

di luce riflessa traduzione in inglese esempi italiano reverso - Feb 09 2023

web mostrare più questo riduce la quantità di luce riflessa e aumenta la resa energetica this reduces the amount of reflected light and increases the energy yield a seconda dell'angolo di luce riflessa si creano ambientazioni cromatiche diverse che risaltano questa finitura dai

di luce riflessa facebook - Jan 08 2023

web di luce riflessa is on facebook join facebook to connect with di luce riflessa and others you may know facebook gives people the power to share and makes the world more open and connected

di luce riflessa anna fienberg libro rizzoli bur ragazzi ibs - Aug 15 2023

web cally pensa di sé di essere una luna che brilla della luce riflessa da persone più carismatiche le stelle ma quando a sedici anni rimane incinta scopre di non avere più ombre dietro cui nascondersi corpi celesti attorno a cui gravitare al centro della sua galassia c'è lei e solo lei

riflessi di luce wikipedia - Mar 10 2023

web riflessi di luce also known in english speaking countries as reflections of light is a 1988 italian erotic movie directed by mario bianchi and starring pamela prati plot sick after an accident in which he lost his wife a musician is angry with the whole world in a secluded villa where a bisexual a lesbian and a spoiled kid live the

amazon it riflessi di luce - Nov 06 2022

web fedeli nuziali riflessi di luce anelli unici hand made in italy con lavorazione artigianale in oro 18 kt 750 920 00 consegna a 10 25 mag 1 giu made in italy personalizzalo

brillano di luce riflessa cruciverba dizi - Jan 28 2022

web definizioni che puoi trovare nei cruciverba e che contengono la parola brillano corpi che non brillano di luce propria brillano nei forzieri brillano nel firmamento parole crociate con il termine riflessa il bagliore della luce solare riflessa

splendono solo

di luce riflessa profiles facebook - Mar 30 2022

web view the profiles of people named di luce riflessa join facebook to connect with di luce riflessa and others you may know facebook gives people the

di luce riflessa song and lyrics by curvarcobaleno spotify - Jun 01 2022

web curvarcobaleno song 2019

translation of di luce riflessa in english reverso context - Sep 04 2022

web translations in context of di luce riflessa in italian english from reverso context questo riduce la quantità di luce riflessa e aumenta la resa energetica

di luce riflessa visionnaire home philosophy - Oct 05 2022

web a synesthetic narrative based on a vision of studiopepe arianna lelli mami and chiara di pinto to describe a capsule collection of three pieces designed for visionnaire the shibari chair the parade lighting system and the blanche set of two mirrors

riflessi di luce wikipedia - Apr 11 2023

web riflessi di luce è un film erotico drammatico del 1988 diretto da mario bianchi e interpretato da pamela prati e gabriele tinti

translation of luce riflessa in english reverso context - Jul 02 2022

web translations in context of luce riflessa in italian english from reverso context stiamo conducendo ulteriori ricerche spirituali per scoprire la causa di questa differenza di luce riflessa

[riflessi di luce con pamela prati film by film clips](#) - Aug 03 2022

web oct 23 2021 riflessi di luce con pamela prati film by film clips regia mario bianchi sceneggiatura francesco valitutti cast pamela prati gabriele tinti loredana ro

di luce riflessa youtube - Dec 27 2021

web provided to youtube by distrokiddi luce riflessa curvarcobaleno curvarcobaleno curvarcobaleno released on 2019 02 23 auto generated by youtube

[brillare di luce riflessa significato dizionario italiano de mauro](#) - Jul 14 2023

web brillare di luce riflessa loc v co avere fama notorietà non per meriti propri ma per essere in relazione con persone celebri o in vista correzioni e suggerimenti il dizionario di italiano dalla a alla z a b

di luce riflessa storie di luna amazon com tr kitap - May 12 2023

web arama yapmak istediğiniz kategoriye seçin

riflessi di luce amazon com - Dec 07 2022

web sep 15 2009 in una villa di periferia vive un noto compositore costretto su una sedia a rotelle dopo un drammatico incidente in cui la moglie ha perso la vita l uomo vive con il figlio ventenne e una giovane compagna a cui e legato in un disperato e morboso rapporto d amore la giovane matrigna trovera nel ragazzo un conforto per i suoi rimpianti

riflessione fisica wikipedia - Apr 30 2022

web la riflessione del cielo e del bosco nel lago spechtensee in stiria austria riflesso su sabbia e acqua in fisica la riflessione è il fenomeno per cui un onda che si propaga lungo l interfaccia tra differenti mezzi cambia di direzione a

riflessi di luce film completo by film clips youtube - Jun 13 2023

web nov 24 2022 riflessi di luce film completo by film clips regia mario bianchisceneggiatura francesco valituttistar pamelapratigabriele tintiloredana romito 1988

polarizzazione per riflessione 1 università degli studi di - Feb 26 2022

web se si analizza la luce riflessa per angoli di incidenza crescenti si osserva un massimo di trasmissione attraverso il polaroid orientandolo sempre nello stesso modo verticalmente nella situazione illustrata nelle figure qui riportate e la luce risulta maggiormente polarizzata per angoli di incidenza prossimi a 60