```
entry:
                                  %cconvert1 = getelementptr inbounds %struct.jpeg_compress_struct,
                                  ... %struct.jpeg_compress_struct* %cinfo, i64 0, i32 56
                                  %0 = bitcast %struct.jpeg_color_converter** %cconvert1 to
                                  ... %struct.my_color_converter**
                                  %1 = load %struct.my_color_converter*, %struct.my_color_converter** %0,
                                  ... align 8, !tbaa !3
                                  %rgb_ycc_tab = getelementptr inbounds %struct.my_color_converter,
                                  ... %struct.my_color_converter* %1, i64 0, i32 1
                                  %2 = load i64*, i64** %rgb_ycc_tab, align 8, !tbaa !11
                                  %image_width = getelementptr inbounds %struct.jpeg_compress_struct,
                                  ... %struct.jpeg_compress_struct* %cinfo, i64 0, i32 6
                                  %3 = load i32, i32* %image_width, align 8, !tbaa !14
                                  %cmp112 = icmp sgt i32 %num_rows, 0
                                  br i1 %cmp112, label %while.body.lr.ph, label %while.end, !prof !15
                                                   T
while.body.lr.ph:
%arrayidx4 = getelementptr inbounds i8**, i8*** %output_buf, i64 1
%arrayidx7 = getelementptr inbounds i8**, i8*** %output buf, i64 2
%cmp9108 = icmp eq i32 %3, 0
br i1 %cmp9108, label %while.end, label %while.body.us.preheader, !prof!16
                                             while.body.us.preheader:
                                             br label %while.body.us
                      while.body.us:
                      %dec115.us.in = phi i32 [ %dec115.us,
                      ... %for.cond.while.cond.loopexit_crit_edge.us ], [ %num_rows,
                      ... %while.body.us.preheader ]
                      %input_buf.addr.0114.us = phi i8** [ %incdec.ptr.us,
                      ... %for.cond.while.cond.loopexit_crit_edge.us ], [ %input_buf,
                      ... %while.body.us.preheader ]
                      %output_row.addr.0113.us = phi i32 [ %inc.us,
                      ... %for.cond.while.cond.loopexit_crit_edge.us ], [ %output_row,
                      ... % while.body.us.preheader ]
                      %dec115.us = add nsw i32 %dec115.us.in, -1
                      %4 = load i8*, i8** %input_buf.addr.0114.us, align 8, !tbaa !17
                       %idxprom.us = zext i32 %output_row.addr.0113.us to i64
                      %5 = load i8**, i8*** %output_buf, align 8, !tbaa !17
                       %arrayidx2.us = getelementptr inbounds i8*, i8** %5, i64 %idxprom.us
                      %6 = load i8*, i8** %arrayidx2.us, align 8, !tbaa !17
                       %7 = load i8**, i8*** %arrayidx4, align 8, !tbaa !17
                       %arrayidx5.us = getelementptr inbounds i8*, i8** %7, i64 %idxprom.us
                       %8 = load i8*, i8** %arrayidx5.us, align 8, !tbaa !17
                      %9 = load i8**, i8*** %arrayidx7, align 8, !tbaa !17
                       %arrayidx8.us = getelementptr inbounds i8*, i8** %9, i64 %idxprom.us
                       %10 = load i8*, i8** %arrayidx8.us, align 8, !tbaa !17
                      br label %for.body.us
                       for.body.us:
                        %indvars.iv = phi i64 [0, %while.body.us], [%indvars.iv.next,
                        ... %for.body.us ]
                        %inptr.0109.us = phi i8* [ %4, %while.body.us ], [ %add.ptr.us, %for.body.us
                        %11 = load i8, i8* %inptr.0109.us, align 1, !tbaa !18
                        %conv.us = zext i8 %11 to i32
                        %arrayidx11.us = getelementptr inbounds i8, i8* %inptr.0109.us, i64 1
                        %12 = load i8, i8* %arrayidx11.us, align 1, !tbaa !18
                        %conv12.us = zext i8 %12 to i32
                        %arrayidx13.us = getelementptr inbounds i8, i8* %inptr.0109.us, i64 2
                        %13 = load i8, i8* %arrayidx13.us, align 1, !tbaa !18
                        %conv14.us = zext i8 %13 to i32
                        %add.ptr.us = getelementptr inbounds i8, i8* %inptr.0109.us, i64 3
                        %idxprom15.us = zext i8 %11 to i64
                        %arrayidx16.us = getelementptr inbounds i64, i64* %2, i64 %idxprom15.us
                        %14 = load i64, i64* %arrayidx16.us, align 8, !tbaa !19
                        %add17.us = or i32 %conv12.us, 256
                        %idxprom1897.us = zext i32 %add17.us to i64
                        %arrayidx19.us = getelementptr inbounds i64, i64* %2, i64 %idxprom1897.us
                        %15 = load i64, i64* %arrayidx19.us, align 8, !tbaa !19
                        %add20.us = add nsw i64 %15, %14
                        %add21.us = or i32 %conv14.us, 512
                        %idxprom2298.us = zext i32 %add21.us to i64
                        %arrayidx23.us = getelementptr inbounds i64, i64* %2, i64 %idxprom2298.us
                        %16 = load i64, i64* %arrayidx23.us, align 8, !tbaa !19
                        %add24.us = add nsw i64 %add20.us, %16
                        %shr99.us = 1shr i64 %add24.us, 16
                        %conv25.us = trunc i64 %shr99.us to i8
                        %arrayidx27.us = getelementptr inbounds i8, i8* %6, i64 %indvars.iv
                        store i8 %conv25.us, i8* %arrayidx27.us, align 1, !tbaa !18
                        %add28.us = or i32 %conv.us, 768
                        %idxprom29100.us = zext i32 %add28.us to i64
                        %arrayidx30.us = getelementptr inbounds i64, i64* %2, i64 %idxprom29100.us
                        %17 = load i64, i64* %arrayidx30.us, align 8, !tbaa !19
                        %add31.us = or i32 %conv12.us, 1024
                        %idxprom32101.us = zext i32 %add31.us to i64
                        %arrayidx33.us = getelementptr inbounds i64, i64* %2, i64 %idxprom32101.us
                        %18 = load i64, i64* %arrayidx33.us, align 8, !tbaa !19
                        %add34.us = add nsw i64 %18, %17
                        %add35.us = or i32 %conv14.us, 1280
                        %idxprom36102.us = zext i32 %add35.us to i64
                        %arrayidx37.us = getelementptr inbounds i64, i64* %2, i64 %idxprom36102.us
                        %19 = load i64, i64* %arrayidx37.us, align 8, !tbaa !19
                        %add38.us = add nsw i64 %add34.us, %19
                        %shr39103.us = lshr i64 %add38.us, 16
                        %conv40.us = trunc i64 %shr39103.us to i8
                        %arrayidx42.us = getelementptr inbounds i8, i8* %8, i64 %indvars.iv
                        store i8 %conv40.us, i8* %arrayidx42.us, align 1, !tbaa !18
                        %add43.us = or i32 %conv.us, 1280
                        %idxprom44104.us = zext i32 %add43.us to i64
                        %arrayidx45.us = getelementptr inbounds i64, i64* %2, i64 %idxprom44104.us
                        %20 = load i64, i64* %arrayidx45.us, align 8, !tbaa !19
                        %add46.us = or i32 %conv12.us, 1536
                        %idxprom47105.us = zext i32 %add46.us to i64
                        %arrayidx48.us = getelementptr inbounds i64, i64* %2, i64 %idxprom47105.us
                        %21 = load i64, i64* %arrayidx48.us, align 8, !tbaa !19
                        %add49.us = add nsw i64 %21, %20
                        %add50.us = or i32 %conv14.us, 1792
                        %idxprom51106.us = zext i32 %add50.us to i64
                        %arrayidx52.us = getelementptr inbounds i64, i64* %2, i64 %idxprom51106.us
                        %22 = load i64, i64* %arravidx52.us, align 8, !tbaa !19
                        %add53.us = add nsw i64 %add49.us, %22
                        %shr54107.us = lshr i64 %add53.us, 16
                        %conv55.us = trunc i64 %shr54107.us to i8
                        %arrayidx57.us = getelementptr inbounds i8, i8* %10, i64 %indvars.iv
                        store i8 %conv55.us, i8* %arrayidx57.us, align 1, !tbaa !18
                        %indvars.iv.next = add nuw nsw i64 %indvars.iv, 1
                        %lftr.wideiv = trunc i64 %indvars.iv.next to i32
                        %exitcond = icmp eq i32 %lftr.wideiv, %3
                        br i1 %exitcond, label %for.cond.while.cond.loopexit_crit_edge.us, label
                        ... %for.body.us, !prof!16
                                         T
                                                                                  F
           for.cond.while.cond.loopexit_crit_edge.us:
            %incdec.ptr.us = getelementptr inbounds i8*, i8** %input_buf.addr.0114.us,
           ... i64 1
            %inc.us = add i32 %output_row.addr.0113.us, 1
            %cmp.us = icmp sgt i32 %dec115.us.in, 1
           br i1 %cmp.us, label %while.body.us, label %while.end.loopexit, !prof!15
                                                          while.end.loopexit:
                                                          br label %while.end
                                                               while.end:
```